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BREAST CANCER
This is a cancer that arises from the duct epithelium 04 the breast. It affects mainly women, but can at4ect men.
There are large between countwy diffehehces in incidence, eg the rate a? breast cancer it is very low in Japan while it 15 very cammon in the USA. Trends in incidence and murtality . ihuicate that breast cancer is a majeh af$lictian CF wcmen in atfluent countries, eg in the USA, 12 percent of all women ’ diagnosis 0? breast canceh an: 3.5 per:e:t will cancer. The rates ’
’ the 6% it
ea in breast
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Incidence increaees with age till the age 0% SO when the rate 0? increase declines. The age relationship, of increased risk in the 4th decade and then slower after age 50, is mirrored in leaf affluent countries as well.
Date frat ether cauntries show that breast cancer is increasing in importance and in countries where cervical cancer screehing programmes have been instituted, breaet cancer i; now surpassing cervical cancer as a major ptblic health problem
Eireangamgsszi .5 mum 1.53-
No reliable cumulative figures for Ba exist. The L t : figures (1988 data) have been published by the Cancer Regi
This data shows that breast cancer is the SECDnd cause death in women in SA. (The biggeet propertiah 04 cancer g:m.. due to cancer of the cervix). The table below indicates haw many women die from cancer of the breast in South Africa and the risk.
Asian Black Coloured White
percent of cancer
which is breast
cancer
so Age sirtandaim ncidenceher- 10C) 000-
%% Risk xpressed as one in x number of people.
It is ie;:m:ehh t: u::erstand that the cancer regietry Figures may not be a good reflection of what is happening in Scuth Africa

detected at an early stage; 50% of women who are treated are likely to be alive 5 years later. However if it is detected at a later stage and treated only 20% 04 women treated are likely to
C
be alive 4 years later.
Thus as we have little 1m lemEhtable solic1 shtions at this sta e
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wlth regard to prewahtieh and we knew that th marlier the diagnosis is made the better the P_atmeh 1 ha
Therefore we have to inves igate methbus u
cancer early on in the course 0% the disease.
Thus the move tD screening as
the breast. There are various
include mammographi/ (ah erzw
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t3 tesl for lumps . Althbuj
been :bl1ceptualisE’ no y
has been published.
There are four landmark studies that have looked at the effect of screening mammography.
1. Malmo Screening Trial
Women in this city were either invited or net to attend screening. Mortality rates were compared between those women invited to attend and these nbt. Not all women invited to attend did (less than 70% cf wamer part._-pateu For- the full scret ening intervention) and same women not invited to attend (35%) did have breast mammography via some other mechanism. Results were reported at 10 years after the intervention. he mortality rate 0% women invited to attend dropped after 8 years after the start of the tria1.At the end o$ the tri2l it was estimated that :732362 :atqsr JCtsrh..g pr-adaced a 39% aihuaL re2u ti-zh 1r mortality when compar-ing screening women aged 55 and older with net screen-1ng.
The Swedish Two County Trial.
Again women were randomised to invitation to screening and not. Participation in each screening round was high above 80% for the first three screening rounds,but it is not clear how many women completed all three rounds. Thirteen percent of women in the control group had screening mammography. The study found a 45% annual reduction in mortality (a decrease from 66/100 000 deaths to 30 deaths per 100 000 women, when comparing women screened aged 50 - 69 compared with no screening.
United Kingdom trial
In this trial randomisation was less complete and

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has been very short. Also there was low compliance for screening and there is no information about the screening that the control group might have had. Also physical xamination was alternated with mammography which may have increased the pick up rate. A 42% annual reduction in mortality was found when campahing women aged 45 - 64 screened versus not ecreenihg.
Health Insurance Plan
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Also some complication with study d
quality of the screening that was a
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protective when the epidemieiogita_ en. n: 15 availabie is analysed.
A recent review 6 concluded by saying hat "The epidemiclbgic data reviewed in this paper (the same stwdies as abeve) show that mammographic screening can reduce deaths from breast cancer, but that this effect may vary between screening programs and may be restricted to women aged 50 years and over. The unnecessary investigation is also variable and may b women aged less than SQ years. Routine screening bf 50 years of age cannot be supported an the basis hm evidence."
They go on to say that cost benefit ata
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is minimal and that a
etinite conclusion cannat be drawn ahu a-
that more investigation
is needed. f i
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I.__
1. It is clear that screening in older women (50-69) is associated with behe$its.
2. Breast cancer is not the major cancer risk for women in SA at present. The excess mortality due to cancer of the cer in is greater, in addition interventions for screening for cancer of the cervix exist which can offer good national coverage.
3. There have been no reports of the suecess of national screening programmes (as compared to trials) as yet. Thus the field conditions and success have not yet been demonstrated. (as they have with cervical screening for example)
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eihg the mammogram and reading it are
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4. Even in the trials that have been done the need for centres o exae-ience in terms 04 d.
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very important and the lack of this can invalidate any evidence of positive impact.
5. Thehe are significant unmeasurable cost.s. Many women will have false positive results and then have either needle biop5ies ow lumpectomiesn This 15 costly and emoLiohally stres5ful.
b. It 15 an E): pen-’ive technology and the chance of gsttihg good national coverage is low. The $actor which makes a BCFEGnng programme worthwhile in terms oi hdecr-easihg negative health .im act (mortality) is 500d covera e.
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T1 There are probably emough machines to do "’w ’5 :5Gy are "uprer 1y undeh-utili :ed and over-hoohu , " t1 QPivate sector. t is H t 14 the t’ ’1 ’ t there
i? 55W ously potential to train
Thu5 I would argue that breast cancer 55h u n. .
.heory. However given the SQ situation, 55- need t5 prioritise interventions which are likely have more benefit (screening for cancer o4 the cervi") plus the fact t.hat we cannot offer compra ehengive coverage, that we should suehd hesouhces on other interventions. If we cannot ensure good quality and good co/er-age then, we cannot claim to decrease mortality From brea5t :
Thus we should work towards being able to provide these services. However to implement a breast cancer SCFL aehing programme at the current time would be premature.
In order to f1c1l’.ate the imrtrodt ctioh 0% a breast screehihg phogramme in the future certain ac: .ions 5a.. be taken now.
1. Conscious deci5ioh5 to create remiohal :ehtres where ult imately the technology and experti5e -ror sc ening will be avai lEJle , so as to be able to otfer good coverage. This he aorm ot identifying logical regional centres and they hay budg ots to equip them and p05t5 that are ?-
:reat e job opportunities for people with the required work there. To encourage skilled people to work peripheral areas the possibility of creating incentives for people to relocate from major urban areas to regional centres should be investigated
2 Increased knowledge about breast cancer in all women, health service providers and users is however desirable and opportunistic e24amination by health workers and self e.(amination by women should be encouraged. It is not possible to predict if this will affect mortality however the increased knowledge and awareness about breast cancer will be good grounding for when an effective screening programme could be introduced. In addition it may create a sufficient level at knowledge so that women become a pressuxe ghoup to ensure that re5ourcs allocation in the
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country is such that it allows for the realieation, at a later stage, of a effective, good quality breez- screening programme with adequate coverage 0% the entire female papulation aver age :-
40 .
Thus we would argue that education is a priwwity thet can be implemented now.
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Opportunistic screening 0% women (:n payeew
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Facility. -- would require data which haw many wumem dc
came into cantact wi-h such a facil; y the age 50, to
determine if the coverage would be 930d enuugh ta make an impact on breast cancew mortalitW.
The possibility in the $uture of providing a mobile screening service accompanied by a massive publicity programme if the creation of regional centres is not feasible.
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because they are able to collect only part of the data.
It is likely to be biased by underreporting which is not uniform over geographic areas. In addition people’s access to care and the level of car-e that the Ly have access to influences how and if diagnoses ar-e made and ii cancer cas -es are registered. Thus if a woman presents at an advance d stage oi the disea.se the diagnosis is 50 obvious that ha bi cps; is taken a.hd hew cancer may not thereibre be regis stered. Manet heless these data do give us some idea about breast cancer in BM.
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There is a major potential for preventiuh as a
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In order to prevent cancer occurring bhe has t0 understand what are likely causes and then intervene. However it has been hard to define these risks.
Established risk $actbrs for breast cancer include the $bllbwing;
_ family history of breast cancer
- early menarche (may account iar much 0% the .ihtw. .
variation) i
1 late age at first childbirth
1 late age at menopause
1 history of benign breast dise
- exposure to ionising radiati:
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Each % thes e risl 4a ctbrs individually in is n
a relatively lbw incr-e sL in r1sL:. mepbxnj1rg tars (3g having one iirst degree rel ative with br-east Lancer inL.eares your- risk significantly, in particular if the br-east cancer is bilateral -’ and diagnosed in the relative before the age of 50) have been found, but this combination is in the minority 0% women who actually get breast cancer.
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Thus we do net know enough to implement lifestyle policies which could be used to decrease breast cancer risk..
Treatment of breast cancer is by surgery (removal of the lump or the entire breast) and this is usually accompanied by radio therapy or chemo therapy and/or hormone treatment. The most important factor in leading to effective treatment is the stage of the cancer, the earlier it is found (when it is smaller and has not spread) the better the outcome. Thus if breast cancer is
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