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Cervical Cancer Care Seeking Behaviour Among Community Women, Jos-North, Plateau State

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Abstract

Most people are infected with HPV shortly after the onset of sexual activity. The screening rate has not reached the WHO's target. This study seeks to assess community women's care-seeking behavior toward cervical cancer screening participation. A cross-sectional design was employed, community women who met the criteria for inclusion were given a self-developed questionnaire conveniently. Results show that the majority (51.9%) of women were between the ages of 21-29, majority (83.0%) had only one sexual partner, majority (75.0%) were extremely poor with very low yearly income of less than 284,700.00 Naira, and 19.3% experienced gynecological symptoms. Majority (78.5%) have the fear of being diagnosed with cancer, and 69.6% fear exposing their genital area. Women agreed that HPV is the causative organism of cervical cancer and husband do not allow someone to touch their wives' private parts. They moderately agreed that a woman must obtain consent from her husband before going for screening, that exposing their private part is culturally inappropriate. Only 14.1% of those surveyed had ever undergone a cervical cancer screening. Among the respondents who had screened, 57.9% had bad experience. There is a significant difference between age group and screening where majority who had screened were older women within the age group 30-65 years (X^2=8.402; P-value=0.005) and having gynecological symptoms has positive influence on screening participation (X^2=7.422; P-value=0.012). The majority (92.6%) believed that husband involvement and the caregiver's friendly attitude are among other facilitating conditions to screening. In conclusion, there was low screening participation among community women. Women's knowledge of cervical cancer and screening did not translate into participating in screening. Low socioeconomic status has a significant impact on screening, screening rates were higher among older women than younger ones, and experiencing gynecological symptoms has a positive impact on screening. It was therefore recommended that interventions aimed at enhancing care seeking behavior based on women's needs be implemented.

Keywords – *Cancer prevention, Care seeking Behaviour, Gynecological screening*

I. Introduction

Most people are infected with HPV shortly after the onset of sexual activity. It is the second-most prevalent cancer in Low-income countries and the fourth worldwide (Arbyn, Weiderpass, Bruni, Sanjose, Saraiya, Ferlay et al., 2020). The screening rate has not yet reached the WHO's target. The number of people being screened for CC is declining (Donatus, Nina, Sama, Nkfusai, Bede, Shirinde and Cumber, 2019; (MacLaughlin, Jacobson, Radecki Breitkopf, Wilson, Jacobson, Fan et al., 2019). The prevalence of screening has decreased in Western nations (Donatus et al., 2019), a declined among 21- to 29-year-old women (MacLaughlin et al., 2019). Most African

countries have screening rates of less than 10% (Won, Jin, Bit, & Ju, 2019). According to studies conducted in Nigeria, screening with conventional cytology was less than 9% in the study population. (Musa et al., 2019), and 9.8% among Nigeria's urban population (Utoo, Utoo, Ngwan, Anzaku & Daniel 2016), as well as 32.6% among health professionals at Jos University Teaching Hospital (JUTH) and its neighborhoods (Eka, 2016). Globally, screening, diagnosis, and treatment of precancerous lesion can prevent cancer of the cervix (Musa, Nankat, Achenbach, Shambe, Taiwo, Mandong et al., 2016; Nwobodo & Ba-Break, 2016; Islam, Billah, Hossain & Oldroyd, 2017). The majority of cervical cancer tests are performed opportunistically during normal clinic visits, and the majority of cases (72.3%) are detected in advanced stages (Musa et al, 2016). Women who use cervical cancer screening services have a median age of 37 (Musa et al., 2019), 40–49 years (Egbodo, Edugbe, Akunaeziri, Ayuba, Oga, Shambe, et al, 2018).

Fears, social norms, negative expectations and beliefs, inadequate knowledge of cervical cancer preventions are among the factors that women with the disease may experience (Frerichs et al., 2018; Alexis & Worsley, 2018; Hahm, Choi, Lee, Suh, Lee, Shin et al., 2017; Nyambe, Kampen, Baboo, & Hal, 2018; Ifemelumma et al., 2019; Vhuromu1, et al., 2018; Finocchario-Kessler et al., 2016; Momberg, Botha, Van Der Merwe, & Moodley, 2017; Lor et al., 2017), low income (US Preventive Services Task Force, 2018), a prior negative screening experience (Al-Amoudi, Hohl, Distelhorst, & Thompson, 2015), may discourage screening participation whereas having gynecological symptoms (Ndejjo et al., 2017; Momberg et al., 2017; Nyambe et al., 2018) and facilitating conditions may encourage participation.

II. Materials and Method

A cross sectional design was adopted for this study. The study population consist of adult female residents of fudawa and furaka districts aged 21-65 years, sexually active, and willing to respond to questions. Women were diagnosed with cervical cancer, had their cervix removed and unwilling to respond to questions were excluded from the study. The screening site is about 12.2Km maximum, 20 minutes' drive to the study area, transportation via other route is even shorter and the transport fare is about 80 Naira at most. Sample size was determined using Proportion formula given by Cochran (1963) . Where:

n = sample size to be calculated

Z = Confidence level 95% -> Z=1.96

e = degree of freedom - (e.g., 5%) =0.05

p= 9.8% proportion of women screened in Nigeria's urban population (Utoo, Utoo, Ngwan, Anzaku & Daniel 2016).

q= 1-p (1-0.098).

Self-Developed questionnaire with both close and open-ended questions were distributed to respondents conveniently.

III. Results

Table 1: sociodemographic data of respondents

Item		f	%
Age in Years	21-29	70	51.9
	30-65	65	48.1
	Total	135	100.0
Marital Status	Married	65	48.1
	Widowed	8	5.9
	Divorced	3	2.2
	Separated	2	1.5
	Single	57	42.2
	Total	135	100.0
Religion	Christianity	129	95.6
	Muslim	6	4.4
	Total	135	100.0
Number of sex partner	1	112	83.0
	2	19	14.1
	3	4	3.0
	Total	135	100.0
Family planning method	Natural Method	105	77.8
	Pills	12	8.9

used	Injectable	7	5.2
	IUCD	1	.7
	Implant	10	7.4
	Total	135	100.0
occupation	Housewife	22	16.3
	Civil servant	19	14.1
	Businesswoman	33	24.4
	Others (specify)	23	17.0
	Student	38	28.1
	Total	135	100.0
Annual Income	<284,700.00	48	75.0
	284,700.00-479,500.00	7	10.9
	> 479500	9	14.1
	Total	64	100.0

Table 1 shows that most (51.9%) of the respondents were within the age range 21-29 years while age range 30-65 were 48.1%. Out of the 64 women who responded to annul income 75.0% earned <284,700.00 Naira (693.5 dollar), 10.9% earn between 284,700.00-479,500.00 while 14.1% earn > 479,500 Naira.

Table: 2 Clinical Variables

		f	%
symptom like bleeding from vagina	Yes	26	19.3
	No	109	80.7
	Total	135	100.0
symptom before the bleeding	Pain in the pelvic region	1	25.0
	Bleeding from the private part	2	50.0
	Pain and vagina itches	1	25.0
	Total	4	100.0
	Missing System	131	
Total		135	

Table 2 shows that only 19.3% had clinical symptom in form of bleeding from their vagina while 80.75% had no clinical symptom.

Table 3: Affect

Item		**f**	**%**
The procedure is embarrassing	yes	78	57.8
	no	57	42.2
	Total	135	100.0
Procedure is painful	yes	92	68.1
	no	43	31.9
	Total	135	100.0
Fear of exposing my private part	yes	94	69.6
	no	41	30.4
	Total	135	100.0
Fear of the procedure and screening environment	yes	87	64.4
	no	48	35.6
	Total	135	100.0
Fear of being diagnosed with the disease	yes	106	78.5
	no	29	21.5
	Total	135	100.0

Table 3. shows that, most (57.8%) women said the procedure for cervical cancer screening is embarrassing, 68.1% said the procedure is painful. Women who said fear of being diagnosed with cervical cancer were 78.5%.

Table: 4 Utility

Item		**f**	**%**	**Mean**
Cervical cancer is lack of blood supply to the uterus after delivery	Strongly Disagree	18	13.3	
	Disagree	28	20.7	2.94
	Undecided	46	34.1	
	Agree	30	22.2	
	Strongly Agree	13	9.6	
	Total	135	100.0	
Having sex with more than one man may expose one to the infection	Strongly Disagree	5	3.7	
	Disagree	10	7.4	
	Undecided	9	6.7	4.00
	Agree	67	49.6	
	Strongly Agree	44	32.6	
	Total	135	100.0	
The germ that causes cervical cancer is human papilloma virus	Strongly Disagree	1	.7	
	Disagree	5	3.7	
	Undecided	61	45.2	
	Agree	41	30.4	3.65
	Strongly Agree	27	20.0	
	Total	135	100.0	
Having sex before 6 weeks after delivery can cause cervical cancer	Strongly Disagree	11	8.1	
	Disagree	19	14.1	
	Undecided	47	34.8	3.21
	Agree	46	34.1	
	Strongly Agree	12	8.9	
	Total	135	100.0	
Evil spirit causes the disease	Strongly Disagree	77	57.0	
	Disagree	40	29.6	
	Undecided	9	6.7	1.66
	Agree	5	3.7	
	Strongly Agree	4	3.0	
	Total	135	100.0	
Cervical cancer is not preventable	Strongly Disagree	32	23.7	
	Disagree	67	49.6	
	Undecided	21	15.6	2.16
	Agree	13	9.6	
	Strongly Agree	2	1.5	

	Total	135	100.0	
Screening will detect cell before they turn to cancer cells	Strongly Disagree	5	3.7	
	Disagree	15	11.1	
	Undecided	76	56.3	3.13
	Agree	36	26.7	
	Strongly Agree	3	2.2	
	Total	135	100.0	
Treatment of cervical cancer is by cutting of the affected part	Strongly Disagree	12	8.9	
	Disagree	33	24.4	
	Undecided	56	41.5	2.84
	Agree	32	23.7	
	Strongly Agree	2	1.5	
	Total	135	100.0	
Medical treatment of cervical cancer is just temporal	Strongly Disagree	10	7.4	
	Disagree	30	22.2	
	Undecided	40	29.6	3.11
	Agree	45	33.3	
	Strongly Agree	10	7.4	
	Total	135	100.0	
Traditional/herbal medicine is the best treatment	Strongly Disagree	39	28.9	
	Disagree	52	38.5	
	Undecided	24	17.8	2.21
	Agree	16	11.9	
	Strongly Agree	4	3.0	
	Total	135	100.0	
Even when cervix is cut, the disease reoccurs	Strongly Disagree	12	8.9	
	Disagree	27	20.0	
	Undecided	68	50.4	2.85
	Agree	25	18.5	
	Strongly Agree	3	2.2	
	Total	135	100.0	
Outcome of cervical cancer is death	Strongly Disagree	18	13.3	
	Disagree	33	24.4	
	Undecided	31	23.0	2.96
	Agree	42	31.1	
	Strongly Agree	11	8.1	
	Total	135	100.0	

Strongly disagreed= <1.5, Disagreed=1.51-2.5, Moderately agreed=2.51-3.5, agreed=3.51-4.5, strongly greed=4.51-5.

Table 4 shows that women moderately agreed that lack of blood supply to the uterus and having sex before six weeks postpartum as some causes; screening is to detect precancerous cells; cutting of the affected part as a treatment option; the treatment is temporal; even when cervix is cut the disease reoccurs; outcome of cancer of the cervix is death. They agreed that HPV is the cause of cervical cancer and that having multiple sex partners increases the risk of developing the disease. Women disagreed that cervical cancer is caused by evil spirit, traditional and herbal medicine are the best treatment option, and that cancer of the cervix is not preventable.

Table 5: Norm

Item		f	%	Mean
A woman must obtain consent from her husband before going for screening	Strongly Disagree	6	4.4	
	Disagree	34	25.2	
	Undecided	12	8.9	3.50
	Agree	53	39.3	
	Strongly Agree	30	22.2	
	Total	135	100.0	
Exposing my private part is culturally inappropriate	Strongly Disagree	13	9.6	
	Disagree	41	30.4	
	Undecided	14	10.4	3.18
	Agree	43	31.9	
	Strongly Agree	24	17.8	
	Total	135	100.0	
Culture does not allow sharing of hospital results and experiences	Strongly Disagree	6	4.4	
	Disagree	57	42.2	
	Undecided	30	22.2	2.90
	Agree	28	20.7	
	Strongly Agree	14	10.4	
	Total	135	100.0	
Husbands do not allow someone to touch their wives private part	Strongly Disagree	7	5.2	
	Disagree	18	13.3	
	Undecided	13	9.6	3.77
	Agree	58	43.0	
	Strongly Agree	39	28.9	
	Total	135	100.0	

Strongly disagreed= <1.5, Disagreed=1.51-2.5, Moderately agreed=2.51-3.5, agreed=3.51-4.5, strongly greed=4.51-5.

Table 5 shows that women moderately agreed that a woman must obtain consent from her husband before going for screening, that their culture that does not allow sharing of hospital results and experiences.

Table 6: Habit

Item		f	%
Ever Screened	Yes	19	14.1
	No	116	85.9
	Total	135	100.0
When last screened	Before 2018	7	36.8
	Between 2018-2021	12	63.2
	Total	19	100.0
Screening experienced	Bad procedural experience	11	57.9
	Good experience	8	42.1
	Total	19	100.0

Table 6 shows that majority (85.9%) of the women had never screened for cervical cancer while only 14.1% have screened for cervical cancer. Amongst the women who had screened, majority of them (63.2%) had it done between 2018- 2021, while 36.8% had it done before the year 2018. Out of the 19 women who had screened, 57.9% had bad experience during screening while 42.1%) had good experience.

Table 7: Facilitating Conditions

Item		Frequency	Percent
Awareness of cervical cancer and screening services	yes	114	84.4
	no	21	15.6
	Total	135	100.0
Place of screening near home	yes	99	73.3
	no	36	26.7
	Total	135	100.0
Adequate knowledge on benefits of screening	yes	110	81.5
	no	25	18.5
	Total	135	100.0
Cultural belief which does allow for screening	yes	86	63.7
	no	49	36.3
	Total	135	100.0
Involving Husband in promoting screening	yes	125	92.6
	no	10	7.4
	Total	135	100.0
Involving other important relatives and friends in screening	yes	85	63.0
	no	50	37.0
	Total	135	100.0
Health insurance covering cervical cancer screening	yes	114	84.4
	no	21	15.6
	Total	135	100.0
Recommendation by care provider	yes	120	88.9
	no	15	11.1
	Total	135	100.0

Welcoming attitude of care provider	yes	125	92.6
	no	10	7.4
	Total	135	100.0
Preference of Nurse or Doctor during screening	yes	111	82.2
	no	24	17.8
	Total	135	100.0
A person that is important in women decision making	Mother	32	41.0
	Father	10	12.8
	Sister	19	24.4
	Children	3	3.8
	Aunty	12	15.4
	Neighbour	2	2.6
	Total	78	100.0

Table 7 indicates majority of women (92.6%) believe that husband involvement and a welcoming attitude from the care provider respectively, 88.9% of women said health care provider's recommendation, and 84.4% said health insurance coverage and awareness of cancer of the cervix screening services, 82.2% said preference of female Nurse or Doctor in sample collection, 81.5% said adequate knowledge on benefits of screening, 73.3% said place of screening near home , 63.7% said cultural belief which does allow for screening, and 63.0% said involving important relatives and friends are facilitating conditions for screening. Respondents suggested in order of priority that mother (41.0%), sister (24.4%), aunt (15.4%), father (12.8%), children (3.8%) and Neighbour (2.6) may be influential in one decision to have cervical cancer screening. These findings are in line with (Kim et al., 2012; Black, Hyslop, & Richmond; Oketch et al., 2019; Vhuromu et al., 2018; Yang et al., 2019).

*Table 8: Age in years (specify) * I have ever screened for cervical cancer Crosstabulation*

			I have ever screened for cervical cancer		Total	Chi-Square	Df	P-value
			yes	no				
Age in years	21-29	Count	4	66	70	8.402	1	.005
		% Within Age in years (specify)	5.7%	94.3%	100%			
	30-65	Count	15	50	65			
		% Within Age in years (specify)	23.1%	76.9%	100%			
Total		Count	19	116	135			
		% Within Age in years (specify)	14.1%	85.9%	100%			

Table 8 shows that the Pearson Chi-Square value at 0.05 significance level is 0.005 which is less than 0.05, we reject the null hypothesis accept the alternate.

*Table 9: Having symptom like bleeding from private part * Ever screened for cervical cancer Crosstabulation.*

			Ever screened for cervical cancer		Total	Chi-Square	Df	P-value
			Yes	No				
Having symptom like bleeding from private part	**Yes**	Count	8	18	26	7.422	1	.012
		% Within having symptom like bleeding from private part	30.8%	69.2%	100%			
	No	Count	11	98	109			
		% Within having symptom like bleeding from private part	10.1%	89.9%	100%			
Total	Count		19	116	135			
	% Within having symptom like bleeding from private part		14.1%	85.9%	100%			

Table 9 shows that Pearson Chi-square 0.012 is significantly lesser than 0.05, there for we reject the null hypothesis and therefore accept the alternate hypothesis.

IV. Discussion

According to sociodemographic characteristic, , there was a significant correlation between age group and cervical cancer screening, which can be seen from the fact that the majority of women who screened were between the ages of 30 and 65 (X2=8.402; P value=0.005) which is not similar with (Mungai1, Kikuwi1 and Wanzala, 20116). Most of the respondents (28.1%) were students, businesswomen (24.4%), artisans (17.0%), housewives (16.3%), and civil servants (14.1%). Seventy five percent who responded to annual income were extremely poor, earning less than 693.5 Dollar yearly. Low screening rate in this population may be related to low economic status in line with (US PSTF, 2018). There is a significant difference in CC screening amongst women that were experiencing gynecological symptom (X^2=7.422; P-value=0.012) than those not experiencing symptom similar to (Ndejjo et al., 2017; Yang, Li, Chen, & Morgan, 2019; Momberg et al, 2017).

Concerning affect (feelings), majority (68.1%) perceived that the procedure for CC screening is painful as found (Vhuromu1, et al., 2018; Finocchario-Kessler et al., 2016; Nyambe et al., 2018); the majority (57.8%) said that it is embarrassing (Finocchario-kessler et al., 2016; Joffe et al., 2018; Lor et al., 2013; Vhuromu et al., 2018; Kue et al., 2020; Des Marais et al., 2022; Gitonga et al., 2022; Lunsford et al., 2017), 78.5% fear a diagnosis of cervical cancer (Ubah et al., 2022; Yang et al, 2019; Frerichs, Rhode, Bell, Hunt, Lowery, Hahm et al., 2017; Brooks, et al., 2018; Nyambe et al, 2018), 69.4% fear of exposing the genital area, 64.4% fears of screening procedure and environment which is similar to (Joffe et al., 2018; Lor et al., 2017; Yang et al., 2019; Ubah et al., 2022).

In terms of utility, women moderately agreed that lack of blood circulation to the uterus, having intercourse before six weeks postpartum, cutting of the affected part is the treatment option, and the treatment is

temporal. They moderately agreed that screening will detect cells before they develop to cancer cells in line with (Vhuromu et al., 2018; Ifemelumma et al., 2019), outcome of cervical cancer is death congruent with (Gitonga et al., 2022). They agreed to having multiple sex partners as risk factor and HPV is the causative organism. Women disagreed that cervical cancer is not preventable, evil is the cause, and that traditional/herbal medicine is the best treatment option. The knowledge of women in from this finding does not translate to screening participation.

The respondent's norm indicate that women moderately agreed that a woman must get her husband's permission before screening as found by (Yang et al, 2019; Lor et al., 2013), that exposing one's private part is culturally inappropriate congruent with (Yang et al, 2019; Lor et al, 2013), their culture which forbids sharing of hospital results and experiences (Momberg et al., 2017). Women agreed that husbands do not permit others to touch their wives' private parts. Findings from this study showed that social and personal norms may have an impact on the care-seeking behaviour related to cervical cancer and this is congruent with (Momberg et al., 2017).

Regarding women habit on screening, only 14.1% of women have ever been screened for cervical cancer which is slightly higher than 9% (Musa et al., 2019), 10% (Won, Jin, Bit, & Ju, 2019), 9.8% among urban population in Nigeria (Utoo, Utoo, Ngwan, Anzaku & Daniel 2016). Lower than 32.6% among health care providers in JUTH and in the neighborhoods (Eka, 2016), about 32% among Kurdish women in western Iran (Aminisani, Fattahpour, Abedi, & Shamshirgaran, 2016). Majority (63.2%) of women who screened had it between 2018 and 2021, with 57.9% reporting a poor screening experience in line with (Donatus et al., 2019) and 57.9% reported bad screening experience compared to 42.1% who had good screening experience. Previous bad hospital experiences may have negative influence on screening participation.

Facilitating conditions to screening from this study shown that majority (92.6%) of women stated that including their husbands in the screening process and care provider's welcoming attitude respectively, 88.9% said recommendation by health care provider, 84.4% said awareness of cervical cancer and screening services and health insurance coverage for screening respectively, 82.2% said preference of female Nurse or Doctor in sample collection, 81.5% said adequate knowledge on benefits of screening, 73.3% said place of screening near home, 63.7% said cultural belief which does allow for screening, and 63.0% said involving important relatives and friends is a facilitator. Respondent' suggested in order of priority, a woman's mother, sister, aunt, and father to be influential in one's decision to participate in screening. These findings are similar to (Yang et al., 2019; Oketch et al., 2019; Black, Hyslop, & Richmond, 2019; Vhuromu et al., 2018).

V. Conclusion

There was low screening participation among women in the community. Women's knowledge of cervical cancer and its screening services did not result in increased screening participation. Low socioeconomic status has a significant impact on screening; older women were more likely to be screened than younger ones, experiencing gynecological symptoms has positive influence on screening. It was therefore recommended that interventions aim at improving care-seeking behaviour based on women needs be implemented. This study was limited to communities in Jos-North, Plateau State which may not be generalized in other communities.

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