International Journal of Community Medicine and Public Health
Wambua RT. Int J Community Med Public Health. 2026 Feb;13(2):565-575
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040
DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20260280

Original Research Article

Knowledge and health facility – related determinants of men's support for spousal cervical cancer screening: a mixed-methods study in a rural county of Southeastern Kenya

Ruth Taabu Wambua*

Department of Nursing and Midwifery, Garissa University, Garissa, Kenya

Received: 23 December 2025
Revised: 21 January 2026
Accepted: 22 January 2026

***Correspondence:**
Ruth Taabu Wambua,
E-mail: ruthytabby@gmail.com

ABSTRACT

Background: Globally, cervical cancer is the fourth leading cause of cancer deaths. In Kenya, it is ranked as the second cause of cancer-related deaths among females. Men's knowledge of cervical cancer is essential in reducing cervical cancer burden. This study was conducted in Makueni County, Kenya, to establish knowledge and health facility-related determinants of men's support for spousal cervical cancer screening in Kenya.
Methods: Quantitative and qualitative data were collected using structured questionnaires from married men aged 18–64 years attending three rural Health facilities in Makueni County, Kenya. Participants were recruited via simple random sampling from purposively selected hospitals. Quantitative data were analysed using descriptive and inferential methods, while qualitative data employed thematic coding. Key informant interviews with nurses heading Maternal and Child Health services provided qualitative insights. Ethical approval was obtained and participants consented.
Results: Male support for spousal cervical cancer screening was low, with 82% showing minimal involvement. Knowledge factors such as knowledge of cervical cancer signs or symptoms, causative agent, risk factors, prevention, screening frequency, and screening duration was strongly associated with male involvement ($p<0.001$). Awareness that men can transmit the causative agent to women also showed a significant relationship with involvement ($p=0.019$). The level of male support was significantly associated with service availability, presence of signage, and cost ($p<0.005$).
Conclusions: Male support for their spouses cervical cancer screening was low, calling for increased health education and awareness among men to boost support for cervical cancer screening initiatives. Health facilities should ensure continuous access to free services and promote their awareness.

Keywords: Uterine cervical neoplasms, Men, Partner participation, Health knowledge, Kenya, Papilloma infections

INTRODUCTION

Globally, cervical cancer continues to pose a substantial threat to women's health. Global cancer statistics in the year 2020 revealed that cervical cancer was the most commonly diagnosed cancer and the fourth leading cause of cancer-related deaths among women, with 604,000 new cases and 342,000 deaths reported.[1] The burden of disease is disproportionately high in sub-Saharan Africa, which reports the highest incidence rates alongside the lowest levels of screening coverage. In Kenya, cervical cancer ranked as the second most significant cause of cancer-associated fatalities, with 12.4% (5,236) new cases and 11.9 (3,211) fatalities.[2] In 2020, fewer than half of women living in low- and middle-income countries had received cervical cancer screening, with only 44% of women having been screened.[1]

Worldwide, countries including Kenya are undertaking initiatives to reach the global 90–70–90 targets which aim at ensuring 90% of girls are fully vaccinated against HPV by age 15, 70% of women are screened by ages 35 and 45, and 90% of women diagnosed with pre-cancer or invasive cervical cancer receive appropriate treatment by 2030.[3] Despite this effort, evidence from 2018–2019 shows that only 10.8% of eligible women in Kenya were screened for cervical cancer.[4] Nurses have a significant role in delivery of cervical cancer screening services. Achieving this target requires oncology nurses to be well informed about factors that influence screening uptake. This study aimed to support oncology nurses in identifying men's knowledge-related facilitators and barriers to cervical cancer screening and in addressing these factors to help achieve the global screening goal.

Men significantly influence health-seeking behaviors, including cervical cancer screening uptake by their partners. In Africa, men still act as superiors in the family. Inadequate cervical cancer knowledge influence men's support towards their partners cervical cancer screening.[5] Men's knowledge and awareness play a crucial role in male involvement in reproductive health. Improving reproductive health literacy among men enhances positive perceptions and encourages their involvement in reproductive health services.[6] A study done in Western Kenya on females' perspectives on male involvement in the human papilloma virus revealed that women had a perspective that men may have a crucial part in boosting HPV screening access. Enhanced understanding of HPV and cervical cancer among men was perceived to increase their support for their spouses' screening.[7] Husbands' support has emerged as an important reinforcing factor that motivates women to undertake early detection of cervical cancer. Low male involvement may result in fewer national screenings.[8]

Studies conducted in Swaziland, Ghana, and Kenya revealed that men had a limited understanding of cervical cancer and lacked awareness of risk factors, causes, signs, prevention, and treatment.[9-11]

Studies have highlighted several hospital-related factors that enable or hinder the utilization of reproductive health services, including cervical cancer screening. These factors include healthcare providers' characteristics and competence, waiting times, availability and accessibility of services, and good communication by health professional to establish rapport with patients.[12,13,16] Negative perceptions of health workers, lack of privacy and confidentiality, long distances to screening facilities, long waiting hours, and the cost of services have been identified as barriers.[13-16] Additional challenges include healthcare providers' workload, shortages of trained staff, and limited supplies.[17]

Previous studies have been conducted in limited geographical settings, and few have used men as the primary source of data. In addition, there is limited research on the knowledge and health-related factors influencing men's support for spousal cervical cancer screening. As a result, understanding of the local context regarding knowledge and health facility-related determinants of male support remains limited. Therefore, the present study seeks to assess men's knowledge and the health facility-related factors that influence their support for spousal cervical cancer screening.

METHODS

Study design and settings

A mixed-method cross-sectional study was conducted in Mbooni Sub-County, a rural area in Makueni County, Kenya. Makueni County is a rural County located in Southeastern region of Kenya and it is an arid and semi-arid (ASAL) area. The study aimed to establish knowledge and health facility-related factors influencing men's support for spousal cervical cancer screening, and the study period was from September 2022 to August 2023. Quantitative and qualitative data were collected using questionnaires. Three rural health facilities were purposively selected for the study, and respondents from each health facility were recruited using simple random sampling. A total of 291 men aged 18–64 years, married to women eligible for cervical cancer screening, who had resided in Mbooni Sub-County for at least one year, could communicate in English, Kiswahili, or Kikamba, and had heard of cervical cancer, were included in the study. Men who were physically or psychologically unstable or whose wives had undergone a hysterectomy were excluded. Key informants were nurses heading Maternal and Child Health services, where cervical cancer screening is predominantly conducted.

Data collection

Data were collected using both self-administered and researcher-assisted questionnaires. Participants who were able to read and understand the questions completed the questionnaires independently, while the researcher or research assistants assisted those who were illiterate. The questionnaires included both open- and closed-ended questions and were administered to all 291 participants. The reliability of the instruments was assessed using a test-retest approach, whereby the same questionnaires were administered to the same participants on two occasions and the responses compared. Content validity was evaluated by examining whether the questionnaires covered all relevant aspects of the concepts being measured, while face validity was verified by the supervisor, who reviewed the questionnaires to ensure that the questions appropriately captured the targeted subjects. Additional qualitative data were obtained through key informant interviews, which were audio-recorded and subsequently transcribed.

Analysis

The collected data were analyzed using both descriptive and inferential statistics. Descriptive statistics included

frequency tables, measures of central tendency, and measures of dispersion. Inferential statistics, including Chi-square, Fisher's exact test, likelihood ratio, and multivariate analysis using logistic regression, were used to assess relationships between variables and draw conclusions. Qualitative data from open-ended questions and key informant interviews were analyzed thematically, with codes and themes reported in narrative form. Quantitative data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 25.

Ethical considerations

Authorization to conduct the research was also obtained from NACOSTI and the Makueni County Government. All information collected was treated as confidential, and informed consent was obtained from all participants. The researcher ensured the privacy of respondents, the fair treatment of all participants, and adherence to the principle of autonomy. Anonymity was maintained by avoiding the collection of any identifying information.

RESULTS

Socio-demographic characteristics of male respondents

Socio-demographic characteristics of the participants are presented using univariate statistics (frequencies, percentages, mean and SD) since the study's primary objectives do not focus on associations between these characteristics and the outcome variables. Bivariate analysis is therefore not presented. The 291 respondents had a mean age of 38.59 years (SD=10.51). About 35% had no formal education or only primary level of education, while the rest (65%) had at least secondary level of education. More than two-thirds (72%) were working while the rest had no active form of employment. The majority of respondents (71%) earned less than 20,000 Kenyan shillings per month while 29% earned 20,000 or more. Slightly over two-fifths (43%) were from Mbooni rural area, with the remainder from other rural areas. Approximately 41% of interviews were conducted at Mbooni rural health facility, and the rest at the other selected rural health facilities (Table 1).

Table 1: Respondents socio-demographic characteristics.

Variable	Category	N (%)
Education	No formal education/primary	100 (35)
	Secondary	85 (29)
	College or university	106 (36)
Employment status	Working (employed and self-employed)	210 (72)
	Unemployed	81 (28)
Income	<20,000	207 (71)
	20,000-49,000	67 (23)
	>50,000	17 (6)
Rural area of residence	Mbooni	124 (43)
	Other rural areas	167 (57)
Rural health facility interviewed at	Mbooni	118 (41)
	Other rural facilities	173 (59)

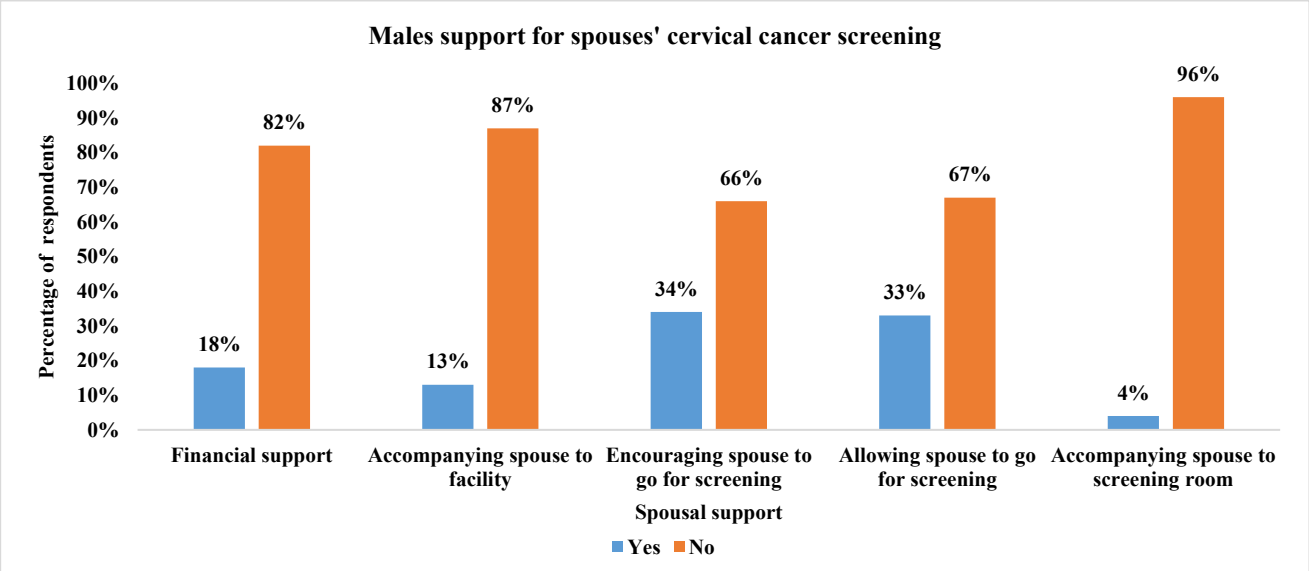

Figure 1: Distribution of male's support for partners cervical cancer screening.

Male support for spouses cervical cancer screening

Men's support was evaluated by whether they assisted their spouses financially, accompanied them to the screening facility, encouraged them to go for screening, allowed them to go for screening and accompanied them into the screening room (Figure 1).The majority of the male respondents (82%, n=231) said that they have never offered financial support to their spouses to go for screening, and almost the same number (87%, n=241) said they have never accompanied their wives to a health facility for examination of cancer of the cervix. In addition, more than half of the respondents (66%, n=190) said they have never encouraged their spouses to go for screening, and almost the same proportion (67%, n=190) said they have never allowed their spouse(s) to go for screening. Most men (96%, n=266) said they had never accompanied their spouse(s) to a screening room.

These quantitative findings were consistent with insights from Key Informants, who uniformly stated that female clients rarely, if ever, came accompanied by their spouses for cervical cancer screening. For example, KI2 said, "*For the time I have worked here, no one has been accompanied by their spouse*." KI3 added, "*To be honest, I have never had a client accompanied by a spouse; usually, the client comes alone*." Key Informants also rated male involvement in cervical cancer screening as very low. KI1 described it as "*very low*," K12 rated it as "*low*," and KI3 characterised the involvement as "*minimal*."

Level of male support

Respondents were asked to evaluate their level of support for their partner's cervical cancer screening, which served as the outcome variable. This level of male support was measured using a Likert scale. The activities assessed included: providing financial assistance to their spouses, accompanying them to the screening facility, encouraging them to undergo screening, permitting them to attend screening, and accompanying them into the screening room. Men who provided support in three or more of the activities were classified as highly supportive, whereas those who supported in fewer than three activities were considered less supportive. After data cleaning, 275 respondents were found to have completed all the items and were used to determine the level of support. The study found that mens' support for their spouses' cervical cancer screening was low, with only 18% (n=49) of participants demonstrating high involvement (Figure 2).

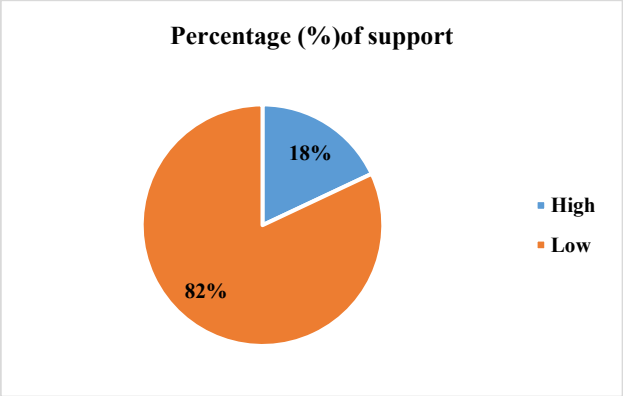

Figure 2: Level of male support.

Knowledge factors

The study revealed that the majority of respondents lacked knowledge on key aspects of cervical cancer. Specifically, 77% of men had no knowledge of the signs or symptoms of cervical cancer, and 85% were unaware of its causative agent. Furthermore, majority (80%) did not know whether men could transmit the causative agent to women. Approximately two-thirds (65%) of respondents were unaware of whether cervical cancer could be prevented, and majority (84%) lacked knowledge on the recommended frequency of screening. In addition, about 62% of men did not have appropriate knowledge regarding the duration of the screening test. The findings on various knowledge factors are summarized in Table 2.

Table 2: Men's knowledge of cervical cancer and its screening.

Variable and responses	Frequency	Percentage (%)
Knows symptoms /signs of cervical cancer (n=289)* **		
Yes	66	23
No	223	77
Knows causative agent of cervical cancer (n=290)** **		
Yes	44	15
No	246	85
Knows men can transmit causative agent of cervical cancer to women (n=286)*		
Yes	56	20
No	70	24
I don't know	160	56
Knows cervical cancer risk factors (n=290)** **		
Yes	85	29
No	205	71

Continued.

Variable and responses	Frequency	Percentage (%)
Knows how cervical cancer can be prevented (n=291)		
Yes	101	35
No	109	65
Knows frequency of cervical cancer screening (n=287)**		
Yes	47	16
No	240	84
Response to the duration of cervical cancer screening procedure (n=291)		
Less than 10 minutes	53	18
More than 10 minutes	50	17
I don't know	188	55

Note: *(n=286), **(n=287), ***(n=289), ****(n=290) -due to incomplete filling of questionnaire.

Table 3: Knowledge versus the level of male support.

Knowledge factor		Level of male support				Significant at p≤0.05
		Low		High		
		N	%	N	%	
Knows signs of cervical cancer	No	185	82.2	28	58.3	X2=13.166 DF=1 P≤0.001
	Yes	40	17.8	20	41.7	
	Total	225	100.0	48	100.0	
Knows the cause of cervical cancer	No	202	89.4	33	68.8	X2=13.803 DF=1 P≤0.001
	Yes	24	10.6	15	31.3	
	Total	226	100.0	48	100.0	
Men can transmit causative agent to women	Yes	37	16.7	11	22.9	X2=7.883 DF=2 p=0.019
	No	49	22.1	18	37.5	
	Don't know	136	61.3	19	39.6	
	Total	222	100.0	48	100.0	
Aware of risk factors	No	178	79.1	17	34.7	X2=38.687 DF=1 P≤0.001
	Yes	47	20.9	32	65.3	
	Total	225	100.0	49	100.0	
Aware of cervical cancer prevention measures	No	166	73.5	12	24.5	X2=42.282 DF=1 P≤0.001
	Yes	60	26.5	37	75.5	
	Total	226	100.0	49	100.0	
Aware of the frequency of screening	No	197	88.3	31	64.6	X2=16.700 DF=1 P≤0.001
	Yes	26	11.7	17	35.4	
	Total	223	100.0	48	100.0	
Duration of cervical cancer screening procedure	<10 mins	28	12.4	18	36.7	X2=28.359 DF=2 p≤0.001
	>10 mins	32	14.2	14	28.6	
	Don't know	166	73.5	17	34.7	
	Total	226	100.0	49	100.0	

Triangulation with key informant opinions

The assessment of men's knowledge was triangulated with the opinions of key informants, all of whom rated men's knowledge of cervical cancer as low. For instance, KI2 stated, "*I can rate it at 20%; most of the men don't know," KI3 remarked, "I think it is low," and KI1 noted, "I can say men have very little knowledge. If men had knowledge they would help in encouraging their partners to come for screening and also accompany them*" An open-ended question on the mode of transmission of the cervical cancer causative agent revealed a recurrent theme of poor knowledge among men. While some correctly identified sexual transmission, others mistakenly believed it could be transmitted through sharing clothes or improper washing, and some even opined that it cannot be transmitted at all.

As shown in Table 3, the Chi-square test revealed a significant association between all knowledge-related factors and male support. Specifically, knowledge of signs and symptoms, the causative agent, risk factors, cervical cancer prevention, frequency of screening, and the average duration of a screening test were all strongly associated with the level of male support (p<0.001). Additionally, knowledge of whether men can transmit the causative agent to women was significantly related to male support for their spouses 'in cervical cancer screening (p=0.019).

Health facility-related factors

This study looked into various health facility-related factors and their influence on male involvement in cervical cancer screening of their spouses. The elements affect accessibility and availability (distance, waiting time, service availability, signages, and affordability) and staff (provision of health education, maintenance of privacy, competency, and attitude). Regarding service availability (See Table 4), less than one-third (30%, n=87) of the men said services were available, with 61% (n=177) having no idea whether the services were available and 9% (n=27) saying the services were not available. The 87 respondents who said the services were available were instructed to complete the rest of the questionnaire. In contrast, those who said the service was unavailable or were not aware of whether the service was available were appreciated and instructed not to continue with the remaining part of the questionnaire. The Distance to health facilities was over 2km to more than half of respondents (55%, n=47), and most (71%, n=61) had ever seen signages on cervical cancer screening in the facility. The majority (80%, n=69) said cervical cancer screening is not charged with a few saying it is charged (7%, n=6) and the rest did not know whether it is charged. A few clients (19 %, n=12) perceived that there were delays at the screening clinics. Regarding staff, their attitude was rated positive by all respondents (100%, n=86) and competent by 94% (n=82). The majority (99%, n=86) agreed that the staff can maintain the privacy and confidentiality of clients. Most of the clients (70%, n=60) had never received health education regarding cervical cancer screening from health care a provider.

Table 4: Health facility-related factors.

Variable	Frequency	Percentage
Screening services available (n=291)		
Yes	87	30
No	27	9
Don't know	177	61
Distance to facility (n=85)* **		
<2 km	38	45
2-5 km	22	26
>5 km	25	29
Ever seen signages on cervical cancer screening in the facility (n=86)**		
Yes	61	71
No	25	29
Cervical cancer screening charged (n=86)**		
Yes	6	7
No	69	80
Don't know	86	13
Ever received health education on CA. Screening from HCP (n=86)**		
Yes	26	30
No	60	70
HCPs ability to maintain privacy and confidentiality (n=87)*		
Yes	86	99
No	1	1
HCPs competent in screening (n=87) *		
Yes	82	94
No	5	6
Attitude of hCPs (n=86)**		
Positive	86	100
Negative	0	0
Women seeking cervical cancer screening services in the facility experience delays (n=62)******		
Yes	12	19
No	50	81

Note: *(n=87)-those who proceeded with the questionnaire after saying they were aware of service availability, [***(n=85), **(n=86), ****(n=62)]-those who proceeded with the questionnaire but some did not fill the relevant sections of the questionnaire.

Although most of the respondents (61%, n=177) said they did not know whether the services were available and some said the services were not available, the Key Informants confirmed the availability of the services. When asked about the availability of the services, KI2 said, "*Yes we offer from Monday to Friday*", KI3 said, "*We offer cervical cancer screening daily that is, from*

Monday to Friday". On availability of signages, all Key Informants confirmed they were available.

Regarding charges, the Key Informants validated the services were free. When asked whether they charge the services, KI2 said "*No, it is free*" KI3 said "*Cervical cancer screening services are free in our facility*". However, a theme of inadequate services arose from the interview. The Key Informants stated that they were offering only VIA/VILLI and HPV tests. When interrogated on what they do to women not eligible for those tests, they all said they refer. For example, KI1 said, "*We usually refer them to go and do the test from facilities offering that service*". KI2 stated, "*We advise them for a pap smear. We refer them to our gynaecologist who usually gets the samples and the test is done outside our facility. This happens only if they agree, and it is under the client's cost, not the hospital management*". The Key Informant confirmed this was being offered as a private service. KI3's voice was, "*We sent them to a clinician who does a referral for a pap smear*."When asked whether they involve men in health education on cervical cancer, all Key Informants affirmed that they involve men. For example, KI3 responded, "*Yeah, we do include men, that is, if they happen to be present at the waiting bay because we give health talk in an open place. We include everyone who has come to the hospital; we give them information on cervical cancer*".

As far as competency is concerned, all the Key Informants stated that the staff working in the screening department were competent. KI1 stated, "*Yes, they are competent*", KI3 replied, "*I would say the staff are competent because most of the cervical cancer screening we have been able to do. Most of the learning we have been able to do on job, so I wouldn't say they are not competent; they are competent*". When asked about the duration of waiting time for clients seeking cervical cancer services, all the Key Informants gave responses indicating the clients wait for a short period. KI3 vocalized, "*I will give a span of maybe 15 minutes-30 minutes depending on the number of people waiting outside to be attended*". KI2 said, "*I can say around 5 minutes, KI1 said, "I can say it is average because we also attend other clients for antenatal care and family planning".*

The association between hospital-related factors and male support for screening was then assessed. As shown in Table 5, service availability (p=<0.001), presence of information through signages (p=0.004), and lack of screening charges (p=0.015) were strongly associated with high male support. This study, however, did not find any strong link between male supportand other hospital-related variables (waiting time, distance, privacy/confidentiality, health education, competency, and attitude) (p>0.05).

Multivariate logistic regression analysis: Likelihood of male support for spousal cervical cancer screening

A multivariate logistic regression analysis was performed to assess the likelihood of men being supportive for their spouses' cervical cancer screening, based on variables that were significant during cross-tabulation (Table 6). The logistic regression model was statistically significant, X^2 (22, N=262)=91.043, p < 0.001. The model explained 48.9% of the variance in male support (Nagelkerke R^2) and correctly classified 82.8% of cases.

Significant predictors of high male supportincluded knowledge of cervical cancer risk factors (OR=3.274, 95% CI [1.073, 9.991], p=0.037) and knowledge of cervical cancer preventive measures (OR=3.414, 95% CI [1.043, 11.177], p=0.042). Men who were aware of risk factors were 3.274 times more likely to be highly supportivethan those who were not, while men aware of preventive measures were 3.414 times more likely to be highly supportive than their counterparts who were unaware. Additionally, men who knew that the cervical cancer screening duration was less than 10 minutes were 3.718 times more likely to be highly engaged than men who did not know the screening time.

Table 5: Health facility-related factors versus the level of male support.

Factors		Male level of support				Significant at p≤0.05
		Low		High		
		N	%	N	%	
Screening services are available	Yes	47	20.8	34	69.4	X2=46.003 DF=2 P≤0.001
	No	24	10.6	3	6.1	
	Don't know	155	68.6	12	24.5	
	Total	226	100	49	100	
Distance to a screening facility	<2 km	19	42.2	18	52.9	X2=0.902, DF=2 P=0.637
	2-5 km	11	24.4	7	20.6	
	>5 km	15	33.3	9	26.5	
	Total	45	100	34	100	
Seen signage on cervical cancer screening	No	17	37.0	3	8.8	Fisher's exact P=0.004
	Yes	29	63.0	31	91.2	
	Total	46	100	34	100	

Continued.

Factors		Male level of support				Significant at p≤0.05
		Low		High		
		N	%	N	%	
Cervical cancer screening charged	Yes	3	6.5	3	8.8	Likelihood ratio=12.119 DF=2 P=0.015
	No	33	71.7	31	91.2	
	Don't know	10	21.7	0	0.0	
	Total	46	100	34	100	
Received H. Education on cervical cancer screening	No	37	80.4	21	61.8	X2=3.418 DF=1 P=0.064
	Yes	9	19.6	13	38.2	
	Total	46	100	34	100	
Privacy and confidentiality maintained	No	1	2.1	0	0.0	Fisher's exact P=1.000
	Yes	46	97.9	34	100.0	
	Total	47	100	34	100	
H.C.P.s competent in screening	No	4	8.5	0	0.0	Fisher's exact P=0.135
	Yes	43	91.5	34	100.0	
	Total	47	100	34	100	
Women seeking cervical cancer screening services experience delays	No	33	84.6	14	82.4	Fisher's exact P=1.000
	Yes	6	15.4	3	17.6	
	Total	39	100	17	100	

Table 6: Logistic regression model showing the likelihood of high level of men support for their spouses cervical cancer screening given the different independent variables.

Independent variables in the model	B	S.E.	WALD	DF	SIG.	OR	95% C.I. For OR	
							Lower	Upper
Knows signs-1=yes)	0.380	0.689	0.304	1	0.582	1.462	0.379	5.647
Knows cause-yes=1)	-0.368	0.746	0.243	1	0.622	0.692	0.160	2.985
Men are involved in transmission (yes-3-reference			0.644	2	0.725			
(no-1)	0.056	0.683	0.007	1	0.935	1.057	0.277	4.033
(DK-2)	0.486	0.718	0.458	1	0.499	1.625	0.398	6.635
Aware of CA. CX risk factors (yes=1)	1.186	0.569	4.342	1	0.037	3.274	1.073	9.991
Aware of CA. CX preventive measures(yes=1)	1.228	0.605	4.117	1	0.042	3.414	1.043	11.177
Aware of screening frequency (yes=1)	0.250	0.544	0.212	1	0.646	1.284	0.442	3.733
Duration of screening-DK-refer 3			5.339	2	0.069			
(<10 minutes-1)	1.313	0.594	4.883	1	0.027	3.718	1.160	11.920
(>-10 minutes-2)	0.841	0.584	2.070	1	0.150	2.319	0.737	7.290

DISCUSSION

The study revealed that knowledge factors were influencing the level of males' support for their partner(s) cervical cancer screening services. On variables used to assess the knowledge of cervical cancer and cervical cancer screening, this study concludes that very few respondents had an idea of the risk factors, cause, presentation, and prevention of cervical cancer. These findings concur with reports from studies done in Uganda, South-East Nigeria, Ghana, and Western Kenya respectively which who found that men had no idea on what causes cervical cancer, its signs, and symptoms, risk factors for cervical cancer or how to prevent it.[7,10,18,19] Key Informants also rated men's knowledge of cervical cancer and its screening as low. Inadequate knowledge of cervical cancer and its screening could have been attributed to inadequate health education. This calls for intensified health education for all men.

Most men in this study had no idea about the recommended frequency of cervical cancer screening tests and how long a screening test takes. These findings are similar to research analysis from Kenya which pointed out that male participants did not comprehend how often women should be screened and how long the procedure takes. This was termed to have a detrimental impact on the adoption of cervical cancer screening services.[16] Lack of knowledge on the frequency of screening means that the men do not know when to support their spouse(s) to go for re-screening and they will be lowly involved. Lack of knowledge on the duration of screening can be a barrier to males' involvement in their partner(s) cervical cancer screening because they might think it is a long procedure and their spouse(s) will spend much time in the facility doing the screening. It is important to involve men in screening and explain the frequency of screening and the duration of the procedure to improve their support towards cervical cancer screening.

From study analysis, the majority of men responded that they did not know how cervical cancer virus is transmitted. This finding is similar to a study done among female health workers in Ghana which showed that the majority of the respondents did not know whether cervical cancer is sexually transmitted.[20] The low knowledge levels on how cervical cancer is transmitted could be due to inadequate health promotion. There is a need for men to know the HPV virus is sexually transmitted and they can contribute to its transmission.

The study aimed to determine knowledge factors influencing the level of male support for cervical cancer screening. The study results revealed that those who were aware of; risk factors, whether cervical cancer can be prevented and the duration of the screening procedure were more involved in their partner's screening than those who did not have such knowledge. This is not strange since knowledge generally shapes attitude and practice. The men with high knowledge of these variables were highly involved in their partner's screening probably due to having received some form of health education. The findings align with findings of a study done in Uganda which disclosed that high knowledge levels affect attitudes and practices towards cervical cancer screening and thus has an enabling role in cervical cancer screening.[21]

Interestingly, those who did not know the signs and symptoms of cervical cancer, were not aware that men can transmit the causative agent for cervical cancer, were not aware of the frequency of screening and the cause of cervical cancer were highly involved in the screening than those who had the knowledge. This could be probably due to having valued involvement in screening despite inadequate knowledge. Although it is assumed that knowledgeable people would be heavily involved, this was not the case for these variables in these study. This is contrary to a study done Mid-Western Uganda in which revealed that limited knowledge on cervical cancer can limit uptake of the service.[22] However, the findings concur with the findings of a cohort study done in Canada which revealed that patients with low literacy had a higher probability of seeking medical attention than those with higher literacy.[23] The study findings add to the literature on the knowledge factors influencing the level of male involvement in cervical cancer screening.

In this study, various hospital-related factors influencing male support for their spouses' cervical cancer screening were examined. Awareness of the availability of cervical cancer screening was identified as a determinant of the involvement of men in cervical cancer screening services. Less than half of the respondents reported the screening services were available despite the Key Informants affirming the services are available from Monday to Friday. The majority of those who were aware of the availability of screening services reported that they had seen signages on cervical cancer screening in the facility and the Key Informants affirmed that the signages were available. The awareness of the availability of services and the presence of signages were identified as indicators of the high level of male involvement. The observations are backed by a study done in Nepal by who identified the availability of services and accessibility of services as predictors of cervical cancer screening.[12] If men do not know whether the services are available, they may end up not fully supporting the screening.

The majority of respondents reported that the screening services were free and Key Informant affirmed that the screening was free. Free services were associated with high male involvement in examining cervical malignancy. Those who reported the screening was charged were lowly involved in their partner's cervical cancer screening. This revelation is validated by a study done in America which observed the cost of screening services as a prohibition of cervical cancer screening.[14] The free services were linked to a high male involvement in their partner(s) cervical cancer screening probably because the men will not incur a cost for the screening.

In this study, the staff's attitude, competence, and ability to maintain privacy and confidentiality had no significant association with the level of male involvement. However, all the respondents rated the staff's attitude as positive toward patients, and the majority (94%) said the staff are competent in screening. Nearly all (99%) of the respondents said that the staff are capable of maintaining privacy and confidentiality. The results deviate from those of who discovered that healthcare professionals were antagonistic towards patients and misdiagnosed them, preventing them from attending the screening.[15] Additionally, their research exposed institutional barriers to screening, such as healthcare providers' incapacity to protect patient privacy and confidentiality. The staff's positive attitude could be due to favourable working conditions and their competence contributed by quality training and mentorship they get from their employer.

Distance to health facilities was not found to have an association with the level of involvement in cervical cancer screening. This is contrary to a study by 24 which revealed that geographic distance to the screening health facilities as a barrier to screening. Nevertheless, the findings are consistent with a study done in Kenya by 25 which divulged that the distance to the hospital had no connection with previous participation in cervical cancer screening. In this study, the distance to the hospital had no influence on male involvement but other factors such as willingness to participate could have an influence.

The variable on whether men had ever received health education on cervical was found to have no statistical significance with the level of male involvement in the screening. However, the majority of the respondents reported that they had never received health education from healthcare professionals. This finding is similar to a study by 24 which revealed that during other encounters, medical professionals frequently neglected to encourage, suggest, or provide screening and relevant cervical cancer information. Although the Key Informants reported that they involve men in health education regarding cervical cancer, probably they do not target reaching out to large numbers thus the reason why the majority of the respondents reported not to have ever received health education on cervical cancer. Although the majority had an idea that the women seeking screening services do not experience delays, there was no significant association between the waiting time and the level of male involvement in their partner's cervical cancer screening. This is contrary to 25 and 26 studies which revealed a connection between the waiting time and utilization of cervical cancer services and thus the longer the waiting time, the lesser the utilization of services. Distance alone might not have an association with the level of male involvement in a partner's cervical cancer screening but other factors such as the level of motivation and knowledge might create an impact. The results contribute to the body of knowledge regarding the factors connected to health facilities that affect men's involvement in cervical cancer screening.

This study found that the level of male support for their spouses' cervical cancer screening in Makueni County, Kenya, was low, with majority (82%) of participants not being actively involved. This finding are consistent with a study done in Ghana which revealed that, some male partners did not provide support to their female partners. Several women with cervical cancer reported receiving no assistance at all from their male partners.[10] The findings also concur with a study done in Western Kenya, which found out that, while the majority of women described their own partners as supportive, many believed that other men would not offer similar support.[7]

CONCLUSION

In conclusion, the findings indicated significant associations between knowledge factors and level of male support for cervical cancer screening. Health facility-related factors such as awareness on availability of screening services, presence of signages and free screening services had an association with the level of male support for cervical cancer screening. The level of mens' support in their spouses' cervical cancer was low with only 18% of men being highly supportive. These findings highlight the critical need to raise awareness about cervical cancer and its screening services among men to enhance their support. The health facilities' management should continue ensuring signages are available designating where the cervical screening is offered inorder to create awareness of the availability of the services, thus increasing males' involvement in cervical cancer screening. The hospitals' managements should also continue ensuring that all screening services are available and free of charge to encourage men to get involved in their spouse(s) cervical cancer screening services. Increasing male support could play a vital role in improving cervical cancer prevention and early detection, thereby contributing to the reduction of the burden of cervical cancer in the community.

ACKNOWLEDGEMENTS

The authors acknowledge the male residents of Mbooni Sub-County for their consent, participation, and cooperation, without which this study would not have been possible. Authors are also grateful to the Makueni County Government for granting me permission to conduct this study within its facilities. Finally, appreciating NACOSTI for authorization to carry out the research in Makueni County.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021;71(3):209-49.
2. WHO. Kenya Cancer Statistics. The Global Cancer Observatory. 2021. Available at: https://gco.iarc.fr/. Accessed on 23 November 2025.
3. Simelela PN. WHO global strategy to eliminate cervical cancer as a public health problem: An opportunity to make it a disease of the past. Int J Gynecol Obstet.2021;152(1):1-3.
4. Ministry of Health. Kenya-Cancer-Policy. Nairobi, Kenya: Ministry of Health, Nairobi: Kenya. 2020. Available at: https://guidelines.health.go.ke/. Accessed on 23 November 2025.
5. Adegboyega A, Aleshire M, Dignan M, Hatcher J. Spousal support and knowledge related to cervical

cancer screening: Are Sub-Saharan African immigrant men interested?. Health Care Women Int. 2019;40(6):665-81.
6. Sharma S, Bhuvan KC, Khatri A. Factors influencing male participation in reproductive health: a qualitative study. J Multidiscip Healthc. 2018;11:601-8.
7. Adewumi K, Oketch SY, Choi Y, Huchko MJ. Female perspectives on male involvement in a human-papillomavirus-based cervical cancer-screening program in western Kenya. BMC Womens Health. 2019;19:107.
8. Kusumaningrum T. Men's Participation to Support Early Detection of Cervical Cancer in Indonesia: A Literature Review in Proc. 8th International Nursing Conference on Education, Practice and Research Development in Nursing (INC 2017), Advances in Health Sciences Research, Atlantis Press, Apr. 2017, pp. 171–173, doi: 10.2991/inc-17.2017.45.
9. Ngwenya D, Huang SL. Knowledge, attitude and practice on cervical cancer and screening: a survey of men and women in Swaziland. J Public Health (Oxf). 2018;40(3):e343-50.
10. Binka C, Doku DT, Nyarko SH, Asare KA. Male support for cervical cancer screening and treatment in rural Ghana. PLoS One. 2019;14(11):e0224692.
11. Rosser JI, Zakaras JM, Hamisi S, Huchko MJ. Men's knowledge and attitudes about cervical cancer screening in Kenya. BMC Womens Health. 2014;14:138.
12. Darj E, Chalise P, Shakya S. Barriers and facilitators to cervical cancer screening in Nepal: A qualitative study. Sex Reprod Healthc. 2019;20:20-6.
13. Marlow L, McBride E, Varnes L, Waller J. Barriers to cervical screening among older women from hard-to-reach groups: A qualitative study in England. BMC Womens Health. 2019;19(1):38.
14. Liebermann EJ, VanDevanter N, Shirazian T, Frías Gúzman N, Niles M, Healton C, et al. Barriers to Cervical Cancer Screening and Treatment in the Dominican Republic: Perspectives of Focus Group Participants in the Santo Domingo Area. J Transcult Nurs. 2020;31(2):121-7.
15. Binka C, Nyarko SH, Awusabo-Asare K, Doku DT. Barriers to the Uptake of Cervical Cancer Screening and Treatment among Rural Women in Ghana. Bio Med Res Int. 2019;6320938.
16. Lunsford BN, Ragan K, Smith JL, Saraiya M, Aketch M. Environmental and Psychosocial Barriers to and Benefits of Cervical Cancer Screening in Kenya. Oncologist. 2017;22(2):173-81.
17. Adewumi K, Nishimura H, Oketch SY, Adsul P, Huchko M. Barriers and Facilitators to Cervical Cancer Screening in Western Kenya: a Qualitative Study. J Cancer Educ. 2022;37(4):1122-8.
18. Moses E, Wagner EC, Sekikubo M, Pedersen HN, Money DM, Ogilvie GS, et al. Understanding Men's Perceptions of Human Papillomavirus and Cervical Cancer Screening in Kampala, Uganda. J Glob Oncol. 2018;4:00106.
19. Okedo-Alex IN, Uneke CJ, Uro-Chukwu HC Akamike IC, Chukwu OE. "it is what i tell her that she will do": A mixed methods study of married men's knowledge and attitude towards supporting their wives' cervical cancer screening in rural south-east nigeria. Pan Afr Med J. 2020;36:156.
20. Nyaaba JA, Akurugu E. Knowledge, barriers and uptake towards Cervical Cancer screening among female health workers in Ghana: A perspective of the Health Belief Model. Int J Africa Nurs Sci. 2023;19:100587.
21. Usman IM, Chama N, Aigbogun EO, Kabanyoro A, Kasozi KI, Usman CO, et al. Knowledge, Attitude, and Practice Toward Cervical Cancer Screening Among Female University Students in Ishaka Western Uganda. Int J Womens Health. 2023;15:611-20.
22. de Fouw M, Stroeken Y, Niwagaba B, Musheshe M, Tusiime J, Sadayo I, et al. Involving men in cervical cancer prevention; a qualitative enquiry into male perspectives on screening and HPV vaccination in Mid-Western Uganda. PLoS One. 2023;18(1): e0280052.
23. Shahid R, Shoker M, Chu LM, Frehlick R, Ward H Pahwa P. Impact of low health literacy on patients' health outcomes: a multicenter cohort study. BMC Health Serv Res. 2022;22:1148.
24. Petersen Z, Jaca A, Ginindza TG, Maseko G, Takatshana S, Ndlovu P, et al. Barriers to uptake of cervical cancer screening services in low-and-middle-income countries: a systematic review. BMC Womens Health. 2022;22:486.
25. Wangechi GA, Macharia D. Factors Influencing Utilization of Cervical Cancer Screening Services in Kenya: The Case of Nyeri County. Int J Public Heal Sci. 2018;7(4):236-47.
26. Onyenwenyi AOC, McHunu GG. Barriers to cervical cancer screening uptake among rural women in South West Nigeria: A qualitative study. S Afr J Obstet Gynaecol. 2018;24(1):22.

Cite this article as: Wambua RT. Knowledge and health facility – related determinants of men's support for spousal cervical cancer screening: a mixed-methods study in a rural county of Southeastern Kenya. Int J Community Med Public Health 2026;13:565-75.