Need for Cancer Control

by Professor Habibuz Zaman

ANCER control involves

all activities which may

be undertaken to reduce

the total impact of the problem

of cancer in any community or

vent cancer, to diagnose cancer

at an early stage of the disease.

for the treatment and rehabili-

tation of cases of cancer, to fol-

low up these cases, provide fur-

ther care for recurrences, and

monitor the total picture

regarding the cancer situation

in a specific community, area or

this translates into a total of

approximately 200,000 new

cases per year and a load of

over 800,000 cases of cancer at

any given time. The commonest

forms are those of the mouth

and pharynx in the two sexes

added together. Cancers of the

lungs, larynx and oesophagus

are the other more frequent

ones in the male and those of

the cervix uteri and the breast

It is known that cancers of

the mouth, lungs and larynx

are related to tobacco use and

are therefore preventable, when

such use can be restrained or

stopped altogether. If detected

at an early stage of the disease,

uteri and breast can be cured.

cancers of the mouth, cervix

in Bangladesh must, therefore,

lie on the prevention of the pre-

ventable cancers i.e. those of

the mouth, pharynx, lungs and

larynx through an active to-

bacco control programme in the

first instance. Next in impor-

tance are the efforts directed

towards the detection of the

common cancers at an early

stage of the disease, especially

those of the mouth, breast and

An effective tobacco control

the cervix of the uterus.

The thrust of cancer control

in females.

As applied to Bangladesh,

to provide appropriate facilities

These include actions to pre-

Diagnosis, Management and Care of Cancer

by Dr Anis Waiz

prevalent disease and second only to car diovascular disease as a cause of death. Our increasing knowledge of cellular biology has opened up a new era of cancer research. Unfortunately, to date, this has not had a major impact on therapy. The management of cancer frequently involves more than one special ist, including the surgeon, radiotherapist and medical oncol-

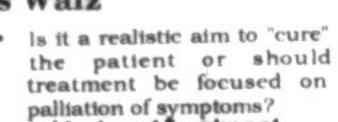
Diagnostic Workup

How does the clinician proceed to evaluate a patient for the presence of malignant disease? Early detection depends primarily on awareness of hereditary and environmental factors contributing to the incidence of cancer, combined with thorough exploration for symptoms and signs which could lead to further diagnostic workup. Three diagnostic screening tests have proved of value in early detection. (1) The exfoliative cytology (Pap Smear) screen for cervical cancer (2) Fecal occult blood testing, ac companied by periodic sigmoidoscopy (3) Mammogramms.

Warning Signals

- · Change in bowel and bladder
- A sore that does not heal. Unusual bleeding or dis-
- Thickening or lump in breast or elsewhere.
- ndigestion or difficulty in swallowing
- Obvious change in wart or
- Nagging cough or hoarse-

The approach to a patient who presents to the physician with a history of symptoms or



Chemotherapy

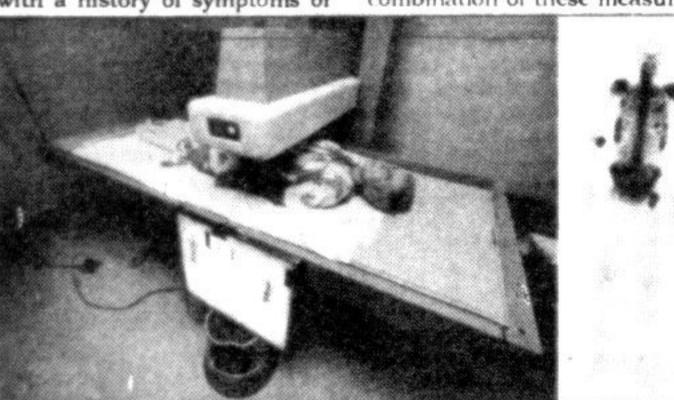
- Biological therapy a. Interferon
- Transplantation
- b. Organ transplantation

Difficulties in Cancer Diagnosis and Treatment In Bangladesh

markers studies are not possionly few institutions. The number of trained manpower for difalso minimum in this country.

In Bangladesh we do not have all facilities of radiotherapy. Only Teletherapy e.g. cobalt therapy, DXT (deep X-Ray therapy) are available. Linear accelerator is still not available. Brachytherapy is not possible in Bangladesh. Drugs used in chemotherapy are not available widely and easily. At present bone marrow transplantation is not possible in any institution of Bangladesh which is an excellent mode of treatment of haematological cancers.

* Tumours that have not metastasised are amenable to local forms of treatment e.g. surgery or radiotherapy whilst tumours that have already disseminated require systemic treatment with chemotherapy or hormonal therapy. It is frequently necessary to use a combination of these measures



Treatment of cancer still remains a costly one with physical findings which could be attributed to cancer involves selection of appropriate diagnostic procedures from a wide variety of available radiologic tests and laboratory studies. The choice of diagnostic procedure used in the staging of cancer patients is guided by the natural history of the various

types of malignancy Methods for Diagnosis

- Physical examination
- Radiologic studies
- a. Roentgenogram
- b. Ultrasound c. CAT Scan d. Angiography and
- Lymphangiography e. MRI
- Laboratory studies a. Hematologic evaluation
- b. Tumour markers
- Pathologic examination of
- Cytogenetics and molecular

Pathology

The fundamental principle of oncology is to establish, usually by biopsy, the pathological nature of any lesion suspected of being neoplastic before making decisions about management The first distinction to be made is between benign and malignant lesion. Malignant tumours are comprised of cells which are capable of invading adjacent tissues and leaving the tissue of origin to disseminate and form metastasis. Histological examination is essential in order to exclude inflammatory processes as well as hyperplasia or benign tumours. Specimens for pathologic examination are usually obtained by biopsy of a suspicious lession. The procedure may involve a surgical operation under general anesthesia but in many cases tissue specimens can be obtained through local incision (e.g. breast cancer) or by removal of a piece of tissue

(bronchoscopy colonoscopy). When direct visualisation is not possible because of the internal location of a suspected lesion, it is often possible to obtain tissue fragments or clumps of cells by fine needle biopsy aspiration guided by computed tomography or fluo-

under direct visualisation

Management

Patients should be informed that they have a malignant disease prior to starting treatment but not necessarily of the exact prognosis. The patient will be helped very considerably by positive assurance and symptoms can almost always be improved even if the underlying disease can not be eradicated.

Cure or Palliation

In order to plan the optimal management for an individual patient it is necessary to consider two questions.

 Is the tumour still localised to its site of origin?

Modes of freatment Surgery Radiotherapy

Hormonal therapy

b. Monoclonal antibodies a. Bone marrow transplan

In our country facilities like MRI cytogenetics and tumour ble. CAT scan is available in ferent diagnostic procedures are

particularly if aiming for complete eradication of the tumour. Surgery, radiotherapy and chemotherapy all cause some degree of host toxicity which may be enhanced by combining the treatments. It is important to decide whether or not cure is feasible and desirable in order to minimise any treatment related toxicity in circumstances where an aggressive therapeutic approach would be inappropriate. Bone marrow transplantation is an excellent mode of treatment for haematological

malignancies. Pain Relief

Pain relief is a matter of skill. Local lesions in bone may respond dramatically to radiotherapy while generalized bone pain may be relieved by steroids. Pain related to compression of nerves may be helped by local nerve blocks or cordotomy.

Analgesic (pain killer) must be given regularly in sufficient dosage. Addiction is not a problem in the terminally ill and medical and nursing staff should not be inhibited in giving diamorphine or morphine in adequate amounts to control pain. It therefore needs to be given regularly and the dose and time interval adjusted so that the patient remains pain

Drugs ascending in potency can be used: paracetamol and dihydrocodeine may be used initially, when these become ineffective, dipipanone with cyclizine may be substituted moving on to morphine or heroin for severe pain. Long acting oral morphine are now available and useful in patients to whom it is difficult to give

parenteral therapy. Anorexia, nausea and vomit ing are often troublesome symptoms in the terminally il Obstructive vomiting should be relieved by a nasogastric tube. Metoclopramide, cyclizine or chlorpromazine may be helpful in preventing nausea. Small doses of steroid may be of

Factors in the Management of Dying Patients.

physical symptoms.

 The forming of a supportive and trusting relationship between the patient and the medical and nursing staff. The provision of counselling

to family members. The protection of the ties between the patient and his/her family.

The symptomatic relief of extreme psychological symptoms by the judicious use of transquillisers or sedatives and the use of antidepressants when the usual indications are present.

(The writer is Principal, Bangladesh Medical College, Dhaka.)



ROFESSOR M A Hai, Di-

rector, Bangladesh Can-

cer Institute, in an

interview with The Daily Star

stressed on the need for gearing

up public awareness in

preventing the spread of this

killer disease. He suggested that

only through a coordinated ef-

fort, we can combat cancer. The

The Daily Star: We under-

stand that mass awareness can

ing against cancer. But can it be

the only preventive against

awareness in our country about

the disease will be of utmost

importance. Because in this

country where health aware

ness among the majority of the

people are very marginal, cases

of cancers are usually detected

at very advanced stages. If early

detection can be made possible,

many cancer cases can be

cured. But in our country, most

cancer cases are reported after

disease do the patients normally

seek professional help, here in

patients at advanced stages.

Patients are actually referred to

this hospital from various other

hospitals of the country. And, I

guess, the process through

which the patients come here is

a time consuming one. So,

when receive the patients, it be-

comes rather too late. Not only

the delay in the process, but

there are other factors too. In

Bangladesh, most people are

reluctant to go to a doctor. If

one feels sick, he would rather

stay back at home and apply

his own methods of medication.

But when all that fails, he goes

to a doctor. Sometimes the

sheer negligence of the patients

causes the disease to take a

stronghold over the body.

DS: In which stage of the

MAH: We receive most of the

the disease takes a fatal turn.

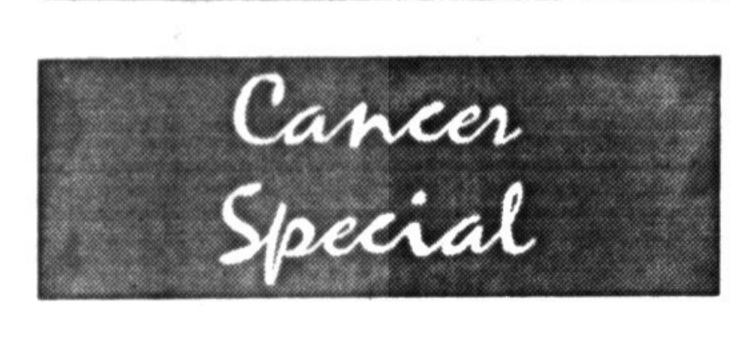
the Cancer Institute?

Professor M A Hai: Public

be a very important tool in fight-

interview follows:

cancer?



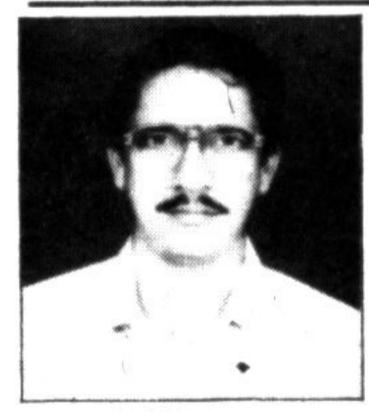
Health i



Combined Efforts to Combat Cancer

by Iftikhar A Chowdhury

The government cannot expected to fight against this killer disease single-handedly. It has to be a coordinated effort, where various social organisations, wealthy sections of the society and specially, the Non-Government Organisations (NGOs) have to come forward with a definite desire to help. Only a combined effort can help combat this menacing disease."



Prof M A Hai

DS: How would you describe the cancer scenario, viewing it from the overall perspectives of its incidence, number of victims and its cure and prevention?

MAH: The disease, it seems, had always been here. Victims of the disease too, are always on the increase. But, the problem is, we have never been able to bring all the sufferers under the umbrella of proper treatment. But we hope that the present gloomy picture will soon be removed by a brighter one. Specially, the present government of Begum Khaleda Zia has given considerable attention to cancer. We are undertaking a Cancer Control Programme, which has also been appreciated in foreign countries.

DS: Do you think that the support and attention provided by the government is enough?

MAH: The government cannot expected to fight against this killer disease single-hand edly. It has to be a coordinated effort, where various social or ganisations, wealthy sections of the society and specially, the Non-Government Organisations (NGOs) have to come forward with a definite desire to help Only a combined effort can help combat this menacing disease.

DS: What are the most common types of cancers in our country?

MAH: Lungs, mouth and throat cancers are mostly prevalent among the males in our country and among the women cervix, breast and mouth are the commonest.

DS: How many cancer patients can be treated in this Institute at a time? What is its capacity, in terms of patients,

MAH: We have now 50 beds in this hospital. But recently, a government decision has been taken to increase this number to 300 beds.

DS: But to treat this large number of patients, do you have the appropriate technical knowhow and skilled personnels required?

MAH: No. What we have. can by no standards be enough. Actually, we need a lot more expert personnels than we have at present. Our radio therapy department needs a lot of attention. We are lacking in specialised equipments. But we are trying to improve the situation. Seven new machines are in the process of being installed.

DS: Is there enough trained medical personnel and expertise required?

MAH: We have a few expert radio therapists. But we need more. Most needed is training of our surgeons. The surgeons that we have, are mainly general surgeons. But cancer surgery demands special expertise. We do not have too many surgeons in our country who have orientations with cancer surgery.

DS: How does Bangladesh Cancer Institute see its future? Does it have any definite plans to be implemented in the near

MAH: We want to increase our manpower, capacity of service provided to the patients and also extend our research activities. Along with these in mind, we would definitely try to generate public opinion and increase the awareness of the general mass for cancer prevention. We are planning to make a registry of our cancer patients, their names and addresses and after their treatments we intend to be informed how the patients are doing.

DS: As a cancer specialist and Director of Cancer Institute do you have any suggestions for those who want to avert the catastrophic effect of this dreaded disease?

MAH: Any person runs the risk of being stuck down by cancer. And, as all are aware that its treatment is one of heavy cost, the thing we should opt for is cancer prevention. For example, of the total number of cancer patients, about 50 per cent have grown the disease through tobacco smoking. So, quitting the habit of smoking would definitely be a way of avoiding cancer.

to treat such a large number of

patients, we should opt for

prevention. One thing that

needs to be remembered is

that preventing cancer is

much cheaper than treating it.

"So, in a poor country like

ours, there's no other way, but

prevention. This is why.

Bangladesh Cancer Society, in

building awareness, preventing

and detecting cancer, is cease-

lessly helping the people and

the government in its untiring

Dr S F Hug thinks that the

present workforce or man-

power are not enough for

treating the growing number

of cancer patients. He feels

that, we have severe shortage

of expert personnels. In total

there are about 40 radio ther-

apists in our country, which is

not near to being enough. We

do not have specially trained

cancer surgeons here. General

surgeons do the work here.

But cancer surgery demands

special expertise. Also, in the

radio therapy department,

there are acute shortages of

As explained by Huq,

Bangladesh Cancer Society do

equipments.

effort.

quired. Today the state of radiotherapy departments in Bangladesh is rather pathetic. These departments have all been neglected during the past 20 years. Can you believe that no new radiotherapy machine has been installed in Bangladesh during the past 20 years? It is indeed true that all of the radiotherapy machines in use are at least 20 years old. These have all outlived their guaranteed life-span. They need to be replaced entirely. Many more radiotherapy machines are required at least 10 times of what we have had in varying

states of disuse over the past 20

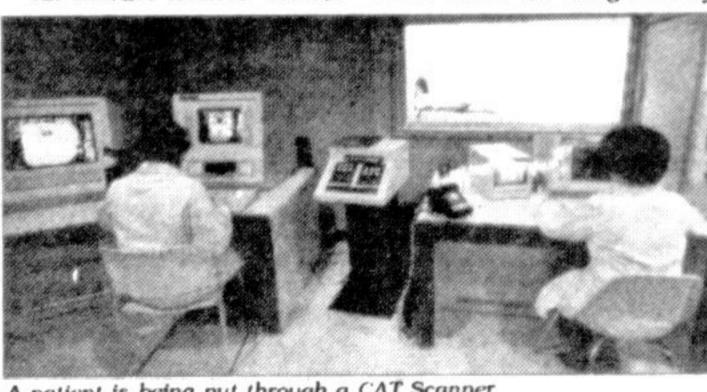
years or sol

surgery, radiation therapy and

cancer chemotherapy are re-

It is said that no costly equipment can be procured through the revenue budget. So it has not been possible to replace the old equipment or to procure new ones. I cannot believe that after 20 years of independence this should reflect the true state of affairs in regard to governmental budgetary rules and regulations. Even if it were so, it should not have beyond the capacity of our illustrious and capable civil servants to devise ways and means of getting over this man-made difficulty

Because of this great handicap, patients of cancer confirmed by histopathology in Bangladesh, are going abroad for treatment in significant numbers. A stzeable amount of foreign exchange is being spent every year for such treatment by Bangladeshi nationals, officially or unofficially, Foreign exchange so spent by every 20 to 30 patients is adequate for buying one piece of radiotherapy equipment, perhaps even a cobalt 60 unit. It may be a good guess to suggest that 12 such units could be bought every



A patient is being put through a CAT Scanner year. Thus an excellent case

programme by inducing smok-

llealth education is best

Cancer of the mouth takes lessions.

The commonest cancer of the female in Bangladesh that of the cervix of the uterus also takes several years to develop. Within this period abnormal cells are shed from the epithelium or lining of the cervix. These cells can be identified on cytologic examination. Uterine cervical cancer when detected early can be completely cured by surgery. Similarly the other common

cancer of the female of Bangladesh — that of the breast can be diagnosed early by the doctor on palpation. Also women can be taught self-palpation of the breasts by properly trained professionals and other female health workers. When a cancer of the breast is detected at an early stage of the disease, many patients can have a complete cure by surgery or a combination of surgery, radiation and the use of anticancer drugs, also known as cancer chemotherapy. Thus the lives of many patients can be saved by early detection and appropriate treatment.

ers and tobacco chewers to quit the habit, and preventing adolescents and young individuals from acquiring these habits, will help reduce the numbers of new cases of cancers of the mouth, throat and the lungs - three of the commonest forms in Bangladesh. In fact, as a bonus, coronary heart disease and heart attacks also can be influenced favourably within days of quitting the habit of smoking. The risks of smoking on lung cancer are fully nullified within a period of 8-10 years of its cessation. Thus health education and information in regard to smoking cessation, when carried out effectively, can prevent these cancers.

planned by professionals who give due importance to the local customs, traditions, culture and sensitivities. The messages should be appealing and create the desired impact. We have a few excellent examples of health messages over Bangladesh Television for the prevention of blindness in children, the use of oral saline for diarrhoeas and for the EPI. Appropriate messages need to be devised and spread to wean away smokers and 'paan' and tobacco chewers from these habits. Similarly the danger signals for cancer in general have to be put across to the people at large with a view to making possible early diagnosis of cancer.

several years to develop and are easy to see and detect. Early surgical removal can result in complete cures of these oral

It can be very frustrating when lack of facilities prevents the prompt treatment of cases of cancer detected at an early stage. Expertise in cancer

Greater Awareness Needed to Avert a Catastrophe

N November 12, 1993, Bangladesh Cancer Society is going to organise a public awareness and mass education programme on cancer in Dhaka. President Abdur Rahman Biswas will inaugurate this programme, said Dr Sayyid Fazlul Huq, President of the Society.

"For spreading public education and awareness, so far, we have addressed the people or made ourselves heard through the help of electronic and the print media. But this time we have come down to the streets to address the issue, " said Dr Hug.

In various advantageous points of the city roads. through placing bill boards, banners and festoons etc the society wants to make an impact about the seriousness of the killer disease - cancer. "We are also trying to popularise the issue through circulative posters, stickers etc to various schools, colleges and clinics of the city and we are publishing a news letter 'Cancer Barta' for addressing the issue with due importance," Hug stressed.

Bangladesh Cancer Society is a non-government voluntary organisation formed in 1974. The society has not gone into elaborate fund raising programmes as yet. It has a small fund amounting to Taka 12 lakhs or so, collected through membership subscriptions and from selling cancer seals. The society's present aim is to make people aware of the causes that are responsible for cancer and the ways these causes can easily be avoided. Because in Bangladesh most of the cancer cases can be prevented if precautions are duly

"When we talk about cancer · The relief of distressing prevention, we definitely have to know the causes that create this fatal disease. So, if we can avoid these causes, then, I believe, 50 per cent of the cancer cases in this country can well be averted. We also want to make people aware of the primary symptoms of cancer. So that the disease is detected at an early stage, and professional help can be sought after without much delay. Because, early detection makes the process of treatment easier," stressed Dr Huq.

> As Hug has noticed, in the developed countries too, early detection helped immensely in alleviating the sufferings of

"If the government had only spent ten per cent of its excise earnings from tobacco alone, on cancer treatment and research, then the picture would have been a lot different from what we see now," said Dr Sayyid Fazlul Hua (President, Bangladesh Cancer Society) while talking to The Daily Star correspondent Iffikhar A Chowdhury over an interview



Dr Sayyid Fazlul Huq

the cancer patients. So, here also, early detection is necessary. Except for lung cancer, in all other types of cancers, the developed countries have lowered the rate of cancer related deaths. Many developing countries, though belatedly, are taking similar steps in cancer prevention. It is a matter of regret that our people are not well informed about the disease.

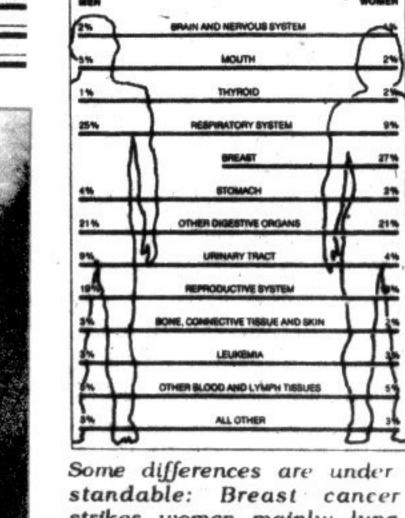
The necessary facilities that ought to be here, for cancer prevention, said Dr. Hug. "are very limited in our country. And those that we have, are not up to the standard. Where, there should be two cobalt units for every 10 lakhs of people, we have only one

so apparent!

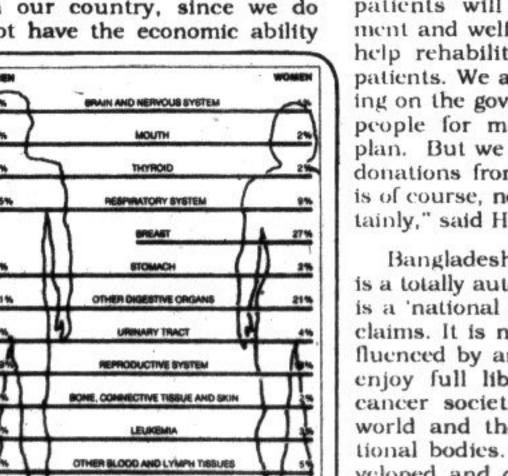
cobalt unit for 10 crores. And that too, approximately 30 years old. We have seven or eight deep X-ray machines in various hospitals of the country, which have long been discarded by the developed countries.

It is very encouraging news said Huq, that the government has recently decided to purchase four cobalt machines, a linear excellerator and some other instruments for cancer treatment. And what is more where there are only 153 cancer beds in different hospital's of the country, of which 50 are in the Cancer Institute, the government has decided to increase the number of beds to 300 there. Cancer Institute, which has been formed lately, is very sloth in its progress, complains Huq. "For the benefit of the people its motion should be geared-up."

As Dr Hug observes, the total number of cancer patients are nearly eight lakhs now and this number is increasing by two lakhs annually and of the two lakhs 1.5 lakhs die from this killer disease. If we do not become alert now, he cautions, this number will be doubled during the turn of the century In our country, since we do not have the economic ability



When the danger of smoking is cause they smoke more . . .



strikes women mainly; lung cancer affects men, simply be-

not receive any assistance from the government. "But we are planning to build a cancer hospital and welfare centre. We have applied to the government for the land and the government has duly promised it. We have also submitted our plans for a cancer hospital and a welfare centre to the government. It is quite an ambitious plan on our part. We want that, in the hospital cancer patients will undergo treatment and welfare centre would

help rehabilitating the needy patients. We are mostly counting on the government and the people for materialising this plan. But we are also seeking donations from abroad, which is of course, not much of a certainly," said Huq. Bangladesh Cancer Society is a totally autonomous body. It is a 'national body' as Dr Huq

claims. It is not in anyway influenced by any quarters. "We enjoy full liberty. There are cancer societies all over the world and they also are national bodies. In both the developed and developing countries, governments are combatting the disease with the help of cancer societies. That, cancer has become such a vast problem, no one can solve it single-handedly. It has to be a joint effort," concludes Dr S F apy machines within the next six years. The private sector can also invest profitably in importing radiotherapy machines into the country. I am sure there are many amongst us who are old enough to recall the name of late R P Saha, who had caused a radio-

can be, made for the

Government to set aside a sum

to Tk 100.00 crore in foreign

exchange for buying radiother-

therapy department to be set up at the Kumudini Hospital in a remote place called Mirzapur, a few years before the premier Medical College at Dhaka had such an unit. Lack of required resources inclines one to take the easiest and cheapest route. There is a real danger of medicines against caneer being used indiscriminately and to the great detriment of our citizens, by people not adequately trained to do so. The public must know that anti-cancer agents are highly

toxic. These drugs not only kill the cancer cells, but they also damage the normal healthy ones. Chemotherapeutic agents are not effective as the primary form of treatment of many cancers. In several malignant conditions, they are used as an adjunct with surgery and or radiotherapy. In a country well known for the extensive practice of quackery, thought needs to be given to restrict the use of anti-cancer drugs to physicians specially trained to do so. A good plan for cancer control must provide for monitoring the efficacy of its preventive as well as its curative programmes. The setting up of a Cancer Registry will help in determin-

ing, on a continuing basis, the

status of cancer in the country.

It would also indicate, in course

of time, changes in the rates of

incidence of prevalence of and

mortality from the various

forms of cancer following pro-

detection and treatment.

grammes of prevention, early

Today, the cancer scene in Bangladesh is a rather unhappy one. Bangladesh has the basic resources of physicians, many specialists and an infrastructure of health care facilities. It is the function of a good cancer control plan for Bangladesh to provide the opportunities for these human resources to be appropriately developed, for the health facilities to be adequately equipped and for the implementation of the various facets of the programme with the overall objectives of preventing cancer, diagnosing cancer at an early stage, providing for the maximum number of cures, making available drugs for the relief of pain in patients with terminal cancer, and lastly, maintaining an over-view of the cancer situation through a functioning Cancer Registry.