The Role of Health Education in the Management of Gynaecologic Cancer in Developing Countries

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Introduction

There is a wide global variation in gynaecological cancers. In most of the developing countries these are often at an advanced stage at the time of presentation. Fear of cancer, cultural taboos and ignorance are some of the factors that contribute to this.

Of the gynaecological malignancies, cervical cancer is one of the leading causes of death amongst women in many parts of the developing world, including Malaysia. A majority of cases present in late stages of the disease. This is despite the fact that cervical cancer is probably the most preventable form of cancer. Frequently it afflicts relatively young women. In a major referral centre in Malaysia, 42% of patients with stage 1 and early stage 2A invasive carcinoma of the cervix were below the age of 40[1]. It is more common in populations of low socio-economic status, which exists in all countries but are most prevalent in the developing world. A recent clinico-epidemiological survey of cervical cancer in Kenya[2] revealed a stage distribution of 7% for stage 1 and 58% for stages 3 and 4; reports from Nigeria[3] are even worse with 81% of cases presenting in stages 3 and 4. These are situations similar to that in Sweden at the turn of the century[2]. Effective measures are needed not only to achieve lower mortality in general but also to give these young and middle aged women with a family and economic responsibilities a longer active life.

Health Education

Health education programmes are essential to achieve the objectives of prevention, early diagnosis and institution of appropriate therapy in the management of gynaecological malignancies. Such programmes should aim at 3 population groups – the general healthy population, cancer patients and medical personnel.

Educating medical personnel

There is no doubt about the need to teach and train medical personnel about current approaches to cancer treatment and prevention. The demythication of cancer can only be achieved by medical staff who have a wide knowledge of the various aspects of the diseases. Medical students should be taught basic aspects of the various gynaecological cancers and see how they are managed. This is because awareness of gynaecological malignancies and their symptoms and signs within the medical profession is a key factor in early diagnosis and treatment.

Clinical down-staging

In developing countries without laboratory facilities or resources to cope with cytological screening, an active attempt to detect the disease at an early stage when still curable could be pursued. This approach of "clinical down-staging" would require the training of nurses and other non-medical health workers in using a simple speculum for visual inspection of the cervix[4] and recognising cervical abnormalities[4,5].

Female primary health care workers involved in these examinations should be taught how to distinguish between clinically normal cervix, cervical ectropion, and a cervix with suspected cancer on inspection with a vaginal speculum. They should be knowledgeable as regards the symptoms and signs of the disease and be

able to take cervical smears for cytology. Such assessments may reduce the number of women who need to be referred for gynaecological assessment. The ability to distinguish normal from abnormal, rather than to establish diagnosis should be the objective. Women with suspected invasive cancer would require appropriately directed biopsies and would thus need referral for further assessment.

One report from India where direct inspection of the cervix and pap smears were done on women attending clinics, stated that visual inspection alone identified as **high risk, 63% of women** who were subsequently found to have cancer in stage 2 or earlier[6].

Mass screening by speculum examination, however, should be regarded as an option that requires thorough evaluation before it is introduced on a large scale.

Role of Public education

The main obstacle to be overcome is the widespread **fear of cancer** – a fear that may be more dangerous than cancer itself. Fear of cancer has been found to be the root cause of much of the delay on the part of cancer patients in seeking prompt medical treatment[7]. A substantial number of people still believe that cancer is always incurable. Public education is vital to overcome these misconceptions; it has important prophylactic and therapeutic roles.

There is no doubt that *"knowledge is the antidote to fear"* (Emerson). One of the main purposes of public education should be the dissemination of accurate information on gynaecological cancer and instilling awareness that treatment at an early stage gives the best prognosis. That cancer is by no means always fatal will remain one of the most important aspects of public education. Only when the idea that treatment can really help the cancer patient is accepted will they see any point in prompt diagnosis or in visiting a doctor before symptoms arise. Instilling a well-balanced optimism is, of course, an essential step in achieving effective health education about cancer.

The second objective of public education should be to discourage harmful customs and habits and increase the willingness of the population to participate in preventive screening programmes.

Cervical cytological screening

Cervical cancer is the most common malignancy of the female genital tract in developing countries. Educational programmes should highlight that cervical cytology provides some defence against cancer and such screening will only be effective if women with positive tests undergo appropriate diagnosis and therapy.

A single cervical smear for all women at age 45 years might reduce the incidence of cervical cancer by 25%[8]. Two tests per lifetime at ages 45 and 55 would reduce the incidence by 40 - 45%[9]. These findings are worth taking note when introducing cytological screening where resources are limited. Other measures when resources are limited include screening all women attending gynaecology and STD clinics, using existing health centres. It is worth bearing in mind that maternal and child health services often miss the older high risk woman. It is also important to ensure that Pap smears are properly taken, read and appropriate therapy instituted when necessary.

Existing data about the *causes and natural history of cervical cancer* suggest the following:

i) cervical cancer is a sexually transmitted disease and is predominantly caused by external, avoidable factors connected to sexual behavioural characteristics of both the male and female. Alteration of such behaviour will be an important preventive measure.

ii) infection by Human Papilloma Viruses, particularly types 16 and 18, is a likely factor, but not a sufficient cause of invasive cancer.

iii) there are consecutive stages of the disease: CIN of increasing degree (1 - 3) and invasive cancer. The *precursor lesions* (CIN) are asymptomatic. *Only routine screening will help detect these.* A question often asked is how early should such screening commence; ideally this should be with the onset of coitus as a significant number of young patients present with invasive disease[1]. It is also important to note that appropriate treatment of the precursor lesion will prevent subsequent invasive cancer.

iv) usually invasive cervical cancer and its precursors develop slowly, thus leaving ample time for intervention.

v) whilst spontaneous regression has been observed in some cases of dysplasia, *invasive cancer is irreversible* and will, if not treated, progress and lead to death within few years.

vi) the development of invasive cancer occurs in 4 successive stages. Risk of death increases by a factor of 2.5 per each successive stage[2]. This means that as cancer advances anatomically treatment becomes progressively less effective

v) the natural history of cervical cancer is similar irrespective of geographic location.

Health education should be directed at disseminating the above known aspects of cervical cancer, emphasising that *treatment of the precursor lesions leads to prevention of cancer.*

Regular examinations of healthy persons and teaching people to be particularly watchful for certain *signs that may be early indications of cancer* would help in early diagnosis. With regard to genital tract malignancies these signs would be

- unusual vaginal bleeding or discharge
- post-coital bleeding
- a vulval ulcer that does not heal

The cancer patient

Once the cancer is diagnosed, from the point of view of the patient, who faces with an "aggressive" surgical, radiological and chemotherapeutic treatment, there will be reserve and even fear. *Whether or not to tell the truth to the patient is a dilemma.*

What the clinician tells the patient about her disease will depend on:

- the patient's personality
- what she can accept psychologically
- what the doctor's statements will contribute to the effect of treatment

The "truth" must be represented in a manner that will help the patient endure and overcome her disease[10]. With *good physician-patient rapport,* the patient will be more able to overcome the reality of her problem. However, *irrespective of the stage of the disease at diagnosis, no cancer patient must be condemned out of hand; the incurable patient must receive the same skilled and constant care.*

Role of Government, Voluntary Organisations, etc

Health care centres, polyclinics, general practitioners and hospital services should be persuaded to examine women with symptoms with a view to regarding them as having cervical cancer or CIN until these have been excluded by cytology, biopsy and/or colposcopy. This type of public and professional educational approach is applicable in developing countries. The dissemination of information needs commitment by Governments, voluntary organisations and medical personnel. Malaysia, has made a good start with its recent nationwide Healthy Life-style campaign with prevention cancer as its theme. The next step is to *establish a national cancer register.*

There is no doubt that there is a **lack of trained medical personnel** in most developing countries. The developed world could help in training of gynaecologic oncologists, cytologists and cytotechnicians and help improve diagnostic and therapeutic facilities. The disease seen is often large and advanced. We need trained staff to deal with these problems.

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