# Attitudes and knowledge gaps of the communities about cervical carcinoma and it's detection in four selected districts of Uganda

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**Abstract:** The main objective of the study was to determine the attitudes and knowledge gaps about cervical carcinoma in the urban and rural women and health workers. A cross sectional study survey was done on four districts of Sironko in the eastern part of Uganda, Kawempe in the central, Ntungamo in the south-west and Arua in the north. Focus group discussions were held and structured questionnaires was administered 288 rural and urban women and 29 health workers in all the four districts. The study revealed that less than 10% of rural and urban women had claimed to know what cancer of the cervix was and how it was prevented compared to 96% of the health workers. Thirteen percent (n=4) of the health workers knew Pap screening procedures. Regarding the causes of cancer of the cervix, less than 35% of both urban and rural women believed that cancer of the cervix is caused by early coitus, family planning, having many partners and prolonged painful bleeding. While 3.4% rural and 1.4% urban women linked cancer of the cervix to witchcraft, only 0.7% of rural women associating it with "curse from GOD". Although more than 60% of rural and urban women had a positive attitude towards going to health centers when sick, less than 10% preferred visiting a witchdoctor while less than 30% wanted home medication. None had had a Pap smear done. Eleven percent (n=2) of the female health workers had Pap smear despite the fact that they were near health facilities. Although urban and rural women had different education backgrounds, they had the same low understanding of cancer of the cervix and its prevention. The difference in their beliefs and attitudes on the causes of cancer of the cervix and health seeking behaviour was insignificant. Most of the health workers lacked skills on Pap screening and female health workers were found to have low opinion towards going for Pap screening. There is therefore a need to sensitise rural and urban women, and female health workers about cancer of the cervix and on the relevance of Pap screening. There is equally a great need for health workers to be trained and have Pap screening services introduced at health centers. If the above measures are put in place, then prevention and early detection of cervical carcinoma will be done with good prognosis upon treatment.

#### **INTRODUCTION**

Cancer of the cervix is an important problem world-wide being responsible for high mortality and morbidity in women in developing countries<sup>1</sup>. In Uganda, this cancer is number one cancer killer disease among women, followed by breast cancer <sup>2,3,4,5</sup>. Eighty percent of women are diagnosed with this cancer at the late stage and yet it can be treated successfully if detected early<sup>6</sup>. The management of cervical cancer has remained insurmountable in developing countries including Uganda due to lack

of comphensive cervical cancer screening facilities at Dictrict Health Centres (DHCs). Besides most women are unaware about cancer of the cervix, its prevention, evolvement, detection and treatment. Studies on knowledge gap, attitudes and practices including health seeking behaviour of women towards cervical cancer<sup>7,8</sup>, have only been done in Uganda at Mulago. This study therefore had the main objective of determining the knowledge gaps, attitudes and believes of urban women and health workers from the communities in four selected districts of Uganda.

#### METHODOLOGY

The cross sectional study was carried out in four districts of Uganda namely: Sironko in the eastern, Kampala in the central, Ntungamo in the western and Arua in the northern.

The study population consisted of urban and rural women and health workers. Since this is primarily female disease, only female participants were identified in urban and rural communities except in health centers where both men and female respondents were selected. Mentally ill persons were not recruited for the study. The participants between 18-60 years were selected for the study because participants in this age group were able to personally consent and were physically fit to participate in the KAP interview.

The districts were visited; District Directors of Health Services (DDHS) and District Council Chairmen were briefed about the purpose of the study. One sub-county was selected in each district using simple random sampling procedure. The trading center of each sub-county was visited and with the help of Local Council One Chairman, eligible rural women were mobilized and using the same procedure used to select the sub-counties, 36 women were identified for focus group discussions. They were grouped into three clusters of 12 persons each. Each investigator then held guided focus group discussions with one group after obtaining their consent. All the discussions were tape- recorded. The questionnaire was then given to the participants to fill. Those who could not fill were either helped by investigators or facilitators. The same procedure was used for same number of urban women. A total of 72 rural and urban women were therefore interviewed in each district giving an overall total of 288 urban and rural women interviewed in all the four districts of Uganda.

One health center IV in each district was selected using simple random sampling procedure. All the health workers in the selected health centers were privately (personally) interviewed to eliminate bias. Focus group discussions were not used for health workers because some health centers had as few as 5 health workers. The questionnaire was used to generate the data from a total of 29 health workers in all the four districts.

The data was analyzed using EPINFO and the differences in knowledge gap and attitudes between

these populations were compared using Chi-Square test 9.

### RESULTS AND DISCUSSION

The education backgrounds and interview results generated from the respondents were summarized in tables as shown in Table 1, 2 and 3 respectively. Most of the urban women had secondary education and very few had university, tertiary and primary education. Contrary, most of the rural women had primary education and few had secondary and tertiary education. Notably some of the rural and urban women had no formal education with high number among the rural. Most of the health workers had tertiary and few had primary and university education.

Although there were differences in education background between rural and urban women, there was evidence in the study to suggest that the majority of these women did not know what cancer of the cervix is and had low understanding about its prevention. Less than 10% of urban and rural women were familiar with cancer of the cervix and claimed to know how it is prevented. One possible reason could be that cancer of the cervix is still considered mysterious disease in these communities whose origin remains complex.

The understanding among rural, urban women and health workers about cancer of the cervix differed. As was expected (96%) of the health workers were familiar with cancer of the cervix and 69% claimed to know how cancer of the cervix is diagnosed although only 13% had the idea about Pap screening procedures

The beliefs about cancer of the cervix varied among rural, urban women and health workers. Twenty five percent rural and 30% urban women believed that prolonged bleeding could be one of the causes of cancer of the cervix, while 23% rural and 28% urban women believed that early coitus was one of the likely causes of cancer of the cervix. Seventeen percent rural and 23% urban women associated cancer of the cervix with pills respectively. More than 64% of health workers associated cancer of the cervix to coitus, family planning pills and having many partners. It was found that while 3% (n=5) rural and 1% (n=2) urban women believed that cancer of the cervix is due to witchcraft, only one rural woman believed that it was a curse from GOD.

However, they were slight differences involving few populations of rural and urban women concerning their beliefs about the aetiology of cancer of the cervix. Between 8-25 percent of the rural and 13-30 percent of urban women believed that prolonged bleeding, early coitus, having many partners, STDS and pills were likely causes of cancer of cancer of the cervix. It was also surprisingly noted that 3% rural and 1% urban women linked cancer of the cervix to witchcraft while only 0.7% (n=2) of the rural women associated it with "a curse from GOD". The rest of the women had no idea at all. This therefore clearly reflects the influence which witchcraft and eccentric imagination have on some people in our communities. However, (27%) rural and 31% urban women believed that cancer of the cervix is treatable if diagnosed early.

When the attitudes of the rural and urban women were compared, there were fairly marked differences regarding their health seeking behaviour. It was noted that 10% rural and 4% urban women preferred visiting a witchdoctor whenever they are sick, while 40% rural and 16% urban women opted for home medication. Although 50% of the rural and 80% of the urban women preferred going to health center when sick, only 6% rural and 10% urban women had visited a gyanecologist and none had had a Pap smear despite the fact some of them had had prolonged bleeding. Asked why they did not seek the advice of the gynaecologist, they responded that bleeding usually stopped when they took painkillers like panadol and herbs bought from shops.

These notably interesting observations therefore reinforce the fact that most of these women die from cancer of the cervix because they report to health centers when the symptoms of the cancer are at advanced stages. When health workers were assessed, some of the findings were as expected. On average 96% of the health workers were familiar with

cancer of the cervix and were aware about its prevention and detection although they lacked skills on Pap screening. On contrary although 35% (n=6) of the female health workers had visited a gynaecologist, only 11% (n=2) had had a Pap smear. There was therefore insignificant difference between female health workers, rural and urban women regarding their attitudes towards Pap screening.

Although the findings of this study are not representative of the whole population because only four districts were identified, they provide very important information on the health knowledge, attitudes and beliefs of rural, urban women and health workers in four districts of Uganda about cancer of the cervix. Most of the findings of this study were found to be characteristic of the studies which have been published else where in the world 10,11,112

In conclusion our findings agree with findings of other studies which have equally noted that urban and rural women are ignorant about cancer of the cervix, its prevention and have low attitude towards health seeking behaviour. The study has equally noted that the health workers lack skills on Pap screening methods and these services are lacking at health centers. This may be the reason why rural, urban women and female health workers have no interest in these services.

There is therefore urgent need to sensitize both urban and rural women about cancer of the cervix and its prevention and importance of going for Pap screening. Emphasis should equally be put on female health workers to regularly go for Pap screening. However, the health workers need to be trained to perform Pap screening procedures and have these services introduced at district health centers. Since the study covered only four districts of Uganda, there is therefore a need for further studies to be done involving many districts of Uganda.

Table 1: Percentage composition of respondents according to educational background

| Study population | Formal | Informal |       |       |          |            |  |
|------------------|--------|----------|-------|-------|----------|------------|--|
|                  |        | P1-P7    | S1-S4 | S5-S6 | Tertiary | University |  |
| Rural            | 16.7   | 70.1     | 24    | 0     | 2.1      | 0          |  |
| Urban            | 9      | 27.1     | 60    | 0     | 16       | 6.9        |  |
| Health-workers.  | 0      | 10.3     | 0     | 0     | 79.3     | 13.9       |  |

**Table 2:** Summary of percentage response of rural and urban women to different variables asked about cervix cancer (CC) and Pap smear

| Variable                       |                                | Perc    | entage respo | Level of significance difference |                      |            |
|--------------------------------|--------------------------------|---------|--------------|----------------------------------|----------------------|------------|
|                                |                                | Rural   | Urban        | Overall                          | X <sup>2</sup> value | P value    |
|                                |                                | (n=144) | (n=144)      | (n=288)                          |                      |            |
| a) Kno                         | a) Knowledgeability            |         |              |                                  |                      |            |
| i)                             | Familiarity with cervix cancer | 8.3     | 9.7          | 9                                | 0.17                 | p>0.05 ns  |
| ii)                            | About prevention               | 4.1     | 6.9          | 5.5                              | 1.06                 | p>0.05 ns  |
| iii)                           | How it is diagnosed            | 0       | 0            | 0                                | 0                    | p>0.05 ns  |
| iv)                            | To perform PAP smear           | 0       | 0            | 0                                | 0                    | p>0.05 ns  |
| b) Beliefs on causes of cancer |                                | (YES)   | (YES)        | (YES)                            |                      |            |
| i)                             | Prolonged bleeding             | 25      | 30           | 27.4                             | 0.85                 | p>0.05 ns  |
| ii)                            | Early coitus                   | 22.9    | 27.8         | 25.3                             | 0.9                  | p>0.05 ns  |
| iii)                           | Having many partners           | 13.2    | 20.8         | 17                               | 3                    | p>0.05 ns  |
| iv)                            | Curse from God                 | 0.7     | 0            | 0.35                             | 1                    | p>0.05 ns  |
| v)                             | Witchcraft                     | 3.4     | 1.4          | 3                                | 1.3                  | p>0.05 ns  |
| vi)                            | Sexually transmitted diseases  | 7.6     | 13.2         | 10.4                             | 2.4                  | p>0.05 ns  |
| vii)                           | Inherited                      |         |              |                                  |                      |            |
| viii)                          | Contraceptive pills            | 0       | 1.4          | 0.7                              | 2                    | p>0.05 ns  |
| ix)                            | reatability when CC is         | 16.7    | 22.9         | 20                               | 1.8                  | p>0.05 ns  |
|                                | diagnosed early                |         |              |                                  |                      |            |
|                                |                                | 27.1    | 31.3         | 29.2                             | 0.6                  | p>0.05 ns  |
| c) Attitudes                   |                                | (YES)   | (YES)        | (YES)                            |                      |            |
| i)                             | Visits to gynaecologist when   | 5.6     | 9.7          | 7.6                              | 1.8                  | p>0.05 ns  |
|                                | sick                           |         |              |                                  |                      |            |
| ii)                            | Had a PAP smear                | 0       | 0            | 0                                | 0                    | p>0.05 ns  |
| 111)                           | Visits witchdoctor when sick   | 9.7     | 4.2          | 6.9                              | 3.4                  | p>0.05 ns  |
| iv)                            | Visits health centre when sick |         |              |                                  |                      |            |
| v)                             | Treats herself at home         | 50      | 79.9         | 65                               | 28.2                 | p<0.001*** |
|                                |                                | 40.2    | 16           | 28.1                             | 21                   | p<0.001*** |

Key: ns - Not significant difference, \*\*\* - Very highly significant difference

**Table 3:** Comparison percentage response of rural and urban women and health workers to different variables asked about cervix cancer (CC) and Pap smear

| Variable  | Percentage            | response         | Level of significance difference |              |
|---|-----------------------|------------------|----------------------------------|--------------|
|   | Health workers (n=29) | Women<br>(n=288) | X <sup>2</sup> value             | P value      |
| a) Knowledgeability                                     |                       |                  |                                  |              |
| i) Familiarity with cervix cancer                       | 96                    | 9                | 142.8                            | p<0.001***   |
| ii) About prevention                                    | 86                    | 5.5              | 142.2                            | p<0.001***   |
| iii) How it is diagnosed                                | 69                    | 0                | 212                              | p<0.001***   |
| iv) To perform PAP smear                                | 13                    | 0                | 40                               | p<0.001***   |
| b) Beliefs on causes of cancer                          | (YES)                 | (YES)            | (YES)                            |              |
| i) Prolonged bleeding                                   | 89                    | 27.4             | 46                               | p<0.001***   |
| ii) Early coitus  | 88                    | 25.3             | 45                               | p<0.001***   |
| iii) Having many partners                               | 86                    | 17               | 64.2                             | p<0.001***   |
| iv) Curse from God                                      | 0                     | 0.35             | 0.1                              | p > 0.05  ns |
| v) Witchcraft   | 0                     | 3                | 0.9                              | p > 0.05  ns |
| vi) Sexually transmitted diseases                       | 38                    | 10.4             | 18.6                             | p<0.001***   |
| vii) Inherited  | 17                    | 0.7              | 33.4                             | p<0.001***   |
| viii) Contraceptive pills                               | 64                    | 20               | 25.4                             | p<0.001***   |
| ix) Treatability when CC is                             |                       |                  |                                  | 1            |
| diagnosed early   | 86                    | 29.2             | 38                               | p<0.001***   |
| c) Attitudes  | (YES)                 | (YES)            | (YES)                            |              |
| i) Visits witchdoctor when sick                         | Ò                     | 6.9              | 0.4                              | p>0.05 ns    |
| ii) Visits health centre when sick                      | 100                   | 65               | 75.7                             | p<0.001***   |
| iii) Treats herself at home                             | 2                     | 28.1             | 8.4                              | p<0.01**     |
| ,   |                       |                  |                                  |              |
| d) Attitudes compared with female health workers (n=17) |                       |                  |                                  |              |
| i) Visits to gynaecologist when sick                    | 25                    | 7.6              | 147                              | ~<0.001***   |
| compared with female health workers                     | 35                    | 7.0              | 14.7                             | p<0.001***   |
| ii) Had a PAP smear                                     | 11                    | 0                | 34.1                             | p<0.001***   |
|   |                       |                  |                                  |              |

Key: ns No significant difference \* Significant difference

\*\* Highly significant difference \*\*\*\* Very highly significant difference

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