

Research Article

# Attitudes and Practices of Women Towards Cervical Cancer Screening in Lesotho: A Descriptive Cross-Sectional Survey

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## Abstract

In 2020, Lesotho reported 541 new cases of cervical cancer and 362 women died. This study aimed to assess the attitudes and practices of women towards cervical cancer screening. A quantitative descriptive cross-sectional design was used to collect data from 289 participants who were selected using convenience sampling from 27 health facilities. Permission to conduct the study was obtained from the National University of Lesotho and the Ministry of Health (ID43-2022). The written informed consent was sought from the participants who took part voluntarily. Data were analyzed using the SPSS (Statistical Packages for Social Sciences) version (26). Respondents aged 30 to 34 years (94.0%) and above 35 years (95.9%) had positive attitudes towards cervical cancer screening. Fifty-one percent of the respondents had done cervical cancer screening. Respondents who had two (65.5%) and four to eight children (52.4%) and were employed (64.0%) had cervical cancer screening done before. Most of the respondents strongly agreed that cervical cancer screening detected cervical changes before they became cancerous (55%) and if found early, they are easily curable (56.7%), and made women know if they were healthy (58.8%). Healthcare professionals should conduct health education on cervical cancer and screening on a daily basis in health facilities to improve the uptake of cervical cancer screening.

## Keywords

Cervical Cancer, Screening, Attitudes and Practices, Lesotho

## 1. Introduction

World Health Organization (WHO) reported that cervical cancer was a grave threat to women's health and that globally, a woman dies of cervical cancer every two minutes [1]. Arbyn, Wiederpass, Bruni, de Sanjose, Saraya, Ferlay & Bray reported that cervical cancer was reported as the most common cancer after breast cancer and that it was killing women globally [2]. Furthermore, Arbyn et al, indicated that the

worldwide incidence of cervical cancer was estimated at 570 000 per 100 000 women in 2018 and that there were 311 000 deaths per 100 000 women that were related to cervical cancer and 90% of the deaths that occurred in 2018 were in low and middle-income countries [2]. China and India were reported to have contributed more than a third of the global cervical cancer burden with 106 000 cases per 100 000 women in

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China and 97 000 cases per 100 000 women in India [3]. The Lancet Global Health 2019 [3] further reported that the highest incidence of cervical cancer was estimated in and approximately 6.5% of women will develop cervical cancer before the age of 75 years. Kamiza reported that the age-standardized incidence rate in Southern Africa was 43.4% per 100 000 women, 40.1 per 100 000 women in Eastern Africa, 29.6 per 100 000 women in Western Africa and 26.8 per 100 000 women in Middle Africa [4].

Cervical cancer screening tests are free in most of the clinics and hospitals in Lesotho. Visual inspection with Acetic Acid (VIA) and visual inspection with Lugol's iodine (VILI) tests are painless, and safe and the outcome is known immediately after the administration of the test. The Country Operational COP 2019 Strategic Directions Summary revealed that Lesotho had significant programmatic gaps in the uptake of cervical cancer services [5]. The report highlighted that only 47% of the women aged 15 years to 49 years have heard of cervical cancer screening and only 4% of the women had cervical screening test in the past twelve months [5].

Previous studies conducted by Tekle and fellow researchers indicated that more than half (54.5%) of women had negative attitudes towards cervical cancer screening while 45.1% of the women had positive attitudes [6]. The respondents 174 (33.5%) agreed that cervical cancer is becoming a problem in Ethiopia while 114 (22.1%) of the respondents strongly agreed that anyone including themselves are at risk of developing cervical cancer [6]. However, the report reiterated that most of the respondents (38.2%) agreed that cervical cancer screening was essential and 42.1% were willing to undergo cervical cancer screening [6]. In another study that was conducted in Nepal in 2018 by Thapa and fellow researchers, it was found that women who were literate and married had more negative attitudes towards cervical cancer screening than women who were illiterate and married [7]. This shows that being educated and married does not motivate women to go for cervical cancer screening and women need proper and continuous awareness on cervical cancer and cervical cancer screening. A similar study on knowledge, attitudes and practices of cervical cancer screening that was conducted by Thapa et al, in 2018 had similar results to that of the study that was conducted by Tekle and the colleagues, and other several studies. In the study that was conducted by Heena et al in 2019, the participants believed that the Pap smear test was useful in detecting cervical cancer (86.8%) but only 26% of the participants had undergone Pap smear testing [8]. The participants in a similar study also believed that the Pap smear test should be started at the age of 20 years, 30 years and after menopause and, should be performed by a doctor [8].

## 2. Methodology

A quantitative descriptive cross-sectional study was used to collect data from 289 women aged 18 to 59 years and were

conveniently sampled from 27 healthcare facilities in Leribe district. A pilot study was conducted on 30 respondents to ensure the validity and reliability of the data collection tool. The questionnaire collected information on the demographic data, attitudes, and practices towards cervical cancer screening. Data was collected from the 27<sup>th</sup> of May to the 6<sup>th</sup> of June 2022. Ethical clearance to conduct the study was obtained from the National University of Lesotho Institutional Review Board (IRB) and the Ministry of Health Research and Ethics Committee (ID43-2022). Written informed consent was obtained for the respondents who voluntarily took part and were identified using codes. They were also allowed to withdraw from participating in the study if they felt uncomfortable without any prejudices. The respondents who needed assistance to fill the questionnaire were assisted and queries and clarifications were also addressed by the researcher and the recruited data collector. Upon completion, the questionnaires were collected and kept under lock and key. Data were analyzed using SPSS version (26) and presented using descriptive and inferential statistics.

## 3. Results

### 3.1. Demographic Characteristics

The socio-demographic data of the respondents included age, marital status, highest education attained, work status and the number of children the respondent has. Twenty-eight percent (n=82) of the respondents were women aged below 25 years of age, 20.4% (n=59) were aged 25 to 29 years of age, 17.3% (n=50) were aged 30 to 34 years and 33.9% (n=98) were aged above 35 years of age. Nineteen percent (n=55) of the respondents were single, 1% (n=3) were cohabiting, 74% (n=214) were married and 5.9% (n=17) of the respondents were divorced or separated. Two percent (n=7) respondents did not attend school, 21.1% (n=61) attended school up to primary level, 36% (n=104) up to junior level, 20.4% (n=59) up to senior high school and 20.1% (n=58) of the respondents attended school up to tertiary level. Less than one percent (n=1) of the respondents were retired, 2.1% (n=6) were students, 30.8% (n=89) were employed and 66.8% (n=193) of the respondents were unemployed. Eleven percent (n=34) of the respondents had no children, 30.4% (n=88) had only one child, 29.1% (n=84) had two children, 14.2% (n=41) had three children and 14.5% (n=42) of the respondents had four up to eight children.

### 3.2. The Attitudes of Women Towards Cervical Cancer Screening

Fifty-five percent 55% (n=159) of the respondents strongly agreed that cervical cancer screening can detect cervical changes before they become cancerous, 35.6% (n=103) agreed, 7.6% (n=22) were not sure, 0.3% (n=1) disagreed and 1.4% (n=4) of the respondents strongly disagreed that cervical

cancer screening can detect cervical changes before they become cancerous. The mean was 4.43, the standard deviation was 0.765, the median was 5.00 and the interquartile range was 1.0.

Fifty-six-point seven percent (n=164) of the respondents strongly agreed that if cervical changes are found early, they are easily curable, 32.5% (n=94) agreed, 6.6% (n=19) were not sure, 1.4% (n=4) disagreed and 2.8% (n=8) strongly disagreed. The mean was 4.39, the standard deviation was 0.887, the median was 5.00 and the interquartile range was 1.0.

Fifty-eight percent (n=170) of the respondents strongly agreed that cervical cancer screening will let a woman know if she is healthy while 35.6% (n=103) agreed. Three percent (n=9) of the respondents were not sure, 0.7% (n=2) disagreed and 1.7% (n=5) of respondents strongly disagreed that cervical cancer screening will make a woman to know if she is healthy. The mean was 4.49, the standard deviation was 0.751, the median was 5.00 and the interquartile range was 1.0.

Twenty-six percent 26.3% (n=76) of the respondents strongly agreed that married women go for cervical cancer screening more than women who are not married and 34.6% (n=100) agreed. Twenty-two-point five percent (n=65) of the respondents were not sure, 11.4% (n=33) disagreed and 5.2% (n=15) of the respondents strongly disagreed that married women go for cervical cancer screening more than women who are not married. The mean was 3.65. The standard deviation was 1.139, the median was 4.00 and the interquartile range was 2.0.

Twenty-two percent (n=66) of the respondents strongly agreed that women educated beyond tertiary level go for cervical cancer screening more than their counterparts, 30.4% (n=88) agreed 17.6% (n=51) were not sure, 20.1% (n=58) disagreed and 9% (n=26) of the respondents strongly disagreed that women educated beyond tertiary level go for cervical cancer screening more than their counterparts. The mean was 3.38, the standard deviation was 1.280, the median was 4.00 and the interquartile range was 2.0.

Eleven percent (n=33) of the respondents strongly agreed that it is embarrassing to have cervical cancer screening, 32.5% (n=94) agreed and 5.5% (n=16) of the respondents were not sure if it is embarrassing to have cervical cancer screening. Twenty-one percent (n=62) of the respondents disagreed that it is embarrassing to have cervical cancer screening while 29.1% (n=84) of the respondents strongly disagreed. The mean was 2.76, the standard deviation was 1.452, the median was 2.00 and the interquartile range was 3.0.

Twenty-eight percent of the respondents (n=83) strongly agreed that health facilities that are too far away discouraged women from going for cervical cancer screening while 46.4% (n=134) agreed. Forty-two percent (n=12) of the respondents were not sure whether health facilities which are too far discouraged women from going for cervical cancer screening, 21.5% (n=36) disagreed and the remaining 8.3% (n=24) of the respondents strongly disagreed. The mean was 3.75, the

standard deviation was 1.231, the median was 2.00 and the interquartile range was 1.5.

Thirty-six percent of the respondents (n=105) strongly agreed that a shortage of staff in the health facilities leads to delays in cervical cancer screening while 39.1% (n=113) of the respondents agreed. A small percentage 3.8% (n=11) of the respondents were not sure whether a shortage of staff in the health facilities leads to delay in cervical cancer screening, 11.1% (n=32) disagreed and the remaining 9.7% (n=28) of the respondents strongly disagreed. The mean was 3.81, the standard deviation was 1.299, the median was 4.00 and the interquartile range was 1.0.

Thirty-nine 39.1% (n=113) respondents strongly agreed that lack of skills and competence of the nurses delay cervical cancer screening and 36.7% (n=106) agreed. About 7% percent (n=20) of the respondents were not sure that the lack of skills and competence of the nurses delayed cervical cancer screening, 8.7% (n=25) disagreed and 8.7% (n=25) of the respondents strongly disagreed that lack of skills and competence of the nurses delay cervical cancer screening. The mean was 1.256, the median was 4.00 and the interquartile range was 1.0.

Forty-five point seven 45.7% (n=132) strongly agreed that lack of and inadequate tools and equipment are more likely to delay cervical cancer screening while a small percentage of 39.8% (n=115) of the respondents agreed. Five percent (n=15) of the respondents were not sure as to whether lack of and inadequate tools and equipment are more likely to delay cervical cancer screening, 4.5% (n=13) disagreed and the remaining 4.8% (n=15) of the respondents strongly disagreed that lack of and inadequate tools and equipment are more likely to delay cervical cancer screening. The mean was 4.17, the standard deviation was 1.049, the median was 4.00 and the interquartile range was 1.0.

Forty percent (n=117) of the respondents strongly agreed that health services that are not comprehensive lead to delays in cervical cancer screening while 36.7% (n=106) of the respondents agreed. Four five percent (n=13) respondents were not sure whether health services that are not comprehensive lead to a delay in cervical cancer screening, 13.5% (n=39) disagreed and 4.8% (n=14) strongly disagreed that health services that are not comprehensive lead to a delay in cervical cancer screening. The mean was 3.94, the standard deviation was 1.195, the median was 4.00 and the interquartile range was 1.0.

Thirty-eight percent (n=111) of the respondents strongly agreed with the statement that having cervical cancer will make a woman's life very difficult and 29.1% (n=84) agreed. Seven percent (n=21) of the respondents were not sure, 16.3% (n=47) disagreed and the remaining 9% (n=26) strongly disagreed that having cervical cancer will make a woman's life very difficult. The mean was 3.72, the standard deviation was 1.358, the median was 4.00 and the interquartile range was 3.0.

There was no statistically significant relationship between the attitudes categories and ages of the respondents [ $\chi^2(1, N =$

289) = 6.16,  $p = 0.10$ ], the marital status [ $X^2$  (1,  $N = 289$ ) = 1.51,  $p = 0.47$ ], educational level [ $X^2$  (1,  $N = 289$ ) = 7.51,  $p = 0.11$ ], number of children [ $X^2$  (1,  $N = 289$ ) = 2.42,  $p = 0.30$ ], and work status [ $X^2$  (1,  $N = 289$ ) = 2.11,  $p = 0.15$ ].

### 3.3. Cervical Cancer Screening Practices

Ninety-six percent ( $n=278$ ) of the respondents reported that there were cervical cancer screening services in their health facilities while 3.8% ( $n=11$ ) of the respondents reported that there were no cervical cancer screening services in their health facilities. Forty-eight percent ( $n=140$ ) of the respondents did not have cervical cancer screening and 51.6% ( $n=149$ ) had cervical cancer screening.

Less than one percent ( $n=2$ ) of the respondents had cervical cancer screening in 2009, 2012 and 2016. In 2017, two percent ( $n=8$ ) had cervical cancer screening while in 2018 it was only 3.5% ( $n=10$ ). In 2019, six percent ( $n=18$ ) had screened and in 2020, 9 percent ( $n=27$ ) had screening. In 2021, sixteen percent ( $n=48$ ) had cervical cancer screening tests and in June 2022, eleven percent ( $n=33$ ) had cervical cancer screening tests. Forty-eight percent ( $n=140$ ) did not do cervical cancer screening.

Thirty-one percent ( $n=91$ ) of the respondents had one cervical cancer screening, 13.5% ( $n=39$ ) had two cervical cancer screenings and 3.8% ( $n=11$ ) of the respondents had three cervical cancer screenings. Two percent ( $n=6$ ) of respondents had four cervical cancer screenings and 0.7% ( $n=2$ ) of the respondents had five cervical cancer screenings. Forty-eight percent ( $n=140$ ) of the respondents have not had cervical cancer screening.

Six percent ( $n=18$ ) of the respondents did not know the type of screening that was done, 10.4% ( $n=30$ ) had a Pap smear and 33.2% ( $n=96$ ) of the respondents had cervical cancer screening with VIA. One percent ( $n=3$ ) of the respondents had cervical cancer screening with both VIA and Pap smear while 0.7% ( $n=2$ ) respondents had cervical screening with both VIA and VILI. One percent ( $n=5$ ) of the respondents were not satisfied with cervical cancer screening results, 49.8% ( $n=144$ ) were satisfied and 48.4% ( $n=140$ ) had not done cervical cancer screening. Four percent ( $n=13$ ) of the respondents did not screen as they feared bad results, 1.4% ( $n=4$ ) did not have money for transport, and 31.1% ( $n=90$ ) had no reasons. Eight percent ( $n=23$ ) of the respondents felt uncomfortable doing the test, 0.7% ( $n=2$ ) had to walk for a long distance to the facilities, 0.3% ( $n=1$ ) of the respondent did not undergo cervical cancer screening because their culture did not allow her, and 2.4% ( $n=7$ ) of the respondents did not do screening because the nurses were busy.

There was a statistically significance relationship between whether the women had cervical cancer screening done before and the age of the respondents [ $X^2$  (1,  $N = 289$ ) = 33.66,  $p = 0.000$ , number of children [ $X^2$  (1,  $N = 289$ ) = 20.52,  $p = 0.000$ ], and work status [ $X^2$  (1,  $N = 289$ ) = 11.3,  $p = 0.010$ ].

There was no statistically significant relationship between

whether the women have had cervical cancer screening done before and marital status [ $X^2$  (1,  $N = 289$ ) = 3.92,  $p = 0.271$ ] and education [ $X^2$  (1,  $N = 289$ ) = 4.12,  $p = 0.390$ ].

## 4. Discussion

The study findings revealed that personal and interpersonal factors like age, marital status, level of education, employment status and the number of children one has an influence on the uptake of cervical cancer screening. The respondents in all age groups had a positive attitude towards cervical cancer screening. The results in this study further revealed that most of the respondents aged 30 to 34 years may think that they are more vulnerable to cervical cancer as opposed to those who are younger because a larger percentage (72% & 64.3%.) reported having had cervical cancer screening as compared to those aged less than 25 years up to 29 years respectively. The findings also revealed that marital status influenced cervical cancer screening. Respondents who were married 53% and divorced or separated 64.7% reported to have had cervical cancer screening than those who were single. The results also showed that education is not a predictor of cervical cancer screening like it was thought. In this study, the percentage of the respondents who had not attended school (57.1%) and reported to have had cervical cancer screening is still high and the respondents who attended school up to primary level had higher percentages than the percentages of the respondents with higher education. The employment status has proved to be a predictor of cervical cancer screening because the percentage of the respondents who were employed (64%) and have had cervical cancer screening is higher as compared to that of the respondents who were not employed (46.6%).

### 4.1. The Attitudes of Women Towards Cervical Cancer Screening Services

Negative attitudes lead to low uptake of cervical cancer screening and late detection of cancerous lesions thus leading to complications like vaginal bleeding and anaemia to mention but a few. People change their unhealthy behaviors and negative attitudes when they perceive that there are some benefits to certain health-promoting activities. So, it is imperative that women be educated on cervical cancer, the risk factors related to cervical cancer, cervical cancer screening and the benefits of cervical cancer screening.

There are several barriers that respondents believed can lead to negative attitudes towards cervical cancer screening, and those are fear of bad results, lack of money for transport, feeling uncomfortable for the test, walking for a long distance, cultural practices, and the fact that nurses were busy. The overall result of attitudes of women towards cervical cancer screening in the current study was 90.7%. The results of the study revealed that respondents aged 30 years and above had adequate knowledge and they had good attitudes towards cervical cancer screening as demonstrated by high percentages from 83.1% to 97.6% in



the biographical categories. The results of the current study are consistent with the results of the study that was conducted among undergraduate female students in Northwest Ethiopia in 2018 [9] whereby 60.1% of the respondents had a positive attitude towards cervical cancer screening. The respondents were also aware of the benefits of cervical cancer screening [9]. The results of the current study indicated that over half of the respondents strongly agreed that cervical cancer screening can detect cervical changes before they become cancerous, they also strongly agreed that if cervical changes are found early, they are easily curable and that cervical screening will make a woman to know that she is healthy.

#### 4.2. The Practices of Women Towards Cervical Cancer Screening Services in Leribe District

Cervical cancer screening services are free in most of the clinics and the hospitals in the country and that makes the services to be more accessible to all those eligible for the test. Cervical cancer screening is free in the country and the results of VIA and VILI are generated quickly as opposed to those of Pap smear with a turnaround time of 3 months or more. The study was conducted because there was a low uptake of cervical cancer screening in Leribe district. The expectation is that positive attitudes should lead to increased cervical cancer screening uptake, but it is not the case in most of the studies that were conducted earlier.

The study results of the current study are in line with the results of the study that was conducted in Zimbabwe by Mutambara, Mutandwa, Mahapa, Chirasha, Nkiwane & Shanga had in 2017 [10]. The results of that study highlighted that the attitude of the respondents towards cervical cancer screening was positive (71.2%) but, the majority (83.2%) of the women reported not having screened for cervical cancer [10]. In the current study, the overall percentage of the respondents who had screened at least once was 31.5% in the 13 health facilities of Leribe where data was collected.

The type of cervical cancer screening that is most common in the country is VIA. The percentage of the respondents who were screened with VIA was low (33.2%). Similarly, the results of the study that was conducted in Bangladesh in 2021 revealed that only 26% of the participants had ever screened for cervical cancer with VIA though the percentage is lower as compared to 33.2% in the current study [11]. Most of the study findings were on Pap smear test, not VIA or VILI test thus making it impossible for the researcher to compare the findings on VIA and VILI.

The findings of the current study highlighted that only 10.4% of the respondents have had cervical cancer screening with Pap smear. Similarly, the results of the study that was conducted in 2022 by Abebaw and fellow researchers revealed that only 8.7% of the respondents had regular cervical cancer screening [12]. The percentages are very low given the fact that a woman dies of cervical cancer complications every two

minutes [1].

Conversely, the findings of the study are in line with that of the study that was conducted in KwaZulu-Natal in 2021 by Omoyeni and colleagues. The report highlighted that 66.8% of the respondents have had cervical cancer screening and it was high when compared to the findings of the current study [13]. The good uptake of Pap smear tests was attributed to the burden of HIV (Human Immunodeficiency Virus) among women in that area [13].

#### 5. Summary

Most of the respondents responded positively to the perceived benefits and that proved that perceived benefits are very important predictors of cervical cancer screening. Most of the women agreed that cervical cancer screening can detect cervical cancer changes before they become cancerous. The women also agreed that if cervical changes are found early, they are easily curable, and that cervical screening will make a woman know if she is healthy. There are reasons for not screening for cervical cancer though the percentage was very low as indicated by the study. The majority of the respondents did not have reasons for not screening for cervical cancer, others felt uncomfortable performing the test while the other respondents were in favor of screening but the nurses were busy. Some of the respondents had no money for transport and had to walk long distances to the facilities. The other reasons for not practicing cervical cancer screening were; fear of bad results, cultural practices and walking long distances to the facilities.

The studies have shown that higher education, being employed, living in urban areas, having information about cervical cancer and cervical cancer screening are some of the variables that increase the self-efficacy and the uptake of cervical cancer by the women. The results of the current study showed that ages from 35 and above, being married, the level of education and the number of children respondents have increased one's confidence and have a positive influence in the uptake of cervical cancer screening even though the uptake was low. Daily health education in health facilities is very important in imparting knowledge regarding cervical cancer, the risk factors associated with cervical cancer, the types of screening methods that are used, the importance of doing regular screening and where to go for cervical cancer screening. Campaigns, media involvement and outreach services should also be done routinely to help the community to have more understanding about cervical cancer screening because increased knowledge and understanding leads to positive attitudes and improved self-efficacy. The improved self-efficacy will also lead to increased screening uptake, early diagnosis and treatment of precancerous lesions and improved health and well-being of women. The afore-mentioned strategies are likely to address some of the barriers to cervical cancer screening and increase the uptake of cervical cancer screening in the country.

## 6. Conclusions

Even though the respondents had positive attitudes towards cervical cancer and cervical cancer screening, their screening practice was very low in all ages. Some were not aware that cervical cancer can be inherited and that the use of oral contraceptives puts a woman at a higher risk of cervical cancer. Knowing about the risk factors of cervical cancer, where to access cervical cancer screening and practicing cervical cancer screening is very crucial to the health and well-being of the women.

## 7. Limitations of the Study

This is a cross-sectional study; hence it is not possible to differentiate cause and effect relationship between dependent and independent variables. The study was limited to attitudes and practices of women who were using the selected health facilities. So, it is difficult for the researcher to generalize the study results to all women in the district of Leribe as it cannot be assumed that women who participated in the study had the same attitudes and practices regarding cervical cancer and cervical cancer screening services as those who did not participate.

## Ethics Approval and Consent to Participate

Ethical approval to conduct the research study was obtained from the National University of Lesotho Faculty of Health Sciences' Institutional Review Board (IRB) and the Ministry of Health Research and Ethics Committee. Consent to conduct the study from 13 health facilities was obtained from the Matron and Motebang DHMT. The respondents were given a consent form to sign before participating in the study. Ethical principles like beneficence and non-maleficence, respect, privacy, anonymity, confidentiality, and informed consent were followed throughout the study.

## Abbreviations

HIV	Human Immunodeficiency Virus
IRB	Institutional Review Board
SPSS	Statistical Packages for Social Sciences
VIA	Visual Inspection with Acetic Acid
VILI	Visual Inspection with Lugol's Iodine
WHO	World Health Organization

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## Author Contributions

**Exinia 'Makhoba Mphunyane:** Conceptualization, Data curation, Writing original draft, Formal analysis, Funding, Methodology, Resources, Software, Validation, Visualization, Writing-review & editing

**Isabel Nyangu:** Conceptualization, Supervision Writing original draft, Writing review & editing

## Conflicts of Interest

The authors declare no conflicts of interest.

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