THE KNOWLEDGE, ATTITUDE, PRACTICE AND PERCEIVED BARRIERS TOWARDS SCREENING FOR PREMALIGNANT CERVICAL LESIONS AMONG WOMEN AGED 18YEARS AND ABOVE, IN SONGEA URBAN, RUVUMA:

By

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A dissertation Submitted in partial Fulfillment of the Requirement for the Degree of Master of Medicine (Obstetrics and Gynecology) of the Muhimbili University of Health and Allied Sciences

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for examination of a dissertation entitled: **the knowledge, attitude, practice and perceived barriers towards screening for premalignant cervical lesions among women aged 18years and above, in songea urban, ruvuma,** in partial fulfillment of the requirements for the degree of Master of Medicine in Obstetrics and Gynaecology of the Muhimbili University of Health and Allied Sciences

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(Supervisor)

Date

DECLARATION AND COPYRIGHT

I, Dr. James John, declare that this dissertation is my own original work, and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature -----------------------

Date----------------------------

ACKNOWLEDGEMENTS

Lastly but not least I would like to thank all the respondens whose acceptance to participate has made this work possible.

DEDICATION

This dissertation is dedicated to my late father JOHN CHAPA, who passed away when I needed him the most. I hope to meet him one day. Amen

ABSTRACT

Background: Cervical cancer is the second most common cancer among women worldwide. About 83% of the cases occur in developing countries, representing 15% of female cancers. Cervical cancer ranks as the most frequent cancer among women in Tanzania, and the most frequent cancer among women between 15 and 44 years of age with age specific incidence rate of 34 per 100,000. Majority of patients present to hospital with advanced disease with dismal survival rate. Carcinoma of the cervix is a preventable disease; its prevention, among other ways, is through screening and detection of premalignant stages of the disease and treatment. Screening test for cervical precancerous and cancerous lesions using visual inspection aided by acetic acid has been a suitable low-cost and a feasible alternative modality for control of cervical cancer in resource poor settings as compared to cytological and colposcopic screening in resource rich settings. Detection of the premalignant lesions however requires knowledge of the disease so that people can be aware and positive towards screening.

Objectives: the broad objective of the study was to determine the knowledge, attitude, practice and the perceived barriers towards screening for premalignant cervical lesions among women aged 18 and above years in Songea urban, Ruvuma region.

Materials and Methods: A cross sectional study was conducted in Songea from 9th to 30th September, 2010. Four wards were chosen to be studied. The chosen wards were Lizaboni, Mjini, Bombambili and Majengo. An interviewer administered structured

questionnaire was used to gather information. Door to door interviewing of respondent meeting the criteria was done. Obtained information was summarized into SPSS data base. Data was cleaned and analyzed by SPSS version 16 for windows. Chi-square tests were used to find out the significant differences between variables.

Results: Generally the knowledge was poor, attitude was positive to majority of respondents but again practice was found to be very poor. The results showed that 243(78.6%) had poor knowledge, 61(19.7%) had satisfactory knowledge and only 5(1.6%) had good knowledge. Overall 172(55.7%) of the respondents were positive about cervical cancer and screening for premalignant cervical lesion. Among 309 respondents, 14.2% only have ever been screened.

Conclusion: The study has shown that there is a lack of knowledge on cervical cancer and screening for premalignant cervical lesion. There is also poor utilization of screening services available at the study area. The reason for poor practice among others was lack of knowledge and information.

Recommendations: There is a need to promote cervical cancer screening among women by informing them on their susceptibility to cervical cancer and encouraging a belief that active and regular screening can detect cervical cancer at the pre-cancerous stage, hence enabling the early treatment and prevention of cancer development. There is also a need for provision of

affordable screening services all over the country to enable women, after being motivated, to go for screening.

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ABBREVIATIONS

CIN---Cervical intraepithelial Neoplasm

CIS---Carcinoma in Situ

DMO – District Medical Officer

DNA - Deoxyribonucleic Acid

GOP - Gynecological Outpatient Department

HPV - Human Papilloma Virus

KAP – Knowledge, Attitude and Practice

MUHAS - Muhimbili University Of Health and Allied Sciences

SD – Standard deviation

VIA - Visual Inspection of the cervix with Acetic Acid

WHO - World Health Organization

INTRODUCTION

Cervical cancer is the second most common cancer among women worldwide, with an estimated 493,000 new cases and 274,000 deaths annually. About 83% of the cases occur in developing countries, representing 15% of female cancers.[1]

The incidence of cervical carcinoma in Africa is on the rise. Nonetheless, the true incidence of cervical cancer in many African countries is unknown as there is gross under-reporting. Very few countries have functioning cancer registries and record-keeping is minimal or non-existent. Some of the figures quoted in the literature are hospital-based, which represent a small fraction of women dying from cervical cancer, as most women cannot access hospital care and die at home.[1]

Reported mortality rates in developed countries with successful screening programmes seldom exceed 5 per 100,000 women. The survival rate for cervical cancer in sub-Saharan Africa in 2002 was 21% compared with 70% and 66% in the United States and Western Europe, respectively.[2]

Tanzania has a population of 10.97 million women aged 15 years and older who are at risk of developing cervical cancer[3]. Current estimates indicate that, in Tanzania, every year 7515 women are diagnosed with cervical cancer and 6009 die from the disease. Cervical cancer ranks as the most frequent cancer among women in Tanzania, and the

most frequent cancer among women between 15 and 44 years of age with age specific incidence rate of 34 per 100,000. Projected number of new cervical cancer cases in Tanzania in 2025 is 12416. Projected number of cervical cancer deaths in 2025 is 9923 per year if specific measures are not put in place. [3] Something has to be done to reduce this number of new cases and deaths as the projections above show.

HPV is the primary etiologic agent of cervical cancer, There are over 100 types of HPV, The genital-type HPVs are divided into high intermediate and low-risk types, according to the association with genital tract cancer. High risk types HPV-16, -18, -31, - 45 accounts for more than 90% of cervical carcinoma. HPV-16 is the most often found[4] and in Tanzania HPV 16 accounts for 41% of cervical malignancies[3].Transmission of HPV occurs primarily by sexual contact or by skin-to-skin contact[5].

Two viral oncoproteins, E6 and E7, of HPV16 and HPV18 are responsible for viral oncogenesis by destabilizing two major cellular tumor suppressors, p53 and pRb, respectively; as a consequence, the host cell accumulates more and more genetic (DNA) damage that cannot be repaired, leading to transformed cancerous cells[6].

Known predisposing factors for HPV infection and hence Ca cervix include early age at first sexual intercourse, multiple sexual partners, a male consort who in turn has had intercourse with multiple women also confers a significant risk, smoking and in women who are immunosuppressed[7].

Primary prevention of cervical cancer aims at reducing the incidence of cervical cancer by controlling the causes and risk factors. Vaccines against HPV have been developed and provide effective protection against some HPV types. Two vaccines to prevent HPV infections ie. Gardasil and Cervarix are in the market. Gardasil is called quadrivalent as it protects against four type of HPV ie. 6, 11, 16 and 18. Cervarix is called a bivalent vaccine because it targets two HPV types: 16 and 18 [8]. Gardasil and Cervarix are proven to be effective only if given before infection with HPV. Studies have shown that both Gardasil and Cervarix prevent nearly 100 percent of the precancerous cervical cell changes caused by the types of HPV targeted by the vaccine up to four years after vaccination to women who were not infected at the time of vaccination[9]. Recommended ages are 9 to 25.[10,11]

Other preventive measures includes screening and treatment of premalignant cervical lesion. Limiting the number of sexual partners, avoiding or quitting smoking and minimizing exposure to environmental tobacco and consuming diet rich in fresh vegetables and fruits may help reduce the risk of cervical cancer. Health promotion activities on sexual health, smoking cessations and healthy diet can contribute to the prevention of cervical cancer.

The largest gain in reducing cervical cancer incidence and mortality could be attained by increasing the coverage of women who are currently unscreened or screened only infrequently.

For many years the Papanicolaou (Pap) smear has been the gold standard method of cervical cancer screening. In developing countries Pap smear screening is available mainly in thelarge private hospitals or in the government referral hospitals that are located in urban areas. Women who most require screening often live in rural areas where such screening is not practical, because the technical capabilities, systems for transportation, communication, follow-up and training are beyond the capacity of the health infrastructure.

These problems with Pap smears have stimulated research on alternative tests, including visual inspection with acetic acid (VIA). VIA has demonstrated high sensitivity for detecting CIN and cervical cancer, but it is limited by low specificity[12]. VIA has the advantage of requiring only low-technology equipment and the result are available within a couple of minutes. These advantages have made VIA a realistic alternative for low-resource settings.

For the screening methods to be fully utilized, women need to be aware of the availability of the methods, to have knowledge of the disease and screening methods. These will enhance uptake of the screening for premalignant lesions and hence reduction of morbidities and mortalities resulting from cervical cancer especially in sub-Saharan Africa.

In Tanzania, as in other Sub-Saharan African countries, screening is very rudimentary. Screening services for premalignant cervical lesions were introduced in Songea, Ruvuma region, in the year 2007, coverage is however still very low.

LITERATURE REVIEW

Very few women in sub-Saharan Africa are ever screened for cervical cancer. Low levels of awareness and poor knowledge of cervical cancer coupled with unavailability and inaccessibility of cervical cancer screening services are responsible for the very small number of women being screened in sub-Saharan Africa and in other developing countries.

In developed countries people seem to be aware of cancer and screening services are widely available and utilized. In a cross-sectional survey of 650 women 15-78 years of age randomly recruited at 2 hospitals in London, England, 76.2% perceived cervical cancer to be a common disease and there was good awareness of the association between this cancer with smoking and the number of sexual partners. Furthermore, 91.7% believed cervical cancer could be treated if detected early enough[13].

A study done in Malaysia on women aged 21-56 years and who had never had a Pap smear test, with the aim to explore their knowledge and awareness of cervical cancer and its screening, showed that there is a lack of knowledge on cervical cancer as well as lack of knowledge on the Pap smear test. Many women did not have a clear understanding of the meaning of an abnormal cervical smear and the need for the early detection of cervical cancer. Many believed that the purpose of the Pap smear test was to detect existing cervical cancer, leading to the belief that Pap smear screening is not required because the respondents had no symptoms. Despite considerable awareness of a link between cervical cancer and sexual

activity, as well as the role of a sexually-transmitted infection, none of the respondents had heard of the human papillomavirus[9].

In Kuwait in one study done regarding cervical cancer screening among Kuwaitian women found that the knowledge about the test was adequate in 147 (52.3%) women only[14].

In Africa A study done in Camerooon to assess the knowledge of cervical cancer by women living in Maroua, the capital of the Far North Province of Cameroon showed that, of 171 women studied, only 48 (28%) had prior knowledge of cervical cancer[15].

In a study done in Lagos, 81.7% of 139 patients with advanced cervical cancer had never heard of cervical cancer before, and 20%, 30% and 10% respectively thought the symptoms they had were due to resumption of menses, lower genital infection and irregular menses[16].

In Nigeria, a cross sectional study done in the General outpatient, department of a tertiary hospital in Ibadan, Nigeria, women aged 20 to 65 years attending or visiting the GOP department in a University Teaching Hospital were studied. Of the respondents, only 15% had heard of cervical cancer[2].

A cross-sectional survey among college women in a university in Ghana showed that only 7.9% were aware of the link between human papillomavirus and cervical cancer[17].

Knowledge is also poor among health professionals where in Niger a survey of 144 female health professionals at two referral hospitals with facilities for Pap smear showed that twenty two percent could not list any risk factor for cervical carcinoma[18].

Practice towards screening for cervical carcinoma is poor to even those with knowledge of the disease and knowledge on the importance of screening. In developed countries majority went for screening as compared to developing countries. In a cross-sectional survey of 650 women 15-78 years of age randomly recruited at 2 hospitals in London, England. 80.5% of these women had had at least 1 Pap smear and 71.5% reported regular smears (every 3-5 years) [13].

Practice on screening among Africans was also shown to be poor as shown in a study done in South Africa, in spite of knowledge of cervical screening and the availability of such services, majority of women (87%) from higher social and educational backgrounds did not undergo cervical screening. Most patients resided within a 12-kilometer radius of a facility that either provided or could potentially provide screening[19].

In one study in Nigeria where 144 questionnaires were filled only 5.7% had ever undergone a pap smear[20].

In many studies barriers toward screening were embarrassment and pain (28). Others were psychological fear (36.8%), physiological pain (30.2%) and worry of family

misunderstandings (some husbands were against it) (15.3%) were considered the most dreadful situations by primary school teachers in case of having cancer in Taiwan[21].

In sub-Saharan Africa Knowledge and awareness of cervical cancer and screening are very poor and mortality still very high[22].

Tanzania reported very poor knowledge of the disease in a study done among female inpatients at Muhimbili between August 1999 and January 2000. It was a case control study to assess knowledge of cervical cancer symptomatology, where the knowledge ranged between 30 and 50% among cases and controls respectively. Many patients thought the symptoms were due to bewitchment, husbands' extramarital affairs, or husbands making love to their daughters. This study also showed that more that 90% of patients presented with invasive cervical cancer[23].

PROBLEM STATEMENT

Cervical cancer remains the leading malignancy among women in Tanzania. The World Health Organization (WHO) documented Zambia and Tanzania to have the highest incidence of cancer of the cervix in sub-Saharan Africa[24]. It is therefore one of the most important public health disease.

Studies in Africa and especially Sub-Saharan Africa indicate poor knowledge of women on cervical cancer as well as on screening for premalignant cervical lesions[22].

Screening has shown to effectively reduce the incidence of this malignancy in developed countries but in developing countries screening coverage is still low ranging from 2.0% to 20.2% in urban areas and 0.4% to 14.0% in rural areas[25].

In Songea Urban where screening has been going on since 2007, there were only 245 women in the year 2009 who went for screening at Songea Regional Hospital in a town of 89,314 females[26].

Low screening coverage cause most patients to present to hospital with advanced disease. In Tanzania 90% of patients with cervical carcinoma present with advanced stage disease[23]. Low screening coverage could be due to, among other reasons, lack of knowledge on cervical cancer and screening for premalignant cervical lesion among women, especially in sub-Saharan Africa and other developing countries.[25]

RATIONALE

Carcinoma of the cervix is a preventable disease; its prevention, among other ways, is through detection of premalignant stages of the disease and treatment. In recent years a screening test for cervical precancerous and cancerous lesions using visual inspection aided by acetic acid has been a suitable low-cost and a feasible alternative modality for control of cervical cancer in resource poor setting. Detection of the premalignant lesions requires knowledge on the disease so that people are aware and hence have positive attitude towards practice of screening for premalignant cervical lesions.

Knowledge of the disease is important, so that people are aware and through motivation they can have positive attitude towards screening for premalignant cervical lesions.

Not much is known about Tanzanian women knowledge, attitude and practice towards cervical carcinoma and screening for cervical lesion. This study aimed at looking on how knowledgeable these women are, what is therefore their attitude and what is their practice on screening for cervical premalignant lesions which is the key to prevention of overt carcinoma of the cervix.

Information obtained from this study should alert authorities so that proper measures can be taken to save the lives of Tanzanian women by educating them and provide screening services in many places. At the end of the study education will be given to study participants with poor and no knowledge and particularly the importance of screening will be emphasized.

Research question

Are the women in Songea Urban, Ruvuma region knowledgeable about carcinoma of the cervix and screening for premalignant cervical lesions? What is the practice of these women on screening?

OBJECTIVES

Broad Objective;

To determine the knowledge, attitude, practice and the perceived barriers towards screening for premalignant cervical lesions among women aged 18 and above years in Songea urban, Ruvuma region.

Specific Objective:

1.   T
   o determine the level of knowledge on cervical cancer and screening among   women in Songea urban.
2.   T
   o determine the attitude towards screening for premalignant cervical lesions among women Songea urban.
3.   T
   o find out the practice of women in Songea urban on cervical cancer screening.
4.   T
   o determine the perceived barriers on screening for premalignant cervical lesions among women in Songea urban.

METHODOLOGY

Study design

The study design was a cross-sectional study looking at the knowledge, attitude, practice and barriers towards cervical cancer and screening for premalignant cervical lesion among women aged 18 years and above in Songea.

Study population

Women aged 18 years and above in Songea urban, Ruvuma.

Study area description

Songea is the capital of the Ruvuma Region in south-western Tanzania. It was chosen for this particular study as it is among the few places in Tanzania where screening for premaliganant cervical lesion is done. The screening is done at Peramiho mission hospital, Ruvuma regional hospital and health centers on Songea urban. The screening is done through VIA. Sensitization for screening has been done via posters, village meetings (with entertaining traditional dances) and using radio (Radio Maria in Songea and radio Tanzania). Despite this sensitization only few people are going for screening. It is free of charge. What is the problem, is it knowledge or attitude, what are the barriers making a low turnout for screening.

Songea town is the home of 175,660 people (2010 projection from 131,336 people during 2002 population census with growth rate of 2.8%), the female population is 89,314 among them females 15 – 49 years are 31610 (35% of the female population).

Songea is the regional headquarter of the Ruvuma region. It lies 35 30'E of Greenwich, and 10 35' south of Equator. It covers an area 750.05sq. Km.

The Songea Urban District is administratively divided into 2 divisions, East and West divisions; it has 13 wards which are Bombambili, Lizaboni, Majengo, Matarawe, Matogoro, Mfaranyaki, Misufini, Mletete, Mshangano, Ruhuwiko, Ruvuma, Songea Mjini and Subira.

Songea urban has one regional hospital with bed capacity of 467. There are two health centres and seventeen dispensaries. The fertility rate is 5% with life expectancy of 53 years for males and 57 years for females. MMR of 293/100,000live births, underfive mortality rate of 31/1000 live births and infant mortality rate of 13/1000 live births. The ethnic groups are Ngoni, Matengo, Yao, Ndebele and Nyasa.

The main economic activities are small scale agriculture and livestock keeping, small scale industries and trades of various nature.

Study period

The study was conducted between 9th and 30th September, 2010

Sample size

Obtained by the formula

$$N= \frac{Z^2 \times P(1-P)}{\varepsilon^2}$$

WHERE

N= required sample size

Z = reliability coefficient at 95% confidence interval (standard value of 1.96)

p= proportion of population with characteristics of interest

ε = margin of error at 5% (standard value of 0.05)

No similar study was done in Tanzania or nearby locality and hence a prevalence of knowledge of 28% from a study done in Cameroon[15] was taken, assumed that somehow socio-demographic factors are similar to Tanzania.

The minimum sample size was estimated at

$$N = \frac{1.96^2 \text{ x } 28 \text{ x } 72}{5 \text{ x } 5}$$

N = 309

The sample size was taken to be 309.

Operational definitions

Knowledge: the understanding the respondents have about carcinoma of the cervix with respects to symptoms, risk factors, prevention and treatment, screening method,

Attitude: the belief and feeling of the respondents about screening for premalignant cervical lesions

Practice: the action taken by individual respondents to go for screening

Sampling technique and procedure

Step 1

Songea urban was chosen by purposive sampling method due to the reason that it is among the few places in Tanzania where screening for premalignant cervical lesion is done. The screening services have been going on in this area for four years now. Despite sensitization and availability of the screening services in this area, only few people are going for screening

Step 2

Songea urban has a total of 13 wards, 4 wards were chosen to be studied by simple random sampling using ballot method. The chosen wards were Lizaboni, Mjini, Bombambili and Majengo.

Step 3

The respondents were proportionately divided among the four selected wards, three wards had 77 respondents each and one ward had 78 (Lizaboni chosen randomly among the four

wards) respondents to make a total of 309 respondents. Proportionate distribution of respondents was done as the sociodemographic characteristics of the respondents in these wards are similar.

Step 4

Three streets in each ward were randomly selected to be studied. Each ward in Songea town is divided into 4 to 7 streets. It was difficult to select the houses for interview because the houses lack numbers/proper identification and also the streets in the wards were not well arranged, Interviewers went door-to-door till the desired sample in that particular ward was reached. To avoid missing respondents in houses, interview was mostly done after working hours and during weekends.

Exclusion criteria

Sick women who were not able to participate

Those who were too old to understand what the study was about.

Women with the history of the disease (carcinoma of the cervix)

Research instrument, measurements and data collection

A standardized questionnaire was developed from questionnaires that had been used in previous studies and from various articles and books on information related to screening

for premalignant cervical lesions and cervical carcinoma. It was an interviewer administered structured questionnaire. The questions aimed to gather information regarding respondent's knowledge on screening for cervical carcinoma, their attitude and practice towards screening for premalignant cervical lesion. The questionnaire also was designed to obtain relevant socio-demographic characteristics of the respondents.

Two research assistants were trained on the subject in question and data collection procedures; they were also involved in the pretesting of the questionnaire.

The questionnaire was divided into four parts:

Part one – *socio-demographic characteristics of the participants*

There were 5 questions on this part that included age, level of education, occupation, marital status and parity.

Part two – *knowledge on carcinoma of the cervix and screening*

This part had four questions. Enquired on the knowledge of respondents to carcinoma of the cervix which included symptoms, risk factors, prevention and treatment modalities. The respondents also responded to questions determining their knowledge on availability of screening for premalignant cervical lesions, screening interval, eligibility for screening and methods used for screening.

Part 3 –*attitude towards screening for premalignant cervical lesion*

There were seven questions on Likert's scale. The questions tried to assess respondents feeling on the magnitude of carcinoma of the cervix in Tanzania, if they feel that they are at risk, also their feeling on whether carcinoma of the cervix can be transmitted from

person to person, how they feel about screening for premalignant cervical lesion-is there any harm caused during the procedure, is the procedure costly, also their feeling on the importance of screening and lastly if they are ready to be screened.

Part 4 *Practice*

Three questions on this part, asked about whether the respondents had ever been screened, how many times and when was the last time when they were screened.

Assessment of Knowledge, attitude and practice.

Knowledge

The knowledge of carcinoma of the cervix and screening for premalignant cervical lesion was assessed using a 12 points scale. There were eight multiple choice questions that carried a total of 12 correct responses. Each correct response was given a score of 1 and a wrong response a score of 0. Total points to be scored were 12 and the minimum was 0. Points were about risk factors for acquiring the disease (any 2 points - early sexual intercourse, smoking cigarette, multiple sexual partners, and infectious agent-HPV), symptoms of carcinoma of the cervix (2 points – vaginal bleeding and vaginal foul smelling discharges), preventive measures (any two correct responses among quit smoking, avoid early sexual intercourse, avoid multiple sexual partners, and vaccination) and treatment modalities (2 points – radiotherapy, surgery, chemotherapy), availability of screening procedures (1 point), eligibility for screening (1 point), frequency of screening (1 point) and methods of screening (1 point)

On assessment, Modified Bloom's cut off [27] (Bloom cut off points were adopted from Ms Nahida's KAP (knowledge, attitude and practice) Study, 2007 (see appendix 3 for original Bloom'scut off points) points were used where a score of 80 – 100% of correct responses meant a good knowledge, a score of 50 – 79% put a scorer in a level of satisfactory knowledge and a poor knowledge was for the respondents with a score less than 50% of the correct responses. Therefore the scores with their respective knowledge levels were

i) 9 – 12 good knowledge

ii) 6 – 8 satisfactory knowledge

iii) 0 – 5 poor knowledge

Attitude assessment

Attitude was assessed by 7 questions put on Likert's scale. The questions on Likert's scale had positive and negative responses that ranged from strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The scoring system used with respects to respondents' responses was as follows: strongly agree scored 5, agree 4, neither agree nor disagree 3, disagree 2, strongly disagree 1.

The responses were summed up and a total score was obtained for each respondent. The mean score was calculated and those scored above the mean and the mean score had positive attitude and scores below the mean meant negative attitude towards screening for

premalignant cervical lesions. The highest score was expected to be 35 and the lowest score to be 7.

Practice assessment

The practice was assessed by looking on the respondent's action towards screening for premalignant cervical lesion in the past three years. Those who ever screened within the past three years were regarded as having regular practice, those who ever screened but more than three years ago from the time of data collection were regarded as having irregular practice and those who never screened were regarded as having no practice on screening.

Data Analysis

Data was entered into and analyzed using the SPSS database program version 16.

Univariate and bivariate analysis were done, univariate analyisis for frequency computations and bivaritate analysis in computing associations between variables. The Chi-square test was used to measure the strength of associations between variables, a p-value of <0.05 was considered to be statistically significant.

Ethical consideration

The respondents were explained in detail about the research, the respondents were let to decide on whether to participate or not in the study and this ensured the right of self-determination and autonomy. The respondents who agreed to participate gave a verbal consent. The data obtained were treated privately with no name tag on it. This study caused no physical or psychological harm to the patient and they weren't exploited in any way. The respondents were treated with respects and their rights to privacy and confidentiality were observed through anonymity.

During research, respondents who were found to have psychological or physical problems of which a participant was, apparently, aware or unaware, she was advised to attend for treatment and nearby hospitals were requested and agreed to receive and take care of these patients.

Ethical clearence

The MUHAS Senate, Research and Publication committee reviewed the proposal for ethical consideration and approval to conduct this study was given. The permission to conduct a research was granted by the Songea Town Administrative Secretary through Medical Officer in charge of the Songea Urban (DMO – Songea urban).

RESULTS:

A total of 309 women participated in this study, their socio-demographic characteristics, knowledge attitude and practice on screening for cervical carcinoma were determined. The mean knowledge score was 2.7 (SD 0.45), the minimum knowledge score was 0 and maximum score was 9.

Table 1: Distribution of respondents by socio-demographic characteristics (N=309)

Characteristic	Number (n)	Percent
Age (years)		
below 20	15	4.9
20 – 29	132	42.7
30 – 39	110	35.6
40 – 49	35	11.3
50 and above	17	5.5
Level of education		
primary education	124	40.1
secondary education	102	33.0
college education	65	21.0
no formal education	18	5.8
Marital status		
not married	116	37.5
Married	170	55.0

separated (death/divorce)	23	7.4
Occupation		
employed/self employed	168	54.4
peasant/farmer	71	23.0
house-wife	58	18.8
Other	12	3.9
Parity		
1 - 4 children	235	76.1
5 and more children	8	2.6
Nullpara	66	21.4

Table 1 shows of the total respondents, majority were in the age range 20-29 (42.7%), the mean age was 31 (SD+/- 9) years. Most of the respondents had primary education 124(40.1%). More than half were married (55%). Majority were employed/self employed 168(54.4%). Regarding parity, 235(76.1%) were parous of 1 – 4 children.

Table 2. Source of Information for the respondents

Source	Frequency (n)	Percent*
news media	105	32.3
brochures and posters	15	4.6
hospital workers	92	28.3
family and friends	12	3.7
other sources	2	0.6
Never heard	99	30.5
Total	325	100.0*

Table 2 above shows that, information from news media accounted for 32.3% of the total responses, from hospital workers 28.3% of the total responses while 30.5% of the

responses were those of respondents who never heard of cervical carcinoma. Others sources were from informal gatherings.

Note:

*the percentages are taken to a total responses and not respondents as some respondents had more than one source of information.

Table 3: Distribution of respondents by level of knowledge, attitude, practice and - reasons for not - screening for cervical carcinoma (N=309)

Variable	Number (n)	Percentage
Knowledge		
good knowledge	5	1.6
satisfactory knowledge	61	19.7
poor knowledge	243	78.6
Attitude		
Positive	172	55.7
Negative	137	44.3
Practice		
good practice (regular screening)	44	14.2
no practice	265	85.8
Reasons for not screening		
Lack of knowledge	95	30.7

fear of pain	17	5.5
Feeling shy	10	3.2
it is expensive	9	2.9
With no reasons*	178	57.6

Table 3 shows that majority (78.6%) had poor knowledge, 55.7% of had positive attitude and only 14.2% had ever been screened. Lack of knowledge was the important barrier (30.7 %.)

Note: *these had no reason for not screening; they just didn't want to go for screening

Knowledge on symptoms of carcinoma of the cervix

Vaginal bleeding was the most known symptom by respondents which accounted for 35.8% of the responses, 17.8% of the responses mentioned vaginal foul smelling discharges and 46.3% responses were for those who didn't know any symptom.

Table 4. Distribution of responses on risk factors, preventive measures and treatment options for carcinoma of the cervix.

Responses	Number (n)	Percent
Risk factors		
multiple sexual partners	54	23.2
early sexual intercourse	36	15.5
HPV infection	10	4.3
cigarette smoking	11	4.7
don't know	116	49.8
Others	6	2.6
Prevention		
avoid multiple sexual partners	46	11.7
avoiding early sexual intercourse	30	7.1

vaccination for HPV	3	1.0
screening and treatment	56	18.1
avoid/quit cigarette smoking	2	.6
don't know	89	28.8
other.......	1	.3
Treatment		
Surgery	15	4.9
Chemotherapy	74	23.9
Radiotherapy	51	16.5
don't know	39	12.6

Table 4 shows that, majority of patients don't know the risk factors for acquiring cervical carcinoma (49.8%). The most common risk factor mentioned was multiple sexual partners. Many knew that screening and treatment of premalignant lesion can prevent carcinoma of the cervix. Most patient mentioned chemotherapy as a modality of treatment.

Responses	Number	Percent
Is there a way of screening		
for cervical carcinoma	n=210	
Yes	177	57.3
No	3	1.0
don't know	30	9.4
At what interval is screening		
done?	n=183	
every year	77	24.9
every 3 years	16	5.2
every 5 years	2	.6
don't know	85	27.5
other interval...	3	1.0
Who should be screened?	n=183	

			Table 5.
any woman	145	46.9	**Distribution of**
women of 25 years and above	1	.3	**responses on**
elderly women	34	11.0	**screening**
Other	3	1.0	**questions.**
Can you mention any of the procedures used in screening	n=183		
VIA	35	11.3	
Pap smear	9	2.9	
don't know	139	45.0	

Table 5 above sh

Table 5 shows that many women (57%) knew that there is screening for cervical premalignant lesions. Only one knew the age at which one can screen and only 14% knew about one method of screening.

Table 6. Distribution of responses on attitude questions.

Attitude question.	Number	Percent
Carcinoma of the cervix is highly prevalent in our country		
Agree	95	30.7
neither agree nor disagree	132	42.7
Disagree	82	26.5
Any adult woman including you can acquire cervical carcinoma		
Agree	223	72.1
neither agree nor disagree	74	23.9
Disagree	12	3.9
Carcinoma of the cervix cannot be transmitted from one person to another		
Agree	155	50.1
neither agree nor disagree	132	42.7
Disagree	22	7.2
Screening helps in prevention of carcinoma of the cervix*		

Agree	245	79.2
neither agree nor disagree	64	20.7
Screening causes no harm to the client		
Agree	160	51.8
neither agree nor disagree	114	36.9
Disagree	35	11.3
Screening for premalignant cervical		
lesions is not expensive		
Agree	90	29.1
neither agree nor disagree	161	52.1
Disagree	58	18.7
If screening is free and causes no harm,		
will you screen		
Agree	259	83.8
neither agree nor disagree	24	7.8
Disagree	26	8.4

Table 6 shows that only a third of participants perceive carcinoma of the cervix to be a problem in Tanzania. Susceptibility perception was high as 72% of them agreed that they can acquire cervical carcinoma. Majority (79%) agreed that screening is important and 83% were ready to screen.

Note: Agree and strongly agree were combined together to form agree, disagree and strongly disagree into disagree.

 *In this question there was no disagree response.

Table 7: Association between knowledge and attitude

Knowledge level	attitude		
	positive	negative	Total
	N(%)	N(%)	N(%)
good knowledge	4(80.0)	1(20.0)	5(100.0)
satisfactory knowledge	50(82.0)	11(18.0)	61(100)
poor knowledge	118(48.6)	125((51.4)	243(100.0)
Total	172(55.7)	137(44.3)	309(100.0)

χ2 23.270   p<0.001

Level of knowledge of cervical carcinoma was associated with attitude on screening.

Those with good knowledge were more positive

Table 8. Association between knowledge and practice

practice on screening

knowledge	good practice (regular screening)	no practice	Total
	N(%)	N(%)	
good knowledge	1(20.0)	4(80.0)	5(100.0)
satisfactory knowledge	12(19.7)	49(80.3)	61(100.0)
poor knowledge	31(12.8)	212(87.2)	243(100.0)
Total	44(14.2)	265(85.8)	309(100.0)

χ2 2.047   p>0.05

Level of knowledge was not significantly associated with practice as shown in table 8.

Practice was equally poor to those with good knowledge and with poor knowledge.

DISCUSSION

In this study, knowledge, attitude, practice and barriers to cervical cancer screening were identified. The study found that women were not aware of cervical carcinoma and also screening for premalignant cervical lesions. Among all the respondents in this study, about one third had never heard of cervical carcinoma. This appears to be a problem of developing and underdeveloped world as studies done in Cameroon by Tebeu[15], 2008 and in Lagos by Anorlu et al in 2008[2] and in Ethiopia by Terefe et al[28] have shown similar pattern of lack of awareness. However, In Dar es Salaam, Ilala District, awareness was found to be high as three quarters of the respondents were aware of carcinoma of the cervix[29]. This can be explained by the fact that Ilala is an urban area where people are much more exposed to health facilities, screening services and varieties of news media and hence causing the difference of awareness between this area and where my study was done, which is an upcountry area. Women in developed countries also appear to be more aware on carcinoma of the cervix and screening as indicated in a study done in Mexico where 75% of women had information about screening and carcinoma of the cervix[30]

The level of knowledge was found to be low in this study, only a fifth of respondents were knowledgeable about carcinoma of the cervix and screening. In developed countries the level of knowledge was found to be high. In studies done in Kuwait[14] and London[13], 52% and 76% of respondents were knowledgeable respectively.

Knowledge on symptoms was also poor. Almost half of the respondents didn't know the symptoms for carcinoma of the cervix. Vaginal bleeding was the commonly mentioned symptom among study participants. This finding is similar to the finding in a study done in Ilala Dar es salaam[29].

The risk factors to acquire carcinoma of the cervix were known by 50% of the respondents. The most common risk factor mentioned was multiple sexual partners. This finding is different from the finding in a study done in Ilala Municipality, Dar es salaam where the most common mentioned risk factors were early marriage and multiparity [29]. In a Niger survey, twenty two percent of the respondents could not list any risk factor for cervical carcinoma[31], while in a study done in Ghana[32], the commonly mentioned risk factor by half of the respondents was multiple sexual partners, similarly to what was found in my study. The knowledge on risk factors is an important element in the prevention of cervical carcinoma. Knowing the risk factors can make someone avoid them and hence prevent herself from acquiring the disease. Knowledge on Risk factors was poor in this study and hence education on this important part with respect to prevention should be provided.

Respondents were also ignorant about HPV infection and its link to cervical cancer. Of all the respondents in this study only 10 mentioned HPV as an important factor in causation of cervical carcinoma. The so called 'elite' population also seems not to be aware of the causative agent as shown in a cross-sectional survey among college women in a university

in Ghana that showed that only 7.9% were aware of the link between human papillomavirus and cervical cancer[32]. This can affect prevention as it is difficult for these women to go for vaccination if they don't know the link between HPV and cervical carcinoma.

Women's knowledge of who should receive cervical cancer screening was also very poor, only one respondent in this study knew exactly the age (according to WHO) at which one has to undergo screening. Half of the respondents mentioned any woman irrespective of her age is eligible for screening. More than half of the respondents, who were aware of cervical carcinoma, knew that carcinoma of the cervix can be screened but only 14% mentioned at least one screening method, majority mentioned VIA (11%) and few mentioned Pap smear. VIA was mentioned by many because it is the method of screening that is performed in the study area.

The differences in level of knowledge between developed and developing countries could be due to different populations involved and different levels of intervention such as existing population-based screening programmes, or mass media campaigns to popularize cervical screening which are effectively done in developed than developing countries, among them Tanzania. The health system in developed countries is well organized, people are well motivated, sensitized and there is full access to health care services. The difference can also be due to cultural barriers where women in developing countries do

not discuss diseases affecting the sexual organs as it is considered to be private and women feel shy to discuss anything affecting it.

This study also looked at the respondent's attitude on cervical cancer and screening. Overall more than half of the respondent had a positive attitude towards screening and cervical cancer. However, only one third perceived it as a big problem in Tanzania. Three quarters of respondents agreed that screening is important in prevention of cervical carcinoma. This finding was rather similar to the finding in a study in Ghana where 87% of respondents agreed that screening is important[9]. Susceptibility perception was also a problem; we know that the perception of one's susceptibility to cervical cancer can affect screening behavior. A significant number of women (half of the respondents) expressed lack of personal susceptibility to cervical cancer and therefore believed it was unnecessary for them to have any screening done. A similar finding in a study done in Ghana showed that 48% of women expressed lack of susceptibility to cervical carcinoma[32]. More than three quarters of the respondents in this study agreed that they could avail themselves to screening if they were knowledgeable and if screening was free of charge and causes no harm. This means that if some barriers are eliminated many women could go for screening.

The practice was also determined. In this study only 14% of the respondents had undergone screening. This is also a problem of many African countries. In a study done in Kenya, 22% of respondents were screened. Another study done in Ethiopia showed that

only 6.5% of all the respondents ever had a Pap smear screening test[28]. In South Africa a study done by Wellensiek et al showed that only 19% of the respondents had undergone screening test[19]. The situation was worse in Nigeria; Udigwe GO in 2006 did a study that showed that among the study respondents only 5.7% of respondents had undergone a screening test[20]. Generally women in African countries do not screen for cervical premalignant lesions and this causes these women to present in hospital with advanced disease (Stage IIB-IV) according to this study) which was shown in a study done at Muhimbili in 2002 where 90% of women at Muhimbili presented with an advanced disease[23] (stage IIB – IV).

There were huge differences when comparing the practice in African countries and practice in developed countries. In London for example, 80.5% of women had at least 1 Pap smear and 71.5% reported regular smears[13].

The young women in the 20–29 years age group had smallest proportion of women who had taken the test. Contrary in Jordan older women were the least likely to have Pap smears in their lifetime, currently or regularly[33]. The results in this study can be explained by the fact that younger women tend to be healthier and thus would not seek medical advice but also according to WHO, women who are eligible for screening are those from 25years (but others recommend those who are sexually active to be eligible for screening) and above and hence majority of women in this age group are not eligible. Majority of women who were screened in this study were in the age rage 40 – 49.

Reasons hindering cervical cancer screening have been shown to exist in many countries. The greatest reason in this study was the inadequate knowledge about the disease and screening tests which was mentioned about a third of respondents. The other reasons were fear of pain, shyness, thought it was expensive and also others thought they are health and they didn't have a reason to screen. In other studies barriers toward screening were embarrassment, pain, or the procedure being bothersome. Others were psychological fear and physiological pain [21]. The findings of this study suggest that it is important to provide information about the value of cervical cancer screening and to eliminate barriers. It is hence obvious that screenings test for cervical cancer screening will not increase unless knowledge is improved and barriers (reasons that hinder cervical cancer screening) are eliminated.

The other reasons for the low screening uptake in this study, apart from the barriers mentioned above, could be attitude where women are lacking awareness of susceptibility to cervical cancer hence one seeing no need to go for screening. Many women also did not perceive carcinoma of the cervix to be a big problem in Tanzania; this also contributed to low turnout for screening. Poor commitments and lack of priorities for women's sexual and reproductive health especially those not related to maternity and family planning is also a problem. In setting of priorities cervical carcinoma is not considered a priority despite its high incidence, morbidity and mortality as it is for other disease like malaria, TB, leprosy and breast cancer. There is no single national

programme in Tanzania that is raising awareness for cervical carcinoma and screening among women and there is a limited access to health care services, absent or poor quality screening programmes.

Level of knowledge of cervical carcinoma was associated with positive attitude but not with practice towards screening. Those with good knowledge were more positive. However some of the figures in these associations were small, and this study being cross-sectional, it was difficult to come into conclusion of the associations between level of knowledge with attitude as well as practice.

CONCLUSION

Cervical cancer continues to be a major public health problem in Tanzania.

This study revealed the limited knowledge about cervical cancer and low rate of screening for premalignant cervical lesions.

The findings highlighted lack of knowledge and information on factors that may have contributed to women's non-attendance at screening. It is not surprising that the women's reluctance to undergo cervical cancer screening appears to be based on lack of knowledge about the cervical cancer, the risk factors of cervical cancer and also lack of knowledge on the eligibility and availability of screening services. Education, communication and reassurance are required to overcome such resistances.

Women's attitude was generally positive as most of them showed a positive attitude towards screening for premalignant cervical lesion. This attitude however did not improve practice and this could have been contributed by barriers that were lack of knowledge, thinking that screening is costly, and perception that the procedure is painful and other barriers as shown in the results.

RECOMENDATIONS

Efforts to reduce cervical cancer mortality should focus on reaching out to the women all over the country and provide health education, barrier-specific counseling as well as community-based interventions.

Efforts to promote cervical cancer screening among women should focus on informing women of their susceptibility to cervical cancer and encouraging a belief that active and regular screening can detect the pre-cancerous stage, hence enabling early treatment and prevention of cancer development.

Women should be encouraged to take responsibility for their own health and be active participants in the screening programme. The mass media plays an important role in this context, and its function should be optimized - as shown in this study that most people with information obtained it from mass media (46.2%) compared to Kenya where one study showed that 82% of respondents got information from health care providers. In addition, effective delivery methods, such as the use of local celebrities (as used in malaria

no more campaign) as role models to champion the uptake of screening, can increase public attention as well as effect behavioral change in screening practices among women.

Opportunistic screening can increase screening rates. A woman undergoing gynaecological examination or seeking reproductive healthcare is more likely to receive a recommendation for a screening procedure. At the same time, healthcare providers such as general practitioners and gynaecologists need to do their part in promoting cervical cancer screening. They should disseminate information that focus on educating the women about cervical cancer risks, prevention and early detection to enhance uptake of screening practices.

The government should play its part by increasing health care budgets and put priority on cervical cancer prevention by establishing a national awareness campaign, spreading screening services all over the country using cheap screening procedures that have shown to have reasonable sensitivity and specificity. Women are dying with cervical malignancy more than any other malignancy in Tanzania; please politicians have the political will to reduce these preventable deaths.

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Appendices

Appendix 1:

Questionnaire (English version)

Knowledge Attitude practice and perceived barriers for premalignant cervical screening among women aged 18 and above in Songea Urban, Ruvuma

Interviewer: circle the selected answer(s).Do not read responses.

General and demographic questions

1. Questionnaire number……..

2. Ward …………..

3. Age…………….

4. Level of education

      1.   no formal education

      2.   primary education

      3.   secondary education

      4.   college education

5. Occupation

      1.   employed/self employed

      2.   peasant

      3.   housewife

      4.   other mention

6. Marital status

1. Single

2. Married

3. Separated

7. Parity

1. nullipara

2. 2.1 – 4 children

3. 5 and above children

Knowledge on cervical cancer

8. Have you ever heard about cervical cancer?

1. Yes (go to 8)

2. No (go to 9)

9. Where did you first learn about carcinoma of the cervix? (Check all that are mentioned.)

1. News Media

2. Brochures, posters and other printed materials

3. Health workers

4. Family, friends, neighbors and colleagues

5. Religious leaders

6. Teachers

7. Other (please explain):

10. What are the symptoms of carcinoma of the cervix? (Please check all that are mentioned.)

  1. Vaginal bleeding

  2. Vaginal foul smelling discharges

  3. Do not know

  4. Other:

11. What are the risk factors for cancer of the cervix? (Please check all that are mentioned.)

  1. Having multiple sexual partners

  2. Early sexual intercourse

  3. Acquiring HPV virus

  4. Cigarette smoking

  5. Do not know

  6. Other (please explain):

12. How can a person prevent getting cancer of the cervix? (Please check all that are mentioned.)

  1. Avoid multiple sexual partners

  2. Avoid early sexual intercourse

  3. Quit smoking

  4. through vaccination of HPV vaccine

  5. Do not know

  6. Other (please explain):

13. Can cancer of the cervix be cured in its earliest stages?

    1. Yes

    2. No (go to 15)

    3. Don't know (go to 15)

14. How can someone with cancer of the cervix be treated? (Check all that are mentioned.)

    1. Herbal remedies

    2. surgery

    3. Specific drugs given by hospital

    4. radiotherapy

    5. Do not know

    6. Other:

15. How expensive do you think cancer of the cervix treatment is in this country? (Please check one.)

    1. It is free of charge

    2. It is reasonably priced

    3. It is somewhat/moderately expensive

    4. It is very expensive

    5. 5.dont know

Knowledge on screening for premalignant cervical lesion.

16. are there screening procedures to detect premalignant cervical lesion?

    1. Yes

    2. No (go to 24)

17. How frequent is screening for premalignant cervical lesion done?

    1. Once every year

    2. Once every three years

    3. Once every 5 years

    4. Any other…..mention

18. Who should be screened?

    1. Women of 25years and above

    2. Prostitutes

    3. Elderly women

    4. Others……………….

19. Can you mention any of the procedures used in screening for premalignant cervical lesions?

    1. VIA

    2. VILI

    3. Pap Smear

    4. 4.dont know

    5. other……………

ATTITUDE

20. Carcinoma of the cervix is highly prevalent in our country and is a leading cause of deaths amongst all malignancies in Tanzania.

    1.   strongly agree

    2.   agree

    3.   neither agree nor disagree

    4.   disagree

    5.   strongly disagree

21. Any adult woman including you can acquire cervical carcinoma

    1.   strongly agree

    2.   agree

    3.   neither agree nor disagree

    4.   disagree

    5.   strongly disagree

22. Carcinoma of the cervix cannot be transmitted from one person to another

    1.   strongly agree

    2.   agree

    3.   neither agree nor disagree

    4.   disagree

    5.   strongly disagree

23. Screening helps in prevention of carcinoma of the cervix

1. strongly agree

2. agree

3. neither agree nor disagree

4. disagree

5. strongly disagree

24. Screening causes no harm to the client

1. strongly agree

2. agree

3. neither agree nor disagree

4. disagree

5. strongly disagree

25. Screening for premalignant cervical lesions is not expensive

1. strongly agree

2. agree

3. neither agree nor disagree

4. disagree

5. strongly disagree

26. If screening is free and causes no harm, will you screen

1. strongly agree

2. agree

3. neither agree nor disagree

4. disagree

5. strongly disagree

Practice towards screening for premalignant cervical lesion

27. Have you ever screened for cancer of the cervix

1. Yes (go to 28)

2. No (go to 29)

28. If yes how many times in since you become sexually active

1. Once

2. More than once

29. When was the last time you screened

1. within the past three years

2. More than three years ago.

30. If no, why?

1. It may be painful.

2. I feel shy

3. I am healthy

4. My husband would not agree

5. I am afraid a screening test would reveal cervical cancer

6. it is expensive

7. I am not informed/knowledge

8. I haven't just decided

9. other

Appendix 2:

Dodoso

Ufahamu mtazamo, matendo na vikwazo kuhusu saratani ya shingo ya kizazi na upimaji wa hatua za awali za saratani ya shingo ya kizazi kwa kinamama wa miaka 18 na zaidi katika mji wa Songea, Ruvuma.

Maelekezo:

Zungushia nambari ya jibu litakalotajwa, usisome majibu.

1.   **Nambari ya dodoso…………….**

2.   **Kata/unapoishi………………….**

3.   **umri ………**

4.   **Elimu yako**

    1.   Sina elimu rasmi

    2.   Elimu ya msingi

    3.   Elimu ya sekondari

    4.   Elimu ya chuo

5.   **Unafanya kazi gani?**

    1. nimeajiriwa/nimejiajiri

    2. mkulima

    3. mama wa nyumbani

    4. nyingine taja………………

6. **Hali yako ya mahusiano**

1. Sijaolewa

2. Nimeolewa

3. Nimetengana na mume (amefariki/amenitaliki)

7. **Umezaa mara ngapi?**

1. Sijazaa

2. Mara 1 - 4

3. mara 5 na zaidi

Ufahamu kuhusu saratani ya shingo ya kizazi

8. **Umewahi kusikia kuhusu saratani ya shingo ya kizazi?**

1. Ndio

2. Hapana (Nenda swali la 20)

9. **kama ndio, ulisikia kutoka chanzo gani?**

1. Vyombo vya habari

2. Vijarida au machapisho ya kwenye kuta

3. Wafanyakazi wa afya/hospitali

4. familia/marafiki

5. viongozi wa dini

6. mwalimu

7.   chanzo kingine…..taja………………

10.   Je! dalili za saratani ya shingo ya kizazi ni zipi?

1.   Kutoka damu ukeni

2.   Kutoka maji yenye harufu ukeni

3.   Sijui

4.   Nyingine………..

11.   Taja hali hatarishi zinazoweza kumfanya mtu apate saratani ya shingo ya kizazi

1.   kuwa na wapenzi wengi

2.   kufanya mapenzi katika umri mdogo

3.   kuambukizwa virusi (aina ya HPV - Human papilloma virus)

4.   uvutaji wa sigara

5.   sijui

6.   nyingine taja………..

12.   Mtu anawezaje kujikinga asipate saratani ya shingo ya kizazi?

1.   Kuepuka wapenzi wengi

2.   Kuepuka kufanya mapenzi katika umri mdogo

3.   Kupata chanjo ya virusi vya HPV

4.   Kupima viashiria vya saratani na kutibiwa

5.   Kuepuka uvutaji wa sigara

6.   Sijui

7.   Njia nyingine……….taja……

13. Je Saratani ya shingo ya kizazi inaweza kutibika?

      1.   Ndio

      2.   Hapana (nenda swali namba 16)

      3.   Sijui (nenda swali la 16)

14.   Mtu mwenye saratani ya shingo ya kizazi anaweza kutibiwaje?

      1.   Kwa dawa za mitishamba

      2.   Upasuaji

      3.   Kwa dawa za hospitali

      4.   Kwa mionzi

      5.   Sijui

      6.   Njia nyingine….taja.

15.   Je gharama za matibabu ya saratani ya shingo ya kizazi zikoje hapa nchini?

      1.   Ni bure

      2.   Sio kubwa

      3.   Ni kubwa kiasi

      4.   Ni kubwa sana.

      5.   Sijui

Ufahamu kuhusu upimaji wa viashiria vya saratani ya shingo ya kizazi

16. **Je kuna uchunguzi wowote unaoweza kufanywa kwenye shingo ya kizazi kuangalia viashiria vya saratani ya kizazi kabla ya saratani kutokea?**

      1.   Ndio

      2.   Hapana (nenda swali la 20)

17. **Je uchunguzi huu wa viashiria vya saratani ya kizazi unatakiwa ufanywe kila baada ya muda gani?**

      1.   Kila mwaka

      2.   Kila baada ya miaka mitatu

      3.   Kila baada ya miaka mitano

      4.   Sijui

      5.   Mara nyingine (taja)…..

18. **Nani anapaswa kufanyiwa uchunguzi huu wa awali wa viashiria vya saratani ya kizazi?**

      1.   Wanawake wa umri wa miaka 25 na zaidi

      2.   Wawake wanaouza miili yao

      3.   Wanawake wazee

      4.   Wengine (taja)………….

19. **Taja njia yoyote ya uchunguzi wa viashiria vya saratani ya kizazi unayoifahamu**

1. VIA

2. VILI

3. Pap Smear

4. Sijui

5. Nyingine taja……………………

Mtazamo kuhusu upimaji wa viashiria vya saratani ya shingo ya kizazi.

20. **Tatizo la saratani ya shingo ya kizazi ni kubwa sana hapa nchini Tanzania na linasababisha vifo vingi**

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

21. **Mwanamke yoyote mtu mzima, pamoja na wewe, yuko kwenye hatari ya kupata saratani ya kizazi**.

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

22. Saratani ya shingo ya kizazi haiambukizi

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

23. upimaji wa viashiria vya saratani ya kizazi unasaidia kujikinga na saratani ya shingo ya kizazi

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

24. Upimaji wa viashiria vya saratani ya kizazi hauna madhara kwa mpimwaji

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

25. **Upimaji wa viashiria vya saratani ya kizazi hauna gharama**

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

26. **Kama ukiambiwa upimaji hauna gharama wala madhara, ungependa kupima?**

1. Nakubali sana

2. Nakubali

3. Sina uhakika

4. Nakataa

5. Nakataa kabisa

Upimaji wa viashiria vya saratani ya shingo ya kizazi.

27. **Je umewahi kufanyiwa uchunguzi wa viashiria vya saratani ya shingo ya kizazi?**

1. Ndio

2. Hapana (nenda swali la 30)

28. **Kama ni ndio, umefanyiwa mara ngapi?**

1. Moja

2. Zaidi ya mara moja

29. **Je ulifanyiwa lini kwa mara ya mwisho?**

1. Ndani ya mitatu iliyopita

2. Zaidi ya miaka mitatu iliyopita

30. **Kama hujawahi kufanyiwa uchunguzi, ni kwa sababu gani?**

1. Nahisi nitasikia maumivu

2. Naona aibu

3. Nina afya sihitaji uchunguzi

4. Mume wangu hataruhusu

5. Nina wasi wasi nitagundulika na saratani ya kizazi

6. Gharama ni kubwa

7. Sina ufahamu wa kutosha

8. Sijaamua tu. Hakuna kinachonizuia.

9.   Sababu nyingine

taja…………….

For investigators use:

 A.   **Knowledge**

1. High level of knowledge (Good)

2. Moderate level (satisfactory)

3. Low level (Poor)

 B.   **Attitude**

1. Positive

2. Negative

C. **Practice**

1   Good practice

2   No practice

D. **Barriers** (refer question number 30)

Appendix 3:

Original Bloom's Cut Off Points

80 – 100% - Good Knowledge

60- 79% - Moderate Knowledge

<60% - Poor Knowledge