Investigating cervical cancer awareness: perceptions of the Female Cancer Programme in Mdantsane, South Africa

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Abstract
Background: The Female Cancer Programme (FCP) is offering women visual inspection with acetic acid screening and if necessary, cryotherapy and medication. The aim of this study was to investigate the effectiveness of the awareness campaign.

Method: This study took the form of a cross-sectional survey among women in Mdantsane. The questionnaires sought information about their knowledge of risk factors and symptoms, their opinions, information sources, reasons for participation and fears of cervical cancer screening.

Results: Five hundred and thirty-two questionnaires were collected. Sixty per cent had heard of cervical cancer and 74% of a Pap smear. Forty-three per cent thought the aim of screening was prevention. Forty-three per cent knew irregular blood loss and postcoital bleeding could be symptoms. Forty per cent got their information from a clinic. Fifty-one per cent would participate in a screening programme because of awareness. Thirty per cent did not have any fear of the screening. Eighty-four per cent thought the FCP is important for the future of Mdantsane. Forty per cent acquired their information about cervical cancer screening in a primary health clinic. The opinion about the screening program was positive.

Conclusion: Women in the Mdantsane community are unaware of risk factors and symptoms of cervical cancer. Women participate in cervical cancer screening programmes because of increasing awareness of the disease and the wish to stay healthy.

Introduction
Cervical cancer is the second most common female cancer, with at least 500 000 new cases and 290 000 deaths occurring worldwide per year. Organised cervical screening programmes have reduced the incidence and mortality in developed countries, but owing to a lack of organised screening programmes, 83% of cervical cancers now occur in the developing world. In developing countries, scarce resources, poverty, lack of infrastructure and disenfranchisement of women have been major obstacles in the effective implementation of routine screening programmes.

The Female Cancer Programme (FCP) was established at Leiden University Medical Centre in the Netherlands. The aim of the FCP is to eradicate cervical cancer, or at least lower the incidence, by primary and secondary prevention, and to support related scientific research. The FCP cooperates with the Eastern Cape Department of Health and the Cancer Association of South Africa (Cansa) to fight cervical cancer in South Africa.

The township of Mdantsane, considered to be a low-resource rural area, in the Eastern Cape Province, was chosen for the implementation of the FCP. The high incidence of precancerous cervical lesions, cervical cancer and human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) were important considerations in choosing Mdantsane. Before the introduction of the FCP, opportunistic cervical cancer screening was available by Pap smear testing. However, major problems with the coordination between the clinical, laboratory
and referral services and the lack of cervical cancer awareness resulted in a low compliance rate.

The FCP is offering women in high incidence areas, mostly rural regions, an opportunity to get free cervical cancer screening by visual inspection with acetic acid (VIA) and, if indicated, cryotherapy. Pap smear testing in Mdantsane had, in the past, proven to be unsuitable, because of the relatively high costs, the requirement of experienced medical staff, laboratories and materials, and the necessity of repeated smears and patient recalls for results and colposcopy clinics. Screening by VIA, which is called the “see-and-treat” approach, appears to be a reasonable, practical and cost-effective alternative.

During VIA the cervix is visualised with the naked eye following the application of diluted acetic acid (3-5%). If a visible aceto-white area is found, indicating abnormal epithelial tissue, the test is deemed positive for cervical dysplasia. Results are scored as VIA negative, VIA positive or suspicious for cancer. The advantages of VIA in low-income countries are simplicity, low costs and the provision of an immediate result. The see-and-treat approach is also effective in that only a single visit is required for screening and, if indicated, cryotherapy. The patient is not required to return to the clinic, unless for follow-up. The main disadvantages are wide inter-observer variation and overdiagnosis, which may cause unnecessary treatment and anxiety in women. The FCP trains nursing sisters to carry out see-and-treat screening.

The target group consists of women between the ages of 35 and 49 years. Part of the FCP is an awareness campaign. FCP staff members visit different clinics in the township to inform men and women about different aspects of sexual and reproductive health. The seriousness and transmission of sexually transmitted diseases, with a focus on the human papillomavirus, are emphasised. Educational pamphlets and posters are used as information materials. Diagrams are used in order to reach an illiterate audience effectively. Furthermore, the clinics in Mdantsane show an “edutainment” (combining education and entertainment) DVD detailing the risks and symptoms of cervical cancer. The FCP commissioned the making of the film especially for the Xhosa people, who predominantly live in the Eastern Cape. The awareness campaign is aimed at all men and women, including adolescents.

The current study aimed to measure awareness of the symptoms and signs of cervical cancer and of the health intervention offered by the FCP.

Method

The study was carried out in four primary health clinics in the Mdantsane community. The questionnaires were distributed between January and March 2009. The study design was a cross-sectional survey among women. Pilot testing of the questionnaires was carried out among 20 respondents. The calculated sample size of 384 respondents was determined based on 95% confidence level, 5% confidence interval and a presumed awareness of 50%, as no data from previous studies in the Mdantsane community were available. Thirty per cent over-sampling was done to allow for incomplete responses. Hence, a sample size of 500 respondents was used. In cases where there was an apparent lack of understanding concerning the questions, the questions were explained by interpreters, who accompanied personnel conducting the survey.

Each questionnaire was subdivided into five sections, containing 25 questions in total. Questions were included to establish the women’s age, education, obstetrical history and use of family planning. The questionnaire also sought information about respondents’ knowledge of the risk factors and symptoms of cervical cancer, their opinions about the FCP, information sources and reasons for participating or not participating, and their fears surrounding screening.

Results and discussion

The demographic data are summarised in Table I.

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>Age (mean)</th>
<th>Number of children (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nontyatyambo Community Health Centre</td>
<td>431</td>
<td>36.8</td>
<td>1.7</td>
</tr>
<tr>
<td>NU 1 Clinic</td>
<td>22</td>
<td>34.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Duncan Village Day Hospital</td>
<td>59</td>
<td>37.3</td>
<td>1.6</td>
</tr>
<tr>
<td>NU 3 Clinic</td>
<td>20</td>
<td>41.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>532</td>
<td>36.9</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Major findings of the study were that 60% of respondents had heard of cervical cancer, 74% had heard of a Pap smear and 66% had heard of the FCP. There results are in contrast with the findings of a study by Ayinde et al in Ibadan, Nigeria, which found an awareness of 71% for cervical cancer and only 34% for Pap smears.

The respondents got their information mainly through word of mouth from nurses in the clinic, and from friends and relatives. The media, like radio and television, had also played an important role in
informing the community of Mdantsane (16%). This is important information for the awareness campaign. The results are similar to the findings of Ezem et al in Nigeria, where most of the respondents were informed of cervical cancer in the hospital and by friends, but in that study only 2.2% got their information from radio and television. In the current study it was found that the main reason for participation was staying healthy (52%). Thirty per cent of respondents did not have any fears surrounding the screening, but some did have fear of pain (23%) and of the test result (25%).

We found a lack of knowledge of the risk factors and symptoms of cervical cancer. Less than 50% of the respondents knew that that irregular bleeding (43%) and postcoital bleeding (45%) could be signs of cervical cancer. Forty-three per cent of the respondents thought cervical cancer screening was for prevention, but 89% said an early stage of cervical cancer could be treated.

Ninety-nine per cent of the respondents were willing to participate in cervical cancer screening. The majority of the respondents (84%) felt that the FCP is very important for the future of Mdantsane, and 66% said the cervical cancer awareness had increased since the arrival of the FCP.

Limitations of this small study include a possible influence on respondents’ views by FCP staff. Low education overall could potentially lead to a misunderstanding of the questionnaires. Filling in the questionnaire took longer than anticipated, because of slow reading and writing. Women were recruited in the waiting rooms and only voluntary respondents filled in the questionnaires. The study took place just two to three months after the launch of the see-and-treat programme by the FCP. The full effectiveness of the awareness campaign therefore possibly could not be tested at this early point.

These results indicated a lack of knowledge in the Mdantsane community about the aetiology, symptoms and risk factors of cervical cancer. It is important to note that respondents were very positive about the cervical cancer screening programme.

Declarations
The authors declared no financial or personal conflict of interest in conducting this study.

References