HUSBANDS' KNOWLEDGE, ATTITUDE AND BEHAVIOURAL DISPOSITION TO WIVES SCREENING FOR CERVICAL CANCER IN IBADAN

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ABSTRACT
Cervical cancer is one of the leading causes of cancer death in women from both developed and developing countries of the world. About half a million new cases are seen worldwide each year, most occurring in developing countries where cervical cancer screening and treatment are less available and accessible. Several studies have identified various barriers to cervical screening in sub-Saharan African countries which may account for why only a few women are screening. This study aimed at assessing husbands' cervical cancer related knowledge, attitude and practices encouraging their wives to screen for cervical cancer in Ibadan. Through a descriptive survey design, A self-developed validated instrument on Husbands' Disposition to Cervical Cancer Screening (HDCCS) was used for data collection based on random sampling. Four research questions were raised in the study. Data collected was analyzed using Pearson Product Moment Correlation. Descriptive statistics indicated that 70% of the husbands had good cervical cancer related knowledge. On attitude to screening, 55.1% of the husbands will encourage their wives to screen for cervical cancer if they knew a test that can detect cervical cancer early. Husbands' behaviour encouraging wives to screen indicates that wives of 55.2% of the husbands have not gone for pap smear test, 89.1% of husbands did not know when their wives should go for pap smear test and 80% did not remind their wives to go for pap smear test Correlation analysis showed that husbands' cervical cancer related knowledge had a significant linear relationship with husbands' practices encouraging wives to go for cervical cancer screening while their attitude towards screening did not. It was concluded that there is need to educate husbands about cervical cancer and the need for their wives to screen before symptoms are noticed.

BACKGROUND
Cervical cancer is one of the leading causes of cancer death in women from both developed and developing countries of the world (Ferlay, Shin, Bray, Mathers, & Parkin 2010; WHO, 2012). About half a million new cases are seen worldwide each year, most occurring in developing countries (Awodele, Adeyomoye, Awodele, Kwashi, Awodele & Dolapo, 2011; Ertem, 2009) where cervical cancer screening and treatment are less available and accessible. In sub-Saharan Africa, the cervical cancer rates are on the rise, paralleling the HIV epidemic (Anorlu, 2008). In Nigeria and some other developing countries, cancer of the cervix is the commonest genital tract malignancy in the female ranking second to breast cancer (Adefuye, 2006; Agboola, Banjo & Abudu, 2007; Bowa, Wood, Chao, Chintu, Mudenda & Chikwenya, 2009).

The cause of cervical cancer though not fully known has been strongly associated with certain sub types of the Human Papilloma virus which is spread through sexual intercourse (Ngandwe, Lowe, Richards, Hause, Wood & Angeletti, 2007). Approximately half of all people who have had sex will have an HPV infection at some point in their lifetime (Centers for Disease Control and Prevention, 2010; Vetter & Geller, 2007). HPV infections are largely asymptomatic and transient in both men and women (Dunne et al., 2009; Giuliano, 2007), resulting in people unknowingly transmitting the virus to their sexual partners (Giuliano, 2007). Cultural norms, such as early marriage and polygamous marriages, also increase the risk for cervical cancer due to early exposure to sexual activities and having of multiple sex partners which greatly increases the chances of HPV infection. The risk of HPV infection in polygamous marriages increases as the number of wives increase (Anorlu, 2008). Married women in monogamous marriages where husbands engage in extramarital sex are also at increased risks (Hattori & Dodoo, 2007).

The treatment for cervical cancer is no doubt very expensive in terms of cost and highly tasking in terms of physical and psychological demands on the woman, her husband and the children. The disease often affect women who are in their most productive years thus having devastating effects on the well-being of their families, and results, for example, in decreases in school attendance and nutritional status among their children (Saleh, Yusuph, Zailani & Aji, 2013). Subramanian and colleagues have however observed that there is a great difference in the cost of early versus late-stage cancers, making screening among low-income women likely to be cost effective (Subramanian, Trogdon, Ekwueme, Gardner, Whitmire & Rao, 2010) and by implication less traumatic on the family.

The trauma of caring for a wife with cervical cancer could thus be avoided or minimized if only women screened for cervical cancer. Pap smear test is an established screening method for cancer of the cervix (WHO, 2006b). With the test, cervical cancer is almost 100 percent curable as it has the ability to identity precancerous changes in the cells of the cervix hence enabling a woman take action even before cancer develops. Its effectiveness however is contingent upon women going for the test. In spite of the availability of this test, it has been shown that women mostly report late for treatment of cervical cancer (Sankaranarayanan, Thara, Ngoma, Naud, Keita, 2010; Bowa, Wood, Chao, Chintu, Mudenda & Chikwenya, 2009) as cervical cancer screening is often opportunistic in many parts of sub-saharan Africa (Busuttil, Dalmas & Vincenti, 2006).

Several studies have identified various barriers to cervical screening in sub-Saharan African countries which may account for why only a few women are screening. Some of the identified barriers are limited/no knowledge about cervical cancer and its screening tests (Omotara, Yahya, Amodu, & Bimba, 2013), poor routine screening services (Oguntayo & Samaila, 2010; Mupepi, Sampselle & Johnson, 2011), low risk perception for cervical cancer (Oche, Kaoje, Gana & Ango, 2013; Mupepi, Sampselle & Johnson, 2011**)**, being elderly and illiterate (Asthana & Labani, 2013), lack of advice from medical practitioners (Al-Naggar *et al.*, 2010), feeling uncomfortable with the idea of vaginal examination by male doctors (Al-Naggar & Chen, 2012; Oon, Shuib, Ali, Hussain, Shaaban, & Yusoff, 2011) and fear of pain (Farooqui *et al.*, 2013; Kwok *et al.*, 2011). Other studies suggest that lack of support from husband could be a possible source of barrier to screening (Al-Naggar *et al.*, 2010; Oon *et al.*, 2011).

The role of husbands in their wives uptake of cervical cancer screening has not been fully explored in Nigerian studies. The World Health Organization (2006) has suggested that men play an important role in the cervical cancer screening behaviors of women in middle-income countries. It has been observed that psychological barriers, such as the lack of spousal support, can impede a woman's access to cervical cancer screenings (Airhihenbuwa, 2008; Wright, Jr, Blumenthal, Bradley, Denny, Esmy & Jayant, 2007). When a woman feels her husband will not care about the outcome of the screening test she may feel reluctant to go for screening (Al-Naggar *et al.*, 2010; Oon *et al.*, 2011). Moreover, going for screening without permission may indicate pride or imply that she has something to hide for which the woman maybe punished by her husband. Abrahams, Wood and Jewkes (1997) reported that in South Africa, some females mentioned not being allowed to visit clinics for contraceptive services and were even beaten by their husbands for attending mobile health clinics without their permission. Furthermore, most African females are financially dependent on their husbands and would need his support to access screening services. A study in Zimbabwe reported that females who were financially independent were 6.61% more likely to access cervical screening compared with those who were dependent on their husbands (Mupepi, Sampselle & Johnson, 2011). Cultural and religious factors also affect wives ability to make decision since husbands have to be consulted

or informed before seeking any treatment (Bradley et al., 2006). Also, Arulogun and Maxwell (2012) reported that most of the respondents in their study mentioned husbands as significant person to influence their screening behavior which highlights the importance of male involvement in women's reproductive health issues, which is an emerging trend in reproductive health service utilization. Encouraging men to support women's participation in cervical cancer prevention programs (Nene et al., 2007) may reduce husband related barriers where such exist.

This study therefore, was designed to assess husbands' knowledge, attitude, and behavioural dispositions that encourage their wives to screen for cervical cancer. Although knowledge is not a direct predictor of health behaviour, health behavior theories posit that it is a distal factor (Tiro, Meissner, Kobrin, & Chollette, 2007) that could influence health behavior and as such worth looking into.

Purpose of the study: The main objective of this study is to assess the relationship between husbands' behavioural dispositions encouraging their wives to screen for cervical cancer with attitude to cervical cancer screening and cervical cancer related knowledge.

Research questions: The four research questions raised in this study are: 1. What is the level of husbands' cervical cancer related knowledge? 2. What is the attitude of husbands towards their wives screening for cervical cancer? 3. Do husbands encourage their wives to go for cervical cancer screening? 4. What type of relationship exists between husbands' cervical cancer related knowledge, attitude towards cervical cancer screening and husbands' practices encouraging their wives to screen for cervical cancer?

METHDOLOGY

Design: This study adopted the descriptive survey design.

Population: The population for this study comprised married male civil servants living in Ibadan.

Sampling technique and procedure for data collection: A multi-stage sampling technique was used to select a total of 250 husbands in the Oyo State civil service. The purpose of the study for which the questionnaire was designed was explained to the men and those who were willing were given the questionnaire to complete after which it was collected. Out of the 250 questionnaires administered, 221 were suitable for analysis.

Instrumentation: A self-developed and pre-tested instrument titled Husbands' Disposition to Cervical Cancer Screening (HDCCS) was used for gathering data. Items for the instrument were generated from the literature. The generated items were given to experts to examine to ensure the items had both content and face validity. The instrument had four parts tapping information on respondents' demographic information, cervical cancer related knowledge, attitude and practice respectively. The subscale assessing husbands' cervical cancer related knowledge had 17 items with a coefficient alpha of 0.62. Scores on items on this scale were added together to get the total cervical cancer related knowledge score. Participants who scored less than 50% of the items correctly were said to have poor knowledge, while those who scored between 50% to 59%, 60% to 75% and above 75% correctly were said to have average, good and very good cervical cancer related knowledge respectively. The attitude subscale had 5 items with a coefficient alpha of 0.45 while practice subscale assessing husbands' behavioural dispositions encouraging their wives to go for cervical cancer screening had 5 items with coefficient alpha of

0.82. All items on the subscales had a 4-point response format of strongly agree, agree, disagree and strongly disagree.

Method of data analysis: Data collected was analyzed using Pearson Product Moment Correlation (PPMC) to determine the nature of the relationship between the variables in this study.

RESULTS

Table 1: Demographic characteristics of respondents

Age Groups	Frequency (%)	Educational qualification	Frequency (%)	Religion	Frequency (%)
20-29	40 (18.1%)	NCE	74 (33.5%)	Christianity	100 (45.2%)
30-39	99 (44.8%)	First Degree	65 29.4%)	Islam	121 (54.8%)
40-49	65 (29.4%)	Master	25 (11.3%)	Total	221 (100%)
50-59	17 (7.7%)	Above	45 (20.4%)		
Total	221 (100.0%)	Not indicated	12 (5.4%)		
		Total	221 (100.0%)		

Table 1 show that a good number of the respondents (44.8%) were in the 30-39years age group with 45.2% being Christians and 54.8% Moslems. Most (33.5%) of the participants were National Certificate of Education (NCE) graduates.

Research question 1: What is the level of husbands' cervical cancer related knowledge**?**

Table 2: Levels of husbands' cervical cancer related knowledge

	poor knowledge	Average knowledge	Good knowledge	Very good knowledge	**Total**
Frequency (%)	6 (2.7%)	33 (14.9%)	155 (70.1%)	27 (12.2%)	221 (100%)

Table 2 shows that 70% of the husbands had good cervical cancer related knowledge.

Research question 2: What is the attitude of husbands towards their wives screening for cervical cancer?

Table 3: Attitude of husbands towards wives cervical cancer screening

Items	SA	A	D	SD	NR	Total
My wife can never have cervical cancer because I married her as a virgin	50 (22.5%)	54 (24.4%)	63 (28.5%)	51 (23.1%)	3 (1.5%)	221 (100.0%)
I cannot allow my wife to go for cervical cancer screening because I don't want another person to see her private part	45 (20.4%)	45 (20.4%)	67 (30.2%)	63 (28.5%)	1 (0.5%)	221 (100.0%)
If I know of a test that can help detect cervical cancer early I'll encourage my wife to go for it	58 (26.1%)	64 (29.0%)	41 (18.6%)	56 (25.3%)	2 (1.0%)	221 (100.0%)
I will be willing to pay for any test that would help my wife know her cancer of the cervix status	70 (31.7%)	72 (32.5%)	49 (22.2%)	29 (13.1%)	1 (0.5%)	221 (100.0%)
I do not like the nature of pap smear test	55 (24.9%)	32 (14.5%)	86 (38.9%)	39 (17.6)	9 (4.1%)	221 (100.0%)

NB: SA **-** Strongly Agree, A – Agree, D – Disagree, SD – Strongly Disagree, NR – No Response

Table 3 shows that 51.6% of the respondents were opposed to the view that their wives can never have cervical based on their marrying her as a virgin; 58.7% had contrary views on not allowing their wives to go for cervical cancer screening because they did not want another person to see her private part; 55.1% of the husbands will encourage their wives to screen for cervical cancer if they knew a test that can detect cervical cancer early; 64.2% of the husbands were willing to pay for any test that will enable their wives know their cervical cancer status and 56.9% had opposing attitude on not liking the nature of pap smear test.

Research question 3: Do husbands encourage their wives to go for cervical cancer screening?

Table 4: Husbands' practices encouraging wives to go for cervical cancer screening

Items	SA	A	D	SD	NR	Total
My wife has gone for pap smear test before	46 (20.8%)	51 (23.1%)	47 (21.3%)	75 (33.9%)	2 (0.9%)	221 (100.0%)
I give my wife money to go for pap smear test	12 (5.4%)	10 (4.5%)	65 (29.4%)	73 (33.1%)	61 (27.6%)	221 (100.0%)
I know the time my wife should go for pap smear test	13 (5.9%)	10 (4.5%)	86 (38.9%)	111 (50.2%)	1 (0.5%)	221 (100.0%)
I encourage my wife to go for pap smear test	27 (12.2%)	31 (14.0%)	97 (43.9%)	63 (28.5%)	3 (1.4%)	221 (100.0%)
I remind my wife of when to go for pap smear test	23 (10.4%)	20 (9.1%)	58 (26.2%)	119 (53.8%)	1 (0.5%)	221 (100.0%)

NB: SA **-** Strongly Agree, A – Agree, D – Disagree, SD – Strongly Disagree, NR – No Response

Table 4 shows that 55.2%of the husbands indicated that their wives have not gone for pap smear test, 60.7% indicated that they do not give their wives money to go for pap smear test, 89.1% did not know when their wives should go for pap smear test, 72.4% indicated they have

not been encouraging their wives to go for pap smear test and 80% indicated not reminding their wives to go for pap smear test.

Research question 4: What type of relationship exists between husbands cervical cancer related knowledge, attitude towards cervical cancer screening and practices encouraging wives to go for screening?

Table 5: Correlations matrix of husbands' cervical cancer related knowledge, attitude and practices

		1	2	3
Husbands' cervical cancer related knowledge (1)	Correlation	1		
	Sig. (2-tailed)			
Attitude towards wives screening for cervical cancer (2)	Correlation	-.106	1	
	Sig. (2-tailed)	.117		
Practices encouraging wives to go for screening (3)	Correlation	.183**	-.004	1
	Sig. (2-tailed)	.007	.950	
	N	221	221	220
	Mean	45.05	12.03	8.15
	SD	5.93	2.81	5.12

** Correlation is significant at the 0.01 level (2-tailed).

Table 5 shows that a significant linear relationship exists between husbands' attitude towards wives cervical cancer screening and practices encouraging their wives to go for screening ($p<0.01$). This implies that as husbands' knowledge of cervical cancer increases, the practice of doing things that encourage their wives to go for cervical cancer screening also increases.

DISCUSSION

While several studies have assessed the knowledge of women about cervical cancer, not many studies have assessed husbands' cervical cancer related knowledge. This study found that 70% of husbands' had a good cervical cancer related knowledge compared to the level of awareness reported in some other studies in which less than 10% of husbands were aware of cervical cancer (Donta, Begum, Nair, Naik, Mali & Bandiwadeka, 2012, Williams & Amoateng, 2012). However, only 40.3% of husbands in this study know what Pap smear test is which is high compared to the 3.6% reported by Donta et al (2012). Misconceptions about cervical cancer amongst men were reported in a study from Ghana in which men believe cervical cancer could be due to having too much sex, the use of chemicals around the sex organs, having an abortion, inserting local herbs in the vagina, and poor hygiene (Williams & Amoateng, 2012).

The attitude of husbands in this study towards their wives screening for cervical cancer was averagely favourable as 64% of the husbands indicated willingness to pay for any test that will enable their wives detect cervical cancer early while between 51% and 58% would encourage their wives to go for screening irrespective of the nature of the test or despite their marrying their wives as virgins. This percentage of husbands having favourable attitude towards their wives' cervical cancer screening is however on the margin and needs to be improved upon. Many of the married men in another study also indicated that they would not be comfortable knowing that their wives were having a cervical cancer screening performed by a male doctor but would rather do it themselves if they were taught what to look out for (Williams & Amoateng, 2012). The finding in the current study that 64% of men were willing to pay for any test that would enable their wives screen for cervical cancer collaborates the finding in another study that husbands' attitude toward their wives' health problems was reasonably favourable (Singh & Arora, 2008). Asthana and Labani, (2013) also reported in their study that wives were of the

opinion that a large proportion of their husbands will have no objection for permitting them to go for cervical screening. Findings of a Ghanaian study also indicated that men are willing to encourage their wives to get screening in light of the danger inherent in the disease (Williams & Amoateng, 2012).

There was a low practice of husbands encouraging their wives to screen for cervical cancer in our study. This is evidenced from 89.1% of the husbands not knowing when their wives should go for their next Pap smear test, 80% not reminding their wives to go for Pap smear test, 60.7% not giving their wives money to go for pap smear test and 55.2% of the husbands indicating that their wives have not gone for pap smear test. Though 64% of husbands indicated willingness to pay for their wives Pap smear test, 60% have not actually given their wives money to go for the test. Possible explanation for this could revolve around poor communication between husbands and their wives.

The findings of this study also reported a significant linear relationship between practices encouraging wives to go for screening with husbands' cervical cancer related knowledge. This underscores the role played by timely, relevant and adequate cervical cancer related education in enhancing the practice of encouraging wives to go for screening amongst husbands. Promotion of cervical screening awareness through education is needed to prevent incidence of cervical cancer (Rahangdale, 2012). Lessons from the experience of others seem to imply that it is more effective to gain men's support earlier in the process, before women are screened, by directing information, education, and advocacy to men as well as women and by including male partners in counseling prior to screening (Bingham et al., 2003). This will enable husbands to make informed decisions as per supporting their wives to get screened. Men's support has been reported as a key factor in increasing screening coverage and treatment rates in other countries, such as Peru and South Africa (Bingham et al., 2003; Agurto et al., 2005; Winkler et al., 2008). Other sub-Saharan African countries were screening for cervical cancer is low can learn from experiences in India and South Africa, where male health workers and peer educators were trained to go out into the community to discuss cervical cancer prevention with men while encouraging the men to support women in getting screened and to comply with post-treatment instructions (Agurto et al., 2005; Nene et al., 2007). Using community and religious leaders to speak with men about the importance of screening for their wives and by implication the well-being of the entire family will also go a long way. Since husbands are the main decision makers in their homes and have a strong say in their wives' health care (International Institute for Population Sciences, 2007), their positive emotional support (Bingham et al., 2003) will encourage wives to participate in screening program for early diagnosis of cervical cancer.

Implication and future direction

Husbands in this study have good cervical cancer related knowledge and expressed willingness to encourage their wives to go for cervical cancer screening by even paying for the test. However, the practice of actually encouraging their wives to go for the test is low. A possible explanation for this is that perhaps husbands are not fully aware of the gravity of having a cancer diagnosis and hence the need to prevent it in their wives. There is need for more public enlightenment to further sensitize the husbands about the disease and the role they can play in protecting their wives.

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