

An Assessment of Rural Women's Knowledge, Constraints and Perceptions on Cervical Cancer Screening: The Case of Two Districts in Zimbabwe

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ABSTRACT

This paper gives a sociological and anthropological insight into the rural women's perceptions and understanding of cervical symptomatology, screening and cancer. Qualitative data was collected through in-depth interviews and focus group discussions with women and health personnel. Quantitative data was obtained through questionnaires administered to 356 women from Mutoko and Shurugwi districts. The study revealed that cervical cancer is a disease that is of concern among health practitioners and women. 95.78% of the interviewed women had never gone for screening and had little knowledge about the various aspects of the disease in terms of causes, prevention and treatment. The study made four recommendations: the need for national screening policy and programme to be put in place, health education to women about cervical cancer, use of VIA in low resource settings and sensitisation of women about the availability of screening facilities in the districts where programmes are in place. (*Afr J Reprod Health* 2006; 10[1]:91-103)

RÉSUMÉ

Évaluation de la connaissance, des contraintes et des perspectives des femmes rurales sur le dépistage du cancer du col: Le cas des deux districts au Zimbabwe Cette étude donne un aperçu sociologique et anthropologique sur les perceptions et la compréhension de la symptomatologie du col, le dépistage et le cancer, par la femme rurale. Nous avons recueilli des données qualitatives à travers des interviews en profondeur et des discussions à groupe cible avec les femmes et le personnel médical. Des données qualitatives ont été recueillies à l'aide des questionnaires administrés aux 356 femmes des districts de Mutoko et Shurugwi. L'étude a révélé que le cancer du col est une maladie de grande inquiétude chez le personnel médical et les femmes. Parmi les femmes enquêtées, 95,78% n'ont jamais passé le test de dépistage et n'ont qu'une petite connaissance à l'égard des différents aspects de la maladie par rapport aux causes, à la prévention et au traitement. L'étude a avancé quatre propositions: la nécessité d'avoir une politique nationale et un programme du dépistage en place; la nécessité d'avoir une éducation de la santé pour les femmes concernant le cancer du col, l'emploi du VIA dans les milieux à ressources faibles et la sensibilisation des femmes au sujet de la disponibilité des facilités pour le dépistage dans les districts où les programmes existent. (*Rev Afr Santé Reprod* 2006; 10[1]:91-103)

KEY WORDS: *Cervical cancer, Prevention, Screening, Knowledge, Information dissemination and Perceptions*

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Introduction

Cancer of the cervix is the leading cause of mortality in women especially in developing countries. It is the second most common cancer in females with 500,000 new cases yearly^{1,2}. It is estimated that 200,000 to 300,000 women die from cervical cancer every year, mostly in poorer countries³⁻⁵. Various statistics on Zimbabwe show that cervical cancer is a public health problem. According to Chokunonga E.⁶ in Zimbabwean women, cancer of the uterine cervix was the most common (28.3%), followed by Kaposi sarcoma (13.9%), and breast cancer (9.5%). Trends for Zimbabwe show an increase in the number of cases of cervical cancer from 1992-2002⁷. Bassett, *et. al.*⁸ found that the incidence of cancer of the cervix in Harare was 67 per 100,000, which then was the highest ever recorded in Africa.

In terms of the causes of cervical cancer it is now established that human papillomavirus HPV is the central aetiological factor of cervical neoplasia. Studies using advanced polymerase chain reaction (PCR) technology have reported that over 95% of invasive cervical cancer cases worldwide have HPV markers^{9,10}. The vast majority of women infected with an oncogenic HPV type never develop cervical cancer which suggest that additional factors acting in conjunction with HPV influence the risk of disease development. Co-factors such as parity, use of oral contraceptives, tobacco smoking, immunosuppression particularly related to human immunodeficiency virus (HIV) infection with other sexually transmitted diseases and poor nutrition have all been associated, to various extents, with the development of invasive cervical cancer.¹¹

While there are more than 50 HPV types that infect the genital tract, 15 of them (types 16, 18, 31, 33, 35, 39, 45, 21, 52, 56, 58, 59, 68, 73, 82) have been identified as high-risk oncogenic types linked to cervical cancer¹¹. Some information is available on HPV types present in African countries. A study carried out in Zimbabwe

identified HPV types 16, 33, 18 and 31 as major types of HPV among patients that had invasive cervical cancer¹². Studies in South Africa, Cape Town reported that HPV 16 was the predominant type in women with CIN and cervical cancer while in women with normal cytology; the predominant type was HPV 18.¹³⁻¹⁴ In Tanzania and Uganda, HPV 18 was found to be more prevalent among cervical cancer patients and non-cancer patients than in other areas of the world¹⁵⁻¹⁶. In Senegal, a high proportion of patients with cervical lesions were shown to be infected with HPV 18 (39%) and HPV 45 (10%) and HPV 18 DNA was found in 7% of pregnant women¹⁷⁻¹⁸. Bosch *et. al.*⁹ indicated a significant increase in HPV 45 DNA amongst cervical cancer patients in Africa than in other areas. In relation to worldwide HPV types, Munoz¹⁹ reports that HPV 16 accounts for the highest proportion (50%) followed by HPV 18 (12%), HPV 45 (8%) and HPV 31 (5%). The recognition of the role of HPV has far-reaching implications for the primary and secondary prevention of malignancy.

One of the most important reasons for the high incidence of cervical cancer in developing countries is the lack of early detection of pre-cancerous lesions and treatment of the lesions before they progress. In most countries, Papanicolaou (Pap) smear (cervical cytology test) is the standard screening method and until recently HPV DNA testing is being introduced in some countries as a screening method. Countries that have instituted national screening programmes have observed a drastic decline in deaths due to cervical cancer. Unfortunately, comprehensive and Pap screening is practically non-existent in Zimbabwe like most countries in low resource settings. Cytological screening is performed on an opportunistic basis in health-care institutions and is expensive for an ordinary woman. In 2000, the Zimbabwe Ministry of Health and Child welfare introduced two pilot screening projects using Visual Inspection with Acetic Acid (V.I.A.) in Mutoko and Gwanda

districts. V.I.A. is conducted by a trained nurse and involves painting the cervix with 4% acetic acid to detect pre-cancer cells. It is a cheaper alternative to Pap smear screening and has a sensitivity of 76.7% and specificity of 64.1%. (20-21). VIA is being adopted in most developing countries after several studies showed that VIA can be used for risk assessment of the cervix²²⁻²⁵. The challenge for developing countries like Zimbabwe is to introduce alternatives for cervical cancer screening and treatment in low resource settings.

Cancer of the cervix is a gender sensitive condition in that only women suffer from it. Thus, its importance may easily be marginalised. Often, cancer has to compete for meager resources with more dramatic diseases like HIV and AIDS, malaria and tuberculosis. Although cervical cancer is preventable and curable, if detected early, its morbidity and mortality continue to be on the increase in Zimbabwe. Studies have been done in Zimbabwe on cervical cancer²⁰⁻²¹. These studies have mainly focused on the situational analysis of cervical cancer in Zimbabwe. Sociological and anthropological studies on cervical cancer in Zimbabwe are limited. The purpose of this paper is to give a sociological and anthropological insight into rural black women's understanding of cervical cancer, its symptoms and the importance of screening. The paper also assesses women's perceptions and environmental constraints towards cervical screening and treatment. The study focused on the users of cervical cancer screening and treatment services and hence it focused only on women. Men were not included in the study.

Methodology

Study area

The study was carried out in Mutoko and Shurugwi districts in Zimbabwe between February 2002 and January 2003. The two districts were selected from two provinces in Zimbabwe. The first district, Mutoko was purposively selected

because of the existence of a screening programme there. The second district was systematically sampled in a province where there was no VIA screening taking place. After consultations with the Provincial Medical Officer in Midlands, Shurugwi district was selected because it was more comparable to Mutoko in terms of socio-cultural aspects, access to care and the quality of care. Both Mutoko and Shurugwi are rural areas where the majority of the people rely on subsistence farming as a livelihood strategy. They are both patriarchal societies. Mutoko district is situated in Mashonaland East Province. It lies 143km northwest of Harare, the capital city of Zimbabwe. A VIA screening programme was introduced in Mutoko district by the Ministry of Health and Child Welfare in 2000. Early treatment using cryotherapy (freezing the cervix with a liquid coolant to destroy abnormal tissue) is also done at the district hospital. Two doctors and 29 nurses were trained in Mutoko to screen for cervical cancer using VIA. Shurugwi district is located in the Midlands Province. It lies 300km southwest of Harare. There is no screening programme in place in the district. Suspected cases are referred to the provincial hospital for screening and treatment. No training on screening has been carried out in the district.

Study Population

The study population included rural women and health personnel from Shurugwi and Mutoko. All study participants gave informed consent to participate in the study. Women were selected from all the wards in the two districts. A ward is the lowest administrative structure within a district. Mutoko has 29 wards while Shurugwi has 22. The women were recruited from households sampled from villages within each ward. Women were interviewed as they carried out their daily chores. Their ages ranged from 14 to 81 years and included married (monogamous and polygamous), single, divorced, and widowed women and single mothers. Epi 5 was used to

calculate the sample size in both districts. The ideal number of sample women was 200 for Mutoko and 180 for Shurugwi. From the calculated sample 24 women refused to participate in the study due to time constraints. Nurses and nurse aides from local health centres and doctors and some nurses at district hospitals also participated in the study.

Design

The study design was exploratory, (assessing women's understanding of symptoms of cervical cancer, screening and identifying factors that prevent them from being screened or attending follow up) descriptive (identifying ways in which information on cervical cancer is disseminated to women) and comparative (comparing a district with cervical cancer programme in place and one without).

Sampling

The total sample was calculated using Epi 5 statistical package using the demography data of each district. The total population for Mutoko according to the district hospital statistics was 154,467 and for Shurugwi it was 108, 547. After the calculation the ideal sample for Mutoko was 200 women and for Shurugwi 180 women. The difference in size was because of the different total number of women in the two districts. Cluster sampling was used in the selection of women. Within each ward, a list of all the villages was made. Using this list, a random sample of villages was selected and women were then systematically sampled within the villages. Purposive sampling was adopted to reach the relevant health personnel.

Data collection methods

Quantitative data was collected using a structured questionnaire, which was designed in English and translated and administered in Shona, a local vernacular language. The questions included basic socio-economic and demographic indicators of

the respondents as well as specific questions on reproductive history and cervical screening.

Qualitative data was collected using semi-structured interviews with open-ended questions with the women. Data collected consisted of information on knowledge, practices, opinions, views and attitudes about cervical cancer and screening. In-depth interviews were held with key health personnel and semi structured questionnaires were administered to nurses and nurse aides. The data collected focused on incidence of cervical cancer, screening programmes, constraints and dissemination of information on cervical cancer. The questionnaires were pre-tested before being administered to the study population. Narratives were obtained from 2 women suffering from cervical cancer and 1 woman who had undergone hysterectomy due to cervical cancer.

Focus group discussions (FGDs) were also held with rural women in both districts. Different themes in light of cervical cancer were discussed. The themes ranged from knowledge about what cervical cancer is, its causes, prevention methods, screening, sources of information, environmental constraints to screening, methods of treatment, perceptions and opinions. A total of 20 FGDs each with between 8 and 12 participants were conducted. The guides for both in-depth and focus group discussions were written in English and later translated into Shona, the local language. Notes were taken and a dictaphone was also used to record the proceedings. Four research assistants were recruited and trained on data collection. The structured and semi structured questionnaire were both administered to each respondent at the same time. The interviews with women were held at the respondents' households and focus group discussions were held at community meeting places.

Document analysis was also used to gain information about both districts in relation to cervical cancer. These documents were also a source of cases on cervical cancer. *Table 1* summarises all the data collection method that were used in the study.

Table 1: Summary of data collection methods and number of people sampled for each

Data collection methods	Population sampled
Rural woman questionnaire	356
Nurses and nurse aide questionnaire	29
In-depth interviews	2 District Medical Officers, 2 Doctors, 2 Matrons 10 Nurses
Narratives	3
Focus Group Discussions	20 (10- 12 participants)
Secondary data	Hospital and clinical records

Data analysis

Quantitative and qualitative data sets were analysed separately. Quantitative data and some qualitative data were analysed using SPSS. The responses given by the informants were coded before data entry and are presented in the form of percentages and frequencies. Qualitative data from in-depth interviews, narratives and focus group discussions was categorized according to the various themes and a master sheet analysis was done.

Results

Profile of interviewed women

A total of 356 women were interviewed in the study. Of these, 188 were from Mutoko district and 168 were from Shurugwi district. The ages of the women ranged from 14 to 81 years. The mean age was 30. Single women constituted 34 (10.4%) of the study participants, married women in monogamous marriages were, 209 (58.7%) married women in polygamous unions were 24 (6.7%) and widowed and divorced women were 86 (24.2%). In terms of education, 266 (74.7%) had gone through primary school only, 13 (3.7%) had received some tertiary

education, 63 (17.7%) had dropped out of primary school and 14 (3.9%) of the women had never been to school at all. In terms of occupation, most of the women were subsistence farmers. In Shurugwi 97 women and in Mutoko 116 women were subsistence farmers. Other categories of occupation for the women included being traders or hawkers, self-employed, technical jobs and a few had professional jobs.

Reproductive health history of the women

In terms of STIs, women were asked whether they had suffered from sexually transmitted infections (STI) or not. In Shurugwi district 19.6% (33) of the women admitted that they had suffered from an STI and in Mutoko 18.6% (36). From these women the types of STIs suffered from included genital ulcers (36.2%), warts (10.3%), syphilis (8.7%), gonorrhoea (2.8%) and vaginal discharge (24.6%). Some of the women did not know what type of STIs they had suffered from (17.4%) The responses given by the women were for at least one STI. Issues of HIV infection were not looked into.

Eighty-three (44.1%) women in Mutoko and 70 (41.7%) women in Shurugwi had used various forms of vaginal preparations in their lifetime.

The preparations included tree barks, herbs, leaves, powders and soap. The reasons given for using these preparations were use during pregnancy (2.7%), for sexual purposes (89.5%) and fertility purposes (5.9%). In terms of use during pregnancy the users wanted to help open up the vagina so that it would dilate quickly during childbirth. They feared that without the use of these herbs, the vagina would not dilate resulting in complications during child labour, prolonged labour and caesarian sections being done. Under the traditional culture these herbs are known as *vbura masuwo* (opener of birth canal) and are given to expecting mothers to use a few months before birth. In terms of sexual purposes the herbs were being used to enhance sexual satisfaction and enjoyment for their partners. The belief is that men enjoy 'dry sex' and the vagina should be tight. The herbs are then used to dry and tighten the vagina. In terms of fertility purposes, women with fertility problems are given these herbs to help to enhance their fertility.

Besides STIs some of the interviewed women in both districts had also experienced some reproductive health related symptoms as indicated in *Table 2*. The responses given by the women were for at least one incidence or occurrence of the symptoms in the last 12 months. Most of these women confessed that they did

not seek treatment early for these various problems. Treatment was usually sought after the problem had persisted over a month or longer. The reasons for not seeking treatment were lack of money, heavy workload, distance of nearest health center, use of alternative traditional treatment and the belief that the infection would disappear or go away. From the FGDs, women agreed that they were more concerned about the health of the children and the husband. Access to care and treatment was given priority to the children and husband and the woman came last. This scenario resulted in women not seeking health care at all or late when the disease had progressed.

Screening for cervical cancer

The majority of the interviewed women in both districts had never been screened for cervical cancer. In Mutoko district despite the presence of a screening programme only 4.3% (8) had been screened. In Shurugwi district only 4.2% (7) had been screened. The small percentage of women who were screened in both districts had done so after presenting with reproductive health problems at their local health centers. In Mutoko screening of women who came to the hospital was being carried out and was not compulsory. In Shurugwi district no Pap smear or VIAs were

Table 2: Symptoms of health-related problems experienced by women in Mutoko and Shurugwi

Type of symptom		Mutoko	Shurugwi	N
Dysuria	88	35 (18.6%)	53 (31.1%)	
Urine Frequency	108	54 (28.7%)	54 (32.1%)	
Dysmenorrhoe	79	47 (25%)	32 (19%)	
Dyspaerunia	31	15 (8.0%)	16 (9.5%)	

Table 3: Knowledge on the various aspects of cervical cancer among women in Mutoko and Shurugwi

Knowledge of Various aspects Of cervical cancer	n	Mutoko	Shurugwi
What is cervical cancer?	202	94	108
Causes of cervical cancer	212	100	112
Symptoms	216	102	114
Prevention issues	292	142	150
Treatment	219	100	119
Pap Smear	35	14	21
V.I.A.	45	31	14

carried out at the district hospital. All suspected cases were referred to provincial hospitals in Bulawayo and Gweru. There is no significant difference in the percentage of screened women in Mutoko and Shurugwi among the respondents despite the presence of a screening programme in Mutoko. Interviews with nurses from Mutoko hospital revealed that the VIA screening programme had not been effectively socially marketed to all the rural women in the district. This was mainly due to the lack of fuel and resources to reach all the women, trained staff turnover, heavy workload for nurses leaving nurses with no time for screening women and lack of follow up and strengthening of pilot project by the relevant stakeholders. The programme did not manage to cover the whole Mutoko district in terms of sensitizing the community about the cervical cancer-screening programme. The programme was more centred at the core of the district and not in the periphery.

Women's knowledge about cervical cancer

In Mutoko and Shurugwi districts, the knowledge of women about the various facts about cervical

cancer varied. Their knowledge was mainly acquired from radio programmes on cervical cancer, other women, cervical cancer patients, books and magazines and mostly from antenatal clinics. *Table 3* summarises the knowledge levels of women in both districts.

Data from the above table show that they were some women who had no knowledge at all about the disease. For some of the women it was their first time to hear about the disease from the researchers. However, a good proportion of the women knew about the disease in terms of what it was, its causes, symptoms and how it could be prevented. Information generated from FGDs indicated that women knew about the nature and cause of the disease but they had little knowledge about the clinical progression of the disease. Women in both districts had little knowledge or no knowledge about Pap Smears and VIA. Most of the women had not heard about these screening methods.

Perceptions of women about cervical cancer

Data on the perceptions of women was mainly generated from FGDs and in-depth interviews.

Various terms were used in both districts to refer to cancer in general. In Shurugwi district, it was referred to as, *nbukusa* and in Mutoko as *nbuta*. Both terms are based on the concept of a small mouse-like creature, which make numerous tunnels in the soil. This is likened to how cancer spreads in the body and hence the name. The other term *gomarara* was also used to a lower extent in both districts. The term is based on the nature of the bark of trees, which is hard and has many dead cells. Health personnel usually use this term. In both districts cancer was mainly perceived as a wound that spreads and deepens but is incurable. These wounds can occur inside or outside the body.

Cervical cancer was perceived as a disease of the uterus in both districts. It was referred to as a form of cancer that affected the uterus or cervix. Some women viewed cervical cancer as 'dirtiness of the womb' and not a disease. Men were thought to be the main cause of the disease on the basis that they pass STIs to women. Sperms were described as dirt that is retained and accumulates in woman's genital parts after sexual intercourse. The use of vaginal preparations, multiple sexual partners, family planning contraceptives, cold weather and witchcraft were also perceived as causes of cervical cancer.

Some of the symptoms of cervical cancer that were mentioned include lower abdominal pain (LAP), continuous bleeding/ postmenopausal bleeding, water and smelly discharge, nausea, backache and painful legs. Some women highlighted that a woman with cervical cancer 'can feel the uterus moving as if it is about to come out'. In both districts women considered not having multiple sexual partners, not using vaginal preparations and being screened to be important for preventing cancer. Some women, however, viewed screening as the HIV test while others thought it was a process of 'cleaning the womb'. They mistook the taking of samples for laboratory analysis as cleaning of the womb

through removing dirt (samples). In spite of some knowledge on prevention measures that could be used, women still felt powerless to guard themselves against cervical cancer and other sexually transmitted infections because of cultural and patriarchal constraints. Women felt vulnerable because of their limited negotiating power in relation to sexual issues, particularly in the case of married women.

Radiotherapy, chemotherapy, traditional medicines and to a lower extent 'removal of the uterus', were perceived as methods of treating cervical cancer. The majority of the women said cervical cancer was a terminal illness and hence any form of treatment methods was a temporary measure.

Removal of the uterus and stigmas

The concept of 'removal of the uterus' as part of treatment was a matter of great concern among the interviewed women. Women had various myths and beliefs about the 'removal of the uterus'. Some women could not imagine removal of a woman's uterus, as they believed that "womanhood" was incomplete without a uterus. They believed removal of a uterus would have adverse effects on one's sexual activities. They likened removal of the uterus to transformation into 'man', a process that would expose a woman as their vagina becomes hollow. Despite these fears and myths, some of the interviewed women knew and supported the removal of the uterus in order to save women's lives. A woman who had her uterus removed from Shurugwi gave the following narrative:

I am a woman aged 50 and I had my uterus removed four years ago in 1998. Women should not be afraid about the operation. It can save a life. I personally saw women who had been diagnosed late for cervical cancer at my doctors' surgery. They were begging the doctor to have their uteruses removed but unfortunately it was too late and there was not much the doctors could

do for them. I told my husband about the operation and he also says that there is no difference in terms of our sexual life. My children also know. Women have so many myths about the 'removal of the uterus' but they are wrong conceptions. Nothing changes except that you cannot have children anymore. You are still a complete woman and still can perform the same sexual activities. In terms of my health I feel no pain and I am still healthy. I encourage women to have their uteruses to be removed if the doctors recommend it. About stigmas, the secret is not to just tell all the people so that no stigmas are attached to you. If you disclose any information people talk and gossip and stigmas are attached to you. It is only natural for people to talk if they happen to know about it.

There was a general consensus in both districts that women whose uteruses are removed are usually stigmatised.

Low screening uptake: Why?

Lack of knowledge about the need and importance of screening was cited by many women as the major impeding factor to screening. The study revealed that women in Mutoko were not aware of the local screening programme. Some women in two wards in Mutoko district said they were shy of being screened by the local male nurses whom they considered to be their sons. Personal constraints need to be taken into account in dealing with this disease. Some women highlighted the discomfort of lying on one's back during the screening procedure. For some women the way they are expected to lay on their back with their legs wide open during VIA and Pap smears was a constraining factor. Other reasons for low screening rates were lack of knowledge about the signs and symptoms of cervical cancer, absence of reproductive health related symptoms, lack of money or resources, men and drought. Men were viewed as a constraining factor as they did not understand the importance of screening. The drought, which was being ex-

perienced during the time of the study, also made women to prioritise bread and butter issues instead of health issues. In Shurugwi district, the major constraining factor was simply the absence of a screening programme in the district. Due to lack of resources and other pressing priorities women could not travel to other districts for screening, especially if they were well. Lack of follow up also made it difficult to track cancer cases as women referred for screening by local nurses did not go for screening because of lack of money, time and not understanding the consequences of the disease. The health personnel ended up losing track of the referred cases. Health-seeking behaviour patterns of the women was also another reason. Women viewed the absence of symptoms and pain as an indicator of well being and health and hence routine check up and screening were not necessary.

Discussion

Results of the study indicated that cancer of the cervix was a major health problem in the study areas. The women did not practice cervical cancer screening as a health-seeking behaviour. The high percentage (95.78%) of unscreened women in both districts demonstrates the large extent to which many cases of cancer may go undetected. The small percentage of women who were screened had only done so after presenting with reproductive health related problems. This confirms the assessment by WHO^{1,2} that in most developing countries only 5% of women at any point in time have been screened within the past 5 years. The high percentage of unscreened women is of concern especially with the national statistics showing a steady increase of the number of cases of cervical cancer over the past years⁷

There were similar proportions of women screened in Mutoko and Shurugwi districts suggesting that the screening programme in Mutoko was having little impact. The Mutoko screening programme was set up as part of a pilot project to assess the feasibility of integrating

V.I.A. in current primary health-care system before introducing it nationally. Various studies had shown that VIA, is a safe, simple and effective adjunct to the Papanicolaou smear for cervical screening²⁶⁻³¹. The low screening rates in Mutoko were mainly because of poor social marketing in the district and this resulted in poor coverage of the district.

Access to reproductive health-care is still a problem for rural women. From the two districts, women had access to the local clinics but these were not equipped with the necessary resources and staff to offer quality reproductive health-care to the women. In Mutoko, some of the local clinics had VIA but the service was not being offered due to time constraints and lack of trained nurses. In Shurugwi, screening services were not offered at any of the local clinics. This means that screening was not available to women even if they requested to be screened.

The health seeking behavior of women in both districts is also an area of concern. From the study women only sought medical attention when they were experiencing serious health problems. Routine check ups and screening were secondary issues and not a priority. This mainly stemmed from ideologies about well-being and health. If one was well, this was an indicator for the absence of disease. Such attitudes affected the health seeking behaviour of the women. There is need for health education in relation to proper health seeking behaviour in light of reproductive health diseases. Lack of access to quality reproductive health-care and the health-seeking behaviour of these women help to explain the low screening uptake in both districts. The practice of women in terms of their reproductive health is also an area of major concern. Despite health education, some women engage in practices like use of vaginal preparations, which make them prone to reproductive health problems, and diseases like cervical cancer.

The knowledge levels of the women did not differ much despite the presence of a screening programme in Mutoko. Information about the

Mutoko screening programme had not widely been disseminated to most of the women. The majority of the women in both districts knew that cervical cancer was a disease but had a fairly low level of understanding about the nature and progression of the disease, treatment and screening processes. The terminology of the disease differed in the two districts. *Table 3* shows numbers and figures of women who knew the various aspects of cervical cancer. The figures show that slightly over 50% of women in both districts had some knowledge about the disease but they had little knowledge about the screening procedures. Only 9.8% of the women knew about Pap smears and 12.6% knew about V.I.A.

Women from both districts had various perceptions about the disease. For example, witchcraft was also viewed as a cause of cervical cancer. In terms of causes, men were recorded as the main culprit. This mainly stemmed from women's social and cultural position within the patriarchal society. Studies have shown that most women become infected by STIs especially HIV/AIDS through their husbands or partners who usually have extra-marital affairs or multiple sexual partners³². Most women perceived womb cancer to be invariably terminal, knowledge that was constructed from personal, and community experience of the illness. The treatment methods were purely perceived as delaying mechanisms of an inevitable death. The removal of the uterus was seen as an uncultural and problematic solution to the problem of cervical cancer. The removal was seen as giving rise to social problems, which might result in divorce and unwarranted stigmas. Women's myths about the disease mostly lay in their understanding of the treatment methods and some of the causes of the disease.

Perceptions about diseases and their symptoms are usually constructed within the various social and cultural settings. Despite the medical explanations about the causes of the diseases some women insisted that witchcraft was the major cause and this was knowledge that was

also constructed from the fact that if cervical cancer is detected late there is nothing much that can be done. One just receives palliative care and dies. There is need to demystify some of these myths about the causes of cervical cancer through health education. This emphasis that some of the women had limited knowledge in relation to the causes and symptoms of cervical cancer

Health practitioners world over have stressed the need and importance of screening over the years. However, despite these efforts, there is still a low uptake of screening especially in developing countries. Screening could prevent many deaths due to cervical cancer worldwide. There is need to understand the factors that impede women from going for screening so that effective solutions can be put in place. The results from the study indicate that there are macro factors that constrain women from being screened. The major ones are due to socio-economic factors such as lack of knowledge, lack of resources and screening facilities. Macro constraints pose a major concern especially in countries like Zimbabwe, where, there is no systematic cervical cancer screening programme currently available and the prevalence of CIN remains generally unknown⁹. This means that the efforts to deal with the disease are haphazard and this has a negative impact on information dissemination, health education, sensitising and screening. Other factors are cultural such as fear and lack of understanding among men in the women's lives, women's conjugal rights, and embarrassment of being screened by a male doctor or male nurse and women's role within the household. Personal, socio-economic, cultural and structural factors should be taken into account in coming up with effective and sustainable solutions to the problem of cervical cancer.

The current development of HPV vaccines offers a new hope in the fight against cervical cancer in Zimbabwe and other developing nations. Researchers have become increasingly interested in alternative approaches to traditional cervical cancer screening that reduces depend-

ence on infrastructure and are pragmatically more feasible and perform reliably in low resource setting. The recognition that persistent cervical infection by certain HPV types is the central cause in cervical cancer has spawned interest in immunization against HPV as the most promising strategy for preventing this neoplastic disease¹⁰. Immunization may have the greatest value in developing countries, where 80% of the global burden of half a million cases of cervical cancer occurs each year and where screening programmes have largely been ineffective. Biotechnology firms, pharmaceutical companies and academic researchers are working to develop vaccines against the types of HPV that cause most, if not all, causes of cervical cancer. Some are designing prophylactic vaccines and others are focusing on therapeutic vaccines¹¹. Prophylactic vaccines will prevent HPV infection and consequently the various HPV associated diseases, and therapeutic vaccines will induce regression of pre-cancerous lesions or remission of advanced cervical cancer., HPV immunization offers a long-term solution to cervical cancer especially in developing countries like Zimbabwe where it is difficult to effectively implement screening and treatment programs that reduce cervical cancer deaths.

The development of HPV vaccines has its challenges as well. Currently they are no vaccines that are available commercially for immunization. Most of the prophylactic and therapeutic vaccines are still undergoing clinical trials. According to Sherris *et. al.*¹¹ and Mahdavi A, *et. al.*³³ ten years or more will likely be needed to formulate a safe and effective multi valent vaccine suitable for universal immunization. The concerns about the HPV vaccines range from issues of efficacy, safety and costs. The concern for developing countries like Zimbabwe is no vaccine will reach an adequate number unless they are produced and distributed cheaply. Regardless of the age at which a vaccine is administered, coverage will be greater if only one dose is required. Despite the challenges of HPV vaccines they offer hope and

promise for Zimbabwe in dealing with cervical cancer, as this will mean more coverage and less reliance on Pap smears and VIA screening techniques, which have had less coverage.

Conclusions and Policy Recommendations

Cervical cancer was a public health concern among the interviewed women and health personnel in Zimbabwe. Women and key stakeholders from Mutoko and Shurugwi districts gave various recommendations. The main points that were stressed was the need for health education and awareness about cervical cancer, the need for all communication channels to be used to disseminate information about the disease and the need for a national screening policy and programme to be put in place. Health personnel emphasised the need for VIA to be adopted as an alternative to cytology in low resource settings like in Zimbabwe. The stakeholders also pointed out the need for a sustainable screening programme that could cater for women from all walks of life. A national screening programme would ensure a reduction in morbidity and mortality due to cervical cancer in Zimbabwe. In light of the developments of HPV vaccines it would also be critical for Zimbabwe to accumulate data and knowledge of the distribution of various HPV types in the country, as this is essential to the development of HPV vaccination strategies to curb the burden of cervical cancer.

Acknowledgements

We are grateful to the Zimbabwe Ministry of Health and Child Welfare and Gesellschaft für Technische Zusammenarbeit (GTZ) for funding this study. Our appreciation goes to the National Institute for Health Research and University of Zimbabwe Lake Kariba Research Station for providing research facilities and technical assistance during the study. We also thank the women and health personnel from Mutoko and Shurugwi districts who provided us with invaluable data.

Our special thanks also go to Ms A Chitanda, Mr. S.D. Chandiwana, Mrs. N Kurewa and Mrs. Phiri for their assistance in administering the questionnaires and in conducting focus group discussions.

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