

## Chapter 10

### *CERVICAL SCREENING*

A screening test is a test given to pick up unrecognised disease in a person who does not complain of any symptoms. A cervical smear is used in this way. However, a cervical smear may also be taken when a woman with certain symptoms consults a doctor. In this case it is used as a diagnostic test, not as a screening test. This chapter deals only with the cervical smear as a screening test.

Screening was first introduced as one of the routine tests done when women entered hospital for a gynaecological condition. Later on, interested general practitioners offered the test to their women patients. This way of carrying out screening – when an opportunity arose – has been called ‘opportunistic screening’.

The first population-based screening programmes were started in New Zealand in the early 1960s. The paper by Dr McIndoe, ‘A Cervical Cytology Screening Programme in the Thames Area’, published in 1964<sup>1</sup>, reviewed a screening programme launched at the beginning of April 1962 with assistance from the Auckland Division of the Cancer Society. Forty-one per cent of the target patient group in the area were examined, and of those the ‘pick-up rate’ was 6.4 cases of carcinoma in situ or invasive cancer per thousand women screened. This was comparable with the rates from similar programmes in other countries.

During those early years the Papanicolaou smear was highly valued as a means of detecting cancer precursors. In the early 1960s, the Auckland division of the Cancer Society also financially supported a national screening register introduced by the Research Council of the Royal College of General Practitioners. The register contained the names of 377 doctors throughout New Zealand who did screening and held the national results of smear tests. But this initial enthusiasm and co-operation in a nationwide screening project waned rapidly. The register stopped around 1965.

Since 1965 cervical screening has been offered to patients by general practitioners and gynaecologists as the opportunity arises. In 1977 guidelines for the frequency of cervical screening were circulated by the Department of Health. These guidelines followed the recommendations of the Walton Report from Canada. More recently, a working group chaired by Professor Skegg made fresh recommendations for cervical screening in New Zealand.<sup>2</sup>

The group reviewed the evidence for the value of screening. They made recommendations on the optimal frequency of screening, on ways to encourage women to enter the screening programme and on the technique for taking a smear. In referring to ways of encouraging women to enter the screening programme, the authors stated:

“It is now widely held that the full potential of cervical screening will be realised only with effective systems to invite all women for screening, and to check that action has been taken on positive results. These systems (whether manual or computerised) might be based in general practices, laboratories or whole communities.”

This way of carrying out cervical screening has been called ‘population-based screening’ or ‘mass screening’. It differs from ‘opportunistic screening’ in that it is more organised. It should result in a wider coverage of women at risk, fewer women whose abnormal smears are not properly followed up, and easy evaluation of the programme’s effectiveness.

National Women's Hospital has been one of the leading New Zealand exponents of the use of cytology in the detection of CIS and other abnormalities. Paradoxically, in recent years, the published and publicly stated views of a section of the Hospital's gynaecologists have opposed the value of cervical screening. Those attitudes came under intense scrutiny during the hearings. Because of the central role of cervical screening in this Inquiry, it is important to review some of the debate.

### THE ETHICAL PROBLEMS OF SCREENING

McKeown, in 'Validation of Screening Procedures' (Screening and Medical Care OUP 1968), speaks of the obligations in screening. In his view they are to ensure:

- a) that a screening procedure is effective, and if it is
- b) that it makes better use of limited resources than the available alternatives.

There are two additional problems:

- a) reaching the entire at-risk population, and
- b) how to manage the cases when they have been identified.

McKeown distinguishes between issues raised by screening and issues raised by ordinary medical measures which pose questions about effectiveness and priorities. He isolates the difference between a patient who seeks help from a doctor for conventional diagnosis and treatment, and those other patients whom the doctor undertakes to identify as requiring his assistance. He says:

"The position is quite different in screening, when a doctor or public medical authority takes the initiative in investigating the possibility of illness or disability in persons who have not complained of signs or symptoms. There is then a presumptive undertaking, not merely that abnormality will be identified if it is present, but that those affected will derive benefit from subsequent treatment or care.... No-one should be expected to submit to the inconvenience of investigation or the anxieties of case finding without the prospect of medical benefit."

For this reason the general practitioners who referred patients with abnormal smears to National Women's Hospital, must have done so in the belief and with the intention that their patients would be treated.

### IS CERVICAL SCREENING EFFECTIVE?

In theory, cervical screening should be of value if it is true that a significant proportion of the abnormalities found will progress to invasive cancer if left untreated; and secondly, if the treatment of these abnormalities is very effective in preventing this progression. In addition, its value will be greater if most cases of invasive cancer start with a precancerous phase which lasts long enough to be detected by screening. Even if screening is theoretically effective, it won't be shown to be effective in practice unless many of the women at risk have the test, the results are read correctly and the abnormalities are treated properly.

In his 1966 paper, 'Cervical Cytology: A Scrutiny of the Evidence' 1966,<sup>3</sup> E G Knox reviewed current evidence for the effectiveness of cervical screening and suggested that the information needed to determine whether it was truly effective was not available. Professor Skegg said in his evidence that failure in the 1950s to use the optimum method of evaluation of new procedures – the randomised controlled trial, was partly responsible for this lack of proof. Knox had rejected the idea of a randomised controlled trial of

screening in the 1960s on the grounds that it would be impracticable and unethical.

It has been obvious from listening to Dr Green's evidence and reading his papers and public comments on cervical screening, that he shared similar doubts to those expressed by Knox in that 1966 paper. His scepticism might have been justified in the 1960s. However, the emerging evidence of progression from CIS to invasion, not only in his own work at National Women's Hospital but also from studies undertaken in other parts of the world, appears to have been disregarded by him or not fully understood.

Since the 1960s a far clearer picture has emerged. Centres with well organised screening programmes have shown substantial falls in the incidence and mortality rates from cervical cancer. Evidence of this sort was regarded by expert witnesses as demonstrating the value of cervical screening. Professor Skegg considered that a consensus on the positive effectiveness of population-based screening started to emerge in 1977. In New Zealand, however, the importance of these findings has been consistently undermined by the confused statements from Dr Green and some of his colleagues at National Women's Hospital.

It is difficult to understand the logic of those gynaecologists who warmly advocate the virtues of opportunistic screening (taking smear tests from women who attend National Women's Hospital as in- or out-patients as the opportunity occurs) but oppose the benefits of mass screening. As one submission said:

*"In essence a mass screening programme of the relevant female population is simply putting the opportunistic screening already carried out by practitioners onto an organised basis."*

Opportunistic screening results in under-screening large sections of the female population who have no apparent need to seek treatment at a hospital specialising in obstetrics and gynaecology. It may well over-screen the women who are obliged to attend hospital. It is not a rational use of scarce resources in the pursuit of preventive health care.

In 1986 a workshop on screening for cancer of the cervix, arranged by the World Health Organisation International Agency for Research on Cancer, attracted participants from a wide range of countries. They were described by Dr Jordan as leading authorities in the world. It was their view that:

*"Research into screening for cancer of the cervix has moved from the necessity of establishing its effectiveness, which is now generally recognised as having been confirmed, to operational and applied research issues, both in technically advanced as well as in developing countries."*

The workshop's report spoke of the sharp falls in incidence and mortality from cancer of the cervix in Iceland, Finland and Sweden, as well as in parts of Denmark, when organised programmes achieved nearly complete coverage of the population. Professor Richart described the evidence in support of a cervical screening programme as irrefutable:

*"While most of the world is trying to reach every segment of their population for cytological screening there is a continuing debate in New Zealand as to whether screening is effective.... Maybe all the nations are out of step with New Zealand, but the evidence is dead against it."*

Dr Jordan also considered the medical debate about the value of a national programme had largely been resolved and said:

*"I think the debate is not whether it should be set up but how."*

By the 1980s, therefore, few authorities doubted the value of screening. Most countries were turning their attention instead to the administrative problems of establishing a nation wide screening programme, ensuring that diagnostic and treatment facilities were available and that there were high standards in taking smears and reporting.

That these organisational matters are of critical importance to any programme is indisputable. In the United Kingdom, for example, although screening for cervical cancer has become widespread, there is still no nationwide programme fully organised and operative. In 1984, in spite of the general practice of screening, the overall time trends in mortality were not substantially affected. Detailed analyses of trends, however, suggested that without screening, an increase in mortality would have occurred. In effect, in the United Kingdom, screening has probably resulted in about a 20 – 30 per cent reduction in the risk of and mortality from cervical cancer (Hakama, Chamberlain, Day, Miller, Prorok, 'Evaluation of Screening Programmes for Gynaecological Cancer', WHO meeting report).

This failure to achieve a net reduction in mortality is probably due to two factors:

1. The programme had not been fully organised to achieve optimal results throughout the country.
2. Increases in incidence in younger women have been reported in the United Kingdom and in several other countries including New Zealand.

The situation is probably similar in New Zealand. In the past Dr Green argued that the failure of cervical screening to lead to a dramatic reduction in cases or deaths from invasive cancer in New Zealand implied that:

"the concept of progression from epithelial change through a spectrum to invasion is doubtful." (Paper presented at the 1973 MRC Epidemiology Symposium, Green Lane Hospital, Auckland.)

This can no longer be argued because of the success of overseas programmes. Indeed Professor Kolstad suggested that the failure of cervical screening in New Zealand *"possibly reflected the conservative attitude to treatment of such lesions as recommended by the National Women's Hospital. One cannot think that there shall be a decrease in invasive cancer, if the in situ lesions are not properly treated."*

In spite of world authorities' broad agreement on the value of a screening programme, key gynaecologists in the Postgraduate School of Obstetrics and Gynaecology still dispute the evidence. In an editorial, 'Cervical Human Papilloma Virus Infection and Colposcopy'<sup>4</sup> Professor Bonham, Dr Green and Professor Liggins criticised a paper by Pagano and colleagues from the Royal Women's Hospital, Melbourne. It had recommended the mandatory use of colposcopy in the management and follow-up of all patients whose smears suggest HPV infection. The authors say:

"Therefore, before we accept for universal application the recommendations of Pagano and colleagues, would it not be wise perhaps to review more critically the conflicting data on current screening programmes, discrepancies in epidemiological data and cohort trends, the role of tobacco and viruses (whatever happened to Koch's postulates?) and, above all, to seek more objectively the natural history of cervical cancer?"

Professor Bonham described this editorial as having been written with 'flair', implying 'provocatively'. I did not draw that inference.

Even in 1987 these authors believed that they were right and the rest of the world was wrong in its assessment of the benefits of a mass screening programme. The editorial quoted Bethwaite's Study,<sup>5</sup> which fixed the value of a woman's life at \$NZ420,000, based on annual screening. The authors questioned this level of expenditure on a disease which causes 0.4 – 0.5 per cent of all deaths in Australia and in New Zealand.

This was not the only time that Bethwaite's study was quoted in support of a poor cost:benefit result. In fact Bethwaite did not recommend annual screening. The current

New Zealand recommendations and those of Bethwaite were based on three-yearly screening at a cost of \$86,000 per life saved. It is disturbing to see this selective use of published data.

Views deprecating the value of cervical screening have also been published by Dr Skrabanek and Dr Jamieson in a letter to the NZ Medical Journal 1985. In his evidence Dr Jamieson said that he had finally been persuaded of the value of a cervical screening programme towards the end of 1986. Petr Skrabanek, from the Department of Community Health at Trinity College, Dublin, continues to criticise screening for cervical cancer. In a letter to the Lancet, May 1987, he analysed a paper by Laara, Day and Hakama on the mortality trends from cervical cancer in Sweden and Norway. In a letter in response, published in the Lancet in July 1987, Drs Day and Hakama refute the inferences drawn from the paper by Dr Skrabanek, saying:

"His idiosyncratic use of other people's data, however, suggests that he does not expect Lancet readers to study the articles he cites in his support."

### PRESENT SCREENING PROCEDURES IN NEW ZEALAND

Although family planning clinics and many general practitioners offer cervical screening to their patients and although obstetrical and gynaecological units such as National Women's Hospital offer smear tests to all women who attend them, local mortality rates are not reducing as they are in countries such as British Columbia and Iceland which have well organised programmes. Professor Skegg commented on the success of cervical screening in New Zealand.

*"It hasn't been as successful as we would like but... the mere fact that there has not been a more rapid decline in cervical cancer in older women and that there has indeed been an increase in younger women, is not inconsistent with a considerable prevention of cervical cancer within this country. Because people often forget that we are really dealing with a moving target as it were, and that there are hardly any diseases I can think of for which the incidence remains constant all the time.... Cervical cancer is certainly a disease which has varied quite dramatically at different times in history, according to factors like patterns of sexual behaviour.*

*"In the last 20 years or so there has been a profound change in sexual mores in New Zealand. There has also been increasing use of oral contraceptives, which may play a part in the aetiology of cervical cancer. There has also been increasing cigarette smoking in young women which also may play some part.... It would be entirely predictable, and indeed was predicted by many people, that there would be a major increase in the incidence of cervical cancer in countries like New Zealand.*

*"My colleague, Dr Cox, has been able to estimate the proportion of invasive cancers that were being prevented by screening as practiced in New Zealand up to about 1980; and he estimated that about one quarter of the invasive cancers that would have occurred were being prevented by screening at that time. That is very similar to the proportion in England and Wales which...also...at that time did not have an organised screening programme."*

The only means of evaluating the effectiveness of the opportunistic screening for cervical cancer in New Zealand is by reference to National Health Statistics Centre publications and the National Cancer Registry. As there is no centralised or regional register which records who is being screened for disease and how often each individual woman is being screened, and as few attempts have been made to establish a follow-up system

to monitor those women who have received treatment or who require further regular tests, there is little information available about the national pattern of cervical screening in New Zealand.

It is entirely possible for instance, that the same group of women are receiving smear tests more often than is necessary, while many others have received no smear tests at all or are unable to be located for diagnosis and treatment when a positive smear is reported. If the experience in Britain is applicable here, the women most likely to be developing invasive cancer are those who have received no recent smear tests. The few women patients I met who had an initial diagnosis of invasive cancer, certainly fell into this category.

In my view, the debate has established the usefulness of a population-based screening programme. The report prepared for the Department of Health and the Cancer Society by Skegg, Paul, Seddon, Fitzgerald Barham and Clements<sup>2</sup> confirms the need for the implementation of a programme in New Zealand.

The report's summarised recommendations for routine screening are:

1. A woman should have her first smear as soon as possible after commencing sexual activity, or when first presenting for contraceptive advice, antenatal care, or treatment of a sexually transmitted disease.
2. If the first smear is negative, it should be repeated within one year (because of the possibility of a false-negative result).
3. Screening should thereafter be repeated regularly at least every three years.
4. Screening may be stopped at age 65 provided that the woman has had two recent negative smears and that no previous smears have been abnormal or doubtful. But any woman who has never had a smear should be screened, even if she is over 65.

"This programme is only for women who continue to have negative smears. If a cytological abnormality is found, the subsequent investigations and follow-up will depend on the circumstances of the individual case.... Our recommendations also do not apply to women who present with gynaecological symptoms, for whom the cervical smear may be an important part of the investigation. Nevertheless, a negative smear in a woman with clinical features suggestive of cervical cancer does not rule out the presence of a malignancy."

I accept the recommendations of the Skegg Report. Further study is not required to evaluate the **need** for such a programme. However, there are problems in **implementing** an effective nationwide programme. Its implementation should establish a system which will:

- aim to screen all sexually active women until the age of 65
- repeat the first smear to avoid the possibility of a false negative result
- repeat it at least every three years thereafter
- develop follow-up procedures for those women in whom disease is detected
- provide adequate facilities for diagnosis and treatment
- ensure that women are monitored so recurrent or persistent disease can be treated.

The Ministry of Women's Affairs, in its consultation with New Zealand women, has identified a population-based cervical screening programme as one of the most pressing women's health issues. The Ministry recommends establishing a "national, centrally coordinated screening programme which is based on the needs of women [and which] must be acceptable, culturally appropriate, and affordable". In its evidence, the Ministry stressed the number of women dying of cervical cancer each year in New Zealand.

At present 100 women die annually, and with current incidence rates, one in 80 women can expect to develop invasive cancer of the cervix before the age of 70.

Present trends demonstrate a marked rise in the incidence amongst young women. The estimate is that as many as one in 28 women born around 1957 may develop invasive cervical cancer before the age of 70 if their disease is not detected, diagnosed and treated at an early stage. The Ministry said:

*"Statistics cannot convey the shocking reality of this information for women themselves or the effect on their families, husbands or partners. With organised screening, many women's lives would be saved."*

It is important to emphasise that although the economic evaluation of a cervical screening programme estimates that it will cost about \$86,000 (in 1984 prices) for each life saved, there is a far greater but unquantifiable cost to the community. Each woman who is diagnosed with invasive cancer, even if she does not die prematurely, costs a great deal more to treat than her sister whose precancerous lesion is discovered at an early stage and that lesion excised.

The social costs include the intense stress suffered by the woman, her family and her work associates. All of their lives are changed. If she dies prematurely that is not just a tragedy for her immediate family. It is felt by all her friends and associates, many of whom will take on extra burdens as the result of this death.

### PROBLEMS IN IMPLEMENTING SCREENING

In a comment in the British Medical Journal, 6 October 1984, Jocelyn Chamberlain stated:

*"Two recent studies, in Manchester and South London, have looked at the reasons why women developing invasive cancer of the cervix have not been detected at a preinvasive stage by screening. By far the most common reason was that they had never been screened at all; this applied to two-thirds of the total sample and four-fifths of those over 40, among whom the great majority of cases occur."*

From the evidence I have heard, including the study by Victoria Grace, <sup>6</sup> this is likely to be the situation in New Zealand.

#### 1. Universal coverage of the population

The Ministry of Women's Affairs isolated three groups it considers most at risk in developing disease of the genital tract and who are seldom reached by existing screening efforts.

(a) **Maori Women** are nearly three times as likely to develop cervical cancer as Pakeha women. Victoria Grace's survey found that Maori women reported more frequently they had not been screened than either the Pakeha women or those women who identified as both Maori and Pakeha. The Ministry's submission said:

*"Information on cervical screening among Maori women has been gathered this year by Te Ohu Whakatupu (the Maori Women's Secretariat in the Ministry of Women's Affairs) so that the view of those women can be presented at meetings of the Cervical Screening Working Party."*

*"The barriers to Maori women being screened are financial, cultural, and questions of accessibility. Cost is a major barrier to Maori women attending a general practitioner, with many attending a doctor only when they or their children are ill and in need of treatment (and this is hardly a time for opportunistic screening)."*

*"Maori women are also saying that they would prefer to have primary health care based on concepts of Maori health, provided in a more accessible and*

*culturally appropriate site, ... a screening programme which does not offer this choice to Maori women will continue to alienate and exclude many Maori women. Any screening programme needs to be created in consultation with Maori women at all levels. Differentials within communities which could prevent a programme from being successful can only be recognised by women from these communities. Maori women also need to be the educators, liaison people and preferably the providers of the service."*

(b) **Pacific Island Women** have been shown to have similar needs. Reports on the attitudes of Pacific Island women to screening mention the difficulties of cost, reluctance to use existing general practice services, and a lack of information about what facilities Pacific Island women themselves consider are appropriate. I believe further information needs to be obtained on this group and their particular needs if they are to be adequately screened.

(c) **Low Paid Women** according to the Ministry of Women's Affairs are also at risk. The cost factor in obtaining a smear test is obvious and particularly true for rural Maori women who predominate in the lower socio-economic groups. Two studies have indicated that low paid women are less likely to be offered a smear than other groups. The Ministry of Women's Affairs' submission said:

*"An unpublished study, although comprising a small sample, gives alarming evidence that women of low socio-economic status in New Zealand are not being reached by existing services.*

*"Maslowski, Malpress, Maxwell and Watson ("Preventive Health Care in the Working Woman") document a screening project in Woolworths Stores in 1981 in the Christchurch area. 38% of the women had never had a cancer smear and a further 14.14% received a smear at least 5 years prior to the study. 79% of those women had attended their general practitioner during 1981.*

*"In a 1987 survey on women's health conducted by the Hotel and Hospital Workers' Federation, 14% of the women surveyed had never had a smear, and a further 29% had not had one in the last 3 years. 44% of the women had never been asked by their general practitioner to have a smear." (Ministry of Women's Affairs' emphasis)*

(d) **Older Women** were not mentioned specifically by the Ministry of Women's Affairs but also warrant special consideration. Dr Jamieson reported that 60 per cent of women over 45 years of age presenting with invasive cervical cancer at National Women's Hospital had **never** had a cervical smear. As cervical cancer is commoner in older women, and as screening seems to be less frequent, improvements for screening women over 40 are important. Opportunistic screening is probably less effective in this group as they are less likely to visit the doctor for antenatal care or contraception.

This information persuades me that there is a significant group in this community which will fall through the large holes in the opportunistic screening net. It is of great concern that cost deters most of these women and that a significant number have not been offered the simple preventative health measure of a smear by their general practitioners, who at present should be a major provider of the screening service. If this group has not been reached, then there is a real need to establish a screening procedure which will systematically attempt to locate and screen the entire female at-risk population.

## 2. False negative smear reports

The problem of false negatives is one that has been raised repeatedly, particularly by members of the Postgraduate School. A false negative cytology report might result in a woman's disease being overlooked; but, if read in context with her other cytology reports,



false negatives can usually be detected. Therefore, when first screening a woman, it is important to ensure that she has a second test a year later to overcome this possibility.

Dr Jamieson, Professor Mantell and Professor Bonham described how in recent years 60 per cent of younger women with invasive cervical cancer at National Women's Hospital had a negative smear test within three years of the diagnosis of invasive disease. Professor Skegg emphasised that this result was apparently based on patient recollection; the fact that some patients may have had positive as well as negative smears; and that there was no independent pathological review of the quality of the smears taken and their interpretation.

Although Professor Skegg also agreed that a high rate of apparent 'false negatives' could arise when the screening rate was high, it would be appropriate for the staff at National Women's Hospital to look into this problem more carefully. The entire screening history of their recent patients might be assessed and an independent pathological review undertaken. Earlier reports from the Hospital by Dr McIndoe (his personal papers) for 1974-75, showed that at least 32 of 134 patients diagnosed with invasive cervical cancer in those two years had pre-diagnosis cytology reports of Grade 2R or worse. It is possible that more recent patients with pre-diagnosis normal smears also had pre-diagnosis abnormal smears which were not acted on.

A similar study of 100 patients with invasive cancer was reported from Australia by Holman et al in 'Cervical Cytology Histories of 100 Women with Invasive Carcinoma of the Cervix.' Holman found problems with lack of screening, false negative results and pre-diagnosis abnormal smears which were not acted on.

The other problem of false negative cytology reports occurs when the smear test is used to diagnose a suspected invasive cancer in a woman with symptoms who attends her doctor. According to Professor Richart

*"the false negative rate is even higher in patients with invasive cervical cancer because the lesions tend to be necrotic and not to exfoliate well-preserved cells which can be diagnosed accurately."*

Although the Skegg Report recommendations state that:

*"a negative smear in a woman with clinical features suggestive of cervical cancer does not rule out the presence of a malignancy"*

there are cases where doctors have mistakenly relied on negative smear tests in patients with symptoms of bleeding. One such patient gave evidence to me (Patient Code 1E).

### 3. Laboratory workloads and standards

Although it is impossible to calculate the numbers of women who are currently being screened, I can assume that the introduction of a New Zealand-wide cervical screening programme will result in a dramatic increase in the number of smear tests. It is unlikely that the present facilities will cope with such a sudden increase. Indeed, Dr Gray in his evidence said that as a result of the publicity arising from this Inquiry, the demand for cytology services had already increased. Many laboratories were working to capacity and, in his view, some possibly over safe limits. The two private laboratories in Wellington had increased their throughput on an average of 20 – 25 per cent per month since the article on the 1966 trial and treatment of women with CIS was published in the 'Metro' magazine.

Although hospitals such as National Women's will carry part of the burden of cytology services, Dr Gray stressed that screening for cervical cancer is an example of well-patient screening. It is a community-based exercise which should be carried out in the community and, therefore, by private as well as public laboratories.

#### 4. Colposcopy facilities

The report 'Screening for Cervical Cancer in New Zealand',<sup>8</sup> commented that:

- "2. There is an urgent need to expand colposcopy services in NZ, so that the increase in patients from a screening programme (between 2 – 4 per cent of all smears) can receive appropriate treatment.
  - a) At present there appears to be a need for 10-12 more gynaecologists trained in colposcopy.
  - b) The present training course provided by the NZ Society for Colposcopy and Gynaecologic Pathology requires improved financial support. Professional education could involve circulars, and visiting colposcopists [going] to smaller centres.
  - c) There is a need for Hospital Boards to provide equipment (colposcopes) and provide hospital sessions for this work.
3. General practitioners should be informed of the referral process in their area following detection of an abnormal smear."

At National Women's Hospital, Dr Jones, one of the specialists involved in cervical pathology and colposcopy, said that:

*"Until very recently colposcopy at National Women's Hospital was regarded as a minor subspecialty of limited importance. There has been considerable expansion of colposcopy services in the past two or three years. There is no shortage of colposcopy personnel with experience in National Women's Hospital but their skills are presently being under-utilised."*

He drew attention to two problems that would arise in the wake of an organised screening programme:

- (a) There is a national shortage of skilled and experienced colposcopists. Smaller communities would not have adequate access to colposcopic services. This shortage would not be redressed for several years until those training at present gain sufficient expertise to be confident and reliable.
- (b) At National Women's Hospital, and probably other hospitals, increased demand for colposcopy services over the past few years has resulted in pressure on facilities such as office space.

As there is likely to be an even greater need for these facilities, care must be taken to ensure that there is adequate private space available and that all areas are geared to operate efficiently, but with the patient's dignity and welfare at the forefront.

Dr Richard Reid is "regarded as one of the leading authorities in the world at the present time, especially in the field of human papilloma virus and its relationship to the disease, in colposcopy and in the management by laser surgery" (Dr Coppleson). He suggested "that a system of regional colposcopy and laser clinics be established, to be staffed by designated and specifically accredited gynaecologists (rather than by general gynaecologists) also has merit and should be evaluated."

#### 5. Leadership

The introduction of a centrally-organised but regionally-based cervical screening programme will need strong leadership to develop and maintain it. In most parts of the world a director is appointed to co-ordinate and provide the leadership for what in New Zealand will be an innovative programme. I believe that this is essential to the success of any such programme.

## 6. Combating NWH influence

When witnesses spoke of the need to introduce a cervical screening programme in New Zealand, most spoke of the need to overcome the views which have been disseminated by members of the Postgraduate School of Obstetrics and Gynaecology at National Women's Hospital.

This problem has also been raised on other occasions. When the Cancer Society of New Zealand and Department of Health organised a symposium in 1986 to discuss the introduction of a screening programme, the difficulty of combating the influence of NWH opinion was mentioned on at least two occasions.

Professor Skegg, in discussing the way in which the working group convened for the symposium had gone about its work, said:

*"In that exercise, we did two things: first, we reviewed the evidence for the effectiveness of screening. Now in many countries that would no longer be regarded as necessary but in New Zealand, there has been great confusion about cervical screening because National Women's Hospital, which is very influential, has over about 15 years contained some people who have been very anti-cervical screening, and I think it would be impossible to overestimate the effect that has had on medical training."*

When asked to comment on this statement Dr Duncan said:

*"Now I would agree with you that the writings from Professor Green and his colleagues had, not only in New Zealand but in many other parts of the world, a very significant influence on these [screening] programmes."*

All too often I have read interviews with or material written by Dr Green, Professor Bonham and Dr Jamieson which belittle the value of screening for cervical cancer. On occasions the argument has been that other forms of cancer (for example breast cancer) are more dangerous to New Zealand women. The simple response is that

*"with the exception of stopping the population from smoking, cervical cytological screening offers the only major proved public health measure for significantly reducing the burden of cancer today."*

If some significant impact can be made on the numbers of women contracting invasive cervical cancer then the effort must be made. After all, as Dr Reid wrote:

*"What consolation does a woman dying needlessly from cervical cancer derive from the knowledge that she was statistically more likely to have contracted breast cancer?"*

## INTRODUCING AN EFFECTIVE PROGRAMME

The consultations undertaken by the Ministry of Women's Affairs demonstrate that many women would prefer a choice of site for screening. In many instances, this implied notions of preventative health measures as opposed to treatment of an existing condition. Suggested sites, which would include the general practitioner's rooms, are mobile clinics, work-based clinics, well-women's clinics and clinics appropriate to the needs of Maori and Pacific Island women.

Maori women prefer a screening programme where the impetus comes from within their community and would prefer mobile clinics staffed by Maori women providing a range of health services for themselves and their children. The Ministry of Women's Affairs' submission said:

*"It was clear that a programme targeting cervical screening only would not be used because the whole community would know why they were going to the clinic and they would be too embarrassed to attend."*

This view may well be true of clinics for Pakeha and other races in any rural area and needs serious consideration. Work-based clinics were favoured by low-paid women in particular and in 1987 a Women's Health Survey conducted by the Hotel and Hospital Workers' Federation found that 94 per cent of women surveyed said they would use a mobile health clinic "if it was available at a convenient time in the workplace and had the support of management". The convenience and cost factors clearly demonstrate the need for work-based clinics for low-paid working women.

Many women would prefer a woman to take the cervical smear. There are those who find the smear test an embarrassing experience or believe that any discomfort would be reduced if a woman undertook the test. The cost of attending a general practitioner and the inconvenience if the woman has to care for young children or is working full-time, are significant factors which lead me to conclude that other alternative health-care givers should also offer this service.

On the whole, the medical profession is dubious about a non-medical person undertaking a cervical smear test. Several gynaecologists stressed the need to take an adequate history and undertake a pelvic examination if important symptoms were not to be overlooked. There are two factors which require emphasis:

1. At present general practitioners and hospitals are not reaching many women who therefore receive neither a smear test nor a pelvic examination. The ideal situation would be for a trained doctor to provide this service to all women. If the profession has not achieved this ideal, then alternatives must be considered.
2. A significant number of women would prefer other women, particularly of their own culture, to offer this test. The most obvious way is to encourage more women graduates to specialise in gynaecology. Nurses consider that with more training they can become skilled at performing cervical smear tests, taking an adequate history and recognising cases where a doctor's examination is appropriate.

As many women are requesting this service, there needs to be urgent evaluation (for example, a pilot study) to establish whether or not trained nurses or other health workers can undertake this task for those women who cannot attend the general practitioner or would prefer not to. If more women were reached in this way, then there is a greater chance that precancerous conditions of the genital tract will be detected than are being identified at the present time.

I accept that there is a risk that non-medically trained personnel may not be as skilled at pelvic examination. I cannot accept, however, that a registered nurse or other health professional with training and experience cannot reach the same level of expertise as a doctor in this area of medical practice.

#### **What action is already underway?**

1. The Skegg Report recommends review of its recommendations in 1990.
2. A Working Committee of representatives of the Department of Health, Cancer Society and Ministry of Women's Affairs is shortly to report to the Minister with recommendations concerning implementation of screening.
3. Some grants have been made to a handful of groups who are to put in place pilot programmes for screening procedures.
4. With the implementation of the Area Health Board scheme there is a real concern among women's health groups that the Health Department may leave the responsibility for screening to the regions. While this may mean that methods used to reach the population will be appropriate for the area, there are several factors which lead me to favour a programme that is centrally organised:

- a) A centralised programme based on regional organisation allows for development of programmes appropriate to the region while at the same time being co-ordinated at national level. Women moving from region to region could be traced more readily, avoiding the problem of under- or over-screening particular individuals.
- b) The leadership necessary to co-ordinate a successful nationwide programme would be diluted by strict regionalisation.
- c) A national programme would allow for better co-ordination of educational material and publicity about screening generally.

### RECOMMENDATIONS

1. The review of the recommendations planned for 1990 should proceed at that time so that developments in knowledge of the nature of the disease, the screening interval and procedural and administrative matters can be evaluated.
2. Both the general public and the medical profession require clear information on the purpose for which a New Zealand-wide cervical screening programme is being introduced, its anticipated benefits and the state of world opinion on the value of screening.
3. All GPs need to be encouraged to become skilled in smear-taking techniques and the role of the Family Planning Clinic should be reinforced in this area. More women should be encouraged to specialise in gynaecology and a pilot study established to evaluate the training of nurses or other health workers to undertake this task.
4. The inevitable increase in the workload of laboratories means more trained cytologists and cytology technicians will be needed. A high priority must be placed on quality control and surveillance screening programmes, and on a system where patient recall can be linked to all laboratories undertaking this work in New Zealand.
5. In order to operate with maximum efficiency, a centralised register based on a regionalised network is the ideal. If such a register could be set up it must be maintained under the strictest rules of confidentiality and privacy and therefore should be administered under the aegis of the Department of Health. It should be an offence to gain access to the register or to use information from it without the consent of the Minister of Health.

Permission might be sought for purposes other than implementing the screening programme when research and evaluation of results was contemplated. There should be consultation with authorities in the field of privacy law to ensure that confidentiality will be guaranteed to all women whose names and identifying details are contained on the register.

I do not have adequate information on which to base a specific recommendation, but the existing move amongst private laboratories to centralise records in one region is worth evaluating. A centralised register may well be based most appropriately on linking the records of all cytology laboratories throughout New Zealand. The register must be computer-based so that efficient recall systems can be established as part of the system.

6. Any recall system must be acceptable to the women to whom it is addressed and there is an urgent need to evaluate various methods of achieving the maximum response. For example, it is already well documented that Maori women are less inclined to respond to a letter than to a direct invitation to undergo a screening test, particularly if it is associated with other health checks for them and their children.

The system must also be efficient so that women have no objection to attending for their regular smear checks; so results are processed and communicated to women; and all contact between the health professional and women encourages their co-operation in an atmosphere that is supportive and unthreatening. The general practitioner should develop his or her present practice so that a smear test becomes a normal part of the at risk woman's health care.

Where possible the recall system, when it involves personal contact, should be staffed by women, as must the smear-taking procedure itself. If the screening service is intimidating, embarrassing or extremely uncomfortable, many women will not take advantage of it. Their disease will not be detected and invasive cancers will result. There is little to be gained in planning a system which is unacceptable to a significant number of women.

7. The benefits of a well-planned New Zealand-wide cervical screening programme are now indisputable. The Minister of Health should establish a group representative of a wide range of women health consumers and appropriate health professionals, including representatives of cytology, pathology, colposcopy and nursing personnel. Privacy and ethical considerations should also be given prominence. The objectives of the group should be to evaluate procedures, advise on resource allocations and implement within 'a reasonable period' a population-based cervical screening programme for New Zealand women.

These are the challenges if screening is to be successfully implemented and the incidence of disease of the genital tract checked. Careful planning and wise expenditure at this stage will pay dividends in the future in both human and financial terms.

During the course of the current Inquiry I met women who are themselves suffering from invasive disease, families of women who have died of the disease, and I have read the files of other women who have now died. If some of those deaths could have been avoided, then the tragedy is so much harder to bear.

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