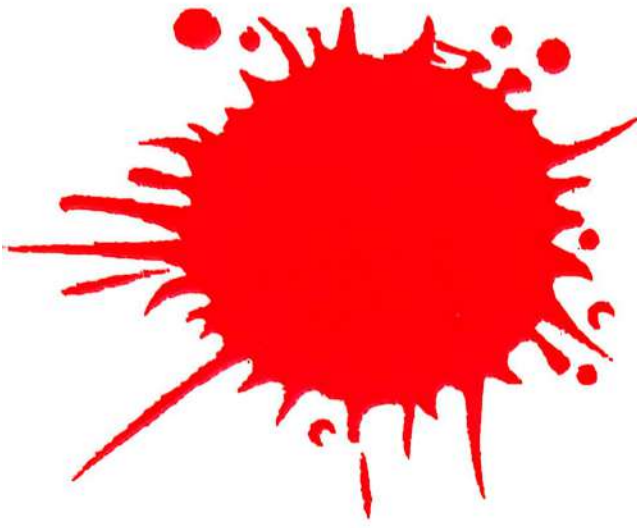




SOME THOUGHTS

*NATIONAL PROFESSOR
DR. NURUL ISLAM*



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National Professor Dr. N. Islam, SI ;

MB, Cal ; TDD, Wales ; FCPS, Pak ; FRCP, Lond ;
FRCP, Edin ; FAS & FCGP, Bangladesh

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Dedicated to
The memory of my father
Syedur Rahman

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A PRIZE FOR MY WIFE

I do acknowledge the ungrudging help and constant encouragement I received from my wife Anwara during the whole process of this publication. Her last minute correction removed many 'printer's devils'.

She shares my pleasure at the outcome, 'That is my prize', she says.

Preface

On many occasions in different forums I had the opportunity of expressing my thoughts and ideas in many ways e.g. as the Chief Guest, Chairman of a Session, Special Guest, Discussant and so on.

Besides, my views have been published in the news papers on different designated days for specific topics. I have also been interviewed by the press on several occasions.

All these, as far as possible, have been collected and put together to bring out this volume. Hence the name is 'Some Thoughts'.

If my observations generate interest and invite constructive criticism and initiate further action for the welfare of the people and particularly for my profession. I shall feel amply rewarded.

N. Islam

'Gulmeher'
63 Central Road
Dhaka - 1205
January 24, 1996

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THE DAYS AHEAD

I was then a student of science. Future was yet undecided. A friend of mine took me to different places of interest in the city. It was Calcutta. Towards the end of the day we reached the Medical College Hospital. A gigantic gate, monstrous pillars with lions at the top, the broad stairs leading to the first floor are all still vivid in my memory. But more vivid is the impression which I had immediately in my mind. Too many anxious visitors for the ailing hundreds within the four walls were at first sight terrifying.

The decision — multifactorial

The next thought that crept in was nonetheless equally pleasing. This was a place where they rush for relief. And here are the doctors with their lives dedicated. A decision which might have taken hours and days with puzzling thoughts and counter-thoughts was then taken in course of minutes. I wished I could be a doctor. Little incident like this must happen sometimes in somebody's life. Some of my new friends who have just enrolled themselves for the profession might have similar incident which guided their decisions. Some might have been influenced by the alluring positions of their relatives in the line. There remains also a group which is influenced by their family trend. Whatever might be the factor behind this is just the beginning. After a long arduous period of two years in the midst of bones and dead bodies with imaginative ideas about the physiological mysteries there comes a life anew.

The clinical course — first contact with people

The clinical course begins. So long confined to the normalities of life mostly on theoretical basis, one now begins to learn the deviations. This is what we call disease — a deviation from normal.

He now comes in contact with the people in whom everything is not normal. Or in other words, to see patients in hospital-beds (all new to him). This is his first contact with the ailing. By and by he passes through the various sections of the clinical side in course of three years. He takes history, examines cases, sees operations, goes to labs and does many things more. There are night duties, emergency duties, labour-ward duties and many more. He acquires patience, builds up confidence, learns to sympathise, but he falters here and there. There is nothing in it. This is his formative stage and he is in the institution for moulding and taking up a shape. He then passes his examination. This of course is not

as simple as I put it in black and white. He might stumble down once, twice or even more but after all he passes either in April or in November as they call it. He is now a DOCTOR — A HEALER.

As a qualified man

After qualification they fall into different categories. Some join the Government services, a few join in Army — some manage to go abroad. Of the rest some are absorbed in the Public Health Service, but there remains a significant number who start as General Practitioners. Whatever route they follow the vast majority remain as professional men, with a wider world to serve. This is distinct from his so long smooth carrier. There are many aspects and many more problems that he has to face day to day. He has his professional colleagues with whom he has to live with dignity — respecting professional ethics. He has a host of patients with all complexities of human nature. He now becomes the most popular actor on the screen. When his patient narrates the history his eyes are fixed on him and so is his confidence. The patient chooses him amidst so many others because he thinks him to be the right man for him. To three categories people confide and conceal nothing -- the God, the priest, and the doctors. Diseases are undoubtedly complex and human nature is again an admixture of varieties. You must have seen some persons playing with fire. Some would light up a smoke from a burning coal in his hand while others would be frightened at the sight. This is what we medically call threshold of sensibility. This obviously varies.

Symptoms — a variety and complex

If the disease is a deviation from normal, it is quite obvious that the reaction of the individual shall vary. It is this expression of reaction which we call symptom for which the sufferers come to us. It is no wonder that he may not only be apparently nonsense, he can at times be astoundingly absurd in his description. To quote an example an old muslim of about 45 came to me one day with the complain that he had 'Hook-Worm' (The word was known to him). He started narrating as follows :

'I have tried all the doctors. I have used all the medicines in the market. But for the last eight months I could hardly sleep.'

I asked 'Why?'

He continued, It is all due to Hook Worm — nothing else,

'What happens?' I parried.

"The story is a long one. I must tell you in brief.

"I am a school teacher. One day when working in the field, I got a

peculier feeling. I was almost fainting and brought to a doctor. He gave me an injection and advised examination of stool. The next afternoon I got the report and took it to the doctor. I must say I recovered after the injection and went to the field again next morning. 'It is all due to Hook Worm', the doctor said. There started my inquisitiveness about the worm. The doctor on questioning told me that these are dangerous — pierce the sole, enter the body — goes to the heart and produces anaemia, heart failure and so on. I was immediately captivated by lots of thoughts, 'Could it be that the Hook Worm in my body is doing all these mischiefs?' I came home, tried to sleep. I could not. Next morning I had medicine, prescribed for me. I had three or four loose motions. I tried to find the worms. I found two or three. Some must be left in me — I imagined. Since then 20 times I got my stool examined by different doctors. Some got it, some did not. They must be persisting. I feel it. They are doing all mischiefs in my body ; it is this mischief, doctor, that is giving me troubles. Very often they crawl up in my body, enter the intestine and give a jark. I get pain and feel the push. At times they enter my heart — bite it. I get peculiar feeling over my heart. I cannot sleep'. Thus he went on narrating. The time at my disposal was limited. Some serious patients were in the waiting room.

I had to make a compromise. I requested him to write all his complaints in details. Two days after he reported to me. As many as twelve pages were covered with the description of too many symptoms referable to all his systems. "And all were due to HookWorm" — he repeatedly emphasized. Incidentally when this was read out in small gathering (all doctors of course) they burst into laughter. One might take it as an exceptional example. But yet it is not so. Instances like these are too many to cite here. One or two such might justify the remarks we are going to make within this space limited for the article.

The telephone rang at 12 midnight. It was from a responsible officer. His college-going daughter was almost collapsing. I was hesitant to go out at this odd hours at night. Requests followed in series from relations who had gathered there in the mean time, with sympathy or possible help. I had to go. As I climbed up-stairs all anxious eyes were on me. Quietly I entered the room. The girl who was reportedly 'collapsing' smiled at me with ease. She was now feeling better — she said. On enquiry the episode was narrated to me. Her result was published this morning and she did not find her name on the wall. Her father came to know about it at the dinner table. There was mild rebuke. The girl started feeling funny for sometime. When everybody was in bed and the lights were off she screamed — 'I am dying'. Parents ran to her. Relatives were informed. And the telephone rang for the doctor.

These cases are expressions of anxiety or emotional conflict. To the

sufferer however they are not simple. To the relatives they are not nominal. They rush for our help which we are obliged to offer without any respect for the routine of the day.

An odd situation — yet unavoidable

There was an occasion when I had to go to see a dead patient. Earlier the family doctor declared the death. The bereaved relations could not reconcile and I was requested over telephone with choking voice to see the patient 'at least once', only to say if he was alive, or dead. In a few minutes I had to rush to the spot to say whether he was dead. The man had been alright throughout the whole day. He was otherwise in perfect health. None could really imagine that he would die so suddenly. It was not unusual for the relatives to refuse to accept the declaration by the family doctor. It is not possible for any doctor to refuse such a call. And these come as oddly as death — sudden — unexpected and you can never refuse.

Alertness — a watchword

There is hardly any other profession in which a little carelessness might invite an unavoidable disaster, a little ignorance can be fatal, a little negligence may throw one out of gear. A history of duodenal ulcer can guard the doctor against a fatal haemorrhage from cortisone therapy. History of Tuberculosis as far back as 20 years might help proper diagnosis of a tender swelling in the abdomen. A patient with angina might step in your consulting room with simply pain in the wrist or jaw which can be wrongly diagnosed as arthritis or simple toothache. Moment's delay in some cases may prove fatal. A throat which might have been neglected during examination of a child might be concealing dangerously flourishing diphtheritic patch. A small lymph node at the root of the neck if palpated carefully and discovered might have clinched the diagnosis and saved the patient from his visits to different departments for investigations. Instances like this are innumerable.

Back-dated knowledge — a tragedy

Nothing can be more dangerous in the therapeutic field than the back-dated knowledge. Calcium, coramine and purgatives are still sweeping the market and draining away our hard-earned foreign exchange. We do not seem to bother about their present status in the therapeutic field. God alone knows (because of lack of postmortem) how many we have killed by injections and purgatives with the idea of

washing out the toxins, whether the underlying malady has an inflamed appendix or an obstructed intestine. The number of 'Coramine families' are still on the increase. Years back when the 'wonder drug' appeared in the therapeutic field with the usual flashes of propaganda nobody possibly bothered to judge the merit. The popularity increased and it has now a strong foothold. 'On each occasion I just put two or three drops of coramine over the tongue. They recovered almost immediately after. This is one of the fanciful stories behind this. I do not disregard the one who narrated this to me — I had only one query — can it be possible? The medicine has to reach blood, attain concentration and then have pharmacological action. And again it only stimulates respiration — nothing else. How could the patient recover where the trouble was different. How could it reach blood immediately after. There was no reply. This medicine like many others have flourished like the spurious 'Pirs' who appeared, flourished and ultimately disappeared when the cat was out of the bag.

Conclusion

The days ahead of my young friends in the line therefore is not a bed of roses. It is beset with all human beings and human beings are most complex of all machineries with a still complex mind and its reaction to environment. Medicine is a science with human understanding and warmth — selfless, dedicated and wise.

The word disease must be understood in its true perspective. It is not malaria, dysentery, typhoid and tuberculosis. It is dis-ease. WHO defines health as a state of physical, mental and social well-being and not just the absence of disease.

To maintain this 'physical, mental and social well-being' is our responsibility. This shall be the responsibility of my young friends in days ahead.

They have to have
a heart
that never hardens,
a temper
that never loosens
and
a touch
that never hurts.

Reprinted from the Chittagong Medical College Magazine '61-'62.

POSTGRADUATE MEDICAL EDUCATION AT HOME OR ABROAD?

The population in East Pakistan is sixty millions and the number of Medical Colleges is now seven. This may be considered as satisfactory. The situation, however, is not exactly what is desired.

There are at present about hundred and fifty foreign-trained doctors in East Pakistan and about two hundred doctors are undergoing training abroad. Only about a third of these foreign-trained doctors have requisite degree or diploma and experience to be 'qualified' as teachers.

Academic status of the Medical Colleges is not very satisfactory. With the exception of a few medical colleges, there are many departments — both basic and clinical — without senior teachers. Those available have to look after as many as forty to fifty students in practical classes and clinical demonstrations. This is far from ideal.

In this connection one might refer to the last Tehran Conference under the auspices of WHO which recommended that the ratio between the teacher and student should be 1 : 10.

This is not the whole truth about the present status of undergraduate education in the country. Basic subjects suffer most. For reasons often repeated, talents are particularly never attracted to these lines.

On the clinical side, though the situation is much better, it is undoubtedly far from ideal. There are some colleges which still run without professors in one or more departments.

The problem as it stands to-day may be briefly summarized as follows :

1. Number of qualified medical personnel in the country is far short of requirement.
2. Establishment of Medical Colleges in quick succession has widened the gap.
3. The situation is worse in basic subjects excluding perhaps pathology.
4. Private practice is one of the most deciding factors in the choice of a career after graduation.

Situation as detailed above clearly indicates the need for sufficient number of postgraduate qualified persons in the country.

At Home or Abroad?

The first question that arises is, therefore, whether we need facilities for postgraduate education in our country.

We have so long been depending mainly on the United Kingdom and to some extent on the U.S.A. for our postgraduate Medical Education. This involves many questions.

1. Foreign Exchange. — Scholarships are usually granted for a period of two years for postgraduate studies abroad, yearly expenditure per candidate is £1200 sterling. The percentage of success in Membership and Fellowship Examinations is such that at least two-thirds of the candidates take on an average three years to obtain Membership and Fellowship from a British Royal College. The amount of foreign exchange involved is to the tune of £300 sterling per head. For a country like Pakistan, it is well nigh impossible to continue with this drainage on foreign exchange for an unlimited period.

2. Pattern of disease. — It varies from country to country. Malaria, typhoid, Kala-azar, helminthiasis, tuberculosis, peptic ulcer and many similar diseases which are very common in our country are extremely rare in foreign countries. Anyone is likely to be surprised to know that the Diploma in Tropical Medicine, which is valued in our country, is conducted by the schools where clinical materials are hardly available. Photographs are frequently used as a substitute for patients for bedside clinics. This is to a great extent applicable for training in general medicine as well. Very little experience is gained by our doctors in the field in which they have to work on return to this country. This is why most of our foreign-trained doctors feel lost during the first one or two years after their return from abroad.

3. Loss of Man Power. — Let us now refer back to the statement of our Health Minister quoted earlier in this communication. About two hundred and fifty doctors from East Pakistan are now undergoing training in various fields of Medicine abroad. The services of these doctors are obviously lost to the country during this period. Had we sufficient number of medical graduates within the country, the matter would have been different. Total number of qualified doctors by which we mean registered medical graduates in Pakistan today is fifteen thousand. Of these seven thousand are from East Pakistan. The figure includes the deceased, departed that is evaques and also the

disgruntled, that is, those settling outside. Under these circumstances, it needs a serious consideration if it is worth-while to dispense with the services of so many doctors for such a period.

Many of our doctors prefer to settle down after obtaining their qualification abroad. This is for reasons of finance and prestige. If the country of origin has a right on their services they have their argument. Prestige, facilities and comfortable living for them are the responsibilities of the state as they put it.

4. Letter Versus Experience. — If the British Rule has done any harm in the field of Medical Education and Research in our country, it is through the introduction of letters after the names, namely M. R. C. P. , F. R. C. S., M. R. C. O. G. and so on. Their system of examination never ensured sufficient practical training and one could obtain 'these letters' without adequate practical knowledge or acquiring practical hand in the field of surgery and allied subjects. Many could become an FRCS without perhaps touching a knife. This did not matter very much for U.K., the country which manufactured these raw materials, because they consider these examinations as exploration of 'potential' for training as consultants, teachers, etc. After obtaining 'letters' one had to work as a research assistant or in a comparable appointment 'to acquire requisite experience and maturity'. After some years of experience in such junior capacity one could compete for appointment for an independent post, namely, consultant.

The situation in our country however is quite different. Soon after their return a claim is made or an avenue is available for our 'lettered' colleagues for independent responsibilities, either as a teacher or as a consultant. This has cost us dearly. In undergraduate training the standard has gone down very low indeed. This is deplorable and a way has to be evolved for a type of postgraduate training in the country which will produce persons having sufficient experience to qualify them as teachers.

Pakistan College of Physicians and Surgeons

The birth of Pakistan College of Physicians by an Ordinance in 1962 is an outcome of serious thoughts by the Medical Educators of the country headed by Lt. Gen. W. A. Burki, on this particular issue. The functions of the college enunciated in the Ordinance are :

1. To promote specialist practice of medicine, surgery, gynaecology and obstetrics and such other specialities by

securing improvement of teaching and training in hospitals and hospital methods.

2. To arrange postgraduate medical, surgical and other specialist training.
3. To hold and conduct examinations for grant of diplomas and admission to the Fellowship of the College.
4. To provide for research.
5. To bring together the physicians, surgeons and other specialists of Pakistan periodically for scientific discussions and practical demonstrations of various subjects.
6. To do all acts and things as it may consider necessary to carry out the purposes of this Ordinance.

Evidently the function of the College centres round postgraduate medical education and research in the country.

Experiences in the British and the American system of education were of great help in formulating our own curricula for postgraduate qualifications. Conservatism of the British system with too much reliance on the outcome of an examination has been carefully scrutinized and accepted with modification while the apprenticeship of the American system has been given the importance it deserves. Emphasis has been put on the education of our postgraduates rather than making them pass examinations.

None is entitled to enter the course before two years after graduation during which time he has held : (i) house job for one year, and (ii) residency in the speciality for one year. After entrance as a student he will have to undergo a course of instructions in basic medical sciences, viz. Anatomy including Embryology, Physiology including Pharmacology and Biochemistry, Pathology and Bacteriology.

The examinations are held in two parts :

1. Basic Medical Sciences
2. Final

A candidate has to work in the speciality for one year after passing his primary before appearing in the final. During this period he has to participate in clinicopathological conferences and submit case records of 30 patients and one dissertation of 60-80 pages. The dissertation means his observations and recent thoughts on a particular problem.

For Fellowship in Surgery, Gynaecology and Obstetrics a candidate has to show certified evidence of having performed hundred operations out of which at least 25 should be major ones. For Fellowship in Anaesthesiology, the candidate has to show evidence of having

administered anaesthesia to 500 patients.

The same emphasis has been put on other subjects. These are not mentioned here for the sake of brevity.

The requirements as laid down by the College of Physicians and Surgeons of Pakistan clearly indicate the distinction between the Western system of education at present and the one proposed and followed by the Pakistan College of Physicians. In Britain, the examination is a method of exploration of potentials of the candidates for becoming specialists in their lines. After obtaining degrees or diplomas by passing an examination practical training becomes virtually compulsory for him. He has to follow a ladder-step of training and experience to attain the status of a consultant or a professor.

The situation is entirely different in our country. There are many posts with only a few qualified people. After being 'lettered' as a postgraduate, the one who wins the race gets the post, if not on a regular at least in an ad-hoc basis.

To overcome this and also to remove the drawbacks outlined earlier in this communication, it is desirable that our system of examinations should be for the selection of specialists rather than for exploration of potentials, so that after qualification they can be entrusted with the responsibilities in their respective fields. This system, if properly followed, will help in :

1. Adequately staffing the undergraduate institutions.
2. Rendering specialist service in the district hospitals.
3. Conducting research in the specialized fields.

The last point was duly emphasized in the Group Meeting on Medical Research held in Alexandria in 1966 by WHO. It was stated as under :

'The question may arise as to whether medical research, being expensive and time-consuming, is necessary for developing countries or whether these countries would be satisfied with the application of knowledge acquired elsewhere. The answer is clear if we bear in mind that many urgent health problems of developing countries are different from those of advanced countries and may be influenced by environmental and possibly ethnic factors and that our present knowledge and resources are not sufficient for their control or eradication. Furthermore the vast amount of information which has accumulated in the advanced countries cannot be applied without further adaptive research to suit different geographic conditions, people and countries.'

A critic might at this juncture point out that there are some fields in which postgraduate education cannot be imparted in a developing country including Pakistan. One cannot disagree. These are highly specialized fields, e.g. Neurosurgery, Cardiovascular surgery; Transplantation and things like that.

We have to realize that all RCD countries are not equally deficient. What is not available in Pakistan may be found in Turkey or Iran and vice versa.

It is, therefore, suggested that a high-powered body consisting of medical educators and research workers representing different countries of the region should be formed.

The functions of this body shall be :

1. To explore the possibility of starting College or Colleges of Physicians and Surgeons in line with the one in Pakistan.
2. To find out the present status of countries of the region regarding specialists in various fields and their possible exchange.
3. To suggest ways and means for implementation of the postgraduate scheme.
4. To find out the available facilities and resources. Experience of the last few years has given us enough confidence in the system of postgraduate training enunciated by the College of physicians and surgeons. It is indeed a matter of pride that we are having increased number of applicants for various postgraduate courses leading to M.Sc., FCPS. And other various diplomas conducted by the Institute of Postgraduate Medicine, the University of Dacca, the Jinnah Postgraduate Medical Centre, Karachi, and in Lahore, We have to-day Fellows and Members of our Colleges side by side with those of foreign Colleges. Government have rightly declared that preference shall be given to those qualified from our College if other experiences are equal.

Misconception that everything foreign is better must go. We do not have enough foreign exchange to spend abroad for medical education. The foreign exchange, in terms of thousands of pounds, which is being spent every year now for medical education at the cost of national economy and medical research in Pakistan can be saved. Postgraduate education in the country shall not only educate our people but also qualify them for the purpose for which they are meant. While continuing their studies, the research involved shall undoubtedly enrich our

knowledge in the field of medicine in the country and help our people and the nation.

In fine I would emphasize on one very vital issue. It is time that we realize the status our postgraduates deserve. We cannot afford to forget that by the time they become 'qualified postgraduate' according to the criteria laid down in the country it is more than seven or eight years of their continued study and struggle with blood, bones, chemicals, patients and not the least examinations. After all these hurdles are over, if they have to wait too long, their practice yields and enthusiasm declines.

We sincerely believe that if the amount so long we have been spending for feeding foreign universities is diverted to our institutes, our problems shall at least be partly solved and the final remedy shall not be too far off.

'The earlier we can attain freedom from intellectual domination' of the foreigners the better.

Our political freedom shall remain incomplete if we do not at the same time have intellectual freedom. We are in no way inferior to others. All we need are encouragement, guidance and facilities from our academic and administrative high-ups.

Establishment of Postgraduate Institute of Medicine is an indication of the sincerity of the Government for the purpose.

We hope this is the beginning of a great end. Future should not be far off when we shall be in a position to impart postgraduate training not only to the students of the region but also to those of the neighbouring countries.

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SENSIBLE PRESCRIBING

PRESIDENTIAL ADDRESS

Section of

Biochemistry, Pharmacy, Medicine, Nutrition and Veterinary Sciences

Many diseases which are to-day effectively controlled in the developed countries of this world are yet taking a heavy toll in the developing ones. Limitation of financial resources in these countries has obviously a serious reflection on the budget allocation for the prevention and treatment of diseases or more specifically in the health sector which involves not only patient care but also medical education.

The problem of population explosion in the developing countries implies that the associated financial involvement increases in relation to increasing population at risk. The disparity between the need and the resources is consequently widening progressively, resulting in high mortality which in its turn results in increasing growth rate or fertility. Bangladesh for example to-day is passing through the phase of high mortality and high fertility. Unless it comes to the stage of low mortality and low fertility through the demographic transition the result will be disastrous from all points of view, public health facilities included.

We are a nation beset with many problems. We have yet to export less and import much more to meet at least part of the many requirements of the country. Though this problem is applicable to many aspects of our commerce, industry and the like we would confine ourselves to various drugs in use in the country to-day.

During the subsequent descriptions within the limited time and space available, we shall try to reveal in how many ways we still do not belong to either to-day or to-morrow and traditionally or rather unfortunately cling to the concept of yesterday. This is a situation not very graceful for a nation which cannot afford to lavishly spend its financial resources for the import of items which are either useless, discarded or banned in the developed countries. Unfortunate though it is, the fact remains that even to-day many of the developed countries take advantage of this gigantic ignorance of the developing nations and use them as their faithful customers for unscientific or rather condemned products. There is unfortunately no moral, ethical or legislative obligation in the committee of nations which prevent them from committing this wilful offence.

Admittedly it is not possible to place before you an exhaustive picture of this unholy trade which deals with human life, if not his health and happiness. We can however choose a few avoidables which should interest not only the members of the profession but also the unfortunate consumers.

Nikethamide

We feel tempted to select nikethamide (coramine) as the first item for discussion. It is difficult to estimate how much of this has been faithfully swallowed by unlimited number of our people most of whom are not obviously as rich as many of our readers.

It is not unusual to hear a young unmarried girl (may be married too) saying, 'Doctor, I have frequent attacks of uneasiness, giddiness, vertigo, praecordial discomfort etc.' The moment I put 2-3 drops of coramine on my tongue I feel immediately better. This I have been continuing for the last 2-3 years because my doctor tells me that my heart is weak and this is a first class heart tonic.'

Let us scientifically analyze this particular case in question. If we take some medicine by mouth it has to be swallowed and then absorbed, reach the circulation and attain a blood level. Every drug has an optimum dosage to attain the desired blood level.

This lady tells us that immediately after she put one or two drops of coramine on her tongue she feels better. Firstly one or two drops of coramine is never an adequate dose, secondly even if it were an adequate dose it could not be immediately effective unless directly put into the circulation by injection. There is , therefore, no scientific basis except 'faith' behind this popularly called cardiac tonic with no scientific evidence whatsoever. Pharmacologically we know that this is respiratory stimulant and has no stimulating action on the heart and there is no basis for its use as circulatory stimulant (Review of Medical Pharmacology, 1971).

Cyanocobalamine (Cytamen, Redisol)

This is vitamin B-12. Of all the vitamins available in the market today this has some distinct features in that it requires an intrinsic factor for its absorption. This intrinsic factor is manufactured by the stomach. Deficiency of the vitamin B-12 can occur when there is absence of intrinsic factor — a condition characterized by pernicious anaemia.

Vitamin B-12 administration by parenteral route to overcome the

deficiency of intrinsic factor is , therefore, a must. In other words, a case of pernicious anaemia can be treated only by vitamin B-12 and nothing else and even then parenterally. Are the prescribers really aware that till to-day there has not been a single authenticated case of pernicious anaemia reported from anywhere in Bangladesh and almost certainly also from India?

Can there be any scientific justification for prescribing vitamin B-12 for any type of anaemia we come across?

Complete removal of the stomach for carcinoma may theoretically result in deficiency of vitamin B-12 due to lack of intrinsic factor. This is not that much important because the storage of vitamin B-12 in the liver can continue to replenish the deficiency for five to six years, and stomach is completely removed in cases of cancer where only ten per cent cases survive for five years (Bailey and Love, 1968).

Daily requirement of vitamin B-12 is about 2-3 micrograms. The vitamin being present in sufficient amounts in most foods of animal origin such as liver, kidney, meat, milk, cheese, fish , eggs and the daily need being so small a quantity nutritional deficiency of vitamin B-12 is very rare.

Vitamin B-12 is also prescribed in peripheral neuropathies. Such use is empirical and there is no scientific basis.

Incorporation of vitamin B-12 in so-called tonics obviously raises the cost without benefit.

Fish tapeworm responsible for utilization of vitamin B-12 causing its deficiency has not been found in this part of the world. Main cause of megaloblastic anaemia in our country are due to malabsorption and pregnancy. The specific deficiency in these cases is folic acid. There is, therefore, sufficient justification for prescribing iron and folic acid in cases of anaemia wherever laboratory facilities are not available. It is on the other hand useless and totally unscientific to prescribe vitamin B-12 in high (or low doses) either parenterally or orally. Our faith in this vitamin is however so deep-rooted that it may take quite some time to convince our lay people, the press and some other doctors about its limitations. Is it not amusing enough that there are at times prescriptions for vitamin B-12 as an appetizer?

Vitamin C

The average daily requirement of vitamin C for adults is 45 mg and for pregnant and lactating women it is 60 mg. The rich sources of this

vitamin are citrous fruits e.g. lemons, oranges, tomatoes, paprika, bellpeppers and all leafy and green vegetables.

The specific deficiency for vitamin C is known as scurvy. Mild or early manifestations are oedema and bleeding from gums and hyperkeratotic hair follicles. Severe or late manifestations consist of severe muscle changes, swelling of the joints, a marked bleeding tendency, anaemia, loosening or loss of teeth.

This vitamin is indicated in severe infections, in healing of wounds, for fractures and burns, aside the specific deficiency state of scurvy. The dosage in which this is being used at present, even where it is indicated, is too high. As low a dose as 100 mg daily with a normal diet usually produces rapid cure because retention is high in deficiency states (Beeson and McDermott, 1975).

Vitamin C is being widely used for the treatment of common cold against which its efficacy has never been proved. Moreover, large doses of vitamin C taken for a long time may cause formation of renal calculus— a fact not yet much known to many practitioners (Ref. Gordon 1976).

Megavitamin therapy

The 'crude' sources containing multiple vitamins are often more effective in therapy than the pure or synthetic preparations as a rule, only during the more severe phases and instances of 'specific' deficiencies it is necessary to give 'pure' vitamins. The use of a 'pure' vitamin in the face of a true multiple vitamin deficiency may aggravate rather than alleviate the condition.

The treatment of vitamin deficiencies consists of giving an adequate, balanced, high protein, high vitamin diet with vitamin supplementation as indicated. In general, it is wise to use vitamins therapeutically in 5-10 times the amounts required for daily maintenance.

In prescribing a pure vitamin which has been found to be less effective than the crude one it is not unlikely that some essential elements are removed or lost during the process of purification. It is, therefore, only logical that we should depend more on natural resources than on pharmaceutical purities.

Large doses of some vitamins e. g., vitamins A, D, K and niacin are toxic and may cause illness, particularly when continued for a long period. For this reason alone, the current popularity of so-called

megavitamin therapy for a variety of imperfectly understood disorders is not rational and is potentially hazardous (Current medical diagnosis and treatment, 1975).

Hazards of vitamin therapy

Vitamin A, if ingested in quantities more than 75000 units for six months or more, produces hypervitaminosis A, especially in children. There is anorexia, loss of weight, hypercalcaemia, hepatomegaly, splenomegaly, anaemia and various central nervous system manifestations.

Hypervitaminosis D can be produced by prolonged ingestion of as little as 500 units daily. Manifestations include renal damage and metastatic calcification.

Large doses of water soluble vitamin K (derivatives of K-3 menadione) to infants— particularly premature infants may cause haemolytic anaemia, hyperbilirubinaemia, hepatomegaly. In adults with G⁶PD deficiency, ordinary doses of the same vitamin may cause haemolytic reactions.

Vitamin K depletion due to dietary deficiency alone is extremely rare. Long-term therapy with antibiotics or nonabsorbable sulphonamides which interfere with micro-organism synthesis of vitamin K may cause vitamin K deficiency.

The hazards of intake of high doses of vitamin C for long periods has been mentioned earlier.

Glycerophosphates and Lecithin

Let us now take up the question of what are popularly known as nerve tonics (e. g. B. G. Phos, Neuroplex, Neurolecithin, Neurons, etc.). A claim is made that various glycerophosphates and lecithin are useful for vitality, memory and even intellect. Attractive advertisements through various media can effectively misguide many of our poor patients not uncommonly through unknowledgeable practitioners. Many of these tonics are quite costly. For example, the price varies from taka seventeen to taka sixty for 10 to 20 ounces. Evidences indicate beyond doubt that these are totally useless.

To quote Lewis Pharmacology (1970), 'The so-called tonics (which have no tonic action in any physiological sense of the term) rely largely on their content of bitters to maintain their popularity among

laymen and family physicians. Their other constituents (which may include glycerophosphates, iron, vitamins and liver extracts) are added for no particular reason. The so-called 'neurophosphates' exert no beneficial action on the central nervous system.'

Laxatives

Purgation was at one time just as popular and as dangerous a form of treatment as bleeding. Judicious physicians now prescribe the laxatives in only a few specific situations of brief duration such as to relieve the constipation that follows the use of opiate drugs or to keep the feces soft during the period following operation or bleeding piles.

Though these are now prescribed much less frequently the laity are only slowly and reluctantly giving up the idea that laxatives and enemas are an important part of general treatment for virtually all illnesses. Most of the huge amount of the drugs consumed is, therefore, self-prescribed for the treatment of what the individual considers to be constipation.

Some people feel that there is a normal frequency of bowel movements that must be maintained ; others still feel perhaps as a carry over of the concept of autointoxication, that they must clean themselves out at intervals to maintain good health, and many people have a neurotic pre-occupation with their bowel habits that is not concerned solely with the number of movements.

The use of laxatives may become habitual since there must be an interval following an evacuation induced by a laxative before the next movement, while the content of the colon is replenished from above. If the interval seems to the individual to be too long, he may repeat the laxative rather than wait for an unstimulated movements. The cycle may be repeated indefinitely.

An unwearied physician often forgets that laxatives are not ion-exchange resins which selectively excrete and allow absorption of the essentials. It purges away the electrolytes, adversely affects the normal bowel movements and produce a vicious cycle of constipation, purgation with elimination leading to deficiencies. It is unfortunately not often understood that nature has provided several ways for the excretion of waste products (? toxic) like perspiration, respiration, micturition and bowel movement is only one of the many channels. The symptoms due to constipation are not due to absorption of toxic metabolites but mostly psychological. Human intellect has a definite influence on his bowel habit or rather for his constipation — a feature unknown in lower

animals. This is by no means a reflection on human intellect but certainly an indication for a change of his attitude towards constipation. It must be made clear that daily bowel movement is not universal and it is not unknown that many people have bowel movement once a week, a fortnight or even longer (Wright's Applied Physiology, 1971).

Amino acid preparations and enzymes

Of all the diseases that we come across for which these two groups of preparations are widely used various diseases and indigestion rank high in the list.

One of the functions of the liver is detoxication of various toxic substances. In liver diseases and specially cirrhosis various toxic substances may reach the cerebral circulation without being metabolized effectively in the liver. In cirrhosis these intoxicants pass through the alternative channels of porto-caval shunts whereas in viral hepatitis they may reach the brain unaltered because of the inefficiency of the damaged liver cells. Even though the nature of the cerebral intoxicants is disputed the role of ammonia is considered significant. It goes without saying that in various liver diseases notably viral hepatitis and cirrhosis of liver amino acid preparations have got no role to play. Even then it is unfortunate that various costly preparations of amino acids are not infrequently used by many general practitioners for a therapeutic benefit. These substances are said to reduce blood ammonium level but results are not convincing enough to recommend their routine use (Reynolds et al. 1958, and Schwartz et al. 1956). Amino acids, such as methionine, are toxic to patients in hepatocellular failure. They cannot be metabolized by the liver and are excreted in the urine. Similarly, Lipotropes, such as choline are of no value and may be toxic (Sherlock, 1975).

Calcium

Popular belief that calcium increases strength and vitality often goes so far as to induce patients to request a doctor for some calcium injection in the prescription.

It must be remembered that an unusual elevation of serum calcium level increases the contractability of the cardiac muscle and can produce ventricular extrasystole. These are aggravated especially when the patient is on digitalis.

Apart from over-administration of calcium vitamin-D intoxication

can also produce hypercalcaemia characterized by anorexia, weakness, vomiting and constipation. As a therapeutic agent in haemorrhagic disorders this is virtually useless. Unfortunately however this is most commonly used as a haemostatic agent.

At this stage we must say a few words about many haemostatic agents available in the market under various trade names. Bleeding occurs in many cases without any definite cause. Some vascular abnormalities have been held responsible in some cases while specific deficiencies are responsible in others.

The haemostatic agents, as they are used, have no scientific reason behind. A forceful reassurance and complete bed-rest are all that is necessary for bleeding especially associated with cough (haemoptysis). Bleeding from the gastrointestinal tract is mostly due to ulceration, varices or cancer. One can, therefore, easily understand how useful these combinations can be.

Within the limitation of time and space, it is not possible to touch on many other medicaments which are frequently misused. In a developing country like Bangladesh where vast majority of our people cannot afford to buy the essential medicines it is an avoidable evil to prescribe medicines of doubtful value not to speak of those which have been proved useless or even at times hazardous. Limitation of foreign exchange in addition to the scientific justification demands that we must produce and when necessary import only the essential drugs which have proved their efficacy beyond doubt. To quote from a report submitted by the Director General of WHO. to the Twenty-eighth World Health Assembly : 'Developed countries are now-a-days faced with the problem of high expenditure on drugs, which is often the result of over-consumption or misuse. Drugs not authorized for sale in the country of origin or withdrawn from the market for reasons of safety or lack of efficacy are sometimes exported and marketed in developing countries where drugs may also be promoted and advertised by the regulatory agencies in the countries of origin. While these practices may not be illegal, they are unethical and detrimental to health.'

Evidently we as a developing nation are the consumers of many discarded or even dangerous medicines exported from developed countries of origin. Everyone responsible for the health care of the people has a moral obligation to offer maximum benefit within financial capacity of the individual. There are many avoidables in our day-to-day prescriptions. It is our sacred duty to avoid these. Every prescription that goes with our signature must be sensible.

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* The author was the Sectional President.

First Annual Bangladesh Science Conference, Dhaka, March 28, 1976.

FROM FRESHERS TO POSTGRADUATES

After long five years of eventful hardship you have successfully crossed the hurdle of examination and attained double bachelorhood, one in medicine and the other in surgery. Many of you, in fact, may not be bachelors. Some of you might have contributed to the population explosion. Yet you are freshers. Yes, you are freshers. Medicine is our life-long study. It is just the first hurdle you have crossed to go a long long way.

Whatever might have been your experiences over the years, curricular or extra-curricular, occasional or social, this is just a new life you have to begin. You are no more a student financially protected by the parents and technically by the teachers. Here is a world of your own with your responsibility to the patients you are entrusted with, the society you are surrounded by, the family in which you constitute an earning member. Over and above this is just the beginning of a long way you have to cross and the success is far ahead with many challenges of multifactorial origin inbetween.

May be some of you in desperation feel that you are destined to remain a medical graduate and there is nothing ahead of you. This is an attitude absolutely negative and is sure to culminate in self-destruction.

After all

‘It is the work and
not the brain
That to the highest
doth attain’.

There are enough opportunities for you to mould your own future. You must have to have a desire and a destination. Whatever be the obstacles, major or minor, frequent or infrequent, there is no doubt that you can overcome those with firm determination and conviction.

Over the years things have changed. What was impossible a decade ago is now within easy reach of many of you. Once a monopoly for the rich and the influential, it is now a matter for the successful competitors. The profession you have chosen is so dynamic in its progress that unless you are active and alert there is bound to be a dangerous gap between your knowledge and advancement. Continuing medical education is a talk of the day and this you can zealously preserve by an honest endeavour and adequate guidance. It is with the sole purpose of

extending guidance, help and cooperation that the Institute of Postgraduate Medicine and Research was born.

Over the years it has developed and attained the stage of recognition in the national and international field. It is for you to utilize this opportunity and mould your future in keeping with the need of the country and advancement of medical sciences.

An unconcerned and uninterested orthodox might raise questions. Is it necessary to have further education after graduation? Should we not direct all our attention, energy and finance to the 90% of our tax payers who live in remote villages far away from the comforts of the city and the amenities of life? The answer is neither difficult nor complex one. Graduation is a period of training with wide range of subjects. This is the beginning of a future medical world much wider in dimension in various directions. You are now either a physician or a surgeon, a gynaecologist or a paediatrician, a radiologist or a pathologist and so on and so forth. You have to be up-to-date in your branch of choice. The days of Crichton are long since gone by. You cannot afford to know everything of everything or even something of everything of your level.

Let there be no confusion that you are not a health worker or a medical assistant. It is for them to know something of everything and it is for you to be always up-to-date in something. Knowledge gap at all level can never, never happen. And yours is a level much above. Unless you equip yourself with modern knowledge you have no right to supervise those at the lower cadres.

Postgraduate Education at home is to help, guide and instruct you for this attainment which you richly deserve and certainly desire.

In doing so, do you really deprive the country of your service? You do not. That used to be. It does not happen now while learning at home you knowingly or unknowingly, willingly or even unwillingly offer your services to the people. The misconception that postgraduate education at home means the campus of the institute to which I belong should no longer exist. Your jurisdiction and responsibility is far beyond it. In fact it can very well extend to the remote areas of the country which has begun to draw our attention. The curriculum may be so adjusted that during the period of training the students may be placed by rotation at various levels of the country for the clinical laboratory and even other investigations. And in doing so the students shall have ample opportunity to learn the problems in the remote areas as well as various environmental factors including the socio-economic status influencing the prevalence of diseases. Practical application of the knowledge

acquired during the institutional learning is a challenge where technical facilities and other resources are strictly limited.

This is a situation which most of us try to avoid. Places which used to be served by licenciates are now at the mercy of unqualified self-styled practitioners who are locally known as 'doctors'. A medical graduate is not attracted to these areas for various factors which may be dealt with separately. Situation as it is now should be changing.

Curricular changes at graduation level has been attempted and in fact made but could never be successfully implemented. This is not because of the unwillingness of the medical students as well as the doctors but because the situation could not be made acceptable.

As a member of the profession it is always a matter of pride and privilege to serve the less privileged people who have infinite love and respect for the doctors.

As the things have been changing and the facilities are being extended there is little doubt that many of us including the freshers will be tempted to serve in the rural areas for a reasonable period of time scheduled for them. It is however in the fitness of the things that the youngsters should not be left alone and there should be supervision. This can be done periodically by the teachers. This will offer specialist facility to the remote areas and guidance to the juniors besides the impetus it offers to the freshers.

It has been discussed on several occasions and policies are being formulated by which our postgraduates shall offer their services, acquire knowledge and conduct researches necessary during their various courses.

It is therefore abundantly clear that postgraduate education at home is not created as a separate cadre not needed for the country. They are very much needed indeed. These are needed for maintaining an optimum health education standard in the country, conducting researches relevant to the problems of the country, maintaining educational institutions, district and sub-divisional hospitals and not the least offering better health services to the community at large.

It is estimated that we need about 4000 postgraduate doctors in various branches for offering minimum acceptable standard health care facility upto thana level.

Unmistakably the figure cannot be attained within a matter of 8 or 10 years. This cannot however be unduly delayed either. The situation must change with the change of time and we cannot continue to deprive our people from a better health care for an unlimited period.

You have crossed many hurdles and tided over series of challenges ; we (at least some of us) no more look to the western world for their 'Magic Diplomas', completely divorced from our needs and problems.

It is not a very insignificant happening in a country like Bangladesh that our home product constitute the bulk of the postgraduate doctors in the country. They are now spread all over the country either as a junior consultant in the district and sub-divisional hospitals or as teachers in the medical colleges.

Conditions are now laid down that for your deputation to the postgraduate and promotion as teachers, it is essential that you offer services outside the city for about two years or so. Let us hope that the facilities and the prospect will attract a large number of our doctors to these areas hitherto neglected.

May it be emphasized that *there are several essentials in medical science today. You have to have these and can afford to ignore the rest. There cannot be any gap in your knowledge. You must acquire knowledge and skill to serve the nation. You cannot at the same time be far away from the people at large, those who constitute the bulk of your tax payers, the millions in the rural areas. Postgraduate study at home offer you a unique opportunity to attain both these objectives, to acquire knowledge and to serve the people.*

It is therefore for you to utilize this. In doing so you continue your medical education and during your education you serve your own people. This is what you are expected of.

Let all the freshers of today be postgraduates of tomorrow to serve the nation better.

*Reprinted From The Bangladesh Times, August 28, 1976.
On the occasion of DMC reunion..*

ON THE OCCASION OF THE FOUNDATION LAYING CEREMONY OF IPGMR Feb. 6, 1978.

Address of welcome as Chairman of Reception Committee.

Honourable President, Adviser for Health and Population Control, distinguished guests and my friends,

On behalf of the teachers and students of this institute and on my own behalf, I extend to you all a very warm welcome.

Re-union, Sir, is our usual annual feature for a social get-together with scientific exchange of ideas and knowledge, for both the teachers and the students — past and present. It gives us a unique opportunity of learning from our previous mistakes and newer experiences.

This day has a historical significance in that we are here with our Honourable President who has shown keen interest in the growth and development of this institute from the very beginning of his administration.

The eventful history of IPGMR with many challenges begotten of misunderstanding and perhaps apathy came to an end on the 27th December 1975 when the Council of Advisers under your Chairmanship, Sir, dropped the proposal for shifting the IPGMR. The process of finalization of the revised scheme could not, however, be completed till 10th October 1977 another landmark in the history of the institute.

Allotment of five acres of land at Katabon has removed the difficulty of limitation of space. This has been possible with all out support and help from the Land Allocation Committee headed by Kazi Anwarul Hoque and subsequently by Mr. Enayetullah Khan.

May I at this stage, Sir, record our appreciation for the foresightedness of Mr. S. M. Safiul Azam, Chief Secretary of the then East Pakistan and now the Adviser for Jute, who could well visualize the need for the institute and decided to hand over an abandoned hotel which enabled us to have a modest beginning of this national institute.

We must also record our gratitude for the generous help of the Advisers for Health, Professor Ibrahim and subsequently Professor A. Q. M. B. Chowdhury who extended all possible help and co-operation for the development of this institute.

It is hardly over six weeks that Prof. Chowdhury, our Adviser for Health and Population Control performed the opening ceremony of the Paediatric Unit accommodating 56 patients.

Notwithstanding many challenges from the beginning, by now more than 3/4ths of the total Postgraduates are constituted by the students of this institute. Out of a total of 460 postgraduate qualified doctors in the country 358 have been trained by us.

Most of the consultants all over the country are our students. There is hardly any institute in the country including medical colleges where our students do not occupy an important position or positions.

You may be proud, Sir, that our students are now serving in friendly countries like Abu Dhabi, Iran, Kuwait, Libya, Malaysia Saudi Arabia and Uganda with great appreciation from the respective countries.

In the field of research, the institute can claim to have made significant contribution over the years. A compilation of THESES, DISSERTATIONS AND PUBLICATIONS till 1976 will give an idea of our research activities relating to our health problems.

Quite a few of our works have been incorporated in the standard books of references and many have achieved international recognition.

By now the Institute has established reputation in countries far and near. Frequently we receive applications from foreign students for admission to various courses. The scheme provides for admission of 20-30 foreign students every year. We have already proposed to the ministry about our readiness for admitting these students for various postgraduate courses.

This is, therefore, a national institute with great responsibility for specialized health care, research and not the least advanced education in the field of medical sciences. This is an institution with international responsibilities. It is, therefore, most befitting in our estimate that the Head of the State would lay foundation stone of such a complex.

I may at this stage briefly mention some of the salient features of our curriculum. The Institute runs almost all necessary courses in basic medical sciences and in clinical subjects to cater primarily for the need of the country. The courses and curriculum are so devised that while pursuing their studies a student is obliged to offer services to the country in conducting research for theses in M.Phil courses and writing out dissertations and case-notes for clinical subjects. Besides, the students of surgical sciences have to perform at least 100 operations each before they become eligible for final examination. This is an advancement over the educational system in many western countries.

In keeping with the future responsibilities of our trained doctors and our obligations and commitment for the nation, community field practice has been incorporated in the curriculum of studies. Suitable health centres shall be selected where our students would spend some months for offering services while gaining experience in collecting data for dissertation etc.

While we are fully conscious of our responsibilities for the teeming millions and the possible solution by extending health care to this people by para-medics, village doctors, bare-foot doctors, practitioner of indigenous system etc., we are one with those who rightly believe that every nation must have at least one centre of excellence rather than draining away our hard-earned foreign exchange by sending complicated cases for sophisticated medical care and offering scholarship for postgraduate training in foreign countries which are not always relevant to our needs. For the development of educational programme, for manpower development and for specialized services the Institute owes a responsibility to the nation and the nation to the Institute. It is heartening that Government has taken it up with right earnest and we hope, within a foreseeable future it will have the status it deserves.

Finally, may I, Sir, draw your kind attention to one of the challenges facing the profession to-day. *Many of our trained teachers are now hesitant to come back home from abroad and many senior teachers are too eager to find an opportunity outside. Juniors are equally Pessimistic about their future prospect. Unless something is done to remove the longstanding colonial discrepancies in the service cadre removing obstacles for having a good beginning with the prospect of attaining systematically the highest position in the national service, we apprehend, the quality of service shall deteriorate and the nation shall suffer.* All that we have known about you, Sir, make us fully optimistic of your personal attention for removing these discrepancies.

Once again, I offer our sincere thanks and gratitude to the Hon'ble President for so kindly accepting our invitation and gracing the occasion and the Adviser for Health and Population Control for all his help and encouragements. Thank you all, ladies and gentlemen, for joining us on this auspicious occasion.

**ON THE OCCASION OF FOUNDATION
LAYING CEREMONY OF B.M.A. ON,
Dec. 13, 1978**

**Address of welcome as the Chairman of the
Reception Committee.**

It is one of my proud privileges as the Chairman of the Reception Committee to welcome our Hon'ble President Ziaur Rahman and you all in our midst on this historic occasion of the BMA.

In the midst of the despair because of the several unavoidable cancellations, we are happy that there has been adequate compensation by the combination of two functions in one. Along with the Foundation Stone Laying Ceremony of BMA House Complex, we are proud that we have been able to organize the National Medical Conference.

Many of you must be surprised how our Organization which represent the entire profession, an organization which is devoted to the welfare of the people as well as of the profession could not achieve what it is going to have this morning. The reasons are not far to seek. We never lacked sincerity in our efforts. Our predecessors made many earnest attempts as we have been making. We have had spells of despair with rumours that, Sir, you would not find time to join us. But we never gave up hope. We were confident of our stand and our strength. We asked ourselves — if we represent a profession which is both a profession and a mission and when our activities have always upheld the national interests, we should no doubt have the good fortune of welcoming our Head of State with us to lay the foundation stone of the BMA House, which shall continue to inspire all of us at home and many distinguished professional colleagues from all over the world through the reflection of the foundation stone that you are going to lay this morning.

On an occasion so unique in the history of the profession as a whole and on this opportune moment we have with you, Sir, we would prefer limiting ourselves to expressing our great satisfaction and deep gratitude for your so kindly joining us this morning to be, if I may say so, involved directly with the development of the BMA House Complex with its manifold activities.

The medical teachers today are in great despair. Attraction outside with various emoluments is a challenge to their national feeling adversely affected by their present status at home. *Despite their*

prolonged, continuous and strenuous studies for years both at undergraduate and postgraduate level with the acquirement of educational and professional skill they agreed on principle to accept the status at par with the university teachers. Their faith has been shaken. All the professors — the senior-most in the educational line have been placed in the third scale without any status. There is no scope for them to go up. What else could be more deterrent in the progress of medical education in the country? When a senior teacher finds during the tenure of the office junior officer in the administrative side gradually stepping up to become his boss, it is only human that he feels frustrated. Educational standard in the existing medical institutions to-day is not what it should be. There are some departments with no teachers at all. The shortage has been due to several factors. Beside the one I have already mentioned, the disparity between the production of teachers and the multiplication of teaching institutes, direct or indirect encouragement or if I may say so, occasional compulsion of teachers to have appointment outside, lack of creation of facilities for those who are already qualified and not the least the retirement of teachers at the age of 57 years are some of the many.

Postgraduate education at home which was initiated more than a decade ago has by now produced in the country as many as four hundred highly qualified doctors which could not be done during the whole period of 1947—71 of Pakistan rule. Lack of systematic promotion, suitable posting and adequate incentive is damping down the spirit of our prospective postgraduates. Of all the departments under your Govt., Sir, this is perhaps one which excels all others in adhoc appointments and supernumerary postings. It is an irony of fate that there are still many departments which do not have posts of professors..

In posting and promotions, personal influence and acquaintance and many other visible and invisible factors determine the speed and stage of promotion and transfer of individuals, without due consideration to their qualification, experience and suitability.

It is time that an Impartial Selection Committee with adequate professional representation should set the things right so that the future generation do not suffer and cannot blame us for the past and present mistakes.

We speak of research promotion and development but we do not recognize them. With the extremely limited financial allocation to the medical research council and no budgetary allotment to the institutes as research funds, whatever work has been done in the country by the

members of the profession is more appreciated outside than at home. Unless we recognize our own talents, encourage them in all possible ways we wonder how long the trend will survive.

It is heartening to note, Sir, you have been emphasizing on decentralization of power. We all agree that this is essential to get away with many of the administrative bottlenecks in the development programme and also to generate initiative and drive in those who are directly involved. Medical institutions almost all over the world have academic and administrative freedom. In Bangladesh unfortunately we still lag far behind. The institutions and the profession serve only as the receiving end with very little or no authority to offer. Time and again BMA has reflected through various platforms that academic and administrative freedom is a sinequanon for the growth and development of the institutes originating a sense of healthy competition among themselves.

A centralized body like Medical Grants Commission may be responsible for the disbursement of funds while a central examining body can have the responsibility of maintaining uniformity and standard of examinations. Once the principle of institutional autonomy is accepted, the details can be worked out by professional representation.

Preventive medicine and population planning are of repeated subjects from the platform and the press. They are inseparably linked with the health services of the country. Without due recognition and proportionate development of these sectors in the light of present day concept of integrated teaching and health care there can be no doubt that the Health Services shall continue to be at a level much less than desirable.

Having reflected on some of the problems in the field of medical education and research it has now become imperative for me to say something about the medical graduates who do not or cannot have higher education. When we look around it becomes abundantly clear that this cannot be a deterrent factor for the promotion and prospect for this group of people. The pattern of service should be logistically worked out so that this group which constitute a vast majority of our professional colleagues like many others in widely divergent services can reach the highest level in national health service.

Opportunities around the world have long been attracting the professional colleagues. A balance, however, was maintained because of their unquestionable love for the country and their fellow countrymen. This obviously could not be sustained because of the decaying prestige

and facilities for the profession. Human nature, as it is, can sacrifice many comforts and our professional colleagues are prepared to boldly face physical and financial difficulties. But all that they desire and certainly deserve is the due position in the society. The discrepancies that exist to-day is something more than perhaps the limit of toleration. The artificial division of different social strata under the ambiguous term of protocol did not find a place in keeping with their professional expertise and attainments. These are more or less physical exhibits which cannot escape attention. The situation at times, becomes unbearable. How many of us have an opportunity of joining national and social functions?

With all the evidences of your unquestionable interest in the profession, may I, Sir, humbly submit that we have many friends and formidable foes. It needs no elaboration. Ours is a profession as I said earlier, with a mission. It is intimately connected with human health, happiness and miseries inescapably connected with the progress and prosperity of the nation. A profession so vital for the nation, Sir, has not yet received the consideration it deserves. We are still third class in the service cadre, of no class in official gatherings and almost non-existent in national policy making as a national body (although I do admit that we have two distinguished members of our profession in the Cabinet).

From sources more than one we have been told of your love and concern for the profession. Today's event is an unquestionable evidence of your affection for us. We only wish that nothing stands between you and us. With nothing invisible between you and the profession we are sure, Sir, the future will be brighter and smoother for us. The entire profession is dedicated to the health of the nation which means physical, mental and social well-being to which you are committed in your people-oriented programme.

It is for you, Sir, to help uplift the profession from its present state of distress, despair and despondency so that it can smoothly discharge its responsibility to the nation.

Thank you.

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THE BEGINNING ***Bangladesh College of Physicians and Surgeons***

The need for development of Postgraduate Medical Education at home was keenly felt during late fifties. Nothing, however, could be done till early 1962 when Lt. General W. A. Burki gave an effective lead. He was well-known for his organizational and administrative ability with the personal experience of Postgraduate Medical Education in U. K. At first he was Minister for Health & Population Control and subsequently Special Assistant to the President of Pakistan. It was, therefore, not a difficult task for him to get the proposal for Pakistan College of Physicians and Surgeons through.

In October 1962 an ordinance was passed to establish the College of Physicians and Surgeons of Pakistan. In exercise of the power conferred by sub-section (1) of section 3 and clause (a) of section 4 of the ordinance of the College of Physicians and Surgeons of Pakistan, the Central Government was pleased to appoint the Founder Fellows of the College. Out of 45 Founder Fellows only nine were from East Pakistan. Many of them are no more with us. They were

1. Late Prof. T. Ahmed
2. Late Prof. K. S. Alam
3. Late Prof. Z. A. Chowdhury
4. Prof. M. Asiruddin
5. Prof. A. K. S. Ahmed (Now settled in U.K.)
6. Prof. Md. Ibrahim
7. Prof. N. Islam
8. Prof. S. M. Rab (Now settled in Pakistan)
9. Prof. W. A. Ansari (Now settled in Pakistan)

A Council was constituted with 20 members of which four were from the then East Pakistan. They were

1. Prof. N. Islam
2. Prof. A. K. S. Ahmed (Now settled in U.K.)
3. Late Prof. K. S. Alam
4. Late Prof. Z. A. Chowdhury

The Councillors met in Islamabad under the Chairmanship of Lt. Gen. W. A. Burki and elected him President of the College, a position which he adorns till today. At his request all sat together to work out the requirements and curricula for various courses.

Dr. Marguilis, Director, Jinnah Postgraduate Medical Centre was invited to participate. It was rather a very hectic and arduous task. Brig. M. Sarwar, Personal Physician to the President of Pakistan was a man of great academic interest. He had already collected necessary papers from various Royal Colleges. They all sat together to draw out the requirements for various courses for Membership and Fellowship Examinations of the College. All of them agreed on principle that the College of Physicians and Surgeons of Pakistan should have a programme in keeping with the needs and standards of the country. It could neither be British nor American, the former was thought to be too theoretical with limited practical application and the latter too sophisticated.

It was, therefore, decided to blend the two and offer simultaneously a theoretical learning with practical skill. This would make a home-qualified doctor competent enough to take up independent responsibility as a Junior Consultant in a peripheral hospital. Students of Internal Medicine, therefore, had to write case notes with comments, dissertation on a particular topic and those in Surgical Sciences were in addition required to perform one hundred operations each. Nothing like this was available in the Western system of Postgraduate Medical Education. Consequently our doctors qualified from abroad could acquire very little practical knowledge by the time they obtained their diploma.

Various Committees like Examination Committee, Reference Committee, etc. were formed for different purposes like organizations of examinations, admission of new Fellows etc.

The first examination was held in Karachi in October 1962. During the same year the Institute of Postgraduate Medicine was established in Dhaka in the teeth of opposition from the Central Government who would have liked to see only one Postgraduate Institute in the country irrespective of the distance and other differences between the two wings. A Cabinet decision was taken that Jinnah Postgraduate Medical Centre should be the only National Postgraduate Medical Centre financed by the Centre and there should be no such institute in East Pakistan.

Mr. Abdul Monem Khan, the then Governor of East Pakistan, however, took a firm decision that even if the centre would not support, Provincial Government should start a Postgraduate Medical Institute. This he did and thus the IPGMR (Institute of Postgraduate Medicine and Research) was born.

Regular courses as laid down by the Pakistan College of Physicians and Surgeons were started with mostly part-time teachers. In West Pakistan no such organized course was available. Consequently the output from East Pakistan showed an increasing trend.

In spite of significant progress in the development of Postgraduate Medical Education in East Pakistan, very little encouragement was received from the centre. The representation from East Pakistan in the Pakistan College of Physicians was very poor. Many senior Professors who were otherwise eligible were not admitted to Fellowship of the College under special clause (Fellowship without examination.)

It will be found subsequently that even the money collected from various sources for construction of the college buildings was used solely for the purpose in West Pakistan while East Pakistan could not even maintain an office accommodation. Ultimately only small amount was sanctioned for construction of a college building in East Pakistan which it failed to receive in full before liberation. Artificial bottlenecks were created and objections raised on various pleas. As a result, there could not be any satisfactory progress in the construction of the college building, even though the land was available in the Public Health Institute Complex. Professor K. A. Monsur was then the Director of Public Health Institute, Mohakhali. He was responsible for handing over the land to the college authorities for the construction of the college building. The work had since then passed through many setbacks during the war of liberation and subsequent years. It was again taken up and efforts made for its completions at an early date.

After liberation of the country, an Ad-hoc committee was constituted by the Government with Professor K. S. Haque, retired Professor of Radiology, Dacca Medical College as President. The Ad-hoc committee met for the first time on January 14, 1972 and elected Dr. Habibuzzaman as the Secretary of the College. In the meeting it was decided to take over the assets of the East Pakistan Branch of Pakistan College of Physicians and Surgeons. Professor K. S. Haque and Dr. Habibuzzaman met Professor Md. Asiruddin, who happened to be the Vice-President of the Pakistan College of Physicians and Surgeons. At

the time of taking over charge it was found that the college had only Tk. 397.61 as bank balance. The East Pakistan wing of the college had a peon and a clerk in its pay roll but had no furniture of its own. There was only a small room about 10 X 15' ft. with a signboard and name-plate of Vice-President. On the request of the Ad-hoc committee, Professor N. Islam, Director, Institute of Postgraduate Medicine and Research, agreed to accommodate the office of the college with necessary furnitures in the Institute campus.

At a later date through the personal efforts of the then Health Minister Dr. M. Ibrahim, Government was pleased to allot the present site for a building of the college.

On Feb. 15, 1972 the Ad-hoc committee approved the draft constitution of the college and forwarded the same to the Ministry of Health leading to promulgation of Presidential Order No. 63. dated June 6, 1972, with all the Bangladeshi Fellows of the Pakistan College of Physicians and Surgeons as Founder Fellows. In this connection the services rendered by the then Secretary Health, Population Control and Family Planning Dr. T. Hossain, who also happened to be the Treasurer of the College, were helpful.

On April, 17, 1972 Dr. Habibuzzaman, Secretary of the College, became suddenly ill and the activities of the College were seriously affected. Professor S. A. Sobhan, was requested to carry on the works of the Secretary of the College. Since then, he had been associated with Bangladesh College of Physicians and Surgeons in various capacities.

The first examination of the College was held in July, 1972. To maintain standard of Postgraduate Examination it was thought appropriate to invite examiners in various specialities from countries abroad. In this regard, Professor N. Islam, Director, IPGMR played a vital role. His personal contact with prominent persons outside the country was responsible for participation of foreign examiners to conduct the examinations of the College. In the first Examination of the College held in July, 1972 four students came out successful in Part I and five in Final Examination.

The first Annual General meeting of the College was held on December 22, 1972 with Professor K. S. Haque in the chair. New council was elected according to the constitution promulgated by the Presidential order. The new council was installed in office on February 28, 1973 for the term 1973-74 and 1974-75, with the following Councillors.

1. Dr. Kamaluddin Ahmed
2. Dr. A. H. M. Ahsanullah
3. Dr. A. K. M. Anowarul Azim
4. Dr. M. R. Chowdhury
5. Dr. Habibuzzaman
6. Dr. K. S. Haque
7. Dr. T. Hossain
8. Dr. A. K. S. M. Mahmudul Huq
9. Dr. M. Ibrahim
10. Dr. Nurul Islam
11. Dr. A. F. M. Nurul Islam
12. Dr. M. A. Jalil
13. Dr. A. A. Khan
14. Dr. K. A. Khaleque
15. Dr. K. A. Monsur
16. Dr. Md. Atai Rabbi
17. Dr. S. A. Sobhan
18. Dr. K. S. Haque
19. Dr. Shamsuzzoha
20. Dr. S. A. Shakur

The following Fellows were elected to the Executive Committee :

- | | |
|-------------------------------|----------------------|
| 1. Professor K. S. Haque | — President |
| 2. Dr. T. Hossain | — Sr. Vice-President |
| 3. Professor N. Islam | — Vice-President |
| 4. Professor K. A. Khaleque | — Treasurer |
| 5. Professor Kamaluddin Ahmed | — Member |
| 6. Dr. A. H. M. Ahsanullah | — Member |
| 7. Prefessor S. A. Sobhan | — Secretary |

In this connection it will not be out of place to put on record something about the Institute of Postgraduate Medicine and Research. The Institute though not a synonym for the college, was inseparably connected with it. Apart from IDCH and RIHD, this was the only Teaching Centre in the country which imparted Postgraduate Medical Education. Inspite of this, the Institute had to face difficulty for its own existence as there was a proposal for shifting it to Tangail Thanks to the

Government that a final decision regarding the site of the Institute was taken and the new Hospital Building for the Institute could come up in its campus.

This, in brief, is the beginning of the Pakistan College of Physicians and Surgeons and that of our College namely the Bangladesh College of Physicians and Surgeons. Subsequent developments are not within the purview of this article. It is hoped that these will be published in due course.

Compiled by : Prof. N. Islam & Prof. S.A. Sobhan

Reprinted from the Souvenir on the occasion of the first Convention 1980 of the Bangladesh College of Physicians and Surgeons.

CRUELITIES OF MEDICINE

Bangladesh has a population of 90 million. The total number of qualified doctors is 12000. This makes the doctor-population ratio 1: 5700. The rural population constitutes 85 percent of the total. Approximately 90 percent of the qualified doctors live in urban areas. This means that the doctor-population ratio in urban areas is approximately 1: 1500 and in the rural areas is 1: 13000. There are eleven medical colleges in the country. Of these, only eight have clinical departments. Two are located in Dacca. Besides, all specialized institutes namely IPGMR, IDCH, ICVD, RIHD and Institute of Ophthalmology are located in Dacca. It is, therefore, abundantly clear that there exists not only a gigantic disproportion between doctor and the population but also a gross maldistribution of available manpower and facilities. Consequently the entire population directly or indirectly is at risk of exposure to various categories of professional personnel.

Most of rural people and vast majority of the urban group have to rely on various types of medical practitioners, many of whom do not have even the minimum qualification. The number of medical colleges and the specialized institutes enumerated above bear no relationship to the standard of medical education and professional competence. *Appointments, promotions and transfers are in most cases without any laid-down principle. There is no provision for periodic assessment of teachers and others at various levels. This is considered to be one of the greatest weaknesses in the administration and a strong protection for the inefficient and insincere group.* Undue reliance of our people on doctor, ignorance and poor educational background make the professional colleagues more or less immune from challenge and the helpless patients may become subjects of various cruelties of medicine while seeking cures. This article is intended to reflect on a few of many such medical cruelties.

A hurried case history

Too many investigations

Too brief a case history may lead to both physical and financial cruelty to the patient. A young lady presents herself with discomfort in the upper abdomen, occasional heart burn and frequency of micturition. The doctor in a hurry to cope with his large number of patients cannot

devote much time to go into details of history. He knows that these symptoms can be produced by peptic ulcer on the one hand and urinary calculus on the other with a host of causes in between. He advises barium meal series of the upper gastro-intestinal tract (stomach and duodenum) followed by intravenous pyelography along with routine examination of blood, urine and stool. A week or 10 days later which is necessary for all these investigations the patient comes back to the doctor. Her X-rays are all normal. Blood examination shows slight anaemia. Urine and stool do not show any abnormality. The doctor wonders what could this be. This time, the husband of the lady, an educated executive voluntarily offers the information that the lady had amenorrhoea for the last three months. An advice is given for examination of urine for pregnancy and for consultation with a gynaecologist.

The laboratory report and the gynaecologist confirm pregnancy. The unfortunate lady has in the meantime spent a considerable amount of money, her physical strains apart, for the investigations. She had to go from one place to another, take medicines for pyelography, suffer from several pricks for collection of blood and for pyelography. But all these were of no avail and could have been avoided only if her menstrual history were taken. Presumably the doctor knew that all the symptoms the lady presented with could be due to early pregnancy. But he had no time to inquire into details.

Here is a lady who was financially solvent and could as such manage to have the investigations. If someone with limited income had the similar misfortune she would have done only part of the investigations. Supposing she went for IVP which turned out to be normal, the diagnosis of peptic ulcer would have been made and a prescription given accordingly.

Three to four weeks later when she would report to the doctor the pregnancy could not be missed. The doctor realising his mistakes would now change the regime of treatment and advise some vitamins and iron (these are usual prescriptions during pregnancy). Even the single investigation and a second visit to the doctor for this patient is an economic burden adversely affecting her budget for other expenditures including food items. Besides, radiological examination during the first three months of pregnancy is hazardous, for the foetus. Various foetal abnormalities may develop as a result.

In these cases it is undeniably true that both physical and financial cruelty could have been avoided at the very beginning with a careful

history. This is one of the many examples of investigational cruelties arising out of indifference or too much hurry on the part of practising doctors.

Ignorance : Inappropriate Investigations

Cruelties in these categories are also inflicted out of ignorance. A case of remittent fever presenting on the fourth days is advised investigation for typhoid, malaria and kalazar. And there again the particular test asked for may not be relevant to the disease at that particular time. Whereas a blood culture for typhoid is indicated on the fourth day, Widal is advised. All test for Kalazar namely AT, CT and CFT are negative at these state and yet these are advised.

The battery of tests advised for these suspected diseases is wholly unjustified. Even if it were a case of typhoid or kalazar or malaria none of the tests are likely to be positive. For malaria careful examination of a blood slide is all that is necessary and for kalazar and typhoid blood culture is the only test to be of help at this stage. Misdirected tests like these are begotten of ignorance about their timing in relation to the disease. These negative results are not only responsible for unnecessary expenditure for the patient who may not be rich enough to afford the luxury but also a strong tool to misdirect the physician. He thinks of other possibilities when the untimely tests are negative.

Mushroom laboratories

All tests are positive

Side by side with the clinics who may be responsible for investigational cruelties like the one cited above, the laboratory personnel share no less responsibility. Proliferation of "Laboratories" by various persons including non-technical businessmen has set in unhealthy competition. Many laboratories claim to be capable of carrying out various investigations for which they lack both facilities and personnel. Simultaneous examination of the same sample of blood from more than one laboratory yield different results. Investigations for venereal diseases and stool for parasites are brilliant examples. There are places where these tests are positive in as many as 80 percent of the referred cases. To the said laboratories it may not matter. They go unchallenged. To the consultant if this is a guide for treatment, he is misguided. The patient faces not only psychological trauma but also

suffers a social stigma if the tests for a disease like syphilis is positive. Reports like this have been responsible for aggravation of unhappiness in many families.

Unfortunately it is true even though utterly disgraceful that some so-called pathologists almost always report stool examination as positive for giardia, round worm (ascaris), hookworm and amoebiasis, either for all or for two or three together. If these sort of reports are relied upon then one will have to admit that a small town near Dacca has almost the entire population infected with all these parasites. This can be nothing but more than fictitious. Innocent practitioners write out prescriptions based on reports, the victims spend money, swallow tablets or syrups for nothing or only for something. This cruel report has no remedy and the calamity continues.

Reappearance of malaria in certain localities has created increasing awareness among the clinicians and the pathologists. In certain quarters this has taken the scale too far. About 80% to 90% of the slides are declared to be positive for malaria parasites, many of which on reexamination from a reliable centre are found to be negative. But very few can have a second opinion before treatment.

Saline and quinine have been used as the treatment for these cases. We speak of chloroquin resistant malaria and toxicity of quinine and yet these are the drugs yet commonly used. A careful scrutiny will reveal whether in many cases these are infliction of cruelties rather than cures for the patients.

Cases with cerebrovascular accidents, myocardial infarction, mild pneumonias, pharyngitis and even typhoid fever have been treated as malaria with 'positive slides' whereas the actual malady was something else.

Outmoded treatment

Misguided diagnosis

Peptic ulcer is one of the commonest gastro-intestinal disorders in Bangladesh. The diagnosis is often made on the basis of vague symptoms. Radiological practice has of late gained momentum as private enterprise. Number of qualified radiologists being limited many underqualified radiologists are engaged in these places. Even quite a few hospitals lack qualified radiologists. Hardly any radiological investigation is reported negative in these places. For example, every barium meal examination detects ulcer and chest x-ray tuberculous or

more commonly 'bronchitis'. Many of the practising doctors are dependent on these reports and a diagnosis is accordingly made. A diagnosis of peptic ulcer is thus frequently made and a prescription is given. In order to save time to tackle his large number of patients dietetic instructions are at times distributed by a doctor in printed form. (There may be a hidden desire to project his professional ability behind this printed chart).

Some of the instructions which this printed sheet contains are

"Do not keep the stomach empty ; must take something every two hours, must have adequate rest ; smoking and spices prohibited." Along with this dietetic regimen is a prescription with half-a-dozen medicines consisting of antacids, anticholinergics, sedatives, tonics and digestive enzymes. If the patient is not too lucky he may have cimetidine as one of the items of prescription.

Question arises if two hourly meals are necessary. There was time when every ulcer patient in a hospital would receive a chart indicating the time for medicine and meal. This used to be an hourly chart and the treatment was known as "Sippy treatment". This is now a subject of historical interest. Hourly feeding stimulates further acid secretion.

All that is necessary is the adjustment in the timing of anti-cholinergics and antacids. If the former is given half an hour before and the later one hour after the principal meals the gastric acidity can be maintained in optimum level with maximum therapeutic benefit.

Two hourly meal is virtually impossible for a working man. The timing so advised is virtually impossible to maintain and the innocent patient blames himself for the therapeutic failure which is more for wrong advice than for his own fault. The unfortunate patient is a victim of ignorance on the part of a practising doctor who is years behind in his ideas and practices. Mention should be made of cimetidine. This is one of the recent addition in the therapeutic field of peptic ulcer. Initial enthusiasm with profound claim for its success for curing ulcer have been tempted by the cost, effectiveness, duration of therapy and long term side effects. We now know that adequate dose of antacid can produce comparable effect with much less cost. One can not deny that cimetidine has its place but every place in the field of peptic ulcer is not meant for cimetidine. It is questionable if Bangladesh, one of the poorest countries of the world, has any place for costly medicines like cimetidine when alternatives are available. One might argue that nothing is more precious than life. In a situation where a costly drug is the only answer it needs to be provided. Where an effective alternative is

available a costly medicine for our patients, vast majority of whom are poor, is indeed a cruelty.

Too Many 'Medicines', Tonics

Jaundice, as elsewhere, is not an uncommon problem in Bangladesh. To the public, it is a dangerous disease. Those yellow coloured eyes and deep yellow urine to them are frightful features. They rush to the doctors for relief at any cost. Careful examinations and relevant investigations can detect operable cases like gall stones in a proportion of cases. Viral hepatitis constitutes a major cause of non-surgical jaundice today. No specific treatment is available. This group of patients or many of their relatives naturally aspire for some medicines and the consultant finds it not very difficult to prescribe 3, 4, 5 or even more medicines. This includes some anti-biotics like terramycin and some aminoacid preparations containing methionine and choline (many of the preparations have the word 'Liver' or 'Hepa' prefixing the name e. g. Livergen, Hepatone, Guronson, Litrison, Lipex, etc.).

"Glucose saline" is another common item in the prescription. It is little appreciated that still these are unquestionably useless for the malady for which they are prescribed. It is also now known that from antibiotic like terramycin to the 'tonics' referral to all can be toxic to the liver. To prescribe them is to precipitate or aggravate injury to the liver already caused by the diseased process. Deaths have been reported after intravenous administration of terramycin in cases of severe jaundice with gross hepatic damage. Years of misconception surrounding the dietetic regimen for jaundiced patient still persists in the minds of many orthodox physicians who prescribe restriction of fat and protein with plenty of carbohydrate.

Studies at home and abroad clearly establish that dietetic restriction is not at all necessary. The patient should eat in keeping with his usual practice rather than facing the monotony of too little fat and too much carbohydrate. In fact too much glucose drink as commonly advised is not tolerated by many and they may suffer from nausea and vomiting. Dietetic imposition rather than helping a patient reduces his intake and thereby impairs recovery. This is a cruelty out of an erroneous notion based on out-dated and discarded practice rather than with scientific justification. A normal diet is all that is necessary.

A daily prick for intravenous glucose and Vitamins may be

responsible for local and systemic infections apart from immediate adverse reactions like rigor and hyperpyrexia. Besides these, we now know that viral hepatitis is caused by more than two different viruses earlier known, namely virus A and B. A third group of viruses known as Non AB (Non-A. None-B), is now considered to be responsible for as many as 80% cases of transfusion hepatitis. As infection with one type of virus is no protection for infection by another, daily pricks for treatment or one type of viral hepatitis may introduce another type of this and produce that disease subsequently.

Introducing One While Treating Another

During recent years we have been able to trace out from case history that a number of cases of viral hepatitis had been in the hospital for some other ailment. They were given several types of injections including infusion or transfusion. Though disposable needles and syringes are orders of the day in the developed countries we have still to depend on ordinary glass syringes and needles. These are used for almost all patients in the same ward. One of the modes of transmission of viral hepatitis is through syringe. Quite frequently one or two cases of viral hepatitis are admitted in a particular ward. Their infection may spread to fellow patients through common syringes and needles. The innocent patients go home perhaps with recovery from the ailment for which he had been admitted but does not know that the hepatitis virus has already been introduced in his system which will manifest itself only after a long incubation period of several months.

Commonest Malady : Misleading Preparation

Anaemia is a sign and constitutes the commonest haematological abnormality. This is one of the commonest conditions with which a patient reports to the doctor. A quick prescription is not uncommonly served with several so-called blood forming tonics. Others may be advised some half hearted investigations without much attention to the dietetic history, environment and not the least to the primary disease responsible for producing anaemia. It is usually forgotten that anaemia is a manifestation secondary to something which can be as simple as reduced intake and as grave as underlying carcinoma. Various blood forming tonics do not have therapeutic dosage of iron and therefore cannot adequately replace the nutritional deficiency. On the other hand,

the money spent for these tonics can provide simple iron tablets with a much less cost and save some money for additional food items. *For those with underlying serious disease these are dangerous in the sense that apparent improvement after their use delays diagnosis and helps progression of the underlying disease beyond the scope of treatment.* It is perhaps one of the greatest tragedies of time that some preparations under the name 'Haemoglobin' is being rampantly prescribed to replenish haemoglobin in the body with the hope of "curing" anaemia. A bottle of this type of tonic costs Tk. 85-100/- and yet the name is so alluring that the patients are usually befooled and they accept this cruel financial and therapeutic misadventure usually with pleasure. Some patients even mention this name with an air of having the "finest treatment for anaemia" and yet admit that due to ill luck they did not have the desired result. This group of simple patients with all their faith in their prescribing doctors blame themselves for their ill luck and do not recognise the ill advice. The mystery behind the popularity of this product and similar others is misleading claim. This is something like the magic wand and drains away a lot of our limited foreign exchange.

It is time that preparations like these should disappear for ever and save our unfortunate patients from these cruel prescriptions with blood sucking rather than blood forming tonics.

Investigations for anaemias are to be judiciously done to determine their causes and types. A simple stool examination in children may detect various types of worms notably the hookworm while a detailed clinical assessment may point to the diagnosis of various causes of mal-absorption which usually produce a combined deficiency of iron and folic acid. Administration of only iron in these cases cannot correct anaemia and simultaneous administration of folic acid is essential. Vitamin B-12, contrary to common practice has no place in most of the cases. Yet the prescriptions are frequently given for this preparation. The patient loses his money and time and the anaemia progresses even though a combined preparation of iron and folic acid or simultaneous administration of both could have corrected it in a matter of weeks. Even for the patients who cannot afford to buy these dietetic advice with plenty of green vegetables can replace both without undue financial burden to the limited income group.

There is hardly any family which does not face the problem of fever some day or other. It may range from a mild irregular fever to a very high rise in temperature. Therapeutic misadventure with financial and physical assault is perhaps commonest with the case of pyrexia. During

the first few days it is not always easy to make a diagnosis. During the subsequent 4-5 days it is not uncommon for some pyrexia to subside spontaneously. Enthusiastic administration of anti-biotics which are at times prescribed in combination earns the false credit in cases of normal remission. Subsequent diagnosis reveals earlier mistake in selecting the anti-biotics.

Multidirectional Therapy with Wrong Combination

A case of common cold will have a normal remission in 7-10 days. A typhoid fever will not be affected by tetracycline, penicillin or streptomycin. When the temperature does not subside after 3-4 days of administration of these drugs cotrimoxazole (septrim, bactrim, cotrim) is advised and other anti-malarials like chloroquines are also added. Cotrimoxazole is effective against typhoid but the action is slow and it takes time for the temperature to subside. If the practising doctor is not cautious he shares the anxiety of the relatives and goes on adding medicines one after another. An average patient being poor collects money at times by selling out his household items. He buys medicines and uses them without any benefit. At times the financial strain becomes too apparent to be missed. By the time he decides to go to a senior consultant or to the hospital (which he usually avoids because of mismanagement in many cases and misconception about others) it is difficult for him to manage even the consultation fee not to speak of purchasing the medicines.

A careful history and detailed examination might not have escaped attention of the physician who can easily detect a toxic facies, a relatively slow pulse, coated tongue and some tenderness in right lower part of the abdomen are enough to suspect a case of typhoid. A combination of cotrimoxazole and chloromycine is a potential risk for the blood forming elements and may rarely lead to fatal agranulocytosis. These combinations are occasionally found in prescriptions. While these drugs may be responsible for some deaths, the disease and not the drugs carry the blame and the outcome is ascribed to ill luck.

There are many more examples of therapeutic cruelties of medicine. In the capital city of Dhaka we lost a professor with cerebrovascular accident who was pushed an injection of morphine immediately after the attack never to regain consciousness and protest against this cruelty. Similarly there are instances where distinction between cardiac and bronchial asthma was not made and an injection of adrenaline inflicted a

final assault on the failing heart.

Limitation of space does not permit narration of many examples of similar cruelties but the fact remains that while seeking cure many of our unfortunate patients may become victims of cruelties. It is a fact that all cruelties are not intentional. Ignorance can never be a bliss and indifference can never be tolerated. If we are responsible for the health and happiness of our patients we have no right to inflict on them penalties of our unnecessary investigations, out-dated advice, obsolete prescriptions and indifference which may bring about financial ruination of the poor family or even a fatal outcome for the patient who could otherwise be cured. When they seek a "cure" let us not offer them "cruelty".

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SPEECH AS CHAIRMAN, BMRC
ON THE OCCASION OF
Fifth Workshop on Research Methodology &
Health Care Delivery System :

Jointly sponsored by BMRC & WHO, Oct. 14, 1983.

Hon'ble Chief Guest, our Special Guest, participants and friends. It is my proud privilege to welcome you all on the occasion of the inaugural ceremony of the fifth workshop on Research Methodology and Health Care Delivery System jointly sponsored by Bangladesh Medical Research Council and the WHO.

There are over 40 participants drawn from various Institutes from all over the country. During the week-long workshop various aspects of Research Methodology and Health Care Delivery System shall be discussed. Senior teachers and experts shall be presenting papers covering a wide range of subjects like information resources research, statistical aspects, ethical considerations and epidemiological methods in research. Besides, due attention has also been given to research on environmental pollution, MCH and family planning as well as human nutrition. We have even included topic like research in traditional medicine.

After the presentation of the main papers by the resource persons which include a WHO Consultant, there will be discussions. The participants will have opportunity to discuss and exchange views and ideas.

Over the years we have observed that a workshop like this is not only helpful in removing many doubts and misconceptions about research but also helps creating interest among the scientists. We have been receiving many applications for grants which signifies the interest we have been able to generate among our potential researchers.

Bangladesh Medical Research Council had meagre allocation of fund from the Government. Even this sum could not have been spent during the first few years of BMRC as many of us would feel shy of submitting a proposal and for that matter a protocol.

The reason is obvious. No interest was created and no expertise was available for the development of a protocol. After the introduction of the workshop we have been receiving more requests than we can financially accommodate. The importance of such a workshop is, therefore, greatly realized today than ever before.

Development of a protocol has been given due consideration in programming the workshop. In short, respected Chief Guest and Special Guest, the workshop is a training and learning programme aimed at improving research development in the country. This shall undoubtedly be influenced by the need and resources of the country. The need has been partly reflected in the programme and the resources as I have already indicated are much less than desirable.

We are by no means disheartened. The amount of co-operation and help that we have been receiving from the Ministry of Health and Population Control is enough to justify our hope that the BMRC will be receiving a reasonable amount of grant for helping conduction of research by health workers in their respective fields as well as in topics of national interest.

May I, at this stage, point out some important issues which need serious considerations.

Unless research is given due importance for appointment and promotion and the researchers are duly recognized for their contribution research is bound to be a neglected branch limited to only a dedicated few. This cannot serve the national purpose. Only goal-oriented research based on national priorities can help national development. BMRC has already set up national priorities. If facilities and encouragement, are provided as I have pointed out, the output shall undoubtedly be perceptible. After all we do not lack so much of manpower, what is lacking is an incentive for desire or perhaps, in many cases a desire.

Notwithstanding limitations BMRC has contributed at least something in the field of research in the country. By now we have published 125 scientific research papers in our bulletin based on research conducted with financial assistance from the council. BMRC bulletin is the only internationally recognized medical journal in the country.

In collaboration with international organization like ICDDR,B and the WHO, BMRC has also developed protocols for collaborative research. We have plans for further collaborative action programme.

At this stage I may point out that the BMRC, at present, functions as a co-ordinating body. This is constituted by members drawn from various teaching institutes and some are nominated by professional organizations like BMA. Unlike BARC and CSIR, BMRC does not have any campus of its own. The office is located temporarily in the Institute of Public Health. A plan exists for a seperate building with attached laboratory. We hope the government will give due consideration to this so that the council can develop its functions in line with other similar

organizations at home and abroad.

In conclusion may I say that we have potential and capable research workers in the country. Given facilities and encouragement there is no reason to believe why they should not be able to conduct research and contribute towards growth and development of the medical sciences in the country. Many of our young scientists have proved their worth abroad, they can equally do so at home.

Thanking you once again.

Reprinted from the Souvenir published on the occasion on 14th October, 1983.

ON A NATIONAL DRUG POLICY FOR BANGLADESH

**As Chairman, Drug Control Committee,
Government of Bangladesh**

On 27 April 1982, the Ministry of Health of the Government of Bangladesh, set up an eight-men Expert Committee with Prof. N. Islam as its Chairman to evaluate all the registered pharmaceutical products presently available in the country and to formulate a draft National Drug Policy in conformity with the health needs of the country. The committee made the following observations :

- (1) Existing drug laws in the country were out-dated and inadequate.
- (2) Out of 4500 registered brand products available in the country about one-third were useless, unnecessary and at times harmful.
- (3) The Bangladesh pharmaceutical market is dominated by eight multinational companies who manufacture about 75% of all products.
- (4) Incomplete transfer of technology, restrictive business practices and purchase of raw materials by the multinationals at inflated prices from tied sources are detrimental to our national economy. Though the multinationals have all the technologies and know-how to produce sophisticated, essential drugs and basic pharmaceutical raw materials, in Bangladesh these companies are engaged mostly in formulation of simple drugs including many useless products such as vitamin mixtures, tonics, gripe-water, digestive enzymes and the like.

OBJECTIVES

The Expert Committee proposed a National Drug Policy with the following objectives :

- (1) To provide administrative and legislative support for ensuring quality and availability of essential drugs which are of relevance to the health needs of the majority of the population.
- (2) To reduce the prices of drugs and medicines and to ensure procurement of raw materials at the most competitive prices.
- (3) To eliminate useless, non-essential and harmful drugs from the market.

(4) To promote local production of finished drugs as well as of basic pharmaceutical raw and packaging materials in the country.

(5) To ensure coordination among various administrative branches of the Government in respect of drugs control and supply system.

(6) To develop a drug monitoring and information system, to prevent wasteful misuse of drugs, to ensure their proper utilization.

(7) To promote the scientific development and application of unani, ayurvedic and homoeopathic medicines and to ensure their standardization and quality by bringing these under the purview of drug legislation.

(8) To improve the standard of hospital pharmacies and private retail pharmacies by improving the facilities for education and training of professional pharmacists.

(9) To ensure good manufacturing practices, each manufacturing company must employ qualified pharmacists.

GUIDELINES FOR EVALUATION OF AVAILABLE DRUGS

The Expert Committee agreed on 16 criteria as guidelines for evaluating the drugs on the market in the country.

(1) In general combination drugs will be accepted only where no alternative single drug is available for the purpose or where the single drug is not cost-effective.

Exceptions will be made for oral rehydration salts (ORS), certain anti-malarials, co-trimoxazole, iron with folic acid for use in pregnancy, combined oral contraceptives (containing up to 35 µg oestrogen) and formulations specified by the licensing authority for a multivitamin (B complex) tablet and paediatric drops ; hydrocortisone with antibiotic skin and eye preparations ; and a haemorrhoid preparation.

(2) The combination of an antibiotic with another antibiotic or antibiotic with corticosteroids or other active substances will be prohibited. Antibiotics harmful to children (e.g. tetracyclines) will not be allowed to be manufactured in liquid form.

(3) The combination of analgesics in any form is unacceptable as there is no, or only trivial, therapeutic advantage and such combination increases toxicity, especially in the case of kidney damage and overdosage. The combination of analgesics with iron, vitamins or alcohol is irrational and unacceptable.

(4) The use of codeine in any combination form is not acceptable as it carries no advantage and may be subject to abuse.

(5) Vitamins should be prepared as single ingredient products with the exception of vitamin B complex. Vitamins of the B Complex, with the exception of B₁₂, may be combined into one product. B₁₂ shall always be produced as a single-ingredient injectable product for use by specialists only. Other members of B complex may also be produced as a single-ingredient product (e.g. B₁, B₂, B₆, etc.). Vitamins will not be allowed to be combined with non-vitamins, e.g. minerals, glycerophosphate, etc. Vitamins shall be in tablet, capsule and injectable forms only. The reason why no liquid forms will be permitted is the wastage of financial resources and the tremendous misuse that has occurred. An exception will be made for paediatric liquid single and multivitamin (without B₁₂, E, K and/or minerals) preparations in bottles of up to 15 ml with droppers.

(6) No multiple-ingredient cough mixtures, throat lozenges, gripewater, antacids etc. will be accepted (either locally manufactured or imported), as these offer no therapeutic advantages to outweigh their cost.

(7) The sale of tonics, enzyme mixtures/preparations and so-called restorative products flourishes on consumers' ignorance. Most are habit-forming and, with the exception of pancreatin and lactase, they are of no therapeutic value. Henceforth local manufacture or importation of such products will be discontinued. However, pancreatin and lactase will be allowed to be manufactured and/or imported as single-ingredient products.

(8) Some medicines are being manufactured with only trivial difference in composition from other products but having similar action. Such duplication confuses both patients and doctors and will not be acceptable in future.

(9) Products whose therapeutic value is doubtful, trivial or absent and products that are judged harmful or subject to misuse will be banned.

(10) Prescription medicines and galenical preparations not included in the latest edition of the British Pharmacopoeia or the British Pharmaceutical Codex will be prohibited unless there is strong evidence of need and of efficacy.

(11) Certain drugs, in spite of known serious side effects and the possibility of misuse, having a favourable risk-benefit ratio will be permitted for restricted use by specialists.

(12) Where a drug or a close substitute is being produced in the country importation will not be allowed, as a measure of protection for

the local industry. This condition may be relaxed in some individual cases where local production is insufficient.

(13) A basic pharmaceutical raw material which is locally manufactured will also be given protection as in (12) above.

(14) The role of multinational enterprises in providing medicines for this country is acknowledged with appreciation. In view of the calibre of machinery and technical know-how which lies in their hands for producing important and innovative drugs for the country, the task of producing antacids and vitamins will lie solely with the national companies, leaving the multinationals free to concentrate their efforts and resources on those items not so easily produced by smaller national companies. Multinationals will, however, be allowed to produce injectable vitamins in single-ingredient products.

(15) No foreign proprietary medicines will be allowed to be manufactured under licence in any factory in Bangladesh if the same or similar products are available/manufactured in Bangladesh, as this leads to unnecessary high prices and payment of royalties. In the light of this policy, all existing licensing agreements should be reviewed.

(16) No multinational enterprise without its own factory in Bangladesh will be allowed to market its products after manufacturing them in another factory in Bangladesh on toll basis.

CLASSIFICATION OF AVAILABLE DRUGS

The drugs available in the country have been classified into three categories :

Category I

These are positively harmful and are therefore to be banned immediately and withdrawn from the market. Under this category there are 265 locally manufactured drugs and 40 imported drugs.

Category II

These drugs will have to be slightly reformulated by eliminating some of their ingredients. These ingredients are considered to be unnecessary, unscientific and at times harmful. The reformulation would make the products scientifically sound and economical. There are 134 products in this category.

Category III

Drugs belonging to this category do not conform to one or more of the sixteen criteria/guidelines. Most fall into one of the following groups : (i) Combination drugs with no (or trivial) therapeutic value and increased toxicity. The combination may be of drug ingredients of the same category or entirely different categories. These drugs have no therapeutic value to outweigh the cost. (ii) Drugs being marketed under a variety of names, but with only slight difference in combination. (iii) Imported drugs which are already locally manufactured, thus impeding the growth of local industry. (iv) Drugs which, in themselves, are not harmful, but are : (a) to become the responsibility of national manufacturing companies instead of multinational companies (e.g. antacids, simple vitamin preparations etc.), or (b) drugs produced under licence from foreign companies which do not themselves manufacture in Bangladesh. There are over 500 drugs listed in this category and the Committee feels that some may be added in keeping with the criteria laid down.

COMMENTS

Admittedly quite a number of products banned in Bangladesh are available in many developed countries. Tetracyclines, cough syrup, and various tonics are but few of the many examples. The first two are most misused in Bangladesh. Tetracyclines are not to be used below the age of 12 years. Cough syrup may produce addiction to various ingredients. In a country where the doctor-population ratio is 1 : 10,000 it is unrealistic to think of a product being available on prescription only. Everything can be procured over the counter, and in any amount, provided one has money. The gradually diminishing therapeutic field of tetracycline, with the availability of harmless and effective alternatives, makes it all the more necessary to restrict its use. Withdrawal of syrup from the market can be of no consequence in any way whatsoever. Where a liquid preparation is considered essential, the contents of a capsule can easily be administered after mixing with some liquid vehicle. For conditions where tetracyclines are considered to be the drug of choice, there are useful alternatives. Besides, these conditions are not very common in children. The placebo effect of cough syrup is recognized, but the risk to and economic loss by the poverty-stricken Bangladeshi people need serious consideration. One has to be cautious when a patient may waste his limited money on an undesirable product,

while missing the specific or more desirable one. There should be no confusion that the cough mixtures have been banned as proprietary products. The ingredients are available (e.g. codeine, ephedrine etc.) and can be used separately in a more economical and judicious manner. Lay customers will not be encouraged to rush for such items through advertisements.

In a country like Bangladesh, where the financial allocation for the health sector is much below the minimum requirements, where *per capita* income is one of the lowest in the world and foreign exchange is extremely limited, one cannot afford the luxury of wasting money on useless, and at times harmful products. According to a conservative estimate, the new drug policy will produce a saving of approximately 800 million taka (US \$ 32.4 million) a year.

A selection of 150 essential drugs in line with the WHO recommendations will further guide prescribers in the right direction, provided that useless, unnecessary and possibly harmful products are not available on the market. *As all drugs in Bangladesh can be purchased over the counter and restriction to prescription is never possible, the only way is to eliminate the undesirable preparations altogether. It is for this reason that many products which are available on prescription in some developed countries, but are of doubtful or no value, have been banned.*

Drug supply in Bangladesh is indeed a problem, as in many other developing countries. The system consists of two different sectors, namely the public and the private. The public sector distributes approximately 20% of the total. In the private sector, drugs are supplied through import and local production. Import is done through registered importers, who are either wholesalers, or retailers, or both. In the public sector, the Central Medical Stores procure medicines through local tenders, by import through the department of supply and inspection, and through the Trading Corporation of Bangladesh. These medicines are distributed to eight medical colleges, to the Institute of Postgraduate Medicine and Research and other hospitals in big cities, and to reserve stores in each district. From the district reserve stores medicines are distributed to the periphery. The ratio of distribution to big cities and to the periphery is 8 : 1. This means that through the public sector hardly any medicine at all reaches the periphery. It is an irony that medicines are least available to those who most need them, and who consequently have to depend on private sources. This has resulted in the mushroom growth of private sale centres or shops, which can exercise free will in maintaining their stock according to demand.

This is why many useless or even harmful products are available in sufficient quantities, whereas the useful ones are not infrequently difficult to obtain. One must accept that in the developing countries, because of financial limitations, it is almost impossible to develop an effective drug supply system. Moreover, the public sector drug supply can hardly be strengthened, for the same reason. The vast majority will have to procure their own medicine through local prescription from semi-qualified or unqualified practitioners, or over the counter. It is therefore essential to see that no undesirable products are available in the country.

For effective supply, local pharmacies or rather shopkeepers may be utilized, with proper supervision by the pharmaceutical firms. The responsibility of the government cannot be denied. *If government legislation is properly enforced, and scientifically approved medicines are supplied while useless and harmful products disappear from the market, prescription habits are bound to change and false beliefs are bound to disappear.*

At present hardly any medical representatives from pharmaceutical firms go to the periphery. The commercial leaflets do not have cautionary notes that can be easily understood. Pharmaceutical firms have the responsibility of educating this group of people. In doing so the medical representatives must focus their attention on the periphery rather than only visiting senior consultants or specialists in big cities. Information literature should be so designed that the doses and side effects are easily understandable by the village prescribers and semi-educated or uneducated consumers.

Investment for research by the pharmaceutical companies, for the development of new products, is obviously essential. The present system of selection of subject and allocation of funds is company-based ; no doubt this has some advantages. Experience teaches us, however, that many of these allocations are avoidable and wasteful. Not uncommonly, a good proportion of the funds is spent on conferences, seminars and travel. It is suggested that a common fund for research — an international research fund — be created, out of contributions from pharmaceutical companies. This fund should be operated by a group of scientists who would define principles and objectives of research and its fields. It would also allocate funds on the basis of research proposals in keeping with guiding principles. This would help avoid duplication of effort and unnecessary expenditure, and would streamline research with the prospect of positive return.

Finally, it need hardly be emphasized that the principles laid down by the International Federation of Pharmaceutical Manufacturers Associations (IFPMA) for the supply of good medicine requires to be put into practice. It is a moral issue, and we all are committed to this for the welfare of the public.

If essential drugs are available to the third world poor, and if unnecessary and possibly harmful medicines are withdrawn from the market through legislation on the lines of the Bangladesh Drug Policy, this should cause no concern to pharmaceutical manufacturers. The market is so big that with the essential drugs alone they can do much better than many other industries. With ethical practice they can contribute to the health and welfare of the people for a better world today and tomorrow.

The objective of the WHO Action Programme for Essential Drugs is 'To ensure the regular supply to all people of safe and effective drugs of acceptable quality and lowest possible cost, in order to reach the overall objective of health for all by the year 2000 through health systems based on primary health care.' (World Health Organization, 1982).

It is a good sign that, through the IFPMA, the pharmaceutical industry has offered its full support to this programme (Peretz 1983). In so doing, the pharmaceutical industry will, we hope, see to the implementation of national drug policies, with necessary adjustments. **Inadequate knowledge or a superficial view of these policies may lead to confusion and miscalculation.** Peretz (1983) wrongly refers to antitoxins, which are in fact on our Essential Drug List in appropriate strength (Bangladesh Expert Committee for Drugs 1982).

In his editorial for *Tropical Doctor* Smith (1982) concludes with the following remarks : 'We have a long way to go before all third world patients get the medicines they need, but at least the problems are being identified and clarified, and they will be resolved in time.' We cannot agree more.

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LETTER TO THE EDITOR

From Mr SM Peretz

*International Federation of Pharmaceutical Manufacturers Associations
Nordstrasse 15, POB 328, CH—8035 Zurich, Switzerland.*

Sir, I have read Professor N. Islam's paper 'On a National Drug Policy for Bangladesh' with great interest and I am in full agreement with much of what he has to say. I am also particularly glad to hear that Bangladesh has reversed its policy and is now allowing imports of gas gangrene and tetanus antitoxins.

Could I be allowed to make a few further comments? Many of the eight multinational companies which Professor Islam mentions as dominating the local pharmaceutical market have a significant ownership by the Bangladesh Government itself. In any event, the main impact of this new legislation is on the 145 locally owned companies who have had 864 of their products banned.

It is, of course, a matter of opinion whether cough mixtures, throat lozenges, gripe water, and indigestion remedies are 'useless products'. There are certainly many health authorities who would not agree with this view.

I am also somewhat surprised that Professor Islam has not commented on the statement in my earlier paper (Peretz 1983) that the present drug policy continues to allow so-called Ayurvedic medicines (tonics, diarrhoea mixtures, laxatives, etc. of herbal origin), some of them containing up to 45% alcohol, to be freely sold.

The Bangladesh Government spends little of its admittedly limited resources in the public health sector (0.8% of GNP in 1976, compared with 1.2% in India in 1976 and 1.9% in Sri Lanka in 1975) (World Bank 1980). There is therefore very little money available in the public sector to provide drugs for 'the third world poor' in Bangladesh.

But surely it is a counsel of despair to suggest that this situation cannot be altered and that, to use Professor Islam's phrase, 'it is almost impossible to develop an effective drug supply system' or to strengthen 'the public sector drug supply'. Depriving the private sector of medicines is hardly likely to help the disadvantaged poor or to correct the situation (as described by Professor Islam) that 'medicines are least available to those who most need them' in Bangladesh at the present time.

Certainly this point of view is shared by other experts who have studied the Bangladesh scene. In this connection, it is of some significance that the two leading Scandinavian Government Aid agencies, in Denmark and Sweden, sent a highly qualified mission to Bangladesh in December 1982. This mission, *inter alia*, reported (DANIDA and SIDA 1983) that 'the new policy' is comprehensive, ambitious, but it does not indicate operational solutions nor does it indeed in itself assure attainment of the goal 'that the common people get essential drugs easily and at a cheap rate.'

22 August 1982

S M PERETZ

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Reprinted from Tropical Doctor January 1984 P. 7

LETTER TO THE EDITOR

National Drug Policy for Bangladesh
From Professor N. Islam
Chairman, Drugs Control Committee
Bangladesh

Sir, The letter of Mr. S. M. Peretz (January, page 7) has come to my attention.

Mr. Peretz unfortunately seems not to have grasped the impact of our National Durg Policy.

Gas gangrene and tetanus antitoxin are definitely in our durg list ; their inclusion is in no way a reversal of policy.

The "significant ownership" of the Bangladesh Government in multinational companies has never been denied ; rather the role of these companies in the field of durg manufacture in the country has been analysed in the policy of the Government. If this partnership with the Government could not make them immune from criticism, this shows the strength of the policy and the policy makers.

Mr. Peretz has expressed his sympathy for local companies "who have had 864 of their products banned". But these companies, Mr Peretz should realize, have taken this challenge with a good grace. After the promulgation of the drug policy local production has gone up, import of finished products has gone down, and the price of imported raw materials has shown a downward trend.

Cough mixtures, throat lozenges, gripe water and indigestion remedies are unquestionably luxury products which the developing countries cannot afford. It would be unfair to compare luxury goods with "luxury drugs" (Islam 1983) : the one shares money with the rich and the other takes away money from the poor.

Some of the remarks of Mr. Peretz are contradictory. He speaks of "limited resources in the health sector" in Bangladesh, while pleading for an unlimited number of useless products in the market. He has quoted a paragraph from a recent report (DANIDA and SIDA 1983) on essential drugs in Bangladesh which suits his purpose. I should like to quote another paragraph from the same report, under the heading "Assessment of the durg regulation and policy":

"The initiatives taken in the field of drugs by the Government have aroused considerable interest — not just in

Bangladesh, but internationally because the policy has been seen as a first implementation in practical politics of the World Health Organization's recommendation concerning essential drugs. It is quite evident that the policy contains major elements of the World Health Organization recommendations, notably concerning Good Manufacturing Practice, elimination of non-essential drugs from the market, and the objective of "Health For All by the Year 2000", inter alia by making essential drugs available for all of the people."

Finally, I would like to draw your readers' attention to the editorial in your esteemed journal (Smith 1984), which labels the action of the Government of Bangladesh as "surely the most commendable".

How can Mr Peretz disagree?

15 December 1983

N. ISLAM

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PRESCRIPTIONS AND PROFESSIONALS

M N DE MEMORIAL ORATION

On the Occasion of the 150th Anniversary of Calcutta Medical College, Calcutta, India, Jan. 29, 1985.

Mr. President, colleagues, ladies and gentlemen.

On my return from abroad while going through the heaps of letters awaiting my attention, the one which was a surprise and engaged my rapt attention was from the Calcutta Medical College ex-students' association.

I hurriedly passed through the letter and noted the contents. It was thrilling indeed. Prof. M. N. De was one of the illustrious teachers of the Institute within the campus of which I am physically present to-day. An oration after his name is unquestionably befitting and to have an opportunity to present the oration is no doubt most fortunate.

At this very moment ladies and gentleman, I see a man, short in stature, his head covered with a cap slowly entering the room, getting on to the dias and addressing the students as :

'Ladies and gentlemen, this morning I am going to present before you one of the commonest problems in the country, killing thousands and millions every year. This is malaria.'

This is the way he used to begin a topic. He would proceed slowly and understandably, occasionally interrupting his deliberation with questions. The hall would be packed to the capacity and there was no roll call. All would get their percentage but yet few or perhaps none would miss his class. That again was not at 10 a.m. but at 7 a.m.

In the bed side, he was truly a clinician with equal attention to all, good or bad, superior or inferior quality students. A man who was well-known for his mode of teaching and power of expression, a man who commanded respect without demanding it, a teacher so respected for his qualities of head and heart, would certainly expect great proficiency from his pupils. In my deliberation to-day, if I cannot prove worthy of it, I am sure my beloved teacher may be unhappy but would certainly forgive me from the invisible place he is occupying now.

Ladies and gentlemen,

You will perhaps agree that a vital part of our health budget is eaten up by the drug budget. This means not only spending precious foreign

exchange, but for some, it may mean giving up a food item or even selling the land. Medicines are double-edged sword. Correctly used they may offer a cure or some relief. Incorrectly used they can prove dangerous and may even kill instead of offering a cure.

To write a prescription is all too easy. It needs a pen and a paper. But the perspectives are more. The scope and jurisdiction of a prescription are far beyond these two. It encompasses all aspects of a society — geographic, socio-economic and political considerations. I have therefore chosen a subject which is engaging greater attention today than ever before.

SOME HEALTH AND SOCIO-ECONOMIC INDICATORS (World Health Statistics 1983)

Health is inseparably linked with socio-economic status of a country. A look at the health and socio-economic indicators of several countries (Table 1) will reveal that there are 31 least developed countries, having a population of 283 millions. Infant mortality in these LDCs is 160 and life expectancy at birth is 45 years. In the developed countries, these are 19 and 72 years respectively.

TABLE 1
HEALTH AND RELATED SOCIO-ECONOMIC INDICATORS
CALCULATED BY THE WHO

	Least Developed Countries	Developed Countries
Number of countries	31	37
Total population (Millions)	283	3,001
Reported infant mortality rate	160	19
Life expectancy (Years)	45	72
% Birth weight 2,500 grams or more	70	93
% Coverage by safe water supply	31	100
% Adult literacy rate	28	98
Population per Doctor	17,000	520
Population per Nurse	6,500	220
Population per Health Worker any type including TBA	2,400	130

Source : WHO 1981.

Adult literacy rate and safe water supply in the developed countries is 100%. In the LDCs, these are around 30%. Population per doctor is 17000 and per nurse, this is 7000 ; while the corresponding figures for developed countries are 520 and 220 respectively.

TABLE II
POPULATION AND EXPENDITURE ON MEDICINE
(In millions)

Country	Population	Expenditure for Medicine
Europe (Excluding USSR)	692.9	32.6
Asia (Excluding Japan)	2638.8	8.1
Africa	513	2.3
North America	392	16.9
South America	259	5.0

Table II shows the population and expenditure on medicine in several sub-continent. In Europe excluding USSR with the population of 692.9 million, the amount of expenditure on medicine is 32.6 million. In Asia excluding Japan on the other hand, the population is 2638.8 million, while the expenditure on medicine is only 8.1 million. This is one-fourth of that in Europe, while the population is four times greater.

TABLE III
CONSUMPTION OF PHARMACEUTICALS AS A PERCENTAGE OF GDP

'Developed' countries	0.74
Industrially less 'Developed' countries :	
American	0.83
Asian	0.78
Middle Eastern	0.42
African	0.79
Total	0.70
Total World	0.73

Source : OECD (1979).

By contrast the consumption of pharmaceuticals as a percentage of GDP, Asian industrially less developed countries will be found to have the same proportion as the developed countries. This is 0.78% and 0.74% respectively (Table III). The money spent for medicine, is therefore, out of proportion to the financial capacity in these less developed countries.

DRUGS IN THE THIRD WORLD

The use of drugs has run wild in the third world. In most developing countries, drugs consume great proportion of health budget. While in the developed countries this is 8-10% ; in India this is 19%, in Thailand 30%, and in Bangladesh 64% (Agarwal, 1978).

The number of drugs available in many developing countries is many times more than in the developed ones. There are 15000 drugs marketed in India (Lall, 1975), 4500 in Bangladesh (Islam, 1984) and 17000 in Argentina (Chudnovsky, 1979). In Nepal, 733 of 2000 drugs available were tonics and vitamins (Melrose, 1982).

Most of these drugs in the third world consist of a combination of antibiotic with antibiotic, antibiotic with vitamins, vitamins and vitamins, various tonics, cough mixtures, digestive enzymes etc. At times these combinations are amusing indeed. Neither the dosage of the ingredient nor the ingredient itself can justify the combination. Heptuna Plus in Bangladesh, for example, consists of 10 ingredients of which only two are necessary (iron and folic acid) and others are not. The price for 100 capsule is Taka 54. While more effective combination Folfetab has folic acid 2 mg as against subminimal dose of 1 mg in Heptuna Plus and costs only Taka 7, G-iron and folic acid cost Taka 5, for the same quantity. Yet Heptuna Plus is popular.

If, at this stage, we look at some of the prestige products of the multinational companies in Bangladesh, it will be evident that most popular drugs are not necessarily most essential or the safer ones. The best sellers in the country have been the least required and even at times harmful ones. Digiplex, a popular digestive tonic ; Becosule, a multivitamin preparation ; clioquinol hydroxyquinoline preparations like Mexaform, Enterovioform and Embequine till recently used to adorn most of the prescriptions by the popular physicians and yet the most essential remedies like antileprosy drugs, anti-infective agents would not be available in sufficient quantities. The pharmaceutical companies would be less interested to produce those and prescribers would not put

forward a demand. Consumers have virtually nothing to say. They depend on their luck, believe in their prescribers and faithfully take whatever is written for them, right or wrong.

CATEGORIES OF PRACTITIONERS

There are to-day approximately 10,000 qualified doctors in Bangladesh. Of them almost three thousand are outside the country, in quest of fortune and future and the population is 95 million. 80-90% of the qualified doctors are located in large cities, concentrated in the capitals and port cities. The mal-distribution of the limited man power has made the situation far worse than what it should be. Consequently, many categories of practitioners have emerged. They range from 'National Doctors', 'Gram Doctors', to other non qualified or little qualified practitioners. Some of them have undergone only short period of training and others have no training at all.

The physicians in the developing countries may be categorized into several groups. There are first class physicians who are acquainted with the recent developments, read journals, both national and foreign, spend money for books and keep contact with their colleagues. There are again some physicians who have never opened the text book after passing, not to speak of reading scientific journals. In between, there are those who partly, if at all, update themselves by attending some seminars or rather more commonly annual conferences, organized by the national associations. There is a group, not quite so small, who almost solely depend on prescriptions from seniors.

There is yet another group, usually fresh from the developed countries acquainted with the sophisticated investigations, expensive equipments and battery of tests.

Developing countries have therefore a complex situation as far as drugs and prescriptions are concerned. Both are governed by free will. No drug is a prescription drug and prescription is anybody's business from the updated professionals to uneducated practitioners.

FACTORS INFLUENCING PRESCRIPTIONS

Several factors may influence prescription writing. Some of these are discussed in some details below :

Promotional Activities

Drug promotion is one of the powerful weapons for educating the target group of practitioners, who are either occupying high positions in an institution, or popular and respectable in the society. 20% of the sales by many companies are spent on drug promotion.

While 5-10% is spent on research and development and of these only 3-5% is spent on research on tropical diseases. As much as 20% is allotted for drug promotion. More attention is given to the promotional activities in the developing countries than in the developed ones. In Bangladesh there is one representative for 7 doctors, in Brazil and Nepal, this is 1 : 3. while in Britain, this 1 : 18.

Double Standard

The commercial information communicated to the prescribers and the consumers are different from scientific information in many ways.

The information literatures produced are attractively designed, the contents are full of forceful claims, not uncommonly having emotional link. Person to person contact through smart young representatives and their follow up is a phenomenon not available with scientific informations through literatures and journals. This contact has been found to be effective in some scientifically conducted studies (Avorn, Stephen & Soumerai, 1983). Various other devices utilized for promotional activities go far beyond this.

In my own experience, I see a medical representative sitting in my chamber with my patients for hours observing each prescription going out and entering the room and at last offering profuse thanks even if one of his company brand name has been prescribed by me. Alternatively he may place small gifts (which may not always be small) with the inscription of brand name on it or name of a company making a modest request to write at least one or two prescriptions for the product, which he says would be enough for his claim for superiority of that particular new brand. One must admit that this has some influence in our

prescription habit. After all we are human beings.

Unfortunately few countries have control over the promotional literature and information supplied by drug manufacturers about their products.

Drugs which have been withdrawn or are not authorized for sale in the country of origin are marketed in the developing countries. Indications and contra-indications are governed in the country of origin by the regulatory agency, while in many developing countries having no such mechanism, a completely different picture is produced.

In Africa and Asia, discrepancy in information has been documented by Silverman, Lee & Lydecker (1982).

Claims for chloramphenicol, digestive enzymes like digiplex and anabolic steroid in the developing countries show how inconsistent the pharmaceutical companies can be in their pursuit of professional motives.

Double standard of drug information and promotion is a serious threat to the developing nations. To cite a few of those, we would like to select chloramphenicol, an antibiotic and winstrol, an anabolic steroid. In the United States, indications of chloramphenicol are Typhoid fever, Rocky mountain spotted fever and H. influenzae infection. In the United Kingdom, the same indications are given. In Indonesia, there are additional indications viz. pneumonia, whooping cough and dysentery. Curiously enough blood dyscrasia as a contraindication is not mentioned at all. Products Warning in PDR for Chloramphenicol is emphasized in italics. It must not be used in trivial infections or where it is not indicated as in cold, influenza, or throat infection or as prophylactic to prevent bacterial infections (PDR, 1984). Similar warnings are issued in the U.K. In Indonesia, Philipines, Malaysia and Central America, the information given are greatly different. The indications given are substantially broad and the contraindications are fewer. In authoritative text books like Martindale and publications like B.N.F. (1984), the contraindications are clearly written. Yet in the developing countries the pharmaceutical companies are bold enough to ignore these established facts for their professional interest.

A comparison of recommended uses for Winstrol, an anabolic steroid on product packaging in USA and Malaysia, will illustrate yet another evidence of double standard promotional activities of the powerful pharmaceutical companies. They mis-direct the limited funds of the poor who need food and not the hormones. The side effects are not negligible. They may range from irreparable masculinization in

females, stunted growth due to premature closure of epiphysis, even the development of liver cancer (BNF, 1984). In March 1982, Ciba-Geigy had to order withdrawal of Dianabol, a similar product from the market worldwide and recommended destruction of the available stock because of side effects.

The warning against clioquinol first originated in Japan in late 1950, when SMON (subacute myelo-optic neuropathy) was described, eventually more than 10,000 cases were reported from that country. Twenty years later when the Japanese govt. banned the clioquinol products, there was an uproar.

The drug is now recognized as the cause of the dreadful disease and is prohibited in many countries of the world. The time lag between the detection of the dangerous side effects and deletion from the list of approved drugs is obviously due to forceful promotional activities of the company, concealing facts from the profession and this happens with many drugs.

It took almost 20 years for Ciba-Geigy to announce their intention to withdraw clioquinol from the world market during the next few years (Lancet, 1982). In India, a preparation of the same company containing amidopyrin was on sale in 1982 (Yudkin, 1984) yet for the last 15 years amidopyrine has been known to cause agranulocytosis and the drug was withdrawn from the USA, UK and Sweden in 1960.

Commercial claim through press, radio and television, does influence prescribing pattern. These not only influence the popular demand but also encourage various categories of practitioners in writing prescriptions. In the developed countries, the law governs the manufacturers over what they say about their product and what they should not say. In the United States, indications and claims of efficacy is to be supported by FDA on substantial scientific evidence. In the developing countries, on the other hand, claims are made on the basis of duration of a product being on the market, the popularity among physicians, most important of which is the prescription by the seniors at top positions. Here, there is no restriction on prescribing. Regulations applicable in the developed countries are of no consequence to them. A large number of publications are pouring in the developed as well as in the developing countries entirely financed through advertisement, so that they can be distributed free. Even the publication like PDR, MIMS (UK) contain informations which are not accepted by internationally respected publications like AMA Drugs Evaluations, the Pharmaceutical Basis of Therapeutics by Goodman & Gilman and Martindale extra

Pharmacopoea.

Even in the field of antibiotic use the double standard is very much evident. Worldwide misuse and overuse of antibiotics — as 'cure-all', for the common cold, as substitute for sanitation, as multi-drug, over the counter remedies — are speeding up the appearance of resistant strains. Today, hundreds of thousands of people succumb to infections that no longer respond to antibiotics. In Central America, people die of typhoid fever because chloramphenicol proves ineffective. In the USA, cancer patients respond to chemotherapy, but die of resistant infection. Throughout the world, children suffer from *H. influenzae* meningitis, now resistant to ampicillin and other drugs. Responding to this challenge there have been changes in the antibiotic use patterns in the developed countries. Fixed combination antibiotics are no longer listed by the FDA or in the BNF. Antibiotic combinations continue to be in rampant use in developing countries.

Kunin, Tupasi and Craig (1973) observed that ready availability of antibiotics combined with powerful promotional activities of the pharmaceutical industry contribute to the prescribing habit of physicians. This has resulted in inappropriate prescription or over-prescription even in developed countries. Kunin and his colleagues have pleaded for an effective medical education programme beginning from the undergraduate courses and continuing throughout the whole period of study. The situation is many more times worse in the developing countries where there is no restriction on drug sales.

The drug efficacy study set up for FDA expert panels testified that fixed ratio combinations were formulated arbitrarily by the manufacturer and not to meet the need of individual patient. Administering the two drugs in combination often made it impossible to set up an appropriate dosage schedule for each component. The move against fixed drug combinations was bitterly opposed by the industrial circles (Silverman, Lee and Lydecker, 1982). Two powerful pharmaceuticals, Upjohn and Squibb, led anti-FDA movement. Upjohn was the producer of Albamycin T (tetracycline and novobiocin) and Squibb was that of Mysteclin F (tetracycline and amphotericin) marketed in Bangladesh as Resteclin. The combination antibiotics were removed from USA markets after prolonged dispute, when the Govt. finally gave verdict in favour of FDA. Such expensive combinations continue to be marketed widely in developing countries (Silverman, Lee and Lydecker 1982), though the following drawbacks of such combination are now recognized :

Drug interaction
Dosage difficulty
Identity in adverse reaction
Economy
Development of resistance
Unnecessary use
(AMA Drug Evaluation, 1980)

Combination products are no longer listed in American Physician Drug Reference or in the BNF (1984). It is unfortunate that in the developing countries several combinations are still popular. These are :

Penicillin and Streptomycin
Ampicillin and Cloxacillin
Chloramphenicol and Streptomycin
Chloramphenicol and Tetracycline.

From the discussion so far it is evident that *prescribing in the developing countries is distinctly different from that in the developed world. In the latter this is restricted to qualified practitioners while in the former it is open to all.* Drugs in the developed countries are different from all other commodities, while in the developing countries this is an open market. There is nothing called 'Prescription products', all are available over the counter. Drug industry uses this anomalous situation to their advantage. Products proliferate and flood the market. Many of these are unnecessary, useless or even harmful.

Is a prescription always necessary?

Millions of prescriptions are written daily with the purpose of giving relief to the sufferers. These are intended to be a cure for a curable disease, a relief or consolation for the incurables and the dying. If a prescription is meant for offering relief, does this always happen? Or on the contrary, does this increase the economic burden and add to the suffering? It is therefore a moral and ethical duty of all those who prescribe to know what they are prescribing, for whom and for what purpose. All that a sufferer wants from the prescriber is relief of his malady. Does that always mean prescribing medicines? A few examples are worth citing here. A man of 70, father of a senior executive was brought to me for weakness and insomnia for the previous two years. The prescriptions he had during the time were almost a dozen. Each one contained some sleeping pills with some injections weekly, bi-weekly or

on alternate days and some fashionable tonics. He and his son both felt that the medicines did him good during the first few days or for a week or so. Subsequently these became ineffective. Careful history and physical examination revealed nothing abnormal. All previous investigations were noncontributory. On questioning he admitted that he slept about one hour after lunch and from 10.00 p. m. to 3.00 a.m. I calculated the number of hours before him and told him in clear terms that the number of hours he slept was more than what he needed. A man of his age needed not more than three hours' sleep, whereas, he in fact slept for six hours. All that is needed, I emphasized, was adequate rest. I also told him, if sleep were essential the existence of priest to politician would have been in peril. What was essential was physical and mental rest for certain period. An undisturbed sleep is a perfect form of physical and mental rest. The man went back hale and hearty. About a month later his son came to me. This time not with his father, but a different patient. On enquiry he told me that since he left my office he never took any medicine for sleep nor did he complain of sleeplessness.

Constipation is a common complaint. Serious misconception centres around constipation among the lay public and professionals. Manufacturers exploit the situation. Advertisements are published in the dailies and weeklies. A weekly 'washout of toxins' by purgatives is strongly recommended for sound health and sound mind. The lay public easily fall prey to this. They become conscious of their constipation and start using purgatives. A vicious cycle of purgative — loose motion — constipation — purgative is thus created. The patient becomes dependent on purgatives and side effects of long term use develop, yet the popularity of purgatives continues to remain almost unaffected.

It is difficult to define constipation. It often reflects the attitude of the patient. One may have sufficient formed stools and yet feel unhappy. On the other hand one may be satisfied with two to three stools per week. Conveniently, a patient may be considered constipated if defaecation is unduly delayed for days and stools become hard, dry and difficult to pass. Constipation is frequently related to physical inactivity and prolonged bed rest. Ignoring the urge of defaecation for occupational or recreational activities may destroy the reflex and result in constipation. Inadequate fluid, highly refined low fibre diet and many drugs may cause constipation. Sudden change of bowel habit without any accountable cause needs careful investigation. A careful history and detailed examination are necessary.

A simple look at nature is enough to explain the relationship

between bowel movement and the nature of diet. A herbivorous animal rarely suffers from constipation. And yet without due attention to the root cause, purgatives are frequently prescribed. Sufficient roughage, adequate fibrous diet are all that is necessary for satisfactory bowel movement. Isphagul 2-3 teaspoonfuls at bed time is enough in most cases to initiate regular bowel movement. It is cheap and side effects are practically nil. Yet, we hesitate to prescribe it because it is neither a medicine nor has an attractive container. Talking to a patient with constipation is not as simple as this description. He has for long developed a habit with faith and conviction. These have to be removed by scientific explanation, friendly attitude and firm reassurance. All these require time.'

While writing a prescription, it is our moral duty to ask ourselves : does the patient really need it?

RATIONALIZING PRESCRIPTIONS

The identification of a limited number of drugs of proven effectiveness and quality and availability at reasonable as well as affordable cost is a significant step in promoting basic health care in developing countries. This, in fact, is the only practical approach for providing drug need with extremely limited resources. WHO list of essential drugs is based on this concept.

So long the drugs are available in the market, they continue to be sold unrestricted. Drugs without established therapeutic utility are too often prescribed than those with proven effectiveness. Potentially toxic drugs are advised for minor conditions which can be managed with simpler and safer medicines. Polypharmacy is common without any justification whatsoever. Economy in prescribing is hardly ever a consideration. So long pharmaceutical products bearing the name 'drugs' are available in the market, they shall continue to be sold in the developing countries. There are not enough doctors to prescribe, not enough pharmacists to dispense, and not enough law enforcing authority to supervise. Literacy rate precludes the utility of small print warnings in promotional literatures of pharmaceutical industries.

The only way to compromise with so many odds is to take away bad medicine from the people in order to give them good ones. This is what our N.D.P. has done. Based on the principles of essential drugs concept of the WHO, the policy has drawn out list of essential drugs.

It has defined useless and harmful products available in the market

on the basis of certain guidelines (Islam, 1984). As Jorn Korn (1984) puts it, 'Third world is actually governed exclusively by the profit motive of merciless multinationals.' But, after all, the presumption and requisition of drugs is totally in the hands of doctors. The pharmaceutical companies are fully aware of the situation and engage all their energies in promoting their products in several different ways. Consequently drugs consume a larger proportion of health care budget in the developing countries.

Experts agreed that about 200 drugs and vaccines would be enough for good medical practice (WHO 1977). In spite of initial opposition, bitter criticism and even indignation from some quarters, the concept has stood the test of time and now the list after modification during subsequent years still remains limited to 220 essential drugs and vaccines (WHO 1983). The list was intended to be modified according to the needs and resources of a country or countries. By now, more than 80 developing countries have adapted the WHO model list to their requirement (Lauridsen, 1984).

Based on this principle the Government of Bangladesh announced the new drug policy in June 1982. Before the introduction of the policy, most needed drugs were not available in sufficient quantities, even though there were as many as 4500 brand products available in the market. Out of the 4500 registered brand products available in the country, about 1/3rd was useless, unnecessary or even harmful. Bangladesh pharmaceutical market used to be dominated by eight multinational companies who manufactured 75% of all products (Islam, 1984).

The policy aimed at safeguarding the interest of the national companies and protecting national economy. A list of 150 essential drugs with an additional 100 superspeciality drugs was prepared (Islam Committee Report, 1982). After the promulgation of the policy the value of imported drugs fell by 4% from Tk. 24.35 crores in 1981 to 23.38 in 1982 and then by 15% to 19.91 in 1983. This reduction was due to the ban on harmful and useless items of medicine and increased home production of essential and useful drugs. Before the drug ordinance, multinationals manufactured twelve essential drugs worth Tk 11.6 crores for village level health workers, while the figure for the national companies was Tk. 22.8 crore (The Bangladesh unit of currency is the Taka : 1 crore = 10 million). After the ordinance during 1983, these figures were Tk. 11.3 and 36.9 crore, respectively. The multinationals used to produce an additional 33 essential drugs worth Tk. 12.1 crore,

while the corresponding figure for the national companies was 5.9. During 1983 the value rose to 17.4 for multinationals and 51.1 for the nationals. The percentage shares, in value terms of the 45 essential drugs to be used at the primary health care level, used to be 45% multinational and 55% national. During 1983 they were 25% and 75%, respectively. The multinationals were more involved than the nationals in the production of useless or even harmful drugs before the ordinance because they were responsible for manufacture of 75% of total products whereas only 25% were produced by the national companies (Islam, 1984).

The production of essential drugs has increased considerably in the country. In 1982, it was worth Tk. 990 million (about US \$ 40 million) whereas it rose to the level of Tk. 1,360 million (about US \$ 55 million) during 1983, an increase of 136% (Mostafa, 1984).

EDUCATION

Incomplete or outdated knowledge and unnecessary costly prescriptions are frequent in day to day practice (Hiatt, 1975). Ineffective drugs are not uncommonly used (Temin, 1980), combination as well as doses are not uncommonly irrational (Melmon and Blaschke 1983).

Present day practice and training in pharmacology is isolated from clinical teaching. There is no separate department of therapeutics in most of the places. As a preclinical subject, it covers 210 hours in total 2000 hours in undergraduate teaching. A teacher in pharmacology has no role in therapeutic decisions, students have no exposure to clinical pharmacology and clinical administrative pharmacy (Bari, 1985, Personal Communication).

The hours allotted are limited to class-rooms and the teachers are far away from clinical contact or field exposure. Teaching materials consist of text books describing almost all available drugs and ingredients in the field of pharmacology. There is very little or no therapeutic consideration in the context of national economy and health. Students become aware of or commit to memory many indications and contraindications of a host of drugs. This reminds us of once upon a time respected largest volume of medical curriculum — Grays Anatomy, comprising about 1600 pages with many of its contents unrelated to future practice of medicine.

The same applies to many of the text books of pharmacology read by our students today. Arteries, nerves, fasciae and their subdivisions in

Grays Anatomy may be equated with various products, ranging from chemotherapeutic agents to antibiotics. Grays anatomy now adorns the book-shelf of a library or of a researcher in Anatomy and does not add to the burden of medical students except possibly in some outdated places. This is high time that pharmacology should undergo the same morphological and functional changes. Time and again, it has been stated that the concept of essential drugs is essential for developing nations. *It is essential to provide essential drugs, essentially for the benefit of the maximum number of people with minimum cost. The plea for luxury drugs in the developing countries is both mythical and mischievous. It would be unfair to compare luxury goods with luxury drugs — one shares money with the rich and the other makes the poor, poorer (Islam, 1983).*

In our action programme, physicians and all other categories of health workers are obviously important partners. The prescribing pattern is a vicious cycle. Prescriptions from the top; the qualified physician and the respected person in the profession in practice, encourage similar prescriptions from the rest. This increases the demand of a product in the market. Demand encourages supply both from known and unknown sources — legal or illegal. Availability of the products keeps the market going. All products in most developing countries are available as easily as any food item. Enactment of law with restriction of products can only be partially successful unless the prescriptions are proper, judicious and adapted to the need and resources of persons concerned.

Bangladesh experience teaches us that we can improve the unhappy situation in the drug field by introduction of National Drug Policy, but *so long the prescriptions remain irrational, the irrational products continue to exist.* These are sold not over the counter but under it. Drug use is no less important than the selection of drugs. To promote rational prescribing, drug information has to reach all levels of health care from the regulatory authorities to the consumers. Education at the primary health care level is particularly important for consumers as self-medication is so common at this level (Helling—Borda, 1983). In Bangladesh context, this is applicable at all levels as self-medication and prescription by back-dated, half qualified or unqualified practitioners are quite common.

Several seminars and workshops involving teachers and students have, in our experience, proved useful and effective in disseminating knowledge and concept of essential drugs and silencing the orthodox antagonists among teachers. They could not play the dual role of

remaining silent observer in the seminar and becoming critical in the class-room or ward clinic.

Avorn, and Soumerai (1983) claim that highly motivated and trained doctors of pharmacy can improve the quality of prescriptions by practising physicians. The authors observe that printed materials alone was less effective than person to person contact. Drug manufacturers are aware that this is more effective and they would not continue their detailing activity if it were not cost-effective (Melmon and Blaschke, 1983). Universities specially schools of medicine and pharmacy, economics and other social sciences should play an important role in introducing and promoting essential drug concept (Helling Borda, 1983).

CONCLUSION

In a prescription, the prescriber, the consumer and the pharmaceutical industry are all involved. Ill-adjusted, they can create a vicious cycle. Unless this is challenged and broken, it goes on and on. Education of the prescribers is one of the most powerful weapons in breaking this cycle. The industry is no doubt a connecting link but is weaker, at least scientifically, than the prescriber.

Over the years, the atmosphere has changed and changed for the better. The indignation and powerful opposition by the pharmaceutical industries is now on the wane. IFPMA has offered all its cooperation to WHO for implementation of essential drug programme. It has offered to supply essential drugs through its members at favourable prices. The federation also anticipate launching pilot projects in some least developed countries.

In the words of Smith (1984), 'The tide of business self-interest is turning albeit slowly. If more governments in poorer countries can follow some of the leads now being taken by the few, the world's poor will one day get the medicines they need.'

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FINGER METHOD FOR EXAMINING PHARYNX

For reasons more than one it becomes necessary for practising physicians in the developing countries to adapt techniques which may be extremely useful.

One such technique is likely to be of great interest for the practising physicians under adverse situations.

Examination of the oral cavity, tongue, tonsils and pharynx is essential in any physical examination of a patient irrespective of age group.

This communication is intended to describe an innovative procedure for examining this area without a tongue depressor.

METHOD

Index finger or occasionally index and middle finger used in place of a tongue depressor. Patients are asked to open the mouth say 'ah'. If a clear view is not obtained the patient is asked to place his finger over his tongue and press it in a way it is done by a tongue depressor. For infant and young children one of the parents, preferably mother can use his or her finger quite conveniently.

DISCUSSION

For some adult it is not difficult to have a clear view of all these structures by asking them to say 'ah', In the majority, however, this is not possible without the help of a tongue depressor. Children in general and some adults become apprehensive when they see the appliance. Others cannot just tolerate. Though the number of patients on the latter group may not be very many they do at times create problems.

Besides, there are technical disadvantages of using tongue depressor. It has to be cleaned and preferably warmed at least during winter months before each use. Cleanliness is really difficult to obtain in our over crowded hospital practice and virtually impossible in our outpatient departments.

A busy general practitioner would avoid thoroughly examining the throat rather than using a tongue depressor. It takes away his limited time available for each patient.

All these difficulties and drawbacks can be avoided by using one's own index finger or at times both index and middle finger in place of tongue depressor.

There are several advantages of this procedure:

- i. No expense is involved
- ii. No warming up is necessary
- iii. No apprehension of an appliance
- iv. No transfer of infection from one person to another
- v. No possibility of inflicting any injury or aggravating a painful condition.
- vi. No time is lost in preparation.

Many would agree that apprehension is a major hindrance in examining children and more so in examining their throat. Use of fingers in these cases has a unique advantage.

I have been using this method for many years and found it extremely useful and acceptable virtually without any exception. Difficulties in the process of examination have prompted me to discover this new technique.

One may say disposable tongue depressor can remove many of the disadvantages associated with conventional one. Use of disposable appliances in health care delivery is no doubt an advance for practical procedure in medicine. This has not been introduced in many developing countries for many reasons not the least of which is economic. Besides, disposable one is also an appliance. It cannot remove apprehension the major hinderance stated above and some other drawbacks listed above.

MEDICINE AND SOCIAL DEVELOPMENT

The revolutions in the field of treatment have brought many diseases under control or cure. Tuberculosis, malaria, peptic ulcer, epilepsy, diabetes, heart diseases, hypertension, many infectious diseases and even some cancers have met with revolution in the therapeutic field. Future will undoubtedly explore many newer drugs and technology to strengthen our hands in our fight against diseases.

In the field of diagnosis high technological advances have developed to the extent of exploitation/revolution. Sophisticated equipments like CT-Scan and NMR (MRI) are so expensive and the number of diseases that can be diagnosed by these means and effectively treated compared to the huge investment is a matter for serious consideration. This is worse for the developing countries where total health budget is much less than desired for the bare minimum facilities.

In the world today a wide gap exists between the haves and the have-nots. To cite a few examples in most developing countries 200 per thousand live births die during their first year while the figure for the industrialised countries lies between 10 and 20. Women in many developing countries have 200 times greater risk of dying during pregnancy and child birth than women in developed countries. About 1000 million people live in the vicious circle of poverty, malnutrition, disease and disability. While the average life expectancy is over 70 years in some countries this is around 50 in others.

Technological Advances and Ethical Aspect

Transplantation of heart was at the initial stage considered to be epoch-making answer to the problem of damaged heart. Over the years the sad experience of rejection and fatal outcome compelled a decision to abandon this heroic attempt in some centres of the world.

Time has shown that heart transplant is not a good medicine because it cannot fulfil the expectation of overcoming premature death and suffering from some heart diseases. In terms of money it deprives millions from cure-remedy for the sake of one incurable problem.

Kidney transplants are more successful. Malborn team claimed 80% five years survival rate after kidney transplantation but this is not all. About 20% of transplanted kidney do not even start functioning. One-third of all transplanted kidney are rejected by the end of first year.

Kidneys taken from the living relatives fare well but question has been raised whether it is ethical to have an irreplaceable part from the healthy donor. Recipients of transplant are permanently on drugs to prevent rejection. These on the other hand increase their susceptibility to infection and even to cancer. While a few can enjoy a period of well being others find their lives burdensome with drugs and machine.

It is indeed an ethical issue whether we should exhaust whatever little health budget we have for saving a few lives or rather prolonging life artificially with inevitable fatal outcome or should divert that money for the cure of curable diseases which kill millions of children and adults in the third world today (Gould, 1987).

Third world Disease pattern

The most widespread diseases in developing countries are intestinal parasitic infections, diarrhoeal diseases, poliomyelitis, typhoid and cholera. These are all transmitted by human faeces. The other major group consists of the airborne diseases, for example, tuberculosis, pneumonia, diphtheria, bronchitis, whooping cough, meningitis, influenza, measles and chickenpox. The third major cause of death, particularly in children, is malnutrition (Muller, 1982). Malaria, schistosomiasis, sleeping sickness, leishmaniasis, filariasis and leprosy may well be added to the list as other major diseases in the developing world.

The few detailed studies that are available suggest that many recurrent illnesses disrupt normal activities for roughly one-tenth of people's time in most developing countries with acute episodes. These illnesses disrupt economic activity, often at critical times such as planting and harvesting seasons. Many chronic debilitating diseases impair people's ability to concentrate, adults' productivity and students' ability to learn (World Bank, 1975).

Fortunately most of these diseases in the Third World countries are either preventable or curable. Infectious diseases can be reduced through early diagnosis and treatment, proper hygiene and immunization. Improvement in water supply and disposal of waste can control faecally transmitted diseases. Global eradication of smallpox is a story of resounding success. Immunization against six major diseases viz. diphtheria, measles, whooping cough, tetanus, tuberculosis and poliomyelitis have now been accepted as major health issue. By now immunization coverage has reached 50%. It aims at immunizing all

children by the year 1990 at a cost of US \$ 5 per child. Major boost to rational immunization effort has come from political commitment and community involvement with the UNICEF playing the central role (Williams, 1988).

Alternative medicine

When there was only a handful of drugs to treat the diseases and life could be saved by removing an infected organ or a limb the strongest weapon the doctors had in possession was confidence and hope which he could instil in his patients and their families. His skill lay in his helpful attitude and generation of hope and confidence. His personality, mode of talking, power of listening — all helped alleviation of sufferings or cure of diseases. Patients of today miss this from the busy, modern scientific doctors. This has led to the revival of alternative or traditional medicine with a tradition of thousands of years.

Practitioners in alternative or traditional medicinal practice in the good old fashion with sympathy and understanding. They devote time in listening to the ailments and suggesting remedies. Besides, their personality and popularity put them in advantageous position.

Faith healing is still one of the most popular methods for medical care. Its success lies upon the belief in some supernatural power. Prayer is the cheapest and the most ancient means of medical care. Most faith healing hour involves a little more than simple prayer. There are recognised spiritual leaders in some societies who are popularly known to be gifted with the power of healing.

Several good reasons for alternative medicines exist :

- * Modern medicine can cure many, alleviate others and yet there are a host of diseases for which it cannot offer anything.
- * Failures in modern medicine have created interest in people for alternative medicine. Even high technology medicine has resulted in disappointments in some places e.g. cardiac transplantation.
- * There are people with a great tendency to believe in magic and supernaturals. They seek comfort upon faith and abandon reasons.

Primary health care

During the last decade health goal and health priority have been redefined. The Alma-Ata declaration defines primary health care as essential health care based on practical, scientifically sound and socially

acceptable methods and technology make universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

It is the first level of contact of individuals, the family and community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process (World Health Forum, 1987).

Principles of Primary Health Care

- * Education concerning prevailing health problems and methods of preventing and controlling them ;
- * Promotion of food supply and proper nutrition ;
- * An adequate supply of safe water and basic sanitation
- * Maternal and child health care, including family planning ;
- * Immunization against the major infectious diseases ;
- * Prevention and control of locally endemic diseases ;
- * Appropriate treatment of common diseases and injuries ; and
- * Provision of essential drugs (World Health Forum, 1987).

Interdependence of social relations, development of social medicines and community health efforts came to realization after the second world war. Decentralization of curative services and appreciation of preventive measure such as immunization and health education gradually received attention. The key role that the environment can play was then recognized ; food, housing, water, sanitation and education were all recognized as prerequisites for health.

It has been emphasised that :

“Health is multisectoral responsibility, inseparably linked to economic, social and cultural development. Equity is the guiding principle in the intersectoral action for health. The strategies of sectors other than the health sector clearly have a major role to play in improving the well-being of these people. The achievement of health for all depends a great deal on an egalitarian approach in each sectoral programme including agriculture, housing, water sanitation, and education” (Senghor, 1987).

The Alma-Ata declaration on primary health care is now 10 years

old. The declaration endorses and emphasises people's right to participation in matters related to their own health.

To quote Mahler

All of us, men and women everywhere who are not only the objects of development but are in fact the very subjects of that development and quite particularly of health development ; men and women active in education, agriculture, industry, information and so many other different walks of life, who understand the mutually beneficial effects of development, in harmony with the protection and promotion of good health.

People everywhere, including top-level political and spiritual leaders, from north and south, east and west, are acknowledging over and above all their differences that health is good for all people and essential for human progress ; that there is both economic value and social justice in health. Surely we must all recognise that health is not everything, but that there is nothing without health. In the interest of the human race there must be Health For All and All For Health (Mahler, 1988).

Conclusion

Medicine today is something far beyond the concept of a pill for an ill. It embraces the man and his environment. health is a major pathway to human development. Advances in health have an instrumental value in the developmental process through their impact on social and economic condition (Ramalingashwami, 1975). Medicine constitutes only a small fragment of health which can not be attained in isolation. Health and social development being inseparable WHO definition of health as physical, mental and social well-being and not mere absence of diseases hold as strongly today as ever before.

To quote Mahler (1978)

"Thirty years ago modern health technology had just awakened and was full of promise. Since then, its expansion has surpassed all dreams, only to become a nightmare. For, it has become oversophisticated and overcostly. It is dictating our

health policies unwisely ; and what is useful is being applied to too few. Based on these technologies, a huge medical industry has grown up with powerful vested interest of its own. Like the sorcerer's apprentice, we have lost control — social control over healthy technology. The slave of our imagination has become the master of our creativity. We must now learn to control it again and use it wisely, in the struggle for health freedom. This struggle is important for all countries ; for developing countries it is crucial.”

State of health is inseparably linked with food, shelter and education not with medicine alone. We cannot afford to lose social control over health technology.

Development after all is a holistic process. Development leads to health ; and health leads to development (Mahler, 1980). Socio-economic development policy and health development policy reinforce one another. Economic situation of a country has direct influence on how much can be spent on health. But a deteriorating economic circumstances should not be used as an excuse for abandoning the aim of better health for everybody. Without health there can be no development.

Referencs : Reprinted from Proceedings of the Seventeenth International Conference on the Unity of the Sciences Los Angeles, 1983 P.649

UTILISING UNDERUTILISED MANPOWER FOR PHC

SUMMARY

In developing countries there is widening gap between the need and resources. Imams of Mosque, Monks, Priests and primary school teachers constitute an underutilised and yet respected vast group in the community — both urban and rural. It is proposed to utilize these persons in their places of work in rural areas for various health care program e.g. EPI, population control, nutrition, sanitation and application of 12 essential drugs for PHC as defined by WHO.

Suitable training can be provided by available qualified manpower at appropriate level. The program shall be self-supporting. Those who can afford shall pay and the needy shall receive help. A token amount shall be available to the health providers.

The program avoids construction and maintenance cost by utilising existing spaces in religious centres and primary schools outside normal use hours. Besides these facilities being available all over are within the reach of the entire community. The program is now at work in Bangladesh. The response has been encouraging.

INTRODUCTION

Bangladesh is one of the poorest countries of the world with a population of 106 million. Total number of qualified doctors is 16,000. There is one doctor per 6,500 population. The total number of hospital beds is 30,000.

The available facilities are again distributed in inverse proportion. For example, 90% of the doctors are either employed or located in urban areas while 85% of the population are rural. Of the available hospital beds only 8,200 are at Upazila level and below.

Evidently vast majority of our people manage to have the least of the available meagre resources for their health-care. In this communication a proposal has been made for utilization of alternative sources for primary health care so that health facilities can be extended to the largest number within affordable means.

RESOURCES AVAILABLE

There are eight medical colleges, one postgraduate institute and five specialised institutes. Medical Colleges are more or less uniformly distributed throughout the country while the postgraduate institute and the other specialised institutes are all located in Dhaka. There is one hospital in each district totalling sixty four and 356 Upazila Health Complexes having provision for limited number of indoor beds and one physician, one surgeon and one gynaecologist in each Health and Family Welfare Centres (HFWC) numbering 2584 are located at grassroot level and serve as out-patient clinics.

It is estimated that not more than 30% of the population has access to modern medicine. In fact, there are many villages where no health care facilities exist. There are some villages or areas where a qualified doctor had never been either because of distance or of inaccessability. And yet there are resources which remain underutilized

UNDERUTILIZED RESOURCES

There is hardly any village where there is no Mosque. Many villages have more than one. Buddist and Hindu temples exist in many villages depending on the population. Christian churches are obviously less than the number of temples. Even then there are over hundred churches scattered throughout the country mostly located in semi-urban and rural areas.

Almost every village has a primary school. Traditional healers, village practitioners, homoeopaths and faith healers are so distributed in the country that at least one member of a particular branch is available in some villages while in others it may be more than one.

RELIGIOUS GROUPS-STATUS

The Imams of Mosques and the priests of churches and temples are respected groups among the rural mass. All of them can read and write. Some of them may be practising traditional medicine or homoeopathy in between prayers which consume not more than a few hours a day. The rest have very little or nothing to do. All of them receive a pay or honorarium much less than what they need. An alternative source of earning is therefore something more than desirable for them.

While the religious groups are virtually underworked, the religious centres, mosques, temples and churches remain underutilized in between prayers. These places remain vacant even though there is no prohibition for Social Welfare activities within the premises, in between prayers.

HEALTH CARE DELIVERY FROM RELIGIOUS CENTRES

Utilization of these places for health care delivery does not in any way interfere with the normal religious activities. Most conveniently these places are available in the morning and afternoon for many welfare activities. Health care delivery can as such be practised during these intervals and delivered from these places. This eliminates the cost of construction and maintenance which can be a significant amount. Besides, the amount thus saved can well be spent on other items, like medicines and first-aid items.

FINANCIAL RESOURCES

The people needing advice on health from these places can be broadly classified into (i) those who can pay and (ii) those who cannot. The principle of redistribution can help solve the problem. Those who can shall pay and those who need shall receive help. The health providers, namely the Imams and the Priests are also needy. In order to generate interest and financially help them the religious groups may be given an honorarium proportionate to their income. This can be worked out by a committee responsible for maintenance and supervision of the activities of the centre.

TRAINING PROGRAMME

As has already been stated, barring a few most of the people in the group need training and for that there must be a set programme. Bangladesh Drug Policy enlists 12 essential drugs for village level health workers. These are safe, economic and useful for treating most of the common diseases one comes across in rural areas. A book has been compiled on these drugs in simple local language describing the indications contraindications, dosage, mode of administration, and side-effects. Special warnings wherever necessary has been recorded with due emphasis.

It has been our experience that a course of training extending for a period of two week is enough to orientate the new comers on 12 essential drugs. Besides, they can be given suitable instructions about personal hygiene, nutrition, food habit, breast feeding and population control. The trainees are all local people. They are grown up with local problems. Their experience is a helpful guide and they can grasp the suggested remedies more easily than any other not exposed to the situation before.

Discussion rather than didective lectures has been found to be more useful and the system of assessment with multiple choice questions and certification on completion of course help maintain a standard, creates a sense of responsibility and seriousness in learning.

OUR EXPERIENCE

During the last two years we trained 400 persons who are back to their respective places on completion of the course. Five out of the total could not be certified because of their poor performance.

Reports obtained so far are encouraging. Almost all of them agree that they now have job satisfaction and a sense of security with additional earning. Besides, they feel happy in offering service to the needy in keeping with the religious and teaching principles. The villagers around can now receive timely advice for many of their common medical problems which can be covered by 12 essential drugs. In case of difficulty or problems beyond the jurisdiction or capability of the trained group the patients are referred to the nearest available medical man, health centre or sub-centre. This is a great improvement over the prevailing situation. Timely advice is likely to prevent many complications and save many lives.

Superstition about food, hygiene, breast feeding etc. are also easily removed when the advice comes from religious groups. This is our common experience.

CONCLUSION

Developing countries can never have adequate finance and personnel for extending health care to all. This is a real threat to the quality of life. All available and underutilized resources must therefore be tapped. In the health care delivery system enormous underutilized

resources exist in mosques, temples, churches and primary schools. Properly utilized, the space and personnels in these areas can effectively contribute to the programme of health for all by the year 2000.

It is time to execute the principle of health for all on the basis of all for health. This is not a mere slogan. It must be taken as a programme of action. Initial limited experience in Bangladesh promises well. We may hope for better health tomorrow than today if we all share the responsibility and carry the burden.

ACKNOWLEDGEMENTS

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A NEW DIRECTION FOR MEDICAL EDUCATION

International Conference on Primary Health Care, Alma Ata defines community as “people living together in some form of social organisation and cohesion.” This fits well with the social structure in Bangladesh. Community based Medical Education is a means of serving community needs by producing doctors through learning activities in the community environment. According to WHO there are six reasons to justify the need for community based Medical Education. These are :

i. Development of a sense of social responsibility among the trainees through understanding of the local problems, needs and requirements.

ii. Trainees can discover during the course the relationship between theoretical knowledge and practical training. Exposure to the community prepares them for future life and field of activity.

iii. It helps breaking down the barrier between the professionals and the lay public and establishes closer relationship between the institute to which they are attached and the community they serve.

iv. Problem-based learning prompts students to learn more and become up to date.

v. It enables students to develop competence for providing health care with limited facilities in the community.

vi. The system improves the quality of community health care through the participation of teachers and students.

In this article an attempt has been made to evaluate the community based Medical Education in Bangladesh Context.

Prevailing situation in Bangladesh

This is a country with a population of 11 crores. The number of registered doctor is reportedly 16 thousand. The population here is 80% rural, while physicians are 80% urban. The doctor-population ratio in the urban area is 1 : 7000 . In the rural areas this is 1 : 27000. Health care facilities are largely urban.

Of late attention has been given more and more towards peripheral health care with the provision of consultants upto Upazila level. So far over 300 upazila hospital complex have provision for at least 3 consultants. These are all, in fact, in papers. Hardly any consultant is found in their field of activity. Many have never left the urban

environment and still draw their salary against the posts in a place which they have never visited. The situation has not, therefore, improved at all over the years.

Per capita Government expenditure on health and family planning in Bangladesh is one of the lowest in the world. This is less than a dollar. Admittedly, with the total expenditure of Tk. 350 crores on health including family planning one cannot expect miracles in health care delivery. Besides Bangladesh is a riverine country and there are areas not easily accessible.

In a situation, so challenging as this, we have to strike a balance between the needs and resources. The Government has its limitations and cannot go beyond these. The private sector has a role to play. Voluntary organisations can also play a vital role here. Future doctors, therefore must be prepared to share the responsibilities either as Government servants or as private individuals directly or through some NGOs.

Western System of Medical Education

The Western system of medical education has never been need-based or people-oriented. It has always been within the four walls of a medical institute. The process through which a physician is trained in these institutions has been completely devoid of reality unconnected with their future field of practice. Besides, his clinical judgement is overshadowed by investigations and laboratory findings. He uses his eyes, ears and even the most popular stethoscope much less often than these used to be in good old days. In fact clinical medicine has been overwhelmed by the instrumental medicine and laboratory investigations.

The real need

A physician in a developing country like Bangladesh must be capable of facing the challenging situation in health care with limited resources and unlimited problems. His clinical acumen is the most inexpensive and yet a valuable instrument he has in possession. His adaptation to the environment is one of the most important prerequisites for successful future career. His identity with the rural lay people, sympathy and understanding can work miracles. His guidance is a gospel to the rural mass and in fact he can be accredited as a community leader

in at least the health field, if not in general. For all these it is essential that a medical student of today from the very beginning of his career has to prepare himself slowly, gradually and steadily to face the challenging situation in society at large on completion of his academic career.

International Network

Community based Medical Education is now gaining ground all over the world with this ideal and concept. Spread all over the world, community oriented medical institutions are not in isolation either. An international network has therefore developed with its head quarters in the Netherlands. The network encourages, helps and guides development of community oriented medical institutions all over the world. This is an international co-operative venture of medical schools throughout the world, all of which are using a new approach to training physicians. There are today many institutions as its full members and as associate members. The executive committee is headed by no less a person than Prof. Dr. Victor Neufeld, Chairman McMaster University, Hemilton, Canada. The Secretary General is Prof (Dr) Zohair Nooman the Founding Dean, Faculty of Medicine, Suez Canal University, Egypt. Eminent scholars from other parts of the world are members.

Of the advantages mentioned in favour of Community Based Medical Education by the WHO all are equally important in Bangladesh context. Through this system of education existing discrepancies in our health care delivery can be remedied to a large extent. Present-day physicians cannot adjust themselves to an unaccustomed environment in the rural or semi-rural set up. They, therefore, avoid going to their field of work which remains officially allocated unless cancelled but functionally unserved. The sufferers are the rural poor. Involvement of the students throughout their educational career and the problem based learning creates interest, confidence and sense of satisfaction in discharging their duties which they can operate in a much better fashion in their official capacity as medical officers or consultants subsequently.

Participation of students and teachers is, in practice, an extension of health care delivery through the system of community based medical education which never before constituted a part of the curriculum and consequently the areas they serve now never had the benefit of health services. Evidently, therefore, community based medical education is complementary to the efforts of the Government extending health care to the remote areas.

Furthermore, the concept of the institute of health sciences as against traditional medical colleges encourages training and utilisation of all available manpower in health care delivery. In Bangladesh, for example, village practitioners, auxiliaries, technicians all can be offered suitable training in the institute in order to make them suitable additional force in health care movement. While the physicians train the student the latter can train other auxiliaries.

Bangladesh has developed a good concept of utilising its vast resource of religious groups and primary school teachers and their places of work for extending health care. The concept has received appreciation in various international forums.

During the last two years several of these groups numbering over 60 have been given training in primary health care, nutrition, sanitation and essential drugs for village people. These people are offering services to their respective areas utilising their own places of work, for example, the mosques. If this programme is fully implemented in every remotest village where there is no doctor or have at least one person to offer basic health care and to guide the people in proper direction for further care to an organised Government health care centre as needed.

Bangladesh Responds

The countries around namely India, Pakistan, Srilanka, Thailand, The Philippines, Indonesia, Nepal etc have already gone ahead of us and established Institutes of Health Sciences. Introduction of a new concept to replace the traditional system is not a challenge for the Government. It is complementary. The conservatives make it a political issue while the opportunists cloud the environment.

Establishment of an Institute of Applied Health Sciences in Chittagong and introduction of its courses during the current year leading to a higher degree as a non-Governmental effort through voluntary organisation is a sound policy even though a belated event in our medical history. This has the proud privilege of being an associate of the International Network of Community Oriented Medical Institutes of Health Sciences popularly known as 'Network' referred together.

It is never too late to begin a great work. We have no doubt started rather late but it is never too late to choose a NEW DIRECTION for better future.

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THE PROFESSION, THE PEOPLE AND THE PRESS

It is indeed a memorable day for me. Reasons are more than one. The moment I received the request for Ibrahim Memorial lecture I had an excruciating feeling of an irreparable loss of the man as every moment I feel his absence. Immediately after when I recollected the life and works of this great crusader in medical profession this sense of sorrow disappeared and I had immense sense of pleasure.

It is not easy to deliver a memorial lecture of a man who reached the pinnacle of glory in his life. A sense of satisfaction and pleasure removes physical and psychological weakness and increases capability. These very factors dispelled my uneasiness and I accepted the responsibility.

The title I have chosen may appear to be complex. This is not limited to my profession only, it includes some other aspects which are inseparably linked with our profession and embraces us all, for example, the people and the press. I would now try to reflect on each of these issues separately beginning with the people.

THE PEOPLE

Growing population :

The profession, I mean the medical profession, exists for the people. Bangladesh is one of the most populous countries of the world. The growth of the population is 2.4% per year. It is estimated that by the end of the century the population shall be 15 crore. Let us now look at some health statistics of the country.

Table 1.

Some health statistics of Bangladesh.

Total No. of hospital beds	:	33,000
No. of registered practitioners	:	16,000
Population per doctor	:	7,000
No. of registered nurse	:	7,000
Expenditure on health and family welfare.	:	Tk. 35.90 Crore
Expenditure per head for health and family welfare.	:	Tk. 34.00

Table 1 clearly shows that we have too many people and too few medical personnel and expenditure on health is very limited indeed. Despite sincere desire the Govt. cannot afford the minimum requirements for health care. About 3% of the total national budget is spent for health. This provides 3.50 taka per head per year for medicine. This reflects the available health care facilities for the poor which by and large reflects the state of health care in the hospital.

In a Government hospital various types of accommodations available — free bed, paying bed, cabin and VIP cabin. Free beds occupy the major portion of the total hospital beds whereas the paying beds occupy only 10 - 15%. Number of cabins in a teaching hospital varies from 50 - 100. Government employees are entitled to have free treatment in a paying bed or a cabin depending on their pay and status. They are required to pay only Tk. 25/= per day for food.

Most of the cabins remain occupied by the Government employees and the special cabins are occupied by Ministers or persons of similar status. Medicines are supplied free to these cabins. Hospital fund for medicine is vastly utilised for these people. The requirements for the free beds are ignored and in fact they are deprived of the little help they are supposed to have. Virtually there exists nothing which can be called free treatment. The helpless poor has to buy everything — food, medicine, syringe, bandage, cotton and in fact, all necessary items. Even the food that is supplied is not enough. All that they receive therefore is a bed to lie down and sleep in an environment not very comfortable. Despite this we claim to have offered them free treatment.

THE DOCTORS AND THE POPULATION

Let us now consider the number of health personnel in relation to the number of patients. I have selected Dhaka Medical College (DMC) as an example. This is accredited as the pioneer institute. Table 2 will show the present status in this regard.

Table - 2

Patient and health care personnel at DMC.

Doctors	:	181 (Indoor 129 & Outdoor 52)
Nurses	:	246
Daily out patients	:	1500
Daily emergency patients	:	185

Evidently in the out patients department one doctor has to examine at least 30 patients a day.

These patients come from rural areas or from urban slums. They are uneducated or have little education and cannot even describe their symptoms. Not infrequently, they narrate a long history unrelated to their disease. Someone suffering from lung cancer would relate a dream or an exposure to heavy rain or even displeasure of his guardian to his illness. Similarly an anginal pain is given a long narration of gas causing discomfort in the upper abdomen and chest. It therefore becomes difficult for the physician to tackle these type of patients where time is so limited and the description is so complex and prolonged. Consequently the patients discover indifference of the doctors and the diagnosis is not infrequently wrong and the investigations are as such misdirected. Loss of faith and misunderstanding result from this unhappy situation. I cannot but side with the profession in this regard. It must be admitted that the apparent negligence by the doctors is not due to lack of moral value but for the situation which is beyond their control and capacity.

HOSPITAL INDOOR

Let us now look at the status of the indoor. I would select a teaching hospital attached to a medical college or a post-graduate institute. In the out patient department there can be no limit to the number of patients. In this context the indoor has a more comfortable situation. Despite crowded corridor and other available spaces occupied by extra beds there is a limit. Doctor and assistants here are reasonable in number. Internees and the trainee students are additional help. Notwithstanding these advantages over the out patient department, if someone puts a question if the indoor patient receive proper treatment I would not say yes and I cannot.

There was a time when the number of patients was limited and that of doctors a few and in fact everything was much less. Even then the environment was peaceful, the relationship cordial and direct between the doctors and the patients. With the passage of time problems arose. Population explosion has multiplied our problems far beyond our imagination. It has destroyed our economy and planning and brought in imbalance in all sectors. As a result we do not find a hospital where the environment is peaceful or the disturbance does not exist. The number of patients exceeding capacity, constant flow of visitors from outside throughout the whole day totally destroys the peaceful environment.

Visiting hours exist in papers and signboards but not in practice.

Within the limited budget many more mouths are to be fed, many more patients are also to be treated. Personnel in the laboratory are far less in number than the requirements. These result in deterioration in standard of treatment and nursing care with loss of faith in the hospital management.

PRIVATE CLINICS

People are now sceptic about the hospital care and therefore, prefer to go to private clinics. To the rich and the poor nothing can be more valuable than life. They do not hesitate to sell their properties for the sake of treatment and recovery with the hope of a fortunate future. When the reverse happens and the tragedy befalls them the economy and the family are destroyed. Illness, poverty and distress are thus set in motion. From the family it spreads to the society and ultimately the whole nation is affected.

Unfortunately health care to-day has not only become more or less a commercial concern, these are growing up not only in different parts of the city but also around established Govt. institutions encouraging lack of confidence of the people in Govt. run hospitals. Additional facilities and finance provided by these clinics distract doctors from their ethical and moral responsibilities. The limited time they have at their disposal is not expandable at will. The deteriorating standard of health care in the Govt. institutions is a logical sequele. The example set by the seniors influences the students and trainees. This is reflected every where from class room to the hospital bed side .

TEACHING AND EXAMINATION

It is astonishing that the factors narrated above do not influence the result of examination. The percentage of pass every year is increasing. About 1300 - 1400 doctors are graduating every year. Numerically the figure appears to be reasonable. But the quality is far from satisfactory. The results of competitive examinations and interview reveal the truth. Very simple questions prove to be difficult for many and yet they all crossed the final examination comfortably. In reality most of the students do not face any difficulty in crossing the bar. There are perhaps two reasons behind. An inefficient teacher is anxious to make the students pass in order to avoid challenge and to become popular among the students. To the administration he wants to project his apparently efficient performance through the numerical extension of the successful candidates. As a result

we are having gradually increasing number of doctors with letters after their names with deteriorating standard.

HOSPITAL SERVICE

Our hospital patients today suffer from lack of proper service. Patients admitted in the hospital do not receive due attention even several days after admission. Many have to leave the hospital without ever being examined by a consultant. Many leave the hospital either without a diagnosis or with a prescription from the junior. The situation is more painful with regard to operation. The number of surgeons has increased but that of operation is reducing. On flimsy grounds many are refused operation. There are at least two reasons. The surgeon having performed several operations outside in private clinics is exhausted physically when he comes to the hospital. He has a limit to his strength. The financial aspect cannot also be ignored. An operation in the hospital has no financial return for him.

These remarks are undoubtedly harsh. Morally and ethically it is our duty to speak the truth.

There is however always a silver lining behind the dark cloud. In teaching and hospital care there are brilliant examples. **There are people who silently contribute much more than what is expected of them. They often go unnoticed and unrecognised. In appointment, promotion and transfer these groups of people suffer while in fact they should have been rewarded.**

DEVELOPMENT IN THE PRIVATE SECTOR

Many among us question the justifiability of development in the non-government sector. The need for development in the private health care is now more and more recognised as complementary to the government efforts. Private institutions are as such receiving increasing attention from the administration. It is however essential that the quality and standard of these institutions are maintained. In the name of social service we have no right to increase the number of such institutions sacrificing quality and standard. BIRDEM is a pride institution in the private sector and this has proved what can be done if there is determined effort with dedication.

AFFORDABLE FACILITIES

For the growth and development of the profession a healthy environment is essential. When a devoted efficient worker finds nothing around him he is depressed. Success depends on many factors — if we consider the question of hospital management the essentials are facilities for diagnosis, management and research. Besides dedicated persons around well-equipped library and laboratory are essential. There are persons who are interested in maintaining standard in their work and research. But the centres where these are to be conducted are not in a happy situation. Instruments which are not usable and the reagents which are date expired are not uncommonly found. Costly equipments lie idle because small parts could not be procured for red tapism and administrative bottlenecks. It is unbelievable that the reagents are still used after the expiry date. The results are conceivably. In a situation with so many odds prevailing the profession once held in high esteem has now lost the image and is looked down upon by the people.

THE PRESS

I will now reflect on a subject which is complex and sensitive. This is about the role of the press with regard to our profession. Newspaper in the life of man and in fact for the nation is essential. Readers anxiously wait for its arrival every morning. They are eager to know what happened around the world during the previous 24 hours. Some news may agitate him while others may be pleasing. But when he finds something contrary to what has happened or what he has said he receives a cruel shock. We must admit that for the propagation of correct news and for educating the public and directing the administration the press has a vital role. My subject matter today is the relationship between the press and the profession. I would therefore confine myself to this aspect only.

Our experience about the press may not be the same for all and in fact cannot be. It is a mixture of pleasure and displeasure. As a watch dog the press must propagate correct news, project irregularities and injustices, demand investigation and punishment whenever necessary. In discharging duty it must be neutral, positive and forceful. Whatever be the status of the culprit, he must be exposed.

It is said that the press in Bangladesh has full freedom. Those working in the press may differ. The truth perhaps lies in between full freedom and total restriction. Whatever it is, it is my experience that the press enjoys full freedom in circulating the news about our profession. Evidences are not rare to prove this contention. **It is painful to see**

that an innocent doctor has been blamed for the death of a patient for whom it was inevitable as the disease had no cure. Those who have lost their near and dear ones not infrequently blame the doctors for the death which was inevitable. We have sympathy for them. Ignoring the emotional aspect of the issue and the wrong accusation by the aggrieved persons the press often projects the negative aspect of the issue and question the sincerity and honesty of the profession. This is painful and yet we do not go deep into the matter and unearth the real truth behind.

I will now describe a news item circulated from a rural area through a well circulated daily which must have surprised the ignorant and amused the informed members of the profession. This was like this.

“Life saving drugs insufficient :

Recently in a nearby village at least 20 persons lost their lives as a result of diarrhoea. It is gathered from reliable sources that the cause of death was nonavailability of enterovioform which is the only cure for this disease.”

An analysis of this news reveals the truth. Not infrequently innocent physicians thus fall victims and the image of the profession is adversely affected. The news which has thus been circulated is totally untrue. Enterovioform is a drug which has been banned because of its side effects. The use of this drug may even lead to blindness. It has no role in the control of diarrhoea. For ages it has been used for the treatment of chronic intestinal amoebiasis popularly known as amoebic dysentery but had to be abandoned because of thousands of blindness it produced. The cause of death in the patients referred to in the press could not therefore be due to lack of enterovioform. The reporter was obviously unaware of this. One cannot, of course, rule out the possibility of involvement of some uninformed physicians in supplying this news item. Nevertheless the reporter and the news paper should have been responsible, for circulating correct news and the profession had the responsibility to be updated about medicine. Reporter has to be responsible and careful before despatching a technical news item.

It is not rare to find some members of the profession receiving unusual credit from the lay public through the press for removing an usually large tumour which may not be unusually difficult to operate. Here the profession gets credit more than what is due. A press therefore can elevate the prestige of the profession or degrade it before the public easily.

Publications against the profession unfortunately generates more curiosity in the people and the administration. Admittedly the press cannot always be blamed. Recent movement by the Bangladesh Medical Association for fulfilling some demands received all co-operation from the press. There are occasions when it has admirably upheld the prestige of the profession. Constructive criticism and sense of direction from it is praiseworthy.

It goes without saying that a neutral news paper can play a vital role in the development of a nation. They can direct the nation effectively against omissions and commissions on various issues. They can as well play an opposite role which may prove to be destructive. Our national news papers have sometime been friendly and at other times indifferent or even to some extent inimical to the profession. We would expect to hear the truth even if it is bitter and earn punishment.

My observations may now be **summarized** as follows :

1. Medical profession cannot be considered isolated from other professions in its responsibility to the people.
2. Disproportionate distribution of manpower and resources and unsatisfactory allocation to the health sector make the situation worse.
3. Privatization has recently been recognised by the government. It must not be allowed unlimited proliferation sacrificing quality. It must be complimentary to the efforts of the government.
4. For unavoidable misfortunes people blame the profession though the real cause may lie somewhere else.
5. Unhappy situation in large teaching hospitals has led to growth of unusual number of private clinics which attract teachers and other health care personnel. As a result, teaching, health care and research are now at stake.
6. News paper reports are not at times factual. Ununiformed physicians and inefficient news paper reporters are responsible. Incorrect news item may lead to loss of faith of the people in the profession.

7. The news paper can play a vital role in revealing corrupt practices and guiding the profession and the administration.

CONCLUSION

Medical profession has a stronger and deeper relationship with the press and the public than perhaps with any other profession. The profession and the people are inseparable. The press can further strengthen this relationship.

Of all the problems associated with our profession the outstanding one is the discrepancy between the need and the resources. This is clearly demonstrated in the educational institutions.

Broadly the members of the profession can be divided into two groups — one consists of devoted sincere and silent workers and the other comprises the unscrupulous and the insincere group. This group ignores their responsibility as a teacher and a consultant and pays more attention to private clinics and hospitals only for the sake of financial benefit.

Decay in academic standard, proliferation of nursing homes and lesser attention to the health care and research point towards a gloomy picture for the future. In a situation like this the poor are the worst sufferers. The influential and the rich occupy an enviable position wherever they stay in the hospital either in a cabin or a paying bed. They receive all attention and comfort. The poor remain neglected. Free treatment is virtually non-existent. The faith in hospital care is thus shaken. To many a hospital is a place of cruelty rather than cure, haphazard treatment and misdirected investigations rather than specific remedy. By and large negligence there overshadows attention. Public image of the profession is as such facing challenge now. Criticism is ever increasing. News media adds to this injury. The unscrupulous group are clever enough to survive this assault while the dedicated honest group suffer. Sense of direction in the administration does not always exist. The flatterers can thus flourish.

Finally, I believe the press can play a vital role in removing the drawbacks and elevating the standard of education and health care. They can discover and dispel anomalies, expose the culprits and challenge the administration in case of neglect for the welfare of the people. The task is undoubtedly difficult but with sincerity and devotion this is not impossible. Similarly press can uphold truth against falsehood and expose

the flatterers and time servers who misguide the administration, ingeniously create false image and at least temporarily overshadow the contribution of the silent, sincere and dedicated workers.

The life of Professor Md. Ibrahim was one of discipline, dedication, modesty and sincerity. At this memorable hour of delivering Ibrahim Memorial Lecture the word that brilliantly shines in my mind is 'discipline'. This was the secret of his success in establishing BIRDEM. This organization admirably exemplifies how non-governmental effort combined with Government help and freedom of work with discipline can bring success. If the profession and the administration work in harmony with discipline and dedication and the press propagates this to the nation we can achieve our goal and save the nation from the destructive social evils and the process of decay, existing at present and eroding the vitality of the nation.

May the life and work of the greatest son of Bangladesh in our profession inspire us and our future generation.

EDUCATION IN DIABETES

Dr. Elliott P. Joslin's work on diabetes included medical care and research. But his greatest contribution was education of professional and even more important people with diabetes.

In the Joslin Auditorium it is inscribed as follows :

"Gladly he would teach." There are several good reasons why a diabetic should be taught. These are to help a diabetic live a productive, useful, happier, healthier and long life with fewer days of illness and complications.

The outlook — changed

The concept of diabetes has changed enormously over the years. Once considered as a *fall accompli* diabetes today is much within our control provided we understand the problem and know the means of tackling it. It is not a disease like many others to be treated with pills and injection for a cure within specified time like Malaria, Pneumonia, Tuberculosis, etc. One must realise that this is a lifelong problem or rather an accompaniment demanding adjustment for living together. A diabetic therefore must know the problem and understand it so that he can tackle a situation rising out of it.

Growing body of knowledge about diabetes has changed the outlook and made it easier to manage the problems. The disease should in fact be taken as an accompaniment of life which need be modified accordingly. It is not only the administration of tablets and various types of insulins but the understanding and application of these remedies that has made it easier to treat the condition. The individual, the family environment and the society all taken together influence the mode of treatment. The life style is no less important.

Diet — more liberal

Diet once considered to be very much restricted has undergone remarkable changes. It is now nearly the same as for those without diabetes. Varieties are not excluded. Insulins are available with different action pattern and so are the tablets. It is therefore more difficult for people with different life style to have their needs met. One of the most important advances is self monitoring of blood glucose. With this people can at once know their blood glucose level and adjust treatment accordingly.

Education — Foundation of good therapy

According to WHO Education is the foundation of good therapy and of preventive medicine. Good therapy is aimed at both the short and the long term good health of the diabetic and has a directly reached benefit in terms of hospital bed occupancy and health economics.

Health education is crucial if we are to improve the quality of life of the patient and enable him, to a large extent, to control his own destiny and to achieve a high level of independence.

Education essential for all :

The news about the discovery of diabetes is not uncommonly received by patients with surprise and shock. A life with prolonged suffering and misery is apprehended. A cloud of suspicion can only be removed through education. Patient, family, high risk individual and professionals must have adequate knowledge about diabetes and its practical management. The community and the policy planners must be made aware of the problem as a whole with special emphasis on economic and preventive aspects. The patients should be taught the basic facts of diabetes and the skill of its management, adjustment of life style and possible emergencies. These can be done by individual and group teaching. Educated patients can serve as teachers, in fact, they do better from their own experiences in managing various problems.

Health care personnel should receive sufficient training about practical management of diabetes, its socio-economic and psychological problems. In fact their education about diabetes should be incorporated in their training programme.

The family members should understand the disease and its implications. The diet of the patients, his care during illness and emergency situation should be made clear to them.

Community understanding of diabetes benefits the patients. It improves social acceptability. Besides, the community, local and national govt. policy is influenced for provision of health care services. It is therefore appropriate to motivate the community to accept diabetes as a public health problem and to lay emphasis on the prevention of the disease.

Alternative health man-power

In a developing country like Bangladesh where the literacy rate is very low while the prevalence of the disease is as high as in the west, limited

health care facilities and strictly limited health care personnels demands effective alternatives. The group of persons most respected are the religious leaders, imams of mosques, primary school teachers and the community leaders. Educational programme of these groups in the health field drawn out by governmental organisation like Islamic Foundation and NGO's like Islamic Medical Missions and Masjid Shamaj have yielded encouraging results. More emphasis on diabetes and enlightenment on its various aspects in the curriculum of these groups is most likely to have a favourable impact on the diabetics in the community.

Lectures, group-discussions can well be arranged in the office premises of the local health authority and in other work-places like community centres, mosques and primary schools.

Apex Body — Diabetic Association

Diabetic Association of Bangladesh may play the role of an apex body with its network spread all over the country. It should coordinate and guide such programmes with materials and moral help — even if financial help poses difficulty. Experience at BIRDEM established by late National Professor Dr. Md. Ibrahim now known as Ibrahim Memorial Diabetes Centre clearly reflects the importance of education in diabetes. Various techniques are applied here for motivating the patients and in that education ranks the highest.

Three Ds :

Dr. Md. Ibrahim, the father of anti-diabetic movement in Bangladesh used to say that three Ds are essential for the control of diabetes. These are Diet, Drugs and Discipline. While the discipline is a keyword of success, the other two are unavoidable essentials. For the proper use of drugs, in order to control blood sugar, one must know the mode and duration of action of hypoglycaemic agents so that after proper monitoring the dose can be adjusted. Similarly the diet must vary according to the needs, resources, availability and taste of the patients. While selecting a menu, therefore, a first-hand knowledge about the diet is essential.

It is not always possible to remember food value of different items and their suitable alternatives. A chart should be available for ready reference. This may be well designed by qualified dieticians and supplied to the patients or their families.

Adjustment of insulin dosage should also be clearly explained to the patient. A written instruction on how, when and what should be adjusted

with the monitoring of blood glucose should also be available with the patients.

Every patient must know how to take their own injections. The exceptions being the blind, the idiots those with amputation of hands, the unconscious and the children. Group demonstration with experienced patients are effective in these cases in creating confidence among those who are apprehensive. One must remember that a diabetic patient on insulin may have to go the places where no one is available and he must manage his own injection or miss it in which case complications may arise.

Is education cost-effective

After all these have been discussed the question that naturally arises is Education cost effective. The answer is not far to seek. It is through education that we can help patients tackle their own problems timely and properly. This helps prevent complications and prolong hospitalisation with loss of earning and high cost of treatment. Monitoring improves control at home and helps solve problems without hospitalisation. It reduces emergency visits to hospital. Education for diabetes offers a good dividend for the patients and the nation. There can be no treatment without education. Education, indeed, is an integral part of treatment.

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ACHIEVING SUCCESS AGAINST TOBACCO

Bangladesh Experience

THE FIGHT AGAINST TOBACCO

Giant tobacco manufacturers today are aware of their moral and ethical strength. Anti tobacco campaign all over the world is developing at a speed which frightens the tobacco monsters to counteract this upheaval. Billions of dollars are spent to motivate the politicians, administrators and the innocent public through ways and means carefully engineered after well designed social research. The influence is so penetrating that it percolates into different strata of the society from top to bottom.

In an effort to counteract these mischievous manoeuvres social scientists all over the world are discussing in seminars and conferences to devise ways and means.

In this article our experience in Bangladesh has been described in brief including the essentials as far as possible.

ORGANIZATIONAL SET-UP

Non-smokers as Members

Non government organisations (NGOs) all over the world play major role in anti-tobacco movement (ATM). These organisations influence policy decisions of the government. Organisational set-up is therefore of vital importance. This has to be so constituted as to integrate desire power and function. Those involved must possess one or more of these. Experience tells us that ex-smokers are more forceful than never-smokers in their attitude towards smoking. Non-smokers are undoubtedly not alligned to smoking. Irregular smokers do not prove to be a force. The organisation must therefore limit its membership to those who do not smoke, never smoked or are ex-smokers.

Persons of eminence and respected public figures have influence in the society, on the people. The press carries the message to the people. In fact the media both print and electronic play a vital role to a large section of the people. Top public figures and media people should therefore be involved in the anti-tobacco movement (ATM) through the organisation in some form or other.

Some people of the category mentioned above may extend all possible help and yet in their busy schedule cannot spare time to attend meetings. It is difficult to select some out of the many in this group. This difficulty may not be universal. Be it what it may one or two should be singled out from among all and should be included in the organization as advisers or patrons. The link may be loose and yet this creates a sense of involvement in some, obligation in others.

As the first step towards this goal we formed an association consisting of respectable persons in various fields of activity. The Vice Chancellor of the largest university in Bangladesh and the Chairman of the Editorial Board of a news paper with largest circulation in the country were made advisers. The executive committee consisted of persons of various walks of life, notable in their respective fields. This included one of the top-most magicians of the country and a very popular football player. The organization was founded by one top-most physician of the country. All are non-smokers or ex-smokers.

It is worthwhile mentioning here that the name of the organization was coined to bear significance. The name ADHUNIK was constructed with the first letter of the Bengali words as under :

- * A — ‘Amra’ meaning we
- * DHU — ‘Dhumpan’ meaning smoking
- * NI — ‘Nibaran’ meaning prevent
- * K — ‘Kori’ meaning do.

CHIEF PATRON

Head of government / Outstanding Person

This is an issue which must be considered in keeping with the political situation of the country. An enthusiast might find an easy solution in selecting the Head of the Government as Chief Patron despite the form of Government. This apparently easy solution may face a challenge if the exalted positions are occupied by smokers. On the contrary, if the persons concerned are either never-smokers or non-smokers the problem virtually does not exist. The constitution must therefore have provision for Chief Patron in a guarded way with an alternative to the Head of the Government. This eliminates the possibility of having a difficult situation where the Head of the Government is a smoker. We have, in our constitution, provision for Chief Patron. This may be Head of the Government or an outstanding person with national and international image. Fortunately, we have from

the beginning of the organization till today the Heads of our Government as non-smokers.

The position of Chief Patron is not decorative only. It has tremendous impact. Involvement of the Head of the Government is a unique force for any organization.

PRESIDENTIAL PALACE

Tobacco-Free Implications

Involvement of the Head of the Government helped us persuading him to declare Presidential Palace as TOBACCO-FREE ZONE. This is a place where cabinet meetings are held every week. Almost all ceremonial receptions with cabinet ministers, members of the parliament, high ranking civil, military and political figures, senior executives and distinguished citizens attend these functions.

Several times a year, the Victory Day on the 16th December, the Independence Day on the 26th March, the Eid Day and occasions with the visits of the Heads of Governments from abroad all take place here. All these occasions are Tobacco-Free. Since the palace has been declared tobacco-free zone, the implication is highly significant and it has a forceful impact. Every occasion reminds the guests about the status of Tobacco in a conscious society. These put the smokers in an uncomfortable position. The desire or rather craving for a cigarette reminds them of the unwelcome status for tobacco. The government expenditure on tobacco thus saved can help implementation of anti tobacco movement and other social welfare activities.

POLITICAL SUPPORT

Ministries

Having the head of the Government as our Chief Patron, we could not be content. We therefore thought of involving initially the important ministries in our ATM. We considered information, education, health, agriculture and religious affairs ministries as the five important ministries which should be involved in some or other. With this in mind we made several contacts through visits and organizational functions.

Ministry of Informations

The media both print and electronic are under the administrative

supervision of this ministry. Electronic media viz, Radio and Television are governed by the Ministry while the print media though not totally are vastly under the control of this Ministry. Our success in banning advertisement in Radio and Television though trickled down from the Head obviously required willingness and co-operation of the concerned Ministry for a successful outcome.

Side by side, banning of tobacco advertisement, various anti-smoking slogans, discussions and debates through Radio and Television disseminated the knowledge of tobacco menace to the listeners and viewers. Both together covered a sizeable population of the society. Publication in the news papers and periodicals can reach a significant number of enlightened population. Serious readers hardly notice advertisements but concentrate on contents. Educative articles are therefore strong weapons against advertisements for tobacco.

Ministry of Education

Information can be understood only when there is an educational background. This has no meaning to the unenlightened, ignorant people. Education is a knowledge as well as means of acquiring knowledge. What we learn at school has tremendous influence in our future career and in fact in shaping our way of life. Many habits and bad habits are acquired in school life through the influence of friends and teachers. A smoker friend is an inducer of a tobacco habit and a smoker teacher is a wrong guide for the students.

If the knowledge about the affects of smoking is offered to the students through the course of studies, they learn at a stage which is most vulnerable to various influences of the peer group.

If the Ministry of Education can be motivated to include in the syllabus an essay on the adverse affects of smoking, addiction and drugs, not only it will act as a note of warning but also prove to be a powerful weapon against the unfortunate habits.

The knowledge put the smoker teachers to shame as he then realises that the publication speaks against his habits. The parents face question and criticism from children when they return home after receiving their lessons in the school on that topic. We, therefore, successfully persuaded the Minister for Education to introduce some essays in the school text books on smoking which he did and the Ministry has now promised to include such articles in all text books from six to ten i.e. upto the school leaving examination.

Ministry of Health

Medical and para-medical personnel by the nature of their profession constitutes a mighty force for ATM. Various programme can be implemented by the Ministry with minimum cost and labour. All health care centres from the primary to postgraduate levels can be declared No-Tobacco Zones. Smoking in hospitals can be strictly forbidden.

Professional members can set ideal examples themselves by not smoking or giving it up and counselling their patients and friends for quitting their habit. Seminars and conferences can be organised in health institutions and this can be well publicised in the media referred to above.

It must be realised that health is not an isolated affair. All must share.

We have involved the Ministry of Health and Family Welfare in many of our conferences, seminars and other activities. The result is highly satisfactory. Instructions have been issued to all health institutes to keep those tobacco free. Admittedly if the executing authority is a smoker we have a weak point. Nevertheless posters prohibiting smoking speak loud and the authorities become cautious in publicly smoking. This is a positive effect.

Ministry of Agriculture

Bangladesh is a tobacco growing country. The growers must therefore have an alternative or else they will continue to grow tobacco for which incentives are given by the Company in various forms. The Ministry of Agriculture therefore has to share the responsibility to find an alternative to tobacco. Happily this is now seriously taken up by the Government. Instructions have been issued by the Ministry of Agriculture not to allow extension of tobacco cultivation any more. At the same time alternatives are being gradually explored.

I proudly quote here Major General (Retd.) M. Majid-ul-Haq, Minister for Agriculture, Govt. of Bangladesh, which reflects the attitude of the Government.

“As for the participation and involvement of my Ministry of Agriculture towards the Anti-smoking drive, we are proud to say that since tobacco crop is an important cash crop for our farmers we are endeavouring to replace it gradually by another cash crop viz. cotton.

The choice of cotton as a replacement crop is obvious since cotton takes easily to the same kind of soil as tobacco, it generates comparable cash in financial terms and finally it would cut down raw cotton import thereby saving much needed foreign exchange for other developmental works."

Ministry of Religious Affairs

This may sound queer to many but for Muslim countries it creates an ideal tool. All addictions are forbidden in Islam and tobacco is an addictive drug. Alcohol and drugs fall to the same category. Muslims join in larger numbers on Friday prayer and a good number on other days in the mosques.

Persons leading prayers are called Imams. They are respected people. The half educated and the illiterate have tremendous respect and faith in them. During Friday sermon (Khutba — meaning lecture), if the Imams explain the position of addiction and tobacco in religious perspective, it will have tremendous impact on those who believe. The middle class and the poor have strong faith in religion. The influence of the Imams on them is therefore strong. Verdict of the creator through holy Quran — our religious book when properly explained reaches the heart of the true worshippers. This is a means which can be utilised for campaigning against tobacco among the less advantaged people. During the World No-Tobacco Day 1991, we explored this potential in some places and were happy with the outcome. The beginning was made from the national mosque in the capital city of Dhaka having the largest congregation on Fridays.

Role of WORLD NO-TOBACCO DAY

On this occasion we organise day long activity involving all sections of people from the top politicians to the lay public. Press, Radio and Television are all involved through press conferences, interviews and discussions in electronic media. Participation by students, nurses, rickshaw pullers make a formidable show. Posters and stickers all around make an attractive display.

Meeting of all categories of people with banners and posters in hand with the Head of the Government makes the event impressive. There is wide publicity in all media. This is an inspiration for the volunteers. For us this is an opportunity for placing our rightful demands for the health and welfare of the people.

The remarks of Dr. Hiroshi Nakajima, Director General, WHO on the occasion of the Third World NO-TOBACCO DAY 1990 speaks volumes of the significance of this day.

“WHO will henceforth regard World NO-TOBACCO DAY not as just a day on which it calls on smokers to abstain for 24 hours but essentially as a day of mobilization, a day on which it appeals to national authorities at all concerned with health throughout the world, to join forces in a sweeping offensive to find the right answer to the question : tobacco or health ?”

World NO-TOBACCO DAY is indeed a day of mobilisation of all forces in ‘a sweeping offensive’ against TOBACCO. People of all walks of life join us this day. It is a festive occasion with fatal warning for the smokers. The impact is enormous. Most of our achievements have been through this specific occasion every year.

CONCLUSION

Anti-tobacco movement today is a world wide phenomenon. Developing countries are now joining this global effort. Each country may devise its own ways and means on the basis of political and socio-economic considerations.

Bangladesh began its national anti-tobacco movement as late as 1987. The intervening period is short but the achievements have been significant and augurs well for the future.

World No-Tobacco Days have been successfully exploited by ADHUNIK, our National Anti-tobacco Organisation. Most of the policy decisions were made during these occasions. All forces joined us and we gathered strength.

From all that narrated here it may be said that six ‘P’s constitute a powerful tool. These are President, Prime Minister, Politician, Press, People and Prayer. One is complementary to the other. All together can work miracle against tobacco menace.

Most powerful bond is a political will. Having this it is not idle to think of combating this global menace. This is our experience in Bangladesh.

Reprinted from the translation of the 8th World Conference on Tobacco or Health, Buenos Aires, Argentina, 1992.

MEDICAL EDUCATION IN BANGLADESH SOME THOUGHTS

There are today eight medical colleges in Bangladesh run by Government with an annual production of around 1400 doctors. Besides, there are two private medical institutions which are four and three years old respectively. These are Bangladesh Medical College (BMC) in Dhaka and the Institute of Applied Health Sciences (IAHS) in Chittagong. There are limited number of seats for students in each of these which are yet to produce doctors.

The total number of qualified doctors registered by Medical and Dental Council is around 21,000. The doctor-population ratio, therefore, is approximately 1 : 5,200. If the distribution is critically analysed, a dismal picture of maldistribution is noticed. Almost 80% of the doctors live in urban areas which contain 15-20% of the population while the remaining 20% live in rural areas where 85.90% of the population live. Virtually, therefore, the doctor-population ratio in the rural areas is 1 : 20,000. With the rate of production of doctors as stated above one can easily visualise that it will take decades if not ages to produce sufficient number of qualified doctors to serve the entire nation.

There are several reasons for uneven and maldistribution of qualified manpower. The first and foremost contributory factor is medical education. Fortunately this has undergone revolutionary changes for the last few decades. It is no more confined to the four walls of the institutes. Community Based Medical Education (CBME) is, now a recognised concept. According to WHO there are six reasons to justify need for CBME, These are :

i. Development of a sense of social responsibility among the trainees through understanding of the local problems, needs and requirements.

ii. Trainees can discover during the course the relationship between theoretical knowledge and practical training. Exposure to the community prepares them for future life and field of activity.

iii. It helps breaking down the barrier between the professionals and the layman and establishes closer relationship between the institute to which they are attached and the community they serve.

iv. Problem-based learning prompts students to learn more and become uptodate.

v. Enables students to develop competence for providing health care with limited facilities in the community.

vi. The system improves the quality of community health care through the participation of teachers and students.

Development of Upazila (thana) health complexes and rural health centres with provisions for consultants is no doubt a move towards peripheral health care in Bangladesh. The programme has unfortunately failed to come up to the expectation. A surprise visit to an Upazila health complex brings to light the real situation prevailing there. Many of those posted here are almost invariably absent. Some of them perhaps visited the place only for a few hours for joining, then at the end of the month only to draw salary. This sordid affair is the inevitable outcome of inefficient administration and the unrealistic western system of medical education which had never been community-oriented.

Bangladesh Medical and Dental Councils have recommended CBME from the beginning of medical curriculum. If a sincere effort is made to implement the programme community health care will have a brighter future with the participation of the teachers and students. In this system the students will receive training in their field of future activities and the community shall get the benefit of improved health care.

The consultants of an Upazila health complex today are in fact the neglected group of unutilised post-graduates who have qualified themselves through several challenging tests. If the medical students are placed at various Upazila health complexes for training and the consultants are designated as teachers this shall benefit the health complex, the consultants, the students and the population in the area. Administratively this is advantageous in that the presence of students demands regularity of attendance by the consultants.

While discussing changes in medical education, it goes without saying that the quality and standard must as well improve. Appointments on Adhoc basis strikes at the very root of quality assessment. Examples are not rare where candidates rejected by PSC have been appointed in the same posts on Adhoc basis which continue for years. This has greatly contributed towards deterioration in the quality of teachers. If by any means one is appointed as a Professor, he faces no further assessment or challenge. The sincerest teacher with all his contribution as a teacher, researcher and health provider not uncommonly fail to procure a suitable placement where he can effectively contribute. An institute which may be most suitable for a man of his calibre may prove to be a dream for him while someone who stands no comparison occupies the position

through unholy alliance. Lack of defined principles regarding placement and posting opens up opportunities for the unscrupulous and deprives the honest and the bright one. This on the one hand impedes progress and destroys the potential for development in research. Publications in recognised journals once a requirement for appointment of Professors is now almost non-existent. It will not be difficult to find out some teachers who have never contributed an article to even an occasional publication. Nothing can be more dangerous than the backdated with abandoned ideas in the field of teaching and yet this is a phenomenon which has not yet been out of existence. This is reflected in our prescriptions which are often criticized abroad-a common experience of our people going abroad for treatment.

In the Supreme Court of Bangladesh while I was sitting in the office of a leading lawyer, there were half a dozen senior lawyers around. I was there for a personal reason. It was a recess period. One lawyer sitting next to me wittily asked me as a busy practitioner how could I compare myself with a busy lawyer. I said, a busy lawyer faces the judges and the defence counsel. There is therefore double protection. A busy practitioner on the other hand can very well go unchallenged. The patients accept whatever is advised in writing as a prescription and something in addition verbally. Even if the prescription is wrong resulting in delay in recovery, non-recovery, complications and even fatality, he is not answerable. There is no legal challenge and the people accept these as their fate. Here lies the difference. This has resulted in gradual deterioration of standard of health care, teaching as well as research.

A system of periodic assessment of teachers exists even in some developing countries. Even the students have the opportunity of assessing the quality of teachers through ballot. The selection committee makes an assessment from academic performance of a particular teacher by way of research publication during the previous years. In many western countries the teachers are required either to publish or perish. There are instances where professors have been demoted as consultants because they could not prove their worth through academic performance.

In our country curiously enough a professor or a teacher can go unchallenged even if he has shown no academic activity after obtaining post-graduate qualification and securing a job.

Question arises how easy it is for the Government to assess academic activities. How the Ministry of Health can shoulder such a

countrywide activity. The problem is not as difficult as one is tempted to think.

I suggest that some procedure be adopted in all medical colleges and other teaching institutions. Institutions should bring out annual publications which will contain report of their academic activities including research and publications.

By this the picture will become clear not only about the organisation but also about the individual teacher. The publication shall also serve as a permanent document on academic activities and research findings.

Finance involved in such work is not a problem. A token grant from the Ministry may be enough as additional amount may be collected through advertisements. It is our common experience that several souvenirs are published by teachers and students during various college functions. These occasional publications are like perishable items. They are never retained in the libraries and also do not have much academic value. The publication I propose shall be of great value in our effort to assess the quality of an institute as well as its teaching staff. On the basis of these we can define appropriate line of action for promotion, transfer, reward and so on. Besides, these shall be useful addition to our libraries for future reference.

It is often said that we do not have facilities for research. This is far from true. Fundamental research may be difficult but for some basic and clinical research we have abundant materials and sufficient facilities. Finance is also not a problem. A well-planned protocol is all that necessary. Both national and international agencies like Bangladesh Medical Research Council (BMRC), WHO and many others are eager to provide fund. In fact we are guilty of underutilisation of these resources in Bangladesh.

It is worthwhile discussing here on the latest developments in the fields of medical education at home. Soon after liberation Bangladesh was beset with many problems as a natural consequence. Enthusiastics among politicians and the labourers led to serious miscalculation in some sectors. Nationalisation of several industries was one such dangerous step. The idea that prompted the leaders were lofty and the sentiment behind was an unmixed love for people. Over the subsequent few years we had to pay heavily for this. Many industries were destroyed. Some are till today too sick to recover.

Behind this dark cloud there is a silver lining. We are today convinced that the nationalisation can be destructive where social responsibility is thin and personal interest prevail over the national goal.

Lack of competition is detrimental to progress and job security begets indifference towards personal responsibility. A look at the government and private enterprises displays the differences between the two sectors too prominently to go unnoticed. Nationalised industries are now being gradually disinvested with the hope of establishing competitive efforts to contribute towards national economy.

In the field of education there is another example where private institutions are flourishing maintaining good quality and standard. This ranges from primary and secondary education to healthcare centres.

The last four years have experienced a new development in the field of medical education. Two institutions, viz. Bangladesh Medical College in Dhaka and Institute of Applied Health Sciences (IAHS) in Chittagong have been developed entirely with private efforts. There has been enthusiastic response and the competition for admission has been no less than that in a government medical college. In some instances there has been in fact greater leaning towards the private ones because of the quality of teaching and the commitment of teachers. Notwithstanding the advantages of these private institutions in selecting quality teachers with attractive pay the students cannot avoid session-jam because of its academic link with the existing universities along with other medical colleges.

The latest move by the government for establishment of private universities will undoubtedly solve this problem. Breaking the chain of administrative obstacles and odd influences and giving the institutions academic freedom, performances by these private universities through regularity and quality will naturally bring to light how well education can be conducted, if this is freed from administrative bottlenecks and political influences.

If the students of a particular university or institution go ahead with their courses of study, it will become clear to the others that they shall be lagging behind and losing their valuable years of life. At present session-jam affects all and does not clearly depict the loss of years.

Private institutions have been occasionally blamed to be expensive. This is not wholly true. If the outcome is financially calculated it will in the long run prove to be more economical. One cannot buy years of life and this is an irreparable loss for the present generation. Sense of participation by parents and awareness among students about their guardians and financial involvement in private institutions deter them from evil forces against smooth academic career and a better future. The selection in these institutes is done purely on the basis of merit and

no amount of money can buy it, no political pressure can prevail. Even though our experience in Bangladesh is for a short period, it is undoubtedly encouraging and emphasises on the need for private efforts in all spheres.

Finally, we must agree that medical education and health care are intimately interlinked. The existing system of medical education has to be recast in the light of current concept and practices prevalent all over the world.

Community Based Medical Education is not a luxury but an essential requirement for a country like Bangladesh. The earlier this is put into operation, the better.

Accountability is an essential prerequisite for desirable performance and attainment of success. This is lacking in our medical education and health-care system. Unless this is carefully redressed and a system of assessment is introduced, we cannot be optimistic of our future in the field of medical education, research and health-care.

Private enterprise in this sphere during recent years is a new development. This augurs well and promises a competitive better future. It must be realised that Government alone can never solve all our problems. Private efforts must not only add strength to the government endeavours but these should as well demonstrate that something better can be done. Both the Government and the private sectors must work in close co-operation with competitive outlook. A healthy competition is essential for healthy growth of the nation. We must all work together to build a happier and healthier future.

The Bangladesh Observer
Dhaka Sunday August 2, 1992

. . . An interview for Dhaka Courier by Shampa Kaiser

April 30, 1993

Changing the Soul

Tobacco is poison, so it's time to grow food instead, says ADHUNIK'S Prof Nurul Islam

An international conference, sponsored by Goa Cancer Society and International Union against Cancer (UICC) was recently held at Dona Paula in the Indian state of Goa. The theme of the conference was to introduce the possibility of having a national anti-tobacco organization in India and second to explore the possibility of having an organization involving SAARC countries. Prof Nurul Islam, president of ADHUNIK, was invited as a special guest to participate, and Dhaka Courier spoke to him upon returning:

How did you get involved in ADHUNIK?

I used to smoke cigarettes for many years. Around 1952 the first challenge to tobacco came up. Sir Richard Doll (who's 93 years of age now) first scientifically proved that tobacco was dangerous. Then of course tobacco companies as usual challenged that contention and continued pouring in counter facts in order to contradict that statement saying that such statistical data are not reliable etc. The controversy continued. Now in 1993 it is established all over the world that tobacco is harmful.

Addiction is something which becomes compulsive in someone's life. It is like addiction to alcohol and drugs which becomes ingrained.

Then why do you campaign against smoking particularly?

I am against all types of addiction but smoking is the gateway to it all. It has been found that most of the people begin with the habit of smoking before becoming addicted to anything else. It has been found that out of 100 alcoholics most are smokers than non-smokers.

Do you feel that your movement infringes on human rights?

Not at all. Human right is to live and not to die. It establishes the human right to live healthily, peacefully and happily. Smoking takes away that right. So if you do something against smoking you're not taking away human right but rather establishing it. On the other hand,

even if you did have the right to kill yourself you have no right to interfere with the healthy life of another individual.

‘The tobacco companies are the government’s best friends. The evasion of taxes of other sectors actually works as a strength to the tobacco companies to encourage the government to help them.’

Is the intention of ADHUNIK to pressurize the government or to influence public opinion?

Both are necessary. But public opinion is more important because government yields to public pressure. Every sensible government should accept sensible suggestions. That is why some of our sensible suggestions have been accepted by the government (although not all). We must congratulate them. I think that they should give us more opportunity to thank them all the more. For e.g. if tomorrow all the members of the legislative assembly stop smoking voluntarily then Bangladesh would earn the credit of being the 1st country to have their public representatives to be free from smoking. I would like to make a request through your column to all our members of Parliament to set an example before the world that the PM’s Secretariat and the Presidential palace have been declared tobacco-free. Let all the MPs irrespective of their political affiliation take a unanimous decision that they discourage smoking and have given it up themselves.

Do you think that your movement will be necessary at all if stringent policy is adopted by the government namely a complete stoppage of the cultivation of tobacco and the manufacture of the means of smoking such as bidi, cigarette, cheroot etc.?

If there is a ban on tobacco and its production made illegal, there will be social problems. The employees of tobacco companies must find alternative jobs. Secondly, the land cultivated for tobacco must have an alternative crop and that research is going on in Bangladesh. In some places in Kushtia for e.g. they have demonstrated that flowers such as dahlia and some fruits can be grown in the fields where tobacco is grown. They have also found that cotton can be cultivated in these fields. We don’t need to waste money by using foreign exchange when we can produce these at home.

So I suggest that the production of poison should be replaced by the production of food and other essential items. If Saudi Arabia with the help of advanced technology can produce vegetables in the same land which was once considered to be useless and barren why is it not possible to have an alternative crop beside tobacco? There was a time when people used to think that Pakistan will not be able to grow mangoes, coconuts, bananas and pineapples. Now mangoes in Pakistan are superior to mangoes in Bangladesh, bananas are equal if not superior, pineapples and coconuts are found in plenty now in the very same soil. The soil has not changed but the soul has. We can do so much with our country but we are totally short of confidence. Also the tobacco companies allure the farmers by giving them advance money for producing tobacco and allure the government by giving taxes well in advance whereas others are always evading it. If for e.g. revenue taxes of 56 crore is to be paid in July, they are enthusiastic enough to pay it in June so the tobacco companies are the government's best friends. The evasion of taxes of other sectors actually works as a strength to the tobacco companies to encourage the government to help them.

What is the programme of your organization to eliminate smoking habit permanently from among the people?

First of all we have been successful in stopping tobacco advertisements on TV and radio . We have been successful in inducing actors and actresses not smoke in the act. If an actor does smoke in the drama then a tragic result should only be depicted.

We have tried to discourage newspapers from accepting advertisements of tobacco but unfortunately money is more important to them than ethics. 'Readers' Digest' for e.g. does not accept advertisements on tobacco. Secondly, we have organized meetings and seminars. I organized a debate on TV the issue being 'women have a greater role than men in the prevention of smoking'.

You said you are trying to discourage newspapers from accepting cigarette ads, yet a member of your own group has a cigarette advertisement every week in his magazine. Do you not think this is a contradiction of principles and does it not enfeeble the very essence of your cause?

Yes, many have written to me criticizing this. I would suggest that if he wants to compromise and print tobacco ads in his magazine then the next page should be devoted free of charge warning smokers that

tobacco kills. Then of course tobacco companies would be less interested in advertising in that magazine but one should do that on ethical grounds.

What is the percentage of regular smokers in Bangladesh (minors, male and female)?

According to our national figures about 60 percent adult male and 20 percent adult female smoke in the urban areas. In the rural areas however, women smoke more (about 45 percent). Among them smokeless tobacco is more prevalent than cigarettes and bidis. Minors acquire the habit of smoking from the age of 6 to 8 onwards.

It was observed a few years ago that Bangladesh has the highest per capita smokers. Why is it that the Western world has been more successful in preventing smoking habit than we have?

In the Western world people are more educated. They are more aware of the present status of smoking effects. Also the voluntary anti-smoking groups are very strong in their propagation. There are legislations also. That is why you will find a gradual increase in the number of smoke-free restaurants, hotels, buses, conferences and other public places. In our case the people are not educated and do not know the risks involved. The poorer a man is both in knowledge and in finance the more likely it is that he will be a smoker.

What is the percentage of people do you think have stopped smoking permanently since you have launched your programme?

We find that the number of smokers amongst the educated are less now (although I cannot give you the exact figure). We have proposed to have another survey. In fact we now have a plan to conduct a survey in 2 places simultaneously (i. e. Dhaka and Chittagong). We shall make a survey in some schools and find out the present rate of smokers there. Then we shall have some interventions in schools located in Dhaka such as educational programmes, posters and pamphlets against smoking. We shall also do that in the schools in Chittagong. Then every 6 to 9 months we shall survey the effects of intervention. So that will give us both the present status of smoking among the younger groups and also the effects of intervention.

But now our general impression is that the educated groups have become more conscious about the hazards of smoking. However, my feeling is that more educated women smoke due to emancipation and a sense of equality. Whatever may be the reason women have taken it as a challenge. But I find that more educated men have reduced smoking.

What do you think will be the impact on the nation as a whole both socially and economically if nobody ever smokes at all?

Socially it will be excellent and economically it will be much better. Safer health can save one's money on health aspects. There was a question in the British Parliament once (about 15 years back) that if tobacco industries were shut down then 26 thousand workers would end up jobless. The opposite party counteracted by saying that if we close down the tobacco industry 26 thousand workers may become jobless temporarily but 52 thousand dying of cancer or lung diseases would be saved. Which is more profitable?

Are there any other social causes which you have devoted yourself to?

We have one programme for the religious groups and primary school teachers whom we use as an auxiliary force for primary health care. These are the groups which are under utilised. They have the space, time and persons available. If we give them training on primary health care such as sanitation, nutrition, food, vaccination and essential drugs required for basic medical care they can offer their services from their respective places of work. They can use mosques, temples and primary schools for health care delivery. By now we have trained about 1200 religious leaders and primary school teachers.

World No-Tobacco Day

TOWARDS A TOBACCO-FREE WORLD

Tobacco related diseases all over the world have taken an epidemic form. At least 3 million lives are taken every year by this deadly poison. One-third of this is contributed by the developing countries. The future is threatening and according to a WHO estimate within the next 20-30 years the death toll in the developing countries from tobacco related diseases shall be around 7 million. It is now established beyond doubt that at least 32-35% and according to some observers 50% of all smokers shall ultimately lose their lives by this suicidal habit. As many as 50% of all cancers and 95% of lung cancer deaths, 80% of chronic bronchitis and 25% deaths due to cardiovascular diseases are tobacco related.

Smokeless tobacco notably chewing and snuff taking, is a major cause of oral cancer in this sub-continent and the practice having no social inhibition is common among rural women.

It is estimated that while the smoking habit in the adult males ranges from 60-70%, the use of tobacco among the rural women is around 30%.

You are not safe even if you do not smoke. The environment polluted by smoking, if inhaled by you, you are a passive smoker and you run 30-32% risk of developing lung cancer more than a non-smoker, the corresponding figure for coronary heart disease is around 20-25%. The examples of ill effect of tobacco use are too many to be cited here. In fact, every organ can be affected by toxic substances of tobacco.

A substance which is so poisonous and a habit so lethal should by no means go unchallenged and it is the moral obligation of all from the political leaders to the social workers to do all that they can in order to eradicate the habit and eliminate this poison from the society.

Economic burden of smoking is not well realised in the face of revenue income which is paid annually by the tobacco industries as a handsome amount and even ahead of time. In a country like Bangladesh, where tax evasion is nothing less than usual, prompt payment of taxes by the tobacco industry automatically becomes magnified.

In the United States in 1985, direct health care costs associated with smoking were US \$ 12-35 billion. Besides this, the suffering far exceeds the cost that is measurable. In the United Kingdom, National Health Service Cost for smoking related diseases is more than £ 400 million yearly. Besides 50 million working days are lost annually due to the same cause.

In Bangladesh, the figures are not available, but the fact remains that the economic burden as a result of tobacco use is estimable on the basis of several factors, namely, i. Direct cost of health care ; ii. Productivity loss and iii. Accidental fires.

Realising the consequences of tobacco use and recognising tobacco as the leading preventable cause of death, WHO has waged a war against this lethal weapon which is peacefully used for a fatal outcome. Of the many measures adopted world No-Tobacco Day on May 31st every year with a particular theme is one which is becoming increasingly popular and proportionately effective in motivating people to join the crusade against the smokers to give up the habit, the non-smokers not to acquire it. The theme for this year's 'World No-Tobacco Day' is 'Health services : our window to a tobacco-free world'.

Smoking in health services means smoking in health facilities available in a country. It, therefore, includes the health institutions, their physical structure and the persons working in these places. In the U.K. earliest measures were taken by the physicians for their protection against tobacco. They are now enjoying the fruit and suffer the least from tobacco related diseases. Smoking among the doctors of the U.K. is one of the lowest in the world today.

During recent years smoking habit among doctors in the developed countries have greatly declined whereas a recent survey in Bangladesh indicates that around 40% of the doctors use tobacco. Among the medical students the rate is lower. Even then it is as high as 28% and 16% constitute ex-smokers. Nurses are rarely found to smoke while the lowest income group namely, the class IV employees, constitute a formidable number of smokers. In other words, the prevalence of smoking is highest among the lowest income group.

There might be many reasons for this inverse ratio but the dominant factor, to my mind, is the influence of smoking doctors. The uneducated lowest income group are ignorant about the hazards of smoking. They hardly realise how the habit takes away their food item and give them diseases. Examples of smoking doctors create an idea in them that smoking is harmless or else, they (the doctors) would have given it up or never have acquired the habit.

The role of a doctor in the health services in the prevention or elimination of smoking can never be overemphasised. In his work place this habit not only pollutes the environment and affects the passive smokers but also creates a sense of security in uninformed group which takes the first stick with curiosity to suffer from the curse in the long run.

Apart from students around them the patients who are in the hospital can be classified broadly into two groups, viz. smokers and the non-smokers. The smokers derive consolation from smoking doctors and are encouraged to continue to smoke even if they suffer from tobacco related diseases. Morally and ethically, therefore, doctors are obliged to shun smoking and frankly and boldly tell the patients about the diseases that it can cause. A doctor therefore, has a privileged position in rightly protecting people from the maladies of tobacco but also to persuade or even command not to smoke. A doctor who smokes cannot have cigarette in one hand and a prescription for quitting tobacco, in another.

As a measure for prevention of smoking, the Ministry of Education, Government of Bangladesh has incorporated articles on the dangers of smoking in the textbooks of school for children aged 13-16 years. This measures help educate students about the dangers of tobacco use and discourage the teachers as well. While informing the students about dangers of tobacco, the teachers should logically feel embarrassed to smoke in front of their pupils. Furthermore, it is expected that students will bring the message home to forcefully discourage parents who smoke.

It has been my personal experience that if the smokers' wives tolerate the irritating and nasty smoke of tobacco at all they do it with hatred in their heart of hearts. Their protest can not be forceful and effective in a patriarchal society like Bangladesh. The children here can play a major role in effectively persuading their father or parents to give up the habit of smoking or not to take it up.

In the health sector, the Ministry has issued instructions to all health care centres to be tobacco-free. Admittedly it is difficult to implement this restriction rigidly in areas frequented by visitors, smoker patients and health workers. Notwithstanding these difficulties, if the qualified medical personnels are not found to smoke in the campus and if they are sincere in implementing the restrictions, the effect becomes far reaching.

The nurses who care for the patients with love and affection can influence the patients who smoke by explaining the nature of the diseases and its relationship with tobacco.

Other category of workers namely the ward boys, sweepers and other helpers constituting the lower income group are naturally afraid of the administration and they do not smoke before the superiors. If there is a report of someone smoking in the premises in their absence, he should be persuaded not to do so. Modest warning and finally punishment can also be resorted to in phases.

What is applicable in Govt. health institutions or health care centres should be equally applicable for the non-governmental organisations of similar nature. Members of the profession have same responsibilities irrespective of their fields of activities. It, therefore, ranges from Govt. institutions to individual clinics or consulting chambers.

I hate to recall the days when I used to smoke before my patients, students, the public and in my consulting room. The addiction was stronger than my moral obligation. I never felt that I was committing an offence even though I knew that this was so. Gradually I realised that I could not effectively influence my patients to give up the habit which I myself did not. When I gave it up almost three decades ago, I could affectionately persuade my patients to follow my example. Situation demanding I could command and even now I can and I do.

To all members of my profession and to all working in health fields whatever their background be medical or non-medical on this World No-Tobacco Day, my passionate request is to join our fight against tobacco. The slogan of the day is 'Health services : our window to a tobacco-free world'. Let all of us open the window and enter that world.

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Addiction - A growing problem in Bangladesh

THE use of drug in some form or other began with the beginning of life on earth. The experience gained through benefits derived by eating plants that had grown around him became traditionally acceptable and these have been a part of human life style. Opium, alcohol and cannabis have been used for centuries with a beginning like this and are still widely used.

Drug abuse is defined by WHO as persistent or sporadic excessive use inconsistent with or unrelated to acceptable medical practice. During the last two decades or a little over drug abuse has increased at an unprecedented rate and no part of the globe has been spared, no country, is immune.

According to the United Nations, there are 15 million drug abuser in the world. This excludes cannabis which is by far the most common illicit drug. According to experts these figures are to some extent under estimated since only registered addicts and those picked up through the police and court are counted.

According to World Development Report '93, as many as 5-10% of the world population are affected by alcohol related diseases. This accounted for 3% of all diseases globally in 1990. About two million people die of alcohol related disease every year in the world and 50% of them suffer from cirrhosis of the liver, 35% from cancer of the liver, oesophagus and 5% by traffic accident. The consumption of alcohol is increasing in many developing countries. Consumption rose from 12 litres to as much as 135 liters per head in some developing countries. Despite stable situation in the consumption of alcohol in the developed countries, the production doubled during the period between 1970 and 1989. This is obviously due to the increasing consumption in the developing countries.

At the beginning of the present century drug abuse started trickling down to developing countries. During the last 2-3 decades the rate of infiltration has increased out of proportion. In some countries of Asia the use of heroin has even exceeded that of America.

ACTION THROUGH THE AGES

It is interesting to note that way back in the 1700 B. C. regulation against drug abuse was introduced in Babylon. In China opium was recognised as a harmful substance in 1950.

During 18th and 19th century opium was an important ingredient of many medicines in the U. K. Warning against the use of opium by the working mothers for keeping their babies asleep during their working period was published in England in a book entitled Condition of the Working class in England in 1844.

Morphine was discovered in 1803. It gained tremendous popularity as a pain killer. During the war in America, in the war fields and prison campus use of morphine increased tremendously. It is estimated that during this period 400, 000 persons became morphine addict.

During 1880 Cocaine became popular both as drink and medicine. In 1884 Sigmund Freud used cocaine for the treatment of mental fatigue. Heroin was discovered in 1898. Marijuana has been used till 1937 as an ingredient of medicine as well as for industrial purpose.

Till the 18th Century drug meant something used for treatment or some other purpose useful to man. We now realise that this is not wholly correct and in fact a dangerous calculation.

SITUATION IN BANGLADESH

Drug abuse in Bangladesh has recently reached a gigantic proportion. The geographical location of the country and the changing trend in social and cultural life are major contributing factors. The golden triangle consisting of Burma Laos and Thailand, the golden crescent consisting of Pakistan, Afghanistan and Iran and golden-edge with Bihar, Nepal and Bhutan — all together make the country vulnerable to easy access of smugglers for illicit drug trafficking through several channels ranging from surface to the sea. The south and south-eastern part of Bangladesh with widespread and unprotected forest, the sea and the surface with known and unknown pathways offer comfortable entrance of illicit drugs.

During 1974-79 the use of alcohol and cannabis reached peak in Bangladesh as in many other countries of the world. Heroin and Phensedyl have now infiltrated not only almost all institutions but also the areas inhabited by less privileged people. During the last two years

four kilogram of cocaine have been recovered form Dhaka and Chittagong.

Data available from Narcotics Control Board, Government of Bangladesh show the current trend of drug abuse in Bangladesh. Seizure of Cannabis, Liquor and Phensedyl is revealing. Seizure of cannabis from January to June '93 has equalled the total amount in 1992. The product is banned is a cough syrup. Because of easy access from the neighbouring country through unauthorised routes this enters the country without much difficulty. As a result its use has infiltrated various institutions including university.

TABLE-1: SEIZURE OF DRUGS FROM 1991, IN BANGLADESH.			
NAME OF DRUGS	QUANTITY OF DRUG-SEIZED		
	<u>1991</u>	<u>1992</u>	<u>Upto June, 1993</u>
Heroin	14 kg 481 gm	14,126 kg	3,679 kg
Cocaine	2 kg 545 gm	1,500 kg	0, 220 kg
Charas	5 kg 428 gm	4,330 kg	0,241 kg
Opium	- 55 gm	2,555 kg	4,211 gk
Cannabis	1111 kg 794 gm	1153,459 kg	808.002 kg
Plants	2,08,874	11,972	50,402
Cigarettes	—	—	6,248
Pathidine			
ampoules	134	1,130	50
Foreign Liquor	1,152.500 Quart	876,707 Quart	237,232 Quart
Cane beer	1,630	2,604	347
Phensedyl	3,798	14,077	13,615
(Bottle)			
Source : NCB			

**TABLE-11: ESTIMATED NUMBER OF ADDICTS IN
BANGLADESH**

Substance	Estimated number of addicts
-----	-----
Heroin	12,00,000
Opium	16,000
Hashish	50,000
Alcohol	3,00,000

This is a rough estimate as the addicts are not all registered and in fact cannot be. Experience tells us that the real truth is difficult to discover for several reason including personal attitude. An addict knows that he is not right in his action and in the eyes of the law and society, he is doing something which is not desirable. Concealing the facts is therefore, not unusual for him.

FACTOR LEADING TO ADDICTION

WE may now touch on some contributing factors to drug abuse as revealed through some small surveys. Despite limitations these are useful indication.

TABLE-111: FACTORS LEADING TO ADDICTION

Factors	Percentage
-----	-----
Peer Pressure	50
Anxiety & depression	35
Unknown	15

Beside these, there are several other factors. These are ignorance, curiosity, changing social structure and alienation. A drug which is used for temporary relief of symptoms is not infrequently abused in good faith for indefinite period or in a haphazard way not knowing the hazards associated with it. By the time it is realised, it is often too late. Tranquillizers, hypnotics and cough syrup like phensedyl constitute a significant proportion in this category.

Much publicity through print media generates curiosity among people who are tempted to have the first taste which may be beginning of the peril.

The pattern of life, gradually deteriorating family bondage and in our parts so-called westernization serve as motivational factors towards a leaning for western culture which begins with "First experiment". Sense of isolation from the society, the family the community or even the country takes one to drugs as an escape.

The drug abuse is a special threat to the young. Several surveys of Bangladesh indicates that largest number falls within the age range between 20 and 30. The next higher incidence is upto the age of 40 after which the rate falls sharply. The beginning is around 14 years. This has been experience in other countries of the world. The youth constitute the most vulnerable group. This is the period when they search for self identity and new experiences with immense curiosity.

Daily expenditure on Addiction.

Surveys conducted by various groups in Bangladesh reveal the following (Table-1v).

TABLE-1V : DAILY EXPENDITURE ON ADDICTION

Amount spent (in taka)	Percent of adults
30-50	40
51-100	15
101-200	10
201-500	15
501-1200	10

It is therefore evident from the above account that the expenditure involve is not in keeping with the per capita income in most cases.

We must realise that to an addict the dying is essential and for that he needs money to procure that. He cannot wait and adopts all possible means to procure money. Consequently various crimes are committed by him. Surveys indicate that 85% of the addicts in Bangladesh are involved in various offences range from hijacking to sale of durgs. Serious offences are committed by about 15%.

IMPACT OF DRUG ABUSE ON FAMILY HEALTH

Exclusive use of psychotic substances can destroy families through violence, discord economic problems resulting from cost of dependence and reduced productivity for impaired health. Diversion of family income to drugs and alcohol results in reduction of finance for food and other essential necessities. Infections, injuries and latest curse AIDS are related to drug abuse.

DRUG TRAFFICKING — A MIGHTY EMPIRE

Drug trafficking is a multi-billion dollar industry supported by widespread network employing modern technology for production and transport of illicit drugs. The organisers who instigate finance and direct their trafficking never handle the drugs themselves. The main conspirators involved in drug trafficking escape prosecution. Tremendous profits derived from this illegal industry constitutes a strong attraction to criminals. Huge amount of drug money has tremendous influence at all levels in administration. The bribery passes across all borders and softens or even paralyzes administrative machinery. Money spent in thousands in bribing official is considered as a good investment.

A relationship between shipment of illegal drugs and illegal arms has recently come to light. These have been used with the political motivation of spreading violence and terrorism with the challenge so powerful and penetrative

ROLE OF THE U. N. AGNECIES IN PREVENTION

The world community must act unitedly to effectively cope with the situation described above. In the words of the Secretary general of the

United nations "In the post cold war, the international community faces a number of new and difficult challenges to peace and security. None is more insidious or more far reaching than illicit drug production, trafficking and consumption. Hardly a country, ethnic group or community has been spared its effects." The theme of the international day in 1993 against drug abuse and illicit trafficking is "Prevention of Drug Abuse Through Education,"

United Nations recommend education on abuse in our schools of all categories religious and secular. It, in fact emphasizes on the creation of awareness at all levels of the society.

Parents and educators have a vital role to play and they must be aware of the problem to become effective instrument in the process of prevention of drug abuse.

The international drug control programme of United Nations and the focal points of United Nations decade of drug abuse 1991 to 2000 are intended to ensure balanced approach for the prevention of drug abuse.

Rapid growth of drug abuse in this globe has aroused public and administrative awareness at national and regional level. Drug abuse being a global problem has to be tackled globally. Each individual nation bears the responsibility to act locally, regionally and globally. For any global effort to be successful regional co-operation is essential. The region to which we belong, namely the SAARC region, have been increasingly affected by this curse because of the proximity of our region to areas involved in the production and trafficking of narcotics.

The SAARC convention in 1990 was to promote co-operation of member states. Since this convention progress has been made in several countries including Bangladesh by way of legislation, penalty, education and mutual co-operation.

CONCLUSION

Intense international concern over the drug abuse has grown during the recent year. Reasons are obvious. The adverse effects on the family, health hazards, accidents, criminal offences, reduced Productivity, learning and mental problems are the all out come of drug abuse.

Most powerful organization of drugs lords which are equally rich in financial terms with a mighty empire or network stronger than many national defence forces is not so easy to tackle. It is therefore. not a matter of days and weeks or even months or years but of ages to find a solution.

Dispite this critical situation the challenge of drug abuse must be counteracted through global efforts unitedly. The global efforts can never be succssful without national or international organizations being aggressive in combation this deadly habit. Even an individual must play his role. Without personal commitment and public co-operation there can be no success. We must all stand together and everwhere to save the lives of millions facing destruction unless a timely action is initiated.

Drug abuse, AIDS and crimes constitute three most destructive inter related weapons in our planet during the present time. Unless these are destroyed, we all have to to be ready to face destruction. It begins at the beginning of life and takes the victims to early destruction unless timely action is taken.

Bangladesh like other muslim countries enjoys a unique privilege in its crusade against offence. The religious principles and the network of poorly utilised or underutilised manpower behind if properly trained and the religious strength form Quranic principles are properly utilised for motivation we can achieve wonders. The existence of three offences viz. Drug Abuse, AIDS and Crimes are but examples of our society being dripped away from religious principles through western influence. Our education institutes are not immune form addiction and in fact the present disgraceful and destructive situation is bound to prove fatal to the nation. Illicit drugs and weapons in the hands of the misguided few are ruining the future genaration. The present genaration is at the brink of annihilation. It is our moral and ethical responsibility to save them. With the armaments at our disposal which is most powerful by which I mean our religious doctrine we cannot of a beter situation. We must behave ourselves in such a way that our advice becomes forceful and acceptable to the youth. the vulnerable group and the society.

It is only through this honesty of purpose and determined effort we can save the present generation form future peril and for this action must begin today. We cannot wait for tomorrow.

ADDRESSING THE GASTROENTEROLOGY SOCIETY

Distinguished guests from home and abroad, members of the Gastroenterology society, my students and grand students (as defined by the President of the society), ladies and gentlemen.

Thank you for giving me this unique honour tonight in this august and colourful gathering. As I stand on this dias before the mike, I remember two worthy sons of Bangladesh with deep sense of gratitude and sorrow. Late National Prof. (Dr.) Md. Ibrahim was the father of medicine in Bangladesh and his contribution has been nothing less than phenomenal in the field of Diabetes. This is recognised all over the world and its lasting example stands erect in Bangladesh as well as in Pakistan (both constituting once two wings of one country, Pakistan). He would have been the best person to adore this function. We lost him and yet he was a successful and satisfied man when he left us for ever.

It was Professor Fazle Rabbee, a young brilliant Cardiologist who introduced Azad as a bright student to me with a request to accept him as one of my trainees in IPGMR when I was Professor of Medicine and acting Director (and Sir James Cameron was an Adviser). I did not know Azad before. My faith in Professor Rabbee prompted me to accept Azad. This had never been shaken. Azad worked with me, became one of my postgraduate students, obtained his FCPS. All together it was about 10 years. He then obtained Ph. D from Oxford under Prof. Truelove. One of his examiners incidentally was Sir Francis Avery Jones, a father figure in Gastroenterology in the UK. He was very close to me. I had immense sense of pleasure and pride when Sir Francis wrote to me about Azad, soon after his thesis defence was over. He highly praised Azad's performance.

I remember Dr. Fazle Rabbee for his contribution ultimately in making a gastroenterologist. It was his introduction of Azad to me which was the first step to the position Azad is occupying today an enviable position as the Founding President of Bangladesh Gastroenterology Society.

Ladies and gentlemen, with a fortunate background and sentimental attachment so strong and well knit the society perhaps could not think of someone else to be the Chief guest tonight. If my assumption is correct and I hope it is so, I have reasons to be happy and proud even though I am an internist and not a gastroenterologist.

Gastroenterology in Bangladesh

I did not have the opportunity of attending your scientific deliberations. I can, therefore, reflect on the speciality as I see it today and uninfluenced by the presentations. I must at this stage express my great satisfaction at the remarks made by delegates from abroad notably India and Japan. In their words, the performance and presentations by my students have been excellent and speaks highly of the progress in the field of gastroenterology in Bangladesh. Who else could be happier with such a message, ladies and gentlemen, than a teacher.

IPGMR started functioning in 1966. It is about the time British Gastroenterology Society was formed. Interestingly enough, this consisted of physicians, surgeons and pathologists at this initial stage. Today it has over 1500 members who are gastroenterologists.

In Bangladesh we have comparable number of FCPS and about 15 gastroenterologists. The figure appears disappointing and yet there are silver linings behind the cloud.

Advances in Gastroenterology

Before bringing these to light, I take this opportunity to reflect on some of the advances in gastroenterology during the last three decades. Hepatocellular Carcinoma (HCC) is no more considered a rare disease in Bangladesh. You will always find some cases in a medical unit of almost all large hospitals. Viral Hepatitis is as common here as in other countries. This pattern is, however, still different. The virus responsible for hepatitis is ever increasing in number and varieties. We began with A and have now come upto virus E. We will perhaps in future discover many more. We are confined with HBV and as such HCV has not come to much prominence. Effective control of HBV in the developed countries has brought C Virus to prominence and this has been found to be more dangerous than B in the development of chronic active hepatitis (CAH). HCC from C is much more than from HBV. As many as 50% cases of HCV can develop CAH according to studies abroad. Increasing number of cases of HCC in Bangladesh is now an accepted fact. Work in this field is in progress and much has to be done for prevention of HBV and HCV infection. Happily Hepatitis A and E do not progress to chronic liver disease (CLD).

Inflammatory Bowel Diseases once used to be considered as a problem in the Western world is now more and more recognised in Bangladesh. Ulcerative colitis, regional ileitis and other inflammatory bowel diseases now occupy important positions in clinical medicine. Intestinal

amoebiasis was once at the top of the list. Advent of successful therapy as well as availability of modern diagnostic techniques and tools have changed the situation.

With the advancement of treatment many hitherto unsuspected diseases have now been unfolded as the number of specific inflammatory bowel diseases are decreasing. More and more cases of irritable bowel syndrome are now being diagnosed. Many believe that this syndrome exceeds the total number of chronic inflammatory bowel diseases. Looking back about two decades ago these used to be treated as cases of chronic intestinal amoebiasis while quite erroneously a group used to be labelled as mucus colitis.

Treatment of peptic ulcer has undergone radical changes during the last quarter of the century. Introduction of H_2 receptor antagonists and its subsequent generations from cimetidine to famotidine has brought with it advantages over many earlier disadvantages in the field of ulcer therapy. The treatment regime has improved and can be determined with endoscopic supervision. Cases which proved to be resistant to these form of therapy can now be treated with proton pump inhibitor, omeprazole. Even the uncompromising Zollinger-Ellison syndrome can now be brought under control. Not long ago this was a case for total gastrectomy.

The role of *Helicobacter pylori* is yet to be finally settled. There is, however, no doubt that it contributes to the development of duodenitis and antral gastritis. Detection of this organism and its eradication with bismuth and antibiotic has helped recovery of cases apparently resistant to standard treatment. Many modern gastroenterologists might be amused to think of frequent feed and drug with charted Sippy treatment. Surprisingly, even today printed sheets are handed over to patients containing instructions for two hourly feed or frequent meals by some members of the profession. These speak of ignorance of the profession, a social hazard for the patient.

Therapeutic Endoscopy

The outstanding contribution of endoscopy has been in the field once occupied by open surgery. At the two extreme ends of the G.I. tracts endoscopy is now effectively utilised. For example, polypectomy under colonoscopy and control of bleeding through lasser therapy at one end and control of variceal bleeding with endoscopic sclerotherapy at the other.

Introduction of transparent balloon is an advancement over Sangstaken tube. This helps inspection of varices to determine their status for a decision regarding further treatment and follow up.

Biliary tract surgery is no more a process of laparotomy, manipulation, cholecystectomy, choledocostomy and post-operative cholangiogram in every cases. Percutaneous transhepatic cholangiogram (PTC) is no more a necessity with the introduction of USG and ERCP. The latter procedure has now advanced further, for example, endoscopic papillotomy and removal of duct calculus. Endoscopic (laparoscopic) cholecystectomy is now an established procedure.

Both these procedures, I am happy to announce have been skillfully acquired by my students. All of you should be happy to know that the first endoscopic cholecystectomy was performed at BIRDEM and on the following day at IPGMR by Dr. Nayeem, one of our bright students trained in Japan. The procedure required four holes, 45 minutes to 2 hours to operate and two days stay in hospital. In the United States, this is done in the out-patient department where the patient reports in the morning and leaves the hospital in the evening for his home if he is near about or stay in the hotel overnight.

By and large, therefore, we are today in a position to tackle many diseases in the upper GI tract extending to second part of duodenum or even to the third part. Through colonoscope we can reach upto caecum. The remaining part is being explored for endoscopic visualisation and therapeutic procedure which are of course not as frequently required as for other parts of the GI tract, because of the occurrence and nature of diseases in this part.

The Future

I must say that despite the phenomenal advances in gastroenterology during the last three decades which more or less correspond with the establishment of IPGMR, we have yet a long way to go.

The beginning

I may mention here in passing that I had the fortune of being the first to perform liver biopsy way back in 1958. It was more than two decades later in 1973 that first endoscopy was performed in IPGMR by me alongwith Dr. M. N. Alam with a first generation model carried all the way from USA to Bangladesh by a friend at my request. Way back in 1968, I published an article on primary carcinoma of liver in East Pakistan in the journal of Tropical Medicine and Hygiene alongwith Dr. Hazeera Mahtab and Dr. Azad Khan (both of them are now Professors) where we emphasized on the importance of considering the disease as important. In fact in conclusion we said "It is stressed that most of the

etiological factors exist in East Pakistan and Primary carcinoma of the liver should not therefore be very rare.

Wider use of needle biopsy is suggested. Routine removal of liver tissue during surgical exploration is recommended as a very important means of diagnosing various unsuspected hepatic disorders including primary carcinoma.”

First ERCP was done by Dr. Mahmud Hasan in IPGMR in 1986 after his return from Edinburgh on completion of his studies there. First therapeutic ERCP was performed by Dr. A.Q.M. Mohsen in 1989 at BIRDEM. He also received training in gastroenterology in the UK.

Dr. Azad and Mahmud Hasan are the first two qualified gastroenterologists in Bangladesh. Azad joined as Prof. of Gastroenterology in 1985 and Mahmud Hasan in 1991. Both obtained doctoral degree from the UK under reputed gastroenterologists. Dr. Mobin Khan was posted as Asstt. Prof. Hepatology in 1982 through my initiative. He obtained M.Sc. in Hepatology from Queensland in 1988. He became Professor of Hepatology in 1989. The department started functioning with Mobin Khan as Associate Professor of Hepatology, from 1983. It was my proud privilege to initiate creation of the specialist posts which they all occupy today. If I claim to be the first to bring life to these specialists they can very well claim to initiate movement, a sign of life. I am a happy and proud teacher, ladies and gentlemen. Gastroenterology society is my grand child and all the junior gastroenterologists are my grand children. This is what Prof. Azad, the father of the society hinted at while introducing me to our friends abroad. I did not require it, according to him, for the rest of the audience.

An appeal to the administrators

Let us at this stage turn our attention or rather draw the attention of our administrators who matter. We have with us today the Secretary, Ministry of Health and Family Welfare and Director General of Health Services to whom I have a request. Our students at postgraduate level are both sincere and capable but the environment in which they are at times placed is not only discouraging for them but also detrimental to the interest of the nation. We cannot be happy to see that there exists only one post of Gastroenterologist in the whole country and our qualified people cannot use their talent and experience. In the absence of opportunities specialities cannot develop and if the specialities do not develop, we have to face the consequences of brain drain. Many of our able specialists are interested to serve the country and yet the doors are closed

to them. We do not offer them any facility. Curiously enough we do not even think of them.

We do speak of primary health care but often forget that without tertiary health care effective implementation of primary health care is as impossible as to have children without mother. I may have an optimistic note for the young gastroenterologists that with speciality so advanced and so much needed they have a bright future and the nation has the obligation to open up opportunities for them.

Conclusion

Ladies and gentlemen, I must thank you once again for the honour you have done me by selecting me as the Chief guest to deliver this banquet lecture. Communication Minister, to my mind, could have been a better choice. Advances in communication system have been phenomenal and those involved are proud of it. The gastroenterologists are by no means lagging behind in their system of communication. They can now comfortably travel through the whole Gastrointestinal tract. They can, in fact, enter the GI tract, inspect and detect the offender, remove and bring a cure. A brilliant example of communication with cure. Despite all these, I have acquired the right to be your Chief guest not as a specialist or as a Minister but as one whom you recognise as your teacher. I am indeed equally proud and happy tonight to be with my students who have pioneered this speciality and their students who are playing significant role in building up the speciality and strengthening it. Distinguished guests, ladies and gentlemen, all of you may rightly feel happy about the progress made so far in this particular speciality and this will be a good news for all who shall be benefited with the advances in health care facilities in the country.

Finally may I say that we have not only gifted our gastrointestinal system with a sumptuous dinner and a pleasant evening but also have added to our hope of a progressive future in the health and welfare of the people. I wish the society a bright future and all of you safe health and happiness.

Thank you.

As the Chief Guest at a banquet by the Bangladesh Gastroenterology Society in its 2nd Annual Convention on the 11th February 1994

TOBACCO TAXATION

(A source of Revenue for the Government and a Boon for the Poor)

WHO predicts that if wide-scale control measures are not urgently undertaken within the next few decades, the annual death rate from tobacco-related diseases worldwide in the 2020s will be 10 million. It goes further to say that 'about five hundred million people who are alive on this planet today are likely to be killed by their smoking habit.'

The epidemic of tobacco habit which is being effectively controlled in many developed countries is now shifting to the developing countries. The tobacco giants are utilising their vast resources to compensate the loss in the west at the expense of the developing nations. Their export to the developing countries has increased manifold during last decade.

The wealth earmarked by the multinational tobacco companies for promotional activities is enormous. This is in terms of billions of dollars. US cigarette manufactures spent about 3.6 thousand million dollars on advertising in 1989. We have the misfortune of witnessing their aggressively penetrating influence for promoting tobacco habit in the country.

Advertisement is banned in our Radio and Television. But this has been widely counteracted by the tobacco companies through sponsorship of sports and cultural events, donations to hospitals and schools, scholarships, relief works and many more which speak volumes to the viewers, listeners and readers. The billboards which spread from the airport and infest the whole city with attractive designs cannot escape attention of the illiterate mass who are naturally influenced. They either stick to the habit of smoking or become new victims of this tragic habit.

According to an estimate there are 20,000,000 male smoker in Bangladesh and approximately 5,000,000 female smokers. In case of female the figure is greater conservative. Most of them hide smoking for social reason.

To smoke or not to smoke is no more a question. The hazards of smoking are now established and the control measures in the west or the developed world as has already been stated have gone a long way. Unless adequate measures are taken now, if smoking epidemic continues unabated in the absence of effective national control programme, the oft-repeated slogan "Health for all by the year 2000" shall remain a myth. We cannot ignore this challenging situation.

Smoking control programme has been argued against on economic grounds. In ultimate analysis this is found to be not valid. Loss of production, increased need for medical care, fires and accidents are three main types of involvement in economic terms.

There are three ways by which smoking can reduce production. These are : i. Reduced life expectancy, ii. Increased absenteeism from work, and iii. Increased number of permanently disabled.

Health service expenditure on smoking-related diseases, disablement, absenteeism from work, fires of cigarette-origin, use of fuel to cure tobacco and reduced food production all lead to economic losses which far outweigh the benefits of smoking as an industry. In the developing countries where tobacco production has been expanding per capita food consumption has either declined or remained stagnant. Malnourishment has increased. This has influenced respiratory and other smoking-related diseases.

Production of tobacco in the developing countries is at the cost of food production and fuel, therefore in actual terms it does not add to the GNP.

The effect of tobacco production in relation to the growth of tobacco industry is noticeable in Africa where per capita food consumption by the end of 1981 was considerably less than what it was two decades before. Food production per capita rose by 1.2% in Latin America between 1971-1980. During the same period there was a decline of food production by 1.2% in Africa.

Economic loss in Bangladesh due to smoking-related problem is difficult to calculate in actual terms. The pattern of diseases we come across in hospital and in private practice indicates that we cannot claim to be better off than other developing countries. Some of the adverse effects of smoking on health may even be worse because of the state of malnutrition and sub-nutrition due to various health problems including repeated pregnancies.

For the control of tobacco epidemics various measures may be adopted. It is intended to restrict this article to one of the most effective means of tackling tobacco. When the country is preparing budget it is time to unearth the truth behind the revenue earned from tobacco industry. The revenue received from tobacco industry is regular and substantial. This at first sight is an attractive, apparently significant and a praiseworthy contribution to the government exchequer.

Extensive research has been carried out in many countries of the world regarding the taxation on tobacco and its impact. Increasing taxation

increased the government revenue. What is more important is that it does decrease tobacco consumption especially among the young people and the poor. It has been found that a 10% increase in the price of cigarette produces a decrease in the quantity consumed by about 4.2% and large majority of this response represents individual's decision not to smoke. For the teenagers a 10% increase in the price of cigarettes will cause a decrease of consumption by 14%.

Study in the United Kingdom show that increase in cigarette taxes increases government revenue and reduce consumption among young people and labourers. Cigarette price in this country rose by about 26% between 1980-1984 with a fall of consumption by 20% while cigarette revenue rose by 10% and provided the government with an extra thirty six million pound revenue. Majority of the decline was attributed to taxation.

In Canada the price increase has shown a decline in tobacco consumption. Between 1980-1989 tobacco prices doubled and the per capita consumption among those of fifteen years and over declined by 29%. Experience in Finland also proves that an increase in the price of tobacco does not decrease government tax revenue even if its consumption declines. In Italy in 1981, the price of tobacco increased by more than the rate of inflation and smoking decreased in all age groups including the young.

Data analysis from 22 countries of OECD (Organization for Economic Co-operation and Development) for over 26 years showed that increase in prices, ban on advertisement and strict warning on cigarettes all played significant role in reducing tobacco consumption.

Though tobacco advertisements were enacted in 1970, there was no reduction on tobacco consumption in Singapore until 1974. Tobacco taxes were increased in 1984 and this was followed by a fall in tobacco consumption. Singapore became the first country in 1991 to ban importing duty free cigarettes by the travellers.

In March 1991 the Hong Kong government announced a tax increase by 200%. Soon after the announcement by the Finance Secretary which was supported by as many as 70 international organizations including ADHUNIK the Government has to yield to the lobbying of the tobacco industry and the proposal of 200% increase was reduced to 100%.

It is therefore abundantly clear from observations in many countries of the world that increase of tax on tobacco is a means of raising Government revenue and protecting the victims from the risky habit either by quitting or not taking up the habit.

In some countries a portion of tobacco taxes is earmarked for anti-tobacco activities. Health sponsorship councils in different parts of Australia and Newzealand provide brilliant example of sponsoring sports and other artistic events replacing tobacco industry. **The European Conference on tobacco policy in 1988 recommends 1% levy on all tobacco sales in addition to taxation. This additional amount is recommended to be used for anti-tobacco activities.**

Government of Bangladesh feels shy of increasing tax on tobacco. The revenue they earn from tobacco is so ready made and lucrative to them that the fear of loss of income deter their decision to act wisely. It is indeed a pity that we hesitate to accept scientific data available from all over the world and yield to the lobbying of the mischievous manufacturers of tobacco. This battle between truth and propaganda in the developing countries in general weigh favourably for propaganda which shuts the eyes of our legislators, the policy makers.

We have observed that in Bangladesh smoking habit is higher among the poorer class of people. One might argue that increased taxation would be a heavy burden on the low income group. This concept is not correct. It has been found in numerous studies that increase of tax discourages and not uncommonly compels the poorer class to quit smoking or not to take up the habit.

The government might apprehend agitation by the tobacco users against taxation and the opposition group may use them. We have ample evidence against this misconception. **If there is a single issue in which the Government and the opposition have identical views it is on the ill effects of smoking.** Both the parties agree that Tobacco Kills and measures must be taken against this deadly habit. In fact we have in our possession identical views expressed by the Prime Minister and the Leader of the Opposition on this particular issue.

Increased taxation on tobacco therefore go unchallenged as against sharp reaction to all other taxaton including that on alcohol which obviously has no significant place in Bangladesh. The Tobacco Industry will not sit idle. They will use their vast wealth in all possible ways to buy support. If the administration can resist temptations and realise the benefit of taxation there is no other way for the tobacco industry. This has to accept the government decision. This conviction is based on experience gained in many countries of the world.

There is yet another question often put forward by the tobacco lobbyists and the uninformed circle. Anxiety exists in different quarters

about the future of the tobacco growers. The misconception that in the tobacco fields nothing else can be grown is gradually disappearing. Alternative farming has been found to be possible and productive.

Tobacco is currently grown in about 47,192 hectares of land, producing 41,545 tonnes per year. Local tobacco production not only meets Bangladesh's domestic requirements, but has good export potential.

From the analysis of the agro-ecological computerized database at the Bangladesh Agricultural Research Council, a wide variety of crops have been found to be potentially suitable for the land currently under tobacco cultivation. In fact, these crops are grown to some extent in soils and climatic conditions similar to those of the tobacco growing belt.

Chilli, potato, garlic and cotton cultivation appears to be more profitable than tobacco. All these crops could be successfully grown without altering the present major cropping patterns.

When the country has to import food items, it is both logical and ethical to produce food in areas which have for so long been used for producing a toxic substance.

Now that we are giving final shape to our budget to be presented before the National Assembly it is time to seriously consider increased taxation on tobacco for which we have been trying to persuade the legislators for long. Those responsible for preparing the budget should consider themselves responsible to the nation for health and welfare of the people.

When tobacco taxation has been found to be an effective weapon for increasing the revenue and protecting the innocent victims in many countries of the world both in the East and the West, there is no reason to doubt that the same should not happen in Bangladesh.

Alternative farming shall not only remove the doubt of creating unemployment but will also add to the food products which the country needs for home consumption and export. Evidences we have indicated that we should not wait till the next budget. This will allow hundreds and thousands of our people die of diseases related to tobacco during the intervening period. In addition in the meantime many will take up the habit and ultimately fall prey to the poison in the prime of their life.

Anti-tobacco movement in the country by ADHIUNIK, our national anti-tobacco organisation has received world recognition for the success it could achieve during a few years of its coming into being viz : i. ban on tobacco advertisements in Radio and Television, ii. ban on smoking in domestic flights, iii. declaration of Bangabhaban (Presidential Palace) a tobacco-free zone ; and lastly iv. declaration of the Prime Minister's

Secretariat as a tobacco-free zone. Declaration of Bangabhaban and Prime Minister's Secretariat as tobacco-free zone bears ample testimony to the serious concern to both the Head of the State and the Head of the Government for the health and welfare of the people. These actions have in fact encouraged many in the Cabinet and outside to declare their office premises or at least their office rooms tobacco-free.

Enough evidences have been cited in this communication which should dispel the misconception about loss of revenue and problem of unemployment with increase of tobacco taxation. The Government therefore has nothing to lose and in fact it will be gainer by this action. Several countries have shown the way. It is now for us to go for action. Will the Prime Minister take up the challenge of the tobacco industry boldly and firmly and set an example before the world. Hong Kong a neighbouring country can increase tobacco tax by 100%, why not Bangladesh? The government is for the people and the industry's profit is at the expense of human lives. No one can disagree that the tobacco industries sell poison for profit. It is time to think whether we should allow this to go unchallenged. Our aim must be a tobacco-free society. It cannot be achieved in a day or even a decade. The action has begun and it must be speeded up.

Taxation is the most effective weapon for elimination of tobacco habit of the poor and the young. It is our moral duty to save them from the mischievous habit of diverting their money for food to poison. The time for action is not the next year, next month or next week. It should be not even tomorrow but today. We must adopt this means at no cost. The government has nothing to lose. It is a gainer through protection of health, reduced mortality and morbidity, increased production and not the least revenue return. The poor and the young shall be the most benefited group. It is they who give up smoking with increased taxation. The poor will use their money so long wasted for a poison to buy food items and the young shall either quit or remain free from the poisonous habit.

Taxation is therefore a source of revenue for the Government and a Boon for the poor but not a burden.

Reprinted from The Bangladesh Observer, 27-4-94

On the occasion of visit of 3 diplomats and WHO Consultant on 28. 6. 94 Address of Welcome.

Respected President of the function, the Vice-Chancellor of USTC, Honourable Chief Guest H. E. Ahmed Fuzi bin Haji Abdul Razak, the High Commissioner of Malaysia, H. E. Hadi Ahmed Wayarabi al-Hadar, the Ambassador of Indonesia, H. E. Lok Bahadur Shrestha, the Ambassador of Nepal, Professor Myo Thwe, Consultant, WHO, Bangladesh, Members of the Syndicate, distinguished guests, colleagues and my dear students.

It is through the infinite mercy of Allah that I am here today with you and in this august gathering. I could have been in the other world. Your best wishes and my luck have brought me back from the door step of an eternal journey. I therefore say, praise be to Allah (Alhamdulillah) and extend to you all a very hearty welcome.

The City Father is physically absent from us for unavoidable reasons. He has to be in the capital for specific purpose. Nevertheless, we may feel that he is with us. Whatever he would have said or read out himself will now be presented before you as he has very kindly left with us his written speech and best wishes.

The presence of His Excellencies from three friendly countries and the consultant of the WHO in Bangladesh is undoubtedly an indication of their sincere desire to learn about USTC for possible participation or involvement in future in some form or other mutually acceptable and feasible.

Malaysia had a close academic link with medical institutions and some other faculties in Bangladesh. For some reason or other the link has weakened. I can assure His Excellency the High Commissioner of Malaysia that these factors which had been responsible for this decay in the academic field shall not be allowed to enter the arena of the USTC which hopefully shall have the pride of academic environment and friendship to all with malice towards none. We shall hopefully have social activities without any trace of anti-social sentiment. We shall continue to struggle for academic excellence and open the doors for other nations to join us.

In this context may I refer to the very friendly approach of His Excellency, the Ambassador of Nepal who never hesitated to frequently

ring in the early morning to enquire about the welfare of the students from Nepal who are as many as 60 in our roll today.

I cannot express how happy I am to have His Excellency with us this morning who readily accepted my last minute request to join us.

Geographically the hillocks and the plains in Chittagong are quite similar to those of Nepal. I am glad to say that the Nepalese students are as happy in Chittagong as I am when I visit this city, my home town.

Indonesia the largest Muslim country of the world is not very far from us. Religiously we are bound together. Academic link combined with religious principles, whatever may be the religion is a strong force of unity and a weapon against socio-political evils. I have no doubt these factors will forge a greater and stronger link between our two nations. We shall be happy to welcome Indonesian students.

USTC Monogram

May I at this stage draw your attention to the USTC monogram which predominantly depicts the first word of revelation from the Almighty to the Prophet Mohammad (SA). This is 'IQRA' meaning 'Read'.

This is what we mean. Reading cannot and shall never be limited to a particular nation. It has to be international, and USTC is formulately so. We dreamt of international participation and co-operation when we conceived of this University years ago and today it is my personal pride which many of my colleagues shall equally share that we are in fact international in character from the very beginning. There are today students from India, Palestine, UAE and last but not the least is Nepal to which I have already referred.

IAHS to USTC

The beginning with IAHS and subsequently establishment of USTC is no doubt modest. We have however in our consideration immediate future subjects like Business Studies, Community Agriculture, Nutrition and Food Sciences with appropriate faculties.

International Link

To the outside world we have been able to project ourselves and earn recognition from Japan and the United Kingdom. The University of

Edinburgh has already expressed their desire to accept our students for their electives. The University of Tokyo has already signed a Memorandum of Understanding for the development of Community Medicine. We shall be participating in joint research and teaching programme in near future. Aside these we are a full member of the NETWORK and as such we have access to other NETWORK Institutions all over the world.

Present Faculties

The present faculties namely, Faculty of Basic Medical and Pharmaceutical Sciences and Faculty of Medical Sciences shall gradually expand their field of activities in training and research when we have sufficient number of qualified teachers. It is indeed gratifying that we have some of the leading members of the profession in our teaching staff and a Vice-Chancellor with an excellent background in administration today. This promises well for the future.

Private University Act

I must at this stage mention about the Private University Act which has opened up avenues for private enterprise in the academic field free from administrative bottlenecks and pollution from politics.

If the present government has only one act for which it can take pride in the academic field, this is the Private University Act, 1992. The guiding principle of this Act is to initiate healthy competition in an unpolluted clean environment which are now beset with many problems with the state universities.

USTC is committed to take up the responsibility of keeping the environment clean with academic excellence,

Challenges

As a new born it is natural to have risk of infection from many sources which may not always be defeated but the defensive forces in this new born baby has so far proved to be stronger than the invading agents. Many infections have been aborted and the child has remained healthy. It is growing well as you all can see from the physical structure and academic performance over a short period of its existence.

May I with all humility admit at this stage that there are many who have been responsible for the healthy growth of this University from smallest tinshed to the present towering position.

Help from all

Truely speaking we received help and guidance from all — both friends and critics. Only flattering words of praise might have destroyed us as it always does. Our critics have helped us to be cautious and by that our pitfalls have perhaps been much less. None can be free from it.

Future

I must, however, admit that we are not all perfect as nobody is. I cannot claim to be free from all vices. I would, however, request each and everyone of you to come forward and help us building the USTC as an ideal one so that it can bring reputation not only to Chittagong but also to the whole country and in fact to the region.

The presence of representatives of friendly countries and the **WHO** is enough evidence that we have friends and many friends are yet to be discovered. A few of them are here today. Many more shall join us in future.

I hopefully wait for the day when we shall have teachers and specialists from abroad visiting us and teaching our students at least for a short time. **WHO** can play a vital role in many ways i.e. offering scholarship for the less developed countries, initiating research activities, involving guest teachers from abroad and even supplying book, periodicals, chemicals and equipments. We request them very sincerely to use us.

Finale

Before I conclude I should boastfully say that I had the privilege of initiating **IPGMR** activities in a tinshed. This is now what you see. **USTC** had a beginning as **IAHS** in a tinshed. These prove universal truth that all big things must have a very small beginning.

Excellencies and the Guest from the **WHO** — may I say that your participation is a small beginning of a greater international participation. Please pray that we can prove worthy of it.

Thanking you once again.

ON THE OCCASION OF
**THE REAR ADMIRAL MAHBUB ALI KHAN
MEMORIAL GOLD MEDAL AWARD ON 22.7.94**

Respected President of the function Gazi Shamsur Rahman, Hon'ble Chief Guest and Minister for Foreign Affairs Janab Mustafizur Rahman, Minister for Health and Family Welfare Chowhury Kamal Ibne Yusuf, chief of the Navy Rear Admiral Mohaiminul Islam, honoured guests, Ladies and gentlemen.

It is one of the rarest opportunities for me to welcome you on behalf of Rear Admiral Mahbul Ali Khan Gold Medal Award Committee in such an august gathering and a rare occasion.

In doing so I fondly remember one of the most charming, soft spoken men I have come across in my life with equally charming behaviour. His sense of duty and dedication, punctuality and sense of appreciation for others overwhelm me on several occasions I had the opportunity to meet him.

At this moment it is heartening to think how he sacrificed his life for the sake of others. After working throughout the whole day when he came to know of the tragic F-27 accident Rear Admiral Khan did not bother for his physical fitness and rushed to the airport to rescue the victims. He continued to supervise the work there till 2-30 A. M. When he became ill and could not continue any more and was brought home and subsequently removed to the Combined Military Hospital where he breathed his last and left us for ever.

He is a brilliant example of dedication and selfless service to the humanity. He left behind lasting impression on those who knew him. To the members of his family his whole life had been an example. The spirit he imbibed in them had been the dominant force in instituting the Rear Admiral Mahbub Ali Khan Award for those who have significantly contributed to health and welfare of the people and for those who have demonstrated brilliance in their professional examinations.

The Award today ranges from scholars of medical colleges who have acquired highest position in the University examination to outstanding medical personalities and social scientists.

The singular distinction of this year's award is the selection of an outstanding personality like Dr. Hudson de Silva of Srilanka for the Award specifically meant for the SAARC countries. Dr. de Silva stands

unparallel in the worldwide eye donation movement. We are fortunate to have such a person in the SAARC countries.

Introduction of SAARC Award in the health arena is new concept which shall be welcomed by all those in the region, this is the milestone in the field of regional understanding and co-operation. I welcome Dr. de Silva to Bangladesh, a country which he visited before with his mission.

Prof. Yunus is our pride. His contribution is internationally recognised. One may wonder how he could be included in the award list which primarily aims at health care. Provision exists in the constitution for the award outside the health field for outstanding personalities like him. I see this from a different angle and feel proud to bring him to the list of health professionals. Health by WHO definition means physical, mental and social well being. There cannot be health without social development and without health social development remains a dream. Prof. Yunus has made most significant contribution in the development of health through social development at the grass root level through his illustrious pragmatic project. Grameen Bank.

Prof. Sultan Ahmed Chowdhury the oldest surviving medical man of the country can be called the Father of Paediatrics. His contribution in the social field is also praiseworthy in Bangladesh.

The research conducted by Dr. Mohammad Hanif and detection of a toxic material in the paracetamol syrup for commercial gain by some unscrupulous businessmen has saved lives of many children. Had it not been so the tragedy would have continued and taken away many innocent children from this planet for ever. I am not aware what action has been taken by the government against the mischievous manufacturees of this fatal product. If they are still free and safe I am afraid the nation should be ashamed of it. Dr. Hanif and his team have made one of the most significant contribution for the protection of the health of our children.

Inclusion of medical graduate for their performance in the professional examination perhaps owe an explanation. These young graduates and the youngest among the awardees have shown promise for a bright future. The Award Committee thought it wise to place them in the foot steps of their fore-runners who have achieved successes and earned Laurels. Thus the committee thought could invigorate the junior awardees to step forward to achieve their goal.

Finally I would say that the selections for the award have been independent decisions by the Award committee and not imposition from

any corner. Mrs. Khan is an admirable lady with formidable modesty and simplicity. She attends the meeting to listen and not to make others listen to her. I have never seen her dictating or differing with the decision of the Award committee. The only exception is during hospitality period at the conclusion of the meeting. her presence in all the meeting with her daughter or daughters indicate how much she is emotionally attached to the programme and her unhesitatingly accepting the decision demonstrate her faith and confidence in the Award committee headed by the illustrious legal expert, writer and thinker and now the chairman of Bangla Academy Gazi Shamsur Rahman.

Distinguished President, Honourable chief Guest, Minister for Health and Family Welfare, the awardees, Ladies and Gentlemen, may I once again welcome you all on behalf of Rear Admiral Mahbub Ali Khan Award Committee and say how grateful we are to have you all in our midst. Your presence indicates how enthusiastic you are for a cause which aims at recognising the national and regional talents in order to project them as examples before the present and the future generation. By honouring them we are indeed more honoured.

**On the occasion of
The Foundation Laying Ceremony of
The Sasakawa Central Library and formal opening of
The University Hospital at Foy's lake, Chittagong by
JANAB ABDUR RAHMAN BISWAS
Hon'ble President, PRB & Chancellor, USTC.**

— N. Islam
National Professor
&
Founder-President, USTC.
20 January 1995

Hon'ble President, PRB, and the Chancellor of the University of Science and Technology, Chittagong (USTC), Hon'ble Ministers, Mayor Chittagong City Corporation, Members of the Parliament, Rotarian Governor, Rotarian Sakuji Tanaka and his distinguished group from Japan, Asso. Prof. Nishigaki of the University of Tokyo, Members of the Syndicate, Teachers, Students, Guardians and Friends.

It is indeed a matter of great pride and pleasure for me to welcome you all in this august gathering. This is a historic event for Chittagong and a unique occasion for the USTC to welcome our **First Chancellor** today in our midst.

His august presence as the Head of the State bears testimony not only to the significance of such an occasion but also reflects on the relationship of the University with the Government of the Peoples' Republic of Bangladesh.

Need for a change

It is estimated that only 10% of the students get the opportunity for higher education in the country. Besides, vast majority of those having higher education cannot find job opportunity.

These clearly indicate the discrepancy between the need and the resources. This is not the whole truth. The education offered to-day is vastly non-productive. As a result the existing educational system has produced a large population of educated unemployed. We must admit

that no Government can employ all educated people both in the developing and the developed countries.

While we need a large number of technically qualified persons in various fields the number of this group is far too small to satisfy the need of the country. This is applicable for all branches of technical education. Ever expanding development programmes in various fields e.g. medical, engineering, agricultural, pharmaceutical, business studies and in fact in all technical branches need many more qualified personnel than we have to-day. And yet avenues for education in these specific fields are limited. As a result the number of Bangladeshi students studying abroad are almost three times more than the number studying in all our Universities, Engineering and Medical colleges. These are the rich and the privileged groups. They do not suffer the consequences and in fact they take it as a pride to send their wards for studies abroad. Not even for a moment they think how much they are depriving the country of the hard earned foreign exchange and degrading the prestige of the nation in the eyes of the outside world. What is even more is that the outcome of such ventures are nothing less than fatal for the country. Most of these students who are trained abroad are lost to the nation and some of them even hesitate to identify themselves as Bangladeshis. Brought up in a different cultural environment where family link is too loose and the religious bondage is too weak it is rather too much to think of bringing them back to their homeland. The grim picture I have projected before you is pitiful and yet factual.

University Act 1992 — a correct step

To-day in January 20, 1995, I am not as anxious and frustrated as I used to be before 1992. Naturally the question arises what has happened in the meantime. You all are aware that the Government was fully convinced that something radical had to be done in the field of education. The dynamic Minister for Education took the lead and received the blessing from the Government for the establishment of the Private University Bill which was passed unanimously in the Parliament on August 5, 1992. The Hon'ble president gave his kind assent on August 9, 1992. Thus the Private University Act 1992 came into effect. This, I would say, was the most commendable step towards a healthy transformation of an age-old stagnant, conservative and if I may say, a

non-productive educational system to an open healthy and competitive one in the Private sector.

The conditions laid down for the establishment of a University were reasonable and I would say affordable. As a result we have today six Private Universities established in the country.

Hon'ble Chief Guest, Ladies and Gentlemen, we in Chittagong are proud because this is the only University in the Private sector located outside the capital city and in fact this is the only Technical University in the Private sector in the country.

It may not be out of context if I say that in future, **Universities** should be developed **outside the capital city**. This will facilitate higher education for many who cannot afford to have higher education in the costly capital.

About USTC

To speak briefly about our faculties in USTC we have purposefully selected two to begin with. These are —

- i. the Faculty of Basic Medical and Pharmaceutical Sciences ; and
- ii. the Faculty of Medicine.

These are most needed for the country today. I must assure you, Ladies and Gentlemen, and our Hon'ble Chief Guest, that we have an ambitious plan for having other faculties for which work is in progress. These are —

1. Faculty of Business Studies ;
2. Faculty of Community Agriculture, Nutrition and Food Science ;
3. Faculty of Social Sciences.

May I now turn to the specific events of today for which our Chief Guest has been graciously pleased to be with us. Our friends from Japan have added glory to the occasion by their presence.

The Library is one of the most essential components of a seat for learning. This is yet to develop to a satisfactory level in Bangladesh. Colleges and Universities depict a poor picture in this regard. We are, therefore, determined to improve this unfortunate situation and contribute to its development with their concepts.

When I personally placed some specific Foundation assured me of our Library Project, which Accordingly I wrote Foundation explaining the included services of a community guidance through this proposal is the establishment at this stage appreciate the Prof. Takusei Umenai and achieving success.

The Birth of the USTC started **IAHS** in a time establishment of the University we had 204 students in January, was admitted in January, students earlier admitted University and those admitted learn together. We are campus including 95 Ph.D. us that we have almost 1 Nepal. Perhaps no other to attract so many foreign today 100 teachers on a 5.64. This is undoubtedly other similar organisations enthusiasm for further development.

Cooperation from other

In our efforts we are from other institutions faculty is fortunate to have Government and non Government

1. Chittagong Port
2. Bangladesh Port

When I personally approached the **Sasakawa Foundation** and placed some specific proposals, Mr. Kinya Narabayashi of the Foundation assured me of his help and co-operation in the development of our Library Project, which we thought would be more appropriate.

Accordingly I wrote to Mr. Roichy Sasakawa, the Chairman of the Foundation explaining the aims and objectives of the Library which included services of a Reference Library, higher education and community guidance through posters and publications. The outcome of this proposal is the establishment of our **Central Library** today. I must at this stage appreciate the encouragement and support I received from Prof. Takusei Umenai and Asso.Prof. Masaru Nishigaki which helped us achieving success.

The **Birth of the USTC** would not have taken place if we had not started **IAHS** in a tin-shed in 1989 with 42 students. Till the establishment of the University under the Private University Act 1992 we had 204 students in IAHS. The first batch of students under USTC was admitted in January, 1993. Their strength today is 265. Though the students earlier admitted belong to IAHS affiliated to the Chittagong University and those admitted after belong to the USTC they all live and learn together. We are one. We have, therefore, 564 students in the campus including 95 Pharmacy students. It is a matter of pride for all of us that we have almost 17% of our students from other countries mostly Nepal. Perhaps no other University Government or private has been able to attract so many foreign students. I feel happy to say that there are today 100 teachers on our roll making the teacher & student ratio 1 : 5.64. This is undoubtedly a comfortable situation compared to many other similar organisations. This does not in any way slow down our enthusiasm for further development to make an ideal situation.

Cooperation from others

In our efforts we are fortunate to receive **help and co-operation from other institutions** and organisations. For example, the medical faculty is fortunate to have the facilities available with the following Government and non Government hospitals —

1. Chittagong Port Hospital
2. Bangladesh Railway Hospital

3. Shishu Hospital
4. Memon Hospital
5. Infectious Disease Hospital
6. Red Crescent Maternity Hospital.

On the other hand the **Pharmacy Department** has been receiving help and co-operation of well established pharmaceutical firms like Glaxo, Hoechst and Janasheba.

Our own Hospital

Despite all these we are fully conscious of our need and responsibility for a **Hospital of our own**. We are today Sir, in proud possession of a Hospital with 135 beds, an outpatients department and all essential laboratory facilities. Undoubtedly more hospital beds are needed and we have the space earmarked for it. Your formal opening of this hospital is, therefore, only a modest beginning of a great end.

A pessimist might think how this is possible. Our experience is contrary to this concept. It is heartening to recall how warmly Mr. Elichi Saji received me at his attractive restaurant when I visited him with Mr. Eskandar A. Chowdhury. Mr. Chowdhury is not with us today for health reason but his heart and soul, I am sure, is with us. It is he who suggested me to approach this illustrious rotarian whose warmth of feeling impressed me. His activities^{thought} the **Rotarian Governor** and his colleagues who are present here today to officially hand over 306 hospital beds and mattresses has convinced me and my colleagues of their whole-hearted co-operation in our efforts.

Japan is the richest counrty in the world today. I would say this is not only in financial term, they are indeed warm hearted for us and the friendship between our two countries is ever increasing. Our experience and in fact my personal experience with these people are for the last 2-3 years. The time is not long enough but the strength of friendships and co-operation they have demonstrated are so convincing that I feel sure that they shall not fail us.

To our own government may I humbly point out that 80-90% of the costs of private education upto the degree level is paid from the Govt. fund . This has helped development of education in the private sector upto that level. University education in the private sector is a

newer concept in Bangladesh. Admittedly this is a responsibility which cannot develop without some financial support. We do hope the Government would not treat these Universities in a different way. If anyone draws a distinction it will be most unfortunate and shall be deterrent to the healthy growth in this sector.

Taxation need review

Recent **taxation policy** is unfortunately having adverse effect on the enthusiasm of donors as they are now deprived of tax exemption. Besides, **equipments and accessories** so needed for us have been made taxable. As a result these become very expensive. This is specially applicable for medical and research equipments. Many countries including our neighbours allow import of these items tax free. This has encouraged tremendous development in the private sector in those countries. We urge upon the Government to review this vital issue.

Before I conclude may I say that all Universities have a common goal — **the development of useful manpower**. In doing so all Universities private or Govt. have equal responsibility and, therefore, they must have a **common platform**. Bangladesh Association of Universities should, therefore, have the doors open to private Universities as well. If we all can think together and work together we can certainly contribute effectively for the development of Bangladesh.

Conclusion

The august presence of the respected Chief Guest and the Chancellor of this University here today leaves no doubt in our mind that the Government of Bangladesh is with us and we are for the people. As the proud father of the Private University Act, 1992 may I in the end say that the desired child should receive all the nutrition it needs from the Government to become a useful citizen of an independent sovereign state of Bangladesh.

TOBACCO COSTS MORE THAN YOU THINK

It is estimated that there are 15 million male and about 05 million female smokers in Bangladesh. If on an average one cigarette is smoked per person per day we are burning 20 million cigarettes daily and if the average cost is fifty paisa per cigarette we are burning out one crore taka daily or in other words 365 crore taka annually.

Indirect consequences are too many. Virtually no organ in human body from head to foot is spared because the poisonous product of tobacco can enter the blood and circulate throughout the body. Of all the diseases caused by tobacco lung cancer occupies the highest position. Eighty to 90 percent of lung cancers is due to smoking. Chronic bronchitis and heart diseases come next. Eighty percent of chronic bronchitis and 20 percent of coronary heart diseases are due to smoking.

Despite these dangerous consequences the smokers and specially the teenagers are not as alarmed as they should be. This is because tobacco is a slow poison and a silent killer. It influences you during your teens and kills you when you begin to contribute to the society. The adverse effect takes as long as 20 to 30 years after the initiation of the habit. Evidently if you start smoking around 15 diseases and the disability shall start showing at the prime of your life when you are around 35. By that time you are most likely married having one or two children and the family is dependent on you. If you are a victim of one of the killer diseases notably the lung cancer or a heart attack the entire family face the tragic ruin with disastrous outcome.

Tobacco products today kill as many as 3 million people a year which means that during the decade 30 million people will be removed from this planet by the killer tobacco.

It is now confirmed and accepted by the WHO that tobacco kills and yet tobacco products continue to be legal and the only consumable legal product which kills. Nicotine is the most important constituent of tobacco. This is more addictive than heroine, alcohol, marijuana and cocaine. And yet tobacco exists as an industry. This is a disgraceful example of human greed and lust for money.

The contribution of tobacco industry to national economy is a myth. Economic burden of tobacco has been studied by a World Bank economist who estimates the cost and benefit of tobacco use. Each 1000 tonnes increase in tobacco consumption gives benefit of US \$ 2.6 million whereas the loss is US \$ 29.8 million in cost which means a loss

of US \$ 27.2 million.

‘With world consumption currently in the ranges of seven million tonnes of tobacco per year, it is estimated that the world tobacco market produces an annual global loss of about US \$ 200 billion, with half of this loss occurring in developing countries’. Recognising the adverse effect of tobacco consumption on health and economy the World Bank articulated a formal policy on tobacco containing five main points :

- i. The World Bank’s activities in the health sector — including sector work, policy dialogue, and lending — discourage the use of tobacco products.
- ii. The World Bank does not lend directly for, invest in, or guarantee investments or loans for tobacco production, processing or marketing. However, in the few countries that are heavily dependent on tobacco as a source of income and of foreign exchange earnings (for example, those where tobacco accounts for more than 10 percent of exports) and especially as a source of income for poor farmers and farmworkers, the World Bank treats the subject within the context of responding most effectively to these countries’ development requirement. The World Bank seeks to help these countries diversify away from tobacco.
- iii. To the extent practicable, the World Bank does not lend indirectly for tobacco production activities, although some indirect support of the tobacco economy may occur as an inseparable part of a project that has a broader set of objectives and outcomes (for example, rural roads).
- iv. Unmanufactured and manufactured tobacco, tobacco-processing machinery and equipment, and related services are included on the negative list of imports in loan agreements and so cannot be included among imports financed under loans.
- v. Tobacco and tobacco-related producer or consumer imports may be exempt from borrowers’ agreements with the Bank to liberalize trade and reduce tariff levels.

In the face of world wide move against tobacco one leading tobacco executive boastfully declared that they have nothing to worry about anti-tobacco activities and the decline of tobacco consumption in the developed countries. They are now concentrating on developing countries which provide them enough of protection and profit. When the loss of consumers is at the rate of 1.1% in the former the gain in the latter countries is at the rate of 2.1%.

Various measures are now being adopted to combat tobacco. Extensive research has been carried out in many countries of the world regarding the taxation on tobacco and its impact. Increasing taxation increases the government revenue. What is more important is that it does decrease tobacco consumption especially among the young people and the poor. It has been found that a 10% increase in the price of cigarette produces a decrease in the quantity consumed by about 4.2% and large majority of this response represents individual's decision not to smoke. For the teenagers a 10% increase in the price of cigarettes will cause a decrease of consumption by 15%.

Study in the United Kingdom shows that increase in cigarette taxes increases government revenue and reduce consumption among young people and labourers. Cigarette price in this country rose by about 26% between 1980-1984 with a fall of consumption by 20% while cigarette revenue rose by 10% and provided the government with an extra thirty six million pound revenue. Majority of the decline was attributed to taxation.

The European Conference on Tobacco Policy in 1988 recommends 1% levy on all tobacco sales in addition to taxation. This additional amount is recommended to be used for anti-tobacco activities.

Government of Bangladesh feels shy of increasing tax on tobacco. In Bangladesh smoking habit is higher among the poorer class of people. One might argue that increased taxation would be a heavy burden on the low income group. This concept is not correct. It has been found in numerous studies that increase of tax discourages and not uncommonly compels the poorer class to quit smoking or not to take up the habit. This has been amply demonstrated in the developed countries as stated above. Besides, increased taxation on tobacco go unchallenged as against sharp reaction to all other taxation including that on alcohol which obviously has no significant place in Bangladesh. The Tobacco industry will not sit idle. They will use their vast wealth in all possible ways to buy support. If the administration can resist temptations and realise the benefit of taxation there is no other way for the tobacco industry but to accept the Government decision. This has happened in many countries of the world.

When tobacco taxation has been found to be an effective weapon for increasing the revenue and protecting the innocent victims in many countries of the world both in the East and the West, there is no reason to doubt that the same should not happen in Bangladesh.

Arguments that reduced tobacco cultivation and production will lead to unemployment is totally unrealistic. This is motivated by the industry and propagated through their penetrating promotional activities.

Alternative farming have been demonstrated to yield more profitable food products by our experts. Chilli, potato, garlic and cotton cultivation have been encouraging and they are now being encouraged in tobacco growing areas. The action needs to be speeded up and incentives to the farmers provided.

In the words of Dr. Hiroshi Nakajima, Director-General, WHO :

‘The costs of tobacco go far beyond the tragic health consequences. Tobacco is devastating to the economic health of the world as well Even allowing for the short-term income it generates, it has been estimated that **tobacco costs the world over US \$ 200 billion per year. Were this money to become available, it would be enough to double the current health budget of all the developing countries.** There are proven measures that can be taken to reverse the tobacco epidemic and turn the economic environment against further growth in tobacco sales. These economic measures will complement health goals, while at the same time maximizing government revenue and reducing health costs.

It is unnatural to encourage war with a view to making the arms industry viable. Tobacco is nothing less than a destructive weapon or even nuclear armaments.

Let us hope that this message from the Director-General, WHO does not go unheeded. We, as a member state of the WHO are committed to the health and wealth of the people. This cannot be achieved until we destroy the weapon that destroys both. This is tobacco that costs us more than you think.

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HERBAL MEDICINE PRESIDENTIAL ADDRESS

Respected Chief Guest Hakim Mohammad Said, distinguished delegates and friends.

After you have heard the learned key-note address delivered by our Chief Guest and the addresses by other experts I have nothing much to add. Nevertheless, if I am given the freedom of summarising the presentations made so far I would say that all these boil down to the following.

Firstly, traditional herbal medicine today is a recognised branch of medicine all over the world.

Secondly, it is rightly called alternative medicine as this is complementary to 'modern medicine'.

These observations did not have enough strength a few decades ago. Thanks to the efforts of the WHO and other organisations devoted to the development of this system of medicine.

As you all know I am a man of 'modern medicine'. To many it may sound queer, to others it may appear unwholesome. Whatever be the reactions from different corners my conscience remains clear.

Many of you may know the great sayings

"For every disease there is a remedy." (Le Qulle Daain Dawaun).

If this is so we must pause and ponder. If we look back several decades ago there will be evidences enough for those who believe. There was time when we would say 'Typhoid means death or disfigurement'. In fact, many cases were fatal and those surviving would have loss of hearing, destruction of bones or damage to some other organ due to complications. After the discovery of Chloramphenicol the disease became curable. Today we have many more drugs effective against this disease. It is no more a threat for us.

Tuberculosis was once the 'Captain of the men of Death'. There was no cure. Death was inevitable — in some cases rapidly and in others with lingering disability. It is no more such a threat. The disease is curable and nobody should die of this disease today.

Cholera once a threat to the society and labelled as a curse from heaven for human sins is no more a challenge. Oral rehydration has

revolutionised treatment and none should die of this disease today.

Small pox has now disappeared from the earth. With successful immunization program we shall be preventing diseases like diphtheria, tetanus, whooping cough, measles, polio and tuberculosis.

Ladies and Gentlemen, there are many more examples. I would rather pose a question at this stage. What all these mean? The answer is simple. God Almighty has also given remedy for diseases. It is for us to discover. As the time passes we know more and more, discover more and more cures and remedies. What was once considered as incurable has now proved to be curable. The past experience indicates that in future we may discover many more cures.

There is other side of the coin. As we discover new remedies, new diseases appear. One time unknown diseases are now coming to the fore and challenging the advances in medicine. The latest most challenging arrival as you all know is AIDS. Before eighty's we never heard of it and today it is all over the world spreading like wild fire.

Before the advent of modern medicine there were diseases and there were healers. Through experience people started using various herbs for cure. With a beginning like this the method of curing diseases through indigenous method saved many lives by curing many diseases. A modern man would say that these did not have any scientific evaluation. Experience over thousands of years and survival of the system through challenges are enough to prove the efficacy of the system.

Some enthusiasts would say that the active principle should be isolated and then used rather than using a crude product. The keynote speaker is very clear on this issue. He says that herbal medicine must be taken as a 'whole'. Proposal for identification of active principle is an indigenous process of expulsion of the method of treatment which has stood the test of time. **I do not disagree with the idea of isolating the active principles of various herbal remedies. This may help discovering something new in the therapeutic field. But this particular substance may not prove to be as effective as the crude form.** A modern physician is aware and should be aware of the drug interaction. This is extremely important as one drug may interfere with the action of another or potentiate its effect. It may be that by isolating an active principle we are removing the influence of other ingredients on that and thereby influencing the beneficial effect of a herbal medicine. **Until proved otherwise, a herbal medicine therefore should be used as a whole.** Even if a particular ingredient is identified to be effective in some

particular condition a herbal medicine should not be withdrawn or its jurisdiction restricted.

It is worth quoting here from the speech delivered by Hakim Mohammad Said,

“The World Health Organization’s attitude is that herbs should be subjected to chemistry, pharmacognosy and pharmacology and that herbs should be used as a whole for the preparation of medicines. I agree with this opinion of the WHO and I consider such a wholesome use of herbs as natural. Pharmacology is certainly a delicate matter and calls for great responsibility. This science has many demands of the time to meet, and it is essential to meet the demands of the time.”

Despite advances in medicine, the fact remains that we have not yet in our possession, effective remedies for all diseases. There are some conditions, where none of the system has anything to offer. In course of time, we shall hopefully have increasing number of remedies at our disposal. Even then, I do firmly believe some newer problems will arise and new diseases will be discovered. AIDS and Ebola virus are the two most recent medical problems which indicate that these two are not the last and in future new arrivals may be seen. Through these examples, I intend to bring home that the two systems namely, the modern medicine and traditional one are complementary to each other and not competitive.

I must mention in passing that the traditional Chinese medicine has long been recognised in China and developed through research. Those practising modern medicines and particularly the people in the west used to laugh at Acupuncture and many of the herbal medicines. All of you are aware how sidely acupuncture is being used today. Many centres are established in the west for the purpose of training this special type of therapy.

Way back in 1958, I had the opportunity of visiting several medical colleges in China for the first time as a member of a Medical Delegation. I was amused to see the department of traditional medicine in all these medical institutions. A couple of years back, when I visited China again, I found these departments further developed and expanded. This method of approach by the Chinese is commendable. I firmly believe co-existence of the two systems is complementary.

Madinat Al-Hikmah established in Karachi by world famous **Hakim Mohammad Said** spread over several thousand acres of land is a centre for education, research and culture. We find here an institute of modern medicine and traditional medicine under the same umbrella. Researchers have been employed and facilities provided either in the

department of the Pharmacy, University of Karachi or in the campus. Hopefully, this will help development of understanding and cooperation between the two systems, encourage comparative study and bring out the best of the two.

You all will be glad to know that Hakim Said has been entrusted with the responsibility by the World Health Organization for preparing a list of herbal medicines for the treatment of common diseases. This is yet another evidence reflecting the present status of traditional medicine in the eye of the WHO.

I have emphasized many times on the importance of traditional medicine in primary health care for the developing countries. The system has traditional link with the society and is popular among the rural poor. This is also known as Folk medicine which conveys a narrow meaning but does have wider connotation. Herbal medicines have many other advantages too. They are locally available, cheaper and in fact much cheaper than modern medicine. To many they are more acceptable than modern medicine. Side effects are virtually nil. **Effectiveness, availability, cost and acceptability are the distinct advantages of this system of medicine for the developing countries.**

It is prudent to utter a note of caution here. Not uncommonly, we come across preparation of herbal medicine with some "Refinement" and expensive packaging. This unnecessarily increases the cost and benefit the manufacturer. For the average poor, I will strongly recommend some herbs in its natural form. The most commonly used herb today by the modern medical practitioners is 'Ispha-gula husk'. Purchased in bulk, this becomes cheaper and is within the means of the poor. We have to have financial consideration in prescribing. By and large, as I have already stated, herbal medicine remains cheaper and safer. It is therefore, an ideal remedy for the vast majority, mostly the illiterate rural poor.

Conclusion :

Advances in modern medicine during recent past promises well for the future, nevertheless, it is unlikely to find out remedy for all diseases in near future.

As modern medicine cannot cure all diseases and so is herbal medicine. Both together can cure many more diseases than either

The two systems should be considered complementary to each other and not competitive.

When modern medicine is either not available or proves expensive herbal medicine should be considered as an alternative, provided it is known to be effective.

Herbal medicine should be utilised as a whole and should not be disintegrated which may disrupt its efficacy. Each health centre should utilise both systems of medicine and a doctor should preferably have some idea of each.

In finale, I would like to quote from the speech delivered by Hakim Mohammad Said again,

“In the Western hemisphere, natural cure is gaining more and more popularity day and night. Medical practitioners there are already prescribing botanical and natural preparations. Tomorrow, medical practitioners in the East will also be forced to follow the new Western trend. Today is therefore the time to think of tomorrow. We must end our apathy towards herbs and start thinking seriously about them now.”

This is a timely advice. We cannot lag behind.

Presidential address in the Seminar on Herbal Medicine organised by Hamdard Foundation, Bangladesh, June 07, 1995.

The author is the Vice President, Hamdard Foundation, Bangladesh.

Hakim Mohammed Said is Waqif Mutwally & Advisor, Hamdard, Bangladesh and President, Hamdard Foundation, Pakistan.

QUALITY ASSURANCE IN POST-GRADUATE MEDICAL EDUCATION

I have listened with rapt attention to the key note paper on quality assurance in Higher Education presented by Prof. G. Ram Reddy. He has brilliantly elaborated the present state of affairs in Quality Assurances in different countries in the West and the East and also in the neighbouring India. He has rightly mentioned that factors which led to assurance of quality in the West apply equally well to the developing countries. In addition, developing countries also have been facing financial crisis. As a result expenditure on higher education is declining in proportion to other sectors and per student expenditure is also going down. If I may add Bangladesh is no exception to that.

Ladies and Gentlemen, I have been asked by the organizers of the seminar to speak on Postgraduate Medical Education in Bangladesh. I would therefore limit my paper to that topic. In doing so it becomes imperative to give some details about the present status of Postgraduate Medical Education in Bangladesh.

THE BEGINNING

It was long felt that medical education abroad having altogether different medical, social, environmental and cultural factors could not model our doctors suited to the need of the country. In fact, justifications for having Post-Graduate Medical Education at home were too many. Convinced about the need for Post-Graduate Medical Education at home the beginning was made as early as in October, 1962 when the College of Physicians and Surgeons of Pakistan came into being by an Ordinance under the leadership of Lt. Gen. W. A. Burki who became the first President of the College. In the first Council meeting which I had the privilege of attending as one of the Founding Councillors, it was agreed on principle that the College of Physicians and Surgeons of Pakistan should have an academic plan in keeping with the need and resources of the country. It could neither be British nor American. The former was thought to be too theoretical with limited practical application and the latter too sophisticated. It was, therefore, decided to blend the two and offer simultaneously a theoretical learning with practical skill. This would make a home qualified doctor competent enough to take up the responsibility as Junior Consultant in a peripheral hospital. A student of

Internal Medicine, therefore, had to write case notes with comments, a dissertation on a particular topic and those in Surgical Sciences were in addition required to perform one hundred operations each. Nothing like this was available in the western system of Post-Graduate Medical Education. Consequently our doctors qualified from abroad could acquire very little practical experience by the time they obtained their diploma. The first examination of the College was held in Karachi in October, 1962.

IPGMR & BCPS

The Institute of Post Graduate Medicine and Research (IPGMR) was established in Dhaka in 1965. Regular courses as laid down by the Pakistan College of Physicians and Surgeons started with mostly part-time teachers.

After liberation of the country Bangladesh College of Physicians and Surgeons (BCPS) was established through a Presidential Order in June, 1972 and the first examination of the College was held in July, 1972. The students preparing for Fellowship under College of Physicians and Surgeons of Pakistan thus had the opportunity to appear for the examination under Bangladesh College of Physicians and Surgeons.

From 1972 to till January, 1995, 726 medical graduates obtained FCPS making an average of 30 Fellows per year.

Table - 1

Showing the number of students qualifying for FCPS in various subjects from 1972 to Jan '95

Course	No. qualified till Jan '95	Course	No. qualified till Jan '95
FCPS :			
Medicine	209	E. N. T.	22
Surgery	190	Radiology	9
Paeiatrics	90	Radiotherapy	7
Obs & Gyn	87	Clinical Pathology	1
Ophthalmology	54	Physical Medicine	3
Psychiatry	26	Haematology	3
Anaesthesiology	24	Biochemistry	1

Source : BCPS

POST-GRADUATE MEDICAL FACULTY

Faculty of Post Graduate Medical Education and Research was established in 1973. This being a separate one had the freedom from the vices of irregularity, postponement of examinations and various other relaxations which upset the undergraduate medical faculty, known as Faculty of Medicine. The Post Graduate Medical Faculty introduced M. Phil. courses in various basic subjects, namely, Anatomy, Physiology, Biochemistry, Pathology, Anaesthesiology and Pharmacology to begin with.

Gradually it introduced diploma courses in various clinical subjects which range from Anaesthesiology to Ophthalmology, Nuclear Medicine and Dental Surgery. Besides the clinical subjects, Paraclinical subjects, namely, Clinical pathology, Radiology and Bacteriology were also included. The latest in the series have been an introduction of MD (Doctor of Medicine) in Nephrology, Gastroenterology, Paediatrics, Dermatology, Anaesthesiology and Internal Medicine.

POST-GRADUATE INSTITUTES

In course of time several specialised institutes were developed which introduced various Postgraduate courses. These are :

IPGMR (Institute of Post Graduate Medicine & Research),
IDCH (Institute of Diseases of the Chest and Hospital),
BCPS (Bangladesh College of Physicians & Surgeons),
RIID (Rehabilitation Institute of Handicapped & Disabled),
NIPSOM (National Institute of Preventive & Social Medicine),
NICVD (National Institute of Cardiovascular Diseases),
BICH (Bangladesh Institute of Child Health),
BIRDEM (Bangladesh Institute of Research in Diabetic, Endocrine & Metabolic Diseases).

These Institutes form the functional units of the Postgraduate Medical Faculty.

Excluding IPGMR & NIPSOM a total of 412 qualified for diplomas in various subjects from these institutes.

Table - II

Institutes and the number qualified for a particular diploma excluding IPGMR & NIPSOM

Name of the Institute	No. qualifying for Diploma offered till Jan '95	
DDCH	DTCD	180
RIID	D. Ortho	57
	MS Ortho	64
	D. in Art. Limb & Brace	32
NICVD	MD Card.	22
	MS Card. Thoracic	10
	D. Card.	47

Source : Directors of the institutes.

IPGMR and NIPSOM are the two apex bodies in the curative and preventive medicine respectively. Faculty of Preventive Medicine has been constituted in keeping with the wider responsibility and the field the speciality covers. It was initially a component of Postgraduate Medical Faculty.

From IPGMR 294 doctors qualified for M. Phil. degrees in various basic subjects while 819 qualified for Diplomas. In Preventive Medicine from NIPSOM 26 M. Phils and 831 in different Diplomas were qualified.

Table - III

**Qualified persons for specific Diplomas
excluding Fellowship till January, 1995
from IPGMR & NIPSOM**

<u>Name of the Institutes</u>	<u>Qualifications M. Phil :</u>	<u>No. qualified</u>
IPGMR	Anatomy	35
	Biochemistry	37
	Microbiology	62
	Pathology	83
	Physiology	39
	Pharmacology	38
	<u>DIPLOMA :</u>	
NIPSOM	DMRD	99
	DMRT	42
	DPM	17
	DBS & T	26
	DCH	92
	DDV	98
	DGO	124
	DLO	74
	DO	50
	DA	126
	DNM	23
	DCP	1
	D. BACT.	5
	DDS	42
	DPH	265
	DCM	173
	DMCH & FP	143
	DIH	100
	MPH	150
	M. PHIL	26

Source : Directors, IPGMR & NIPSOM.
Dean Postgraduate Med. Faculty.

Evidently total number of qualified persons in both preventive and curative side has significantly increased since the beginning of Postgraduate qualification at home. Establishment of BCPS and development of Postgraduate Medical Faculty have facilitated this progress.

ROLE OF POSTGRADUATES

Vast majority of our Postgraduates are in government service as teachers and specialists while a large number are serving abroad as specialists in various fields. Postgraduate qualification at home has therefore served a dual purpose of catering the need for health care in home country and enhancing the prestige of the country abroad notably in the friendly muslim countries by serving there as specialists.

Over and above, a good number of our postgraduate qualified doctors are efficiently serving as Consultants and Teachers in private hospitals and institutions at home. These are complementary to the efforts of the government. A look at the medical colleges, hospitals and health institutions will clearly demonstrate the vital role played by our postgraduate qualified doctors.

There is today no medical college which does not have our Postgraduates occupying the highest position. At the other end of the scale, many peripheral hospitals are also managed by them. If the initiative had not been taken in time and the Postgraduates had not started functioning when it did, we would have today faced a great vacuum in the health field in Bangladesh.

THE CHALLENGES

Notwithstanding this bright picture, we must admit that there are as yet many challenges or critical issues which we have to boldly face. I shall now briefly describe some of those.

UNDUE PROLIFERATION

Privatisation and if I may say so, politicalisation together have led to undue proliferation of medical institutions/colleges in the country without any consideration of the existing rules and regulations. Bangladesh Medical and Dental Council, the regulatory body for education is bypassed and new colleges are coming out with advertisements for admission for MBBS Course without adequate or more correctly very little physical and technical facilities.

At Postgraduate level the picture is not satisfactory either. Diplomas in various specialities and MD's in many subjects have been introduced apparently with a view to **decorating the department rather than dignifying the degree**. These have reduced MDs and MSs to the Diploma level.

Various courses of study for Postgraduate Medical Education have proliferated much more than desirable. Unless the basis is strong superspecialisation is bound to be weak and cannot deliver the desired result. This basis must therefore be the Fellowship of the College of Physicians and Surgeons after which provision should exist for higher diploma/degree in specific fields. Cheaper diplomas of western root can never deliver good to our people. These were introduced for serving the colonial rule. These can betray our common people and destroy quality of service.

COMMUNITY BASED MEDICAL EDUCATION (CBME)

There is yet another issue. Despite appreciable progress in Postgraduate Medical Education no significant change has taken place at undergraduate level. This is not my subject for discussion today. Nevertheless, this is inseparably linked with Postgraduate Medical Education and therefore needs attention. Medical Education today all over the world is need based and community oriented. This has been effectively implemented in neighbouring countries. In India there are at least eight institutes which have been declared as centres of excellence for the Community Based Medical Education. Nepal and Thailand have also attained success. In Bangladesh we are still far behind. Too much emphasis is still laid on class lectures and campus courses. Students therefore cannot acquire the knowledge about the problems in rural areas where their services are most needed. After qualification they therefore adopt all possible means to avoid posting in these areas and if posted they manage to remain in the city depriving the place of posting of their services. This phenomenon is a reflection of the outdated courses and curriculum of the Medical Colleges where field practice in Community Medicine spread over a few weeks exists in curriculum. In practice this is hardly followed. The Faculty members are either disinterested or inexperienced. Without experienced and dedicated teachers the students cannot reap the benefit and cannot learn about the social and cultural background of rural Bangladesh, their implications and management of medical problems in such a set up.

CBME AND QUALITY HEALTH CARE

The success obviously depends on the will and ability of the teachers for generating interest and creating an environment for learning for the students and offering health care to the deprived. After all that have been said about Community Based Medical Education it is essential that a policy must be initiated which will make it obligatory for any one to have community experience before going for higher education. This will serve a dual purpose of extending better health care to community level and educating medical students — our future doctors.

NUMERICAL PROGRESS

It is evident from what I have described so far that there has been significant development in the field of medical education in Bangladesh. This has happened in undergraduate and more particularly at postgraduate level. The numerical progress is not always indicative of qualitative improvement. On the other hand, numerical progress demands increased facilities both technical and financial. Increase in the number of medical colleges therefore ideally means enhanced budget for physical and technical facilities and manpower resources. Without provision of additional fund the outcome is bound to be grossly, if not totally unsatisfactory. Too many students with too few teachers and strictly limited laboratory and other facilities are at present great deterrent to the standard and quality of teaching in many undergraduate and postgraduate teaching institutes.

QUALITY ASSURANCE — PRESENT SYSTEM

I would now briefly describe the present system of quality assurance in medical education in Bangladesh.

Several organisations are involved. The University is responsible for conducting examination through Faculty of Medicine. There are two Faculties of Medicine — Undergraduate and Postgraduate. These Faculties are responsible for the corresponding qualifications. The University accords permission to establish new medical colleges.

MEDICAL AND DENTAL COUNCIL

Medical and Dental Council recognises national and non-national institutes/universities. The non-national institutes/universities are recognised reciprocally. In case where reciprocity does not exist, individual qualifications are assessed through interview of the candidate

by a group of experts. The thesis is also examined by the experts.

At home BMDC recognises a college/institute after inspection by a group of experts on the basis of laid down criteria. The recommendations of the inspection team is scrutinised by the Standing Recognition Committee (SRC) which may recommend recognition for a specific period with or without conditions imposed. When these conditions are fulfilled, the institute may write to the BMDC requesting for further inspection for recognition. BMDC can also derecognise an institute, cancel registration of registered practitioner and suggest punishment by way of fine or even imprisonment. The aggrieved party can appeal to the Ministry of Health for redress. This is something unfair and queer. BMDC is the supreme authority and there should be no provision for appeal against its decision, as in the case of Supreme Court. Provision for appeal, as it exists today, reduces the authority of BMDC to nil. If the situation demands it may be decided in the Court of Law and not by a particular Ministry.

REMOVING THE DEFECTS

I would now like to forward some suggestions for removing the existing defects for assuring quality in Medical Education.

1. SUFFICIENT FUND FOR INSPECTION

A group of three or four experts usually inspects medical colleges/institutes before recognition. BMDC finds it difficult to organise this programme. Existing TA & DA are most unattractive and hence the team members are least interested to perform the function. BMDC must therefore have sufficient fund to cover travel expenses and pay directly to the concerned persons. Official procedure for payment is frequently complex and time consuming. This distracts properly qualified people from taking the responsibility of an inspector.

2. ANNUAL REPORT

An annual report should be prepared by BMDC like the Public Service Commission (PSC) with their observations and suggestions for medical education at both undergraduate and postgraduate level. This report should be prepared on the basis of inspection report and other information collected through correspondence with various institutes. The report should point out the successes and failures and recommend possible remedies.

3. ANNUAL REPORT BY EACH INSTITUTE

Each institute should publish an annual report with academic and administrative details. Academic details will include a description of academic performance namely, publications, research, seminars, symposia, clinical meetings, etc. These reports shall be submitted to the Ministry of Health and the BMDC. Grants for each institute shall be influenced by their performances during the previous year on the basis of the report. Performance of various departments and individual teachers can thus be assessed as well. BMDC and the Ministry of Health shall have the right to verify the report if any doubt arises or expressed from any corner.

4. PROMOTION — REWARD — PUNISHMENT

If there is anything deterrent to the academic development of an institute today, it is the institution of something innovative and destructive in service which goes by the name 'current charge'. A candidate who by all definition is unsuitable for a post and even has been declared unsuitable by the PSC can bypass all regulations by the appointment with 'current charge' by the Ministry. It is clearly stated that 'current charge' is no charge and yet this is frequently violated. As a result some unsuitable candidates can occupy important posts and block the promotion of suitable candidates. This phenomenon is gradually increasing and the eligible juniors are frustrated. No post should be filled up on 'current charge' basis and no 'current charge' should continue beyond six months, a period enough for recruiting a suitable candidate. If none is found through repeated advertisements it is better to keep the post vacant than creating problems for the future. We must remember that 'current charge' does not remove functional vacuum. On the other hand the system adversely affects quality.

If there is no reward for quality performance and punishment for the inefficient group, quality can never be assured and this is bound to deteriorate. Current charge is a means of protecting the inefficient and reflect to some extent the inability of the Ministry to handle the issue timely and efficiently.

5. PRIVATISATION & QUALITY

Encouragement of private education and the private University Act '92 are undoubtedly formidable steps by the government. Judicious approach to these new ventures may bring fruitful result. Over enthusiasm

on the other hand may prove disastrous. Unless rigid criteria are laid down, there shall be mushroom growth of universities solely with commercial interest. This will destroy the spirit of the government behind. We must remember that in the world market today, the competition is open. Survival of the fittest is a dictum which had never been so keenly felt as it is today. Unless we can prove our worth in the global competition, our professional experts shall have a market rapidly shrinking in the outside world. We have been labouring hard to liberate us from the academic domination of the west. For the sake of national integrity, prestige and development, medical education must attain a quality level, which can ensure desired health care for the people and academic excellence of the profession.

6. FREE HEALTH CARE

Bangladesh with a population of 120 million cannot afford to offer free health service through hospitals and dispensaries as it is today. The present system of offering 'free service' in the hospital for all must be discontinued. This exists in letters and not in practice. Patients have to buy medicines and many other essentials for treatment. It cannot be denied that a significant number of our people cannot afford to have enough food not to speak of medical treatment. For them free health care is our obligation but the government can by no means afford. A system must be evolved through which an institute should be self-supporting and income-generating. Many nursing homes are reportedly offering better service and earning an income. It is not clear why a medical institute/hospital run by the government should not be income-generating. Money thus earned may be added to the budgetary provision for medical education and health care.

Financial incentives to the health providers from this source will stimulate their active participation resulting in better health care.

7. SCOPE FOR HIGHER STUDIES

Despite development for postgraduate education at home there is need for higher education abroad in some specific fields. In some fields we are yet to develop facilities for education and health care. These include cardiology, thoracic surgery, reconstructive surgery, neurosurgery, endocrinology, haematology, immunology, virology and genetics. Our postgraduates must be given opportunity to have higher education in these fields if the existing vacuum is to be removed.

Aid giving agencies are eager to help us and various fellowships and

scholarships are available. These are either unutilised or wrong persons are selected who in turn move in a wrong direction. A medical graduate in such branches finds himself at a loss and the fellowship is thus spoiled. There must be strict principle and procedure for selection of candidates for these branches without any fear or favour. It is strongly suggested that the Fellowship (FCPS) must be considered as the essential prerequisite for selection in these cases. If the Fellowships are not available, double sponsorship programme can be utilised. If need be, provision for limited number of scholarships should be made. This will help development of specialities.

8. QUALITY ASSESSMENT

BCPS follows the principle of having examiners from the Royal Colleges in the UK and postgraduate faculties of other countries having reputation for higher studies.

This establishes international relationship and maintains standard of quality assessment at postgraduate level.

IN FINALE

Formation of a Council for quality assurance as suggested by the Key Note Speaker is a welcome proposal. This council must be both representative and authoritative. UGC as it exists today has limited power and function. It should be a supreme decision making body with power to execute. **For quality assurance in medical education BMDC should be recast with reallocation of power.** Ex-officio membership should be reduced to a few and persons should be given preference over the posts unless these are held by regularly appointed persons. Senior Administrative posts in the health sector are occupied by persons on temporary basis and the appointments are rarely regularised.

A decision of the BMDC should be challenged only in the Court of Law and not in the Ministry as this will most likely lead to political pressure and influence the decision of a supreme Technical committee.

Sound technical support is essential for quality assurance. Allocation of fund without a policy is most likely to be misdirected. **A good policy alone cannot ensure quality. Hence fund and policy are both essential for quality assurance in higher medical education. Government must provide fund and BMDC must have an eye on the quality. Working together we can achieve the goal of quality health care for all.**

Proposals

1. For quality assurance in Medical Education BMDC should be given full authority for supervision, control and other necessary steps. If there is any question of appeal by an aggrieved party it should be in the Court of Law and not in the Ministry as it exists today.
2. Ex-officio members of the BMDC should be replaced by persons with competence and background. None holding 'current charge' should be accepted as ex-officio member.
3. Financial allocation to BMDC should be increased to facilitate inspection of colleges / institutes.
4. An annual report should be presented to the concerned authorities by the BMDC. Similarly each institute should also publish an annual report. Assessment of academic activities of these institutes shall be based on these reports. This will influence annual grant by the Government.
5. Private Universities must fulfil the set criteria before receiving permission from UGC.
6. UGC must be given financial and supervisory power as in many other countries for protecting quality in education. Allocation of some fund to the private universities should be made on the basis of their activities and progress.
7. Appointment of teachers should be institution-wise on the basis of qualifications, experience and other requirements laid down by the BMDC.
8. Each Postgraduate Medical Institute should be fully autonomous with financial, academic and administrative freedom. It shall be represented in the BMDC which shall have its usual supervisory and controlling power on it.
9. Appointment of Vice-Chancellors should not be through election as at present but selection should be made with defined criteria.
10. Quality of teachers should be assessed annually. Students should participate by ballots.

* Presented as a Country Paper at the Conference of the Chairperson of the University Grants Commission of the South Asian Region organised by Commonwealth of Learning (COL) & UGC, Bangladesh. On 19. 7. 1995.

** Professor Reddy died suddenly soon after he submitted his Keynote address. His paper was read out at this Conference by Dr. Miss A. S. Desai, Chairperson UGC, New Delli.



Born April 01, 1928 in Chittagong, Bangladesh. Professor Islam has distinguished himself as the most eminent Physician and Medical Scientist of Bangladesh. He has to his credit a brilliant academic and professional career.

Throughout his academic career he has been a scholar with distinctions. Qualified from Calcutta Medical College in 1951. Dr. Islam joined service in 1951; obtained TDD (Wales) in July, 1955 securing the highest position in the University; MRCP (Edin) in January, 1956. Dr. Islam has all along been actively engaged in teaching and research. He has been a pioneer in introducing Postgraduate Medical Education at home as Founder Fellow of College of Physicians & Surgeons of Pakistan; later on College of Physicians and Surgeons of Bangladesh. He has the distinction of being awarded MRCP and FRCP London without examination and at present he is an adviser to the RCP Edin. Dr. Islam has been **Founding Father of IPGMR** and **Founding Dean** of the Faculty of Postgraduate Medical Education, University of Dhaka. Till April, 1987 he had been Director and Professor of Medicine of IPGMR. He is the Founding Chairman of IAHS (Institute of Applied Health Sciences) and **Founder-President of USTC** (University of Science and Technology, Chittagong), the first technical University in Bangladesh in Private Sector and the only one outside the capital sponsored by Janasheba Foundation of which he is the founder.

He had unique privilege of being the **Physician to the Founding Father of Bangladesh, Bangabandhu Sk. Mujibur Rahman and Maulana Bhashani**. Dr. Islam served as Member, WHO Expert panel on HMD from 1978 to May 1992 and then on Expert Advisory panel on Tobacco or Health; Member, International Advisory Editorial Board, Tropical Doctor a publication of the RSM London since 1974. He is the Founder President, (APUA, Boston) Bangladesh Chapter; National Co-ordinator, INRUD. Dr. Islam has to his credit over 100 publications in International Journals. He described a new method of diagnosis of Hepatic Amoebiasis. A new Disease-Eosinophilic Lung Abscess, Two New Methods of percussion, A new Method for examining pharynx (Finger method). His Research Publications have been included in over 20 text/reference books published from abroad. As an Educationist and Research worker he has been awarded many distinctions which include President's Gold Medal 1963, Sitara-e-Imtiaz (S.I.) 1970, Gold Medal Bangladesh Academy of Sciences 1982, Commemorative Medal of Honour, American Biographical Institute 1988, WHO Commemorative Medal on Tobacco and Health 1990, 1992, Osika Eteraf, Darul Hikmat, Pakistan 1992, Golden Grahak Sewa Award, Gujarat State 1993, Bhashani Memorial Gold Medal 1993, Ibn Sina Medal 1995, Mahatma M. K. Gandhi Prize for Non-Violent Peace 1996. Dr. Islam is married to Anwara and has two daughters Dina, Neena and one son Iftekhar.