# Women in Purdah: A Study of their Knowledge, Attitudes and Practices in Relation to Cancer of the Cervix

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## Abstract

Correct and complete knowledge, positive attitudes/beliefs and positive behavioral practices are essential in the control of diseases including cervical cancer. This is in addition to routine screening of apparently healthy women. This study therefore seeks to look at the knowledge, attitude/beliefs and practices of women in purdah as it relates to cancer. A cross sectional survey was carried out on 120 sexually active women made up of 60 that practice purdah and 60 that do not practice purdah in Jos, Plateau State, North Central Nigeria. A structured questionnaire was administered on each subject. The questionnaire contained questions on socio-demographic characteristics of the subjects and questions regarding their knowledge, attitude, beliefs and practices as regards cervical cancer. Show that only 11 (18.3%) women in Purdah had previous knowledge of the cause of cervical cancer as against 35(58.3%) for the women who are not in purdah. Women in Purdah had a mean 68.3% positive Attitudes/beliefs as against 77.2% for the women who are not in purdah women who are not in purdah. In terms of their practices, the women in purdah had a mean positive practice of 62.66% as against 76.66% of the women who are not in purdah. There is need for specific and targeted awareness for women in purdah to remove barriers and fill-up gabs to early detection of premalignant lesion. The response from the women who are not in purdah also show that awareness of women in general is very low and could hinder control.

**Keywords:** Purdah, cancer, cervix, knowledge, attitudes, practices.

## Introduction

In order to design an effective preventive or intervention programme for cervical cancer which seems to be attaining alarming proportion in Africa, it is imperative to understand the level of knowledge of the people concerning the disease and the practices that may predispose them to the infection of the disease. Previous studies on KABP have yielded some important information.

Nearly 500,000 new cases of cervical cancer occur globally annually, 83% are in the developing world, as are 85% of the 274,000 deaths associated with cervical cancer<sup>1</sup>.

The highest incidence is observed in developing countries including the sub-Saharan Africa<sup>2</sup>. Eighty percent (80%) of diagnosed cases are detected in the advanced stages and treatment, even when available, has a low probability of success<sup>3</sup>. Cervical cancer however, is thought to be one of the most preventable cancers<sup>4</sup>. Population-based screening programs have shown the effectiveness of Pap smear screening in reducing mortality due to cervical cancer<sup>5-8</sup>. The risk factors for cervical cancer include early age at first intercourse and multiple sexual partners either on side of the male or female partner and smoking also confer increased risk. Human papilloma virus (HPV) has also been found to increase the relative risk for developing cervical cancer. HIV infection may

also increase a woman's risk for cervical neoplasia9. In most third world countries, women's knowledge of cervical cancer and Pap smears is very limited <sup>10</sup>. A survey performed in Nigeria on 254 randomly selected women who were asked about cervical cancer, only 38 had previous knowledge of the disease and even less knew about cervical screening<sup>10</sup>. With the advent of Pap smear screening by Papanicolaou and Traut, mortality and morbidity attributable to cervical cancer have significantly decreased in most advanced countries, mainly due to effective awareness and screening programmes<sup>11</sup>. Much of the recent research into women's knowledge of cervical cancer and screening has been conducted either in developing countries 12,13 or among ethnic minorities in developed countries<sup>14-16</sup>. Such studies usually identify low levels of knowledge, which, it is believed, contribute to low rates of screening uptake in these populations.

This study therefore seeks to look at a neglected population of women in our society specifically the women in purdah. Purdah is an Indian word which is translated as seclusion. Literarily, purdah means to veil and refers to various modes of protecting women from being seen by other men <sup>17</sup>. It can also refer to the veiling or covering of the entire body, purdah is a practice of the seclusion of women inside their homes <sup>17</sup>. In this sense, seclusion means restrictions on women's movement outside the home. It refers to the practice of some Muslim women staying at home so as to avoid mixing with men, other than their husbands,

family members and close friends<sup>18</sup>. In Nigeria, purdah exists as a viable institution among the Moslem population as we have in other parts of the world. As a consequence of purdah system, a woman is allowed to see only her biological sons, brothers, father, uncle, and husband, or any other relation in position of trust<sup>17</sup>. She cannot even go to mosque to pray, and must wear veil if she must go outside the house. This is a common practice in Nineteen(19) Northern States of Nigeria with a large population of Muslim faithful and a female population of 33,959,448<sup>19</sup> and other Muslim countries around the world.

## **Material and Methods**

A cross-sectional study of 120 sexually active women made up of 60 that practice purdah and 60 that do not practice purdah (to serve as comparison group) with age range 20 – 69 years and mean age of 38 years was undertaken in two locations: a Private Clinic in Jos metropolis where many women in Purdah attend, the Family Planning Clinic of Jos University Teaching Hospital Plateau state North Central Nigeria. Ethical approval was obtained from the ethical committee of Jos University Teaching Hospital and an informed consent from each woman.

A structured questionnaire which contained close and openended questions was administered on each subject to collect data from each respondent upon filling an informed consent form. The questionnaire contained questions on sociodemographic profile of the subjects (eg. age, sex, etc) and questions regarding their knowledge, attitude, beliefs and practices as regards cervical cancer. The criteria for selection of the first category of women are: i. Women who are Muslim and secluded (i.e. must cover-up when they are not in the house environment) ii. Women who go out only at the permission of their husbands. iii. Mental stability.

Women attending the Family Planning Clinic of Jos University Teaching Hospital and others who were not in Purdah and wanted to be screened voluntarily served as the control group.

#### **Results and Discussion**

Results collected using the questionnaire (table 1) revealed that only 11 (18.3%) women in Purdah had previous knowledge of the cause of cervical intraepithelial neoplasia (CIN) while 49 (81.7%) women had no previous knowledge of the cause of CIN. Thirty Five (58.3%) women out of the comparison group had previous knowledge of the cause while 25(41.7%) had no previous knowledge of the cause. A closer study of the different aspects of knowledge showed that 11.7% of the women in purdah had correct knowledge of the symptoms, while 88.3% had no previous knowledge of the symptoms of CIN 21.7% of the women in purdah had correct knowledge of the treatment of CIN while 78.3% had no previous knowledge of the treatment. The control group also showed high percentage of those that are not knowledgeable about the symptoms and treatment (table 1).

Both women in Purdah and the control group had a positive attitude to early marriage 55% and 63.3% respectively. While only 45% of women in purdah and 36.7% of the control had knowledge about the link between early marriage to increase risk of cervical cancer. 86.7% and 100% of women in purdah had positive attitude towards participating in organized cervical screening program and lower percentage of Women in Purdah and those in the comparison group (table 2) had negative attitude towards the gender of the personnel collecting the pap smear.

As regards to practices, the women in purdah had a mean positive practice of 62.66% as against 76.66% of the comparison group. The issue of contraceptive was striking as the women in purdah had for the first-time a higher Positive percentage (55%) than those not practicing purdah(38.3%) (table 3).

Table-1
Distribution of Women practicing Purdah/Control group according to Knowledge that relates to Cancer of the Cervix

	Women in Purdah N		Control Group N	
Aspect of Knowledge	Yes	No	Yes	No
	No. (%)	No. (%)	No. (%)	No. (%)
Do you know the risk factors that can lead to cervical cancer?	11(18.3)	49(81.7)	35(58.3)	25(41.7)
What are the Symptoms of cervical cancer?	7(11.7)	53(88.3)	10(16.7)	50(83.3)
Is cervical cancer treatable?	13(21.7)	47(78.3)	10(16.7)	50(83.3)

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Table-2
Distribution of Women practicing Purdah/Control group according to Attitude/Beliefs that relates to Cancer of the Cervix

Attitudes/beliefs	Women in Purdah N = 60		Control group N = 60	
	Yes	No	Yes	No
	No.(%)	No.(%)	No.(%)	No.(%)
Is early marriage associated to cervical cancer?	33(55)	27(4)	38(63.3)	22(36.7)
Will you participate in organized Cervical screening program if one is organized?	52(86.7)	8(13.3)	60(100)	0(0)
Will you allow a male health personnel to Collect your pap smear?	38(63.3)	22(36.7)	41(68.3)	19(31.7)

Table-3
Distribution of Women practicing Purdah/Control group according to Practices that relates to Cancer of the Cervix

Practices	Women in Purdah N = 60		Control group N = 60	
	Yes	No	Yes	No
	No.(%)	No.(%)	No.(%)	No.(%)
Did you get married before you attained the age of 18 years?	45(75)	17(25)	58(96.7)	2(3.3)
Were you exposed to sex before you attained the age of 18 years?	48(80)	12(20)	59(98.3)	1(1.7)
Are you from a polygamous family?	32(53.3)	28(46.7)	39(65)	21(35)
Do you have more than 5 children?	30(50)	30(50)	51(85)	9(15)
Will you use contraceptives when necessary?	33(55)	27(45)	23(38.3)	37(61.7)

**Discussion:** Knowledge of CIN in both study groups was assessed on the basis of the following specifics which are of CIN, symptoms of the disease treatment/treatability of CIN. The subjects were categorized as knowledgeable or not knowledgeable. On the three aspects of knowledge assessed, the women in Purdah had a mean score of 17.2% who are knowledgeable while 82.8% were not knowledgeable. This is lower than the findings of Syed<sup>1</sup> who reported higher awareness even though, they assessed knowledge of cervical cancer among interns and nursing staff. The mean level of knowledge among the comparison group was 30.6% which is about three times higher. The reason for this is not obvious, but the practice of seclusion and restrictions that reduces access to information on even health issues may be responsible. The practice of a general form of awareness that does not address the socio-cultural peculiarities of women who practice purdah cannot be effective. The need for a focused education and approach to control on this category of women cannot be overemphasized in the light of these findings. Okwi<sup>20</sup>

also reported that only 10% of rural and urban women claimed to know what cancer of the cervix is. This level of knowledge would negatively affect control of the disease and promote such factors early marriage, multiple sex partnership/polygamy and the other factors associated with cause of the disease.

The mean level of knowledge among women who are not in purdah was 30.6%. Even though this is significantly higher than that of women in purdah, it is still low and the need for awareness cannot be over-emphasized.

The attitude/beliefs in respect to early marriage, participation in organized screening exercise and the sex of the health personnel collecting the Pap smear showed that 63.33% of women in purdah had positive attitudes/believes toward cervical cancer. That is to say 31.7% have negative attitude. Large majorities (86.7%) of them were actually receptive to participation in cervical screening but some of these will only participate in screening programs if the health personnel collecting the smear

are women like them. Among the women who do not practice purdah 77.2% of them had positive attitudes/beliefs about cervical cancer and all of them were willing to participate in a screening program. A similar percentage of women in the comparison group also indicated that they would prefer a woman to collect the Pap smear. This implies that the preference for a female health professional is not religious but a gender issue. The use of female staff is strongly recommended. The attitude of women in purdah to early marriage compared to the women that are not in purdah reveals that negative attitudes/beliefs were higher in purdah than in other women. When this is taken alongside the fact that most of the women in purdah are also in polygamy, the likelihood is that these women are at a higher risk of developing cancer of the cervix unless there is a focused and targeted awareness that addresses their peculiarities. The higher negative attitudes/beliefs may also be a function of their level of knowledge or knowledge gabs in what they already know.

The willingness to participate in organized cervical screening was high in both categories of women. It should however, be noted that the practices in purdah that requires the women to obtain the permission of their husbands before going anywhere may negatively affect participation in screening. This implies that the husbands must also be a target of the needed awareness so that the women can have the support of their husbands. The mean positive practice among women in purdah was 62.7% while that in comparison group was 76.7%. The two groups of women differed remarkably in the five indices used to compare them. The most remarkable and unexpected finding is in the use of contraceptives in which 55% of women in purdah had positive attitudes/beliefs as against only 38.3% of the women in the control group. In all the other indicators, women who are not in purdah (comparison group) had a higher positive practice than those in purdah. The higher need for contraceptives among women in purdah may however be attributed to the fact that they generally marry at a younger age and since most of them do not work, the economic implications may be more severe on them. They soon have many children and since many of them live in polygamous setting with other women also having children, even the husbands may require these women to use appropriate means of contraception. The women who are not in purdah are not under the same pressures or challenges.

## References

- 1. Ali S.F., Ayub S., Manzoor N.F., Azim S. and Afif M., et al. Knowledge and Awareness about Cervical Cancer and Its Prevention amongst Interns and Nursing Staff in Tertiary Care Hospitals in Karachi, Pakistan, PLoS ONE, 5(6), (2010)
- 2. Stat bite: Cervical cancer mortality worldwide, *J Natl Cancer Inst.*, 98. (2006)
- 3. Redhwan Ahmed Al-Naggar, WY Low and Zaleha Md Isa, Knowledge and Barriers towards Cervical Cancer

- Screening Among Young Women in Malaysia. *Asian Pacific J Cancer Prev*, **11**, 867-873 (**2010**)
- **4.** Pontin J et al., Strategies for global control of cervical cancer, *International Journal of Cancer*, **60(1)**, 1–26 **(1995)**
- 5. Bergstrom R., Sparen P. and Adami H.O., Trends in cancer of the cervix uteri in Sweden following cytological screening, *British Journal of Cancer*, **81(1)**,159–166 (**1999**)
- 6. Mahlck C.G., Jonsson H. and Lenner P., Pap smear screening and changes in cervical cancer mortality in Sweden, *International Journal of Gynaecology and Obstetrics*, 44, 267–272 (1994)
- 7. Morris M, et al., Cervical intraepithelial neoplasia and cervical cancer, *Obstetrics and Gynecology Clinics of North America*, 23, 347–410 (1996)
- **8.** Elovainio L., Nieminen P. and Miller A.B., Impact of cancer screening on women's health. *International Journal of Gynaecology and Obstetrics*, **58(1)**, 137–147 (**1997**)
- **9.** Arevian M. et al., A survey of knowledge, attitude, and practice of cervical screening among Lebanese/American women, *Nursing Outlook*, **45(1)**,16–22 **(1997)**
- **10.** Ombech Elizabeth A., Muigai Anne. W.T. and Wanzala Peter. Awareness of cervical cancer risk factors and practice of Pap smear testing among female primary school teachers in Kasarani division, Nairobi Kenya, *African Journal of Health Sciences*, **21**, 121-132 (**2012**)
- **11.** Peel K.R., Premalignant and malignant diseases of the cervix, In: Whitfield CR, ed. *Dewhurst's Textbook of Obstetrics and Gynaecology for Postgraduates*, Oxford: Blackwell Science, 717-37 (**1995**)
- 12. Gichangi P., Estambale B., Bwayo J., Rogo K., Ojwang S., Opiyo A. and Temmerman M., Knowledge and practice about cervical cancer and Pap smear testing among patients at Kenyatta National Hospital, Nairobi, Kenya, *International Journal of Gynecological Cancer*, 136, 827–33 (2003)
- **13.** McFarland D.M., Cervical screening and Pap smear testing in Botswana: knowledge and perceptions, *International Nursing Review*, **50**, 167–75 (**2003**)
- **14.** Gupta A., Kumar A. and Stewart D.E., Cervical cancer screening among South Asian women in Canada: the role of education and acculturation, *Health Care Women International*, **23**,123–34 (**2003**)
- **15.** Ralston J.D., Taylor V.M., Yasui Y., Kuniyuki A., Jackson J.C. and Tu S.P., Knowledge of cervical cancer risk factors among Chinese immigrants in Seattle, *Journal of Community Health*, **28**, 41–57 (**2003**)
- **16.** Scarinci I.C., Beech B.M., Kovach K.W. and Bailey T.L., An examination of sociocultural factors associated with

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- cervical screening among low-income Latina immigrants of reproductive age, *J Immigr Health*, **5**, 119–28 (**2003**)
- 17. Ige-Ogunniyi A.E. and Ajadi T.O., 'Women in Purdah: The Challenges of Open and Distance Education in Nigeria', paper presented at the 2nd Conference and General Assembly of the African Council for Distance Education (ACDE), Lagos, 8-11 July (2008)
- **18.** Badawi J. Misconception about Islam, Minna: Islamic Education Trust Fund, 210 (**1992**)

- 19. National Population Commission (2007)
- **20.** Okwi A.L., Othicno E., Byarugaba W., Okoth A.D., Wandabwa J and Ocaido M., Attitudes and Knowledge gaps of the Communities about Cervical carcinoma and it's detection in four selected districts of Uganda, *African Journal of Animal and Biomedical Sciences*, **2(1)**,15-20 (**2007**)