

Knowledge and behavior of women on cervical cancer in the northern region of Cameroon

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Abstract

Cervical cancer is the second common cancer among women worldwide. The aim of this study was to evaluate the knowledge and behaviors of women on cervical cancer in the northern region of Cameroon. 307 women were recruited and included in statistical analysis. Age was varying between 20 to 62 years. After obtaining informed consent, a questionnaire was administered to each woman on sociodemographic characteristics, gynecological and obstetric history and knowledge on cervical cancer. This study reported that women in the northern region of Cameroon have weak knowledge about cause (10,74%), means of preventing methods (14,65%) of cervical cancer and just 2,93% were screening before. 27.36% have never heard about cervical cancer. This situation shows that there is a real need for public awareness about cervical cancer in the northern region of Cameroon to fight against this cancer.

Introduction

Cancer is a pathology characterized by an anarchic and uncontrolled proliferation of cells. Cancer can reach all organs [1,2]. Cervical and breast cancer are the most frequent cancers in women in the world. Cervical cancer is in terms of frequency, the second cancer affecting women. It represents 20 to 30% of all cancers in women [3]. In 2005, nearly 500,000 new cases and 260,000 deaths were recorded [4]. More than 528 000 new cases and approximately 275 000 deaths in 2012. The 80% of these deaths occur in developing countries, countries in which this cancer is the leading cause of cancer deaths in the female population [5].

In Cameroon, work in semi-urban areas has found 57% of cervical cancers among gynecological cancers [6]. This cancer in most women is diagnosed at a later stage [7]. This is due to the long delay between the beginning of symptoms and the treatment and the lack of a national strategy for screening and vaccination. Indeed, surveys have shown that the knowledge, attitudes and practices of Cameroonian women and health workers on HPV (Human Papilloma Virus) and cervical cancer are low [8,9].

Cervical cancer is a preventable and curable disease, but provided it is detected early and treated [10]. In developed countries, early detection has significantly reduced the incidence of cervical cancer. This action should be included in a well-defined and adapted control program [5,11]. The success of a screening program depends to a large extent on the target population, their level of knowledge about the disease and the level of awareness [12]. Cameroon has not a cervical cancer control program. Cervical cancer control activities are limited to sporadic screenings by the National Cancer Control Committee. The level of awareness of the population on cervical cancer is thus limited. A study in Nigeria on women referred for cervical cytology showed that only 39.5% had heard of cervical cancer and only 15.1% had screening before [13].

A study in the Maldives in South Asia also showed a poor

knowledge of the female population on cervical cancer, 37.9% had expected to talk about cervical cancer [14]. Knowledge of the sexually transmitted origin of cervical cancer by women in Qatar is 24.8% [15]. The population of Northern Cameroon is generally poor and women are less educated.

Awareness is the first weapon used in disease control strategies. A good awareness is translated in the population by a level of knowledge of the etiology, the risk factors, the means of prevention and acceptance of treatment regarding the disease.

The aim of this study was to evaluate women's knowledge on cervical cancer in the Northern region of Cameroon to undertake an appropriate and effective method of awareness and fight against cervical cancer.

Materials and methods

This is a cross-sectional descriptive study conducted in the Northern region of Cameroon from May 02 to August 13, 2016 in the following hospitals: Regional Hospital of Garoua, District Hospital of Guidar and Esperance Hospital of Djamboutou (Garoua). 307 were included in the statistical analyses. Inclusion criteria were all women age 20 to 65 years old who were consulted in hospitals. After obtaining informed consent, a questionnaire was administered to each woman on the sociodemographic characteristics, gynecological and obstetric history and knowledge on cervical cancer.

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Key words: knowledge, behaviors, cervical cancer

Received: April 10, 2017; **Accepted:** May 22, 2017; **Published:** May 25, 2017

Results

Age

The women recruited in this study were between 20 and 62 years old. The mean age was 34.72 ± 8.82 years.

Marital status

The following Table shows the distribution of women by marital status

Type of marriage

The monogamous marriage was the most represented with 192 cases or 62.54%. The polygamous marriage was represented at 31.59% or 97 cases and the singles constituted the rest (Table 1).

The level of schooling

The Table 2 below shows the distribution of women according to their level of schooling.

In Table 2, we find that women at the primary level were the most represented at 28.01%. Not schooling women also represented a significant proportion of the sample at 27.68%.

Socio-Professional Category

Table 3 presents the distribution of women recruited in our study according to the socio-professional category.

Housewives were the most represented in this study with 28.01% followed by health care workers (11.72%).

Table 1. Distribution of women according marital status.

Marital status	Effective	Percentage (%)
Married	236	76,87
Divorced	29	9,44
Widow	24	7,81
Single	18	5,86
Total	307	100

Table 2. Distribution of women according level of schooling.

	Effective	Percentage (%)
Not schooling	85	27,68
Primary level	86	28,01
Secondary first cycle	65	21,17
Secondary second cycle	51	16,61
University level	20	6,51
Total	307	100

Table 3. Distribution of women according to socio-professional category.

	Effective	Percentage (%)
Housewife	176	57,32
Health personnel	36	11,72
Trader	23	7,81
Farmer	20	6,51
Teacher	19	6,18
Secretary's office	12	3,90
Other	21	6,84
Total	307	100

Age of First sex intercourse

The age at first intercourse of the women who participated in the study was between 13 and 30 years. The mean age at first intercourse was 17.52 years with a standard deviation of 2.80 (Table 4).

Parity

The number of births is among 0 to 14. The mean was 3.89 with a standard deviation of 2.91. The following Table 5 present the distribution of women according to the number of birth.

Knowledge about cause and means of preventing cervical cancer.

Discussion

The mean age of 34.72 ± 8.82 years was observed in our study with extremes of 20 and 62 years. The 20-year-old extreme could be considered early for the evaluation of knowledge and practices regarding cervical cancer although the natural history of this pathology tells us that it appears very late with an incidence rate that increases up to 40 years and then decreases [16]. Scientific journals also require that screening be carried out from the age of 25 years. Bernard, in his study in French, chose as his minimum age of 25 years [17]. However, studies such as Nkegoum in Cameroon have shown a high prevalence of precancerous lesions in women under 25 years old [18].

The level of schooling is a protective factor for the contraction of STD, particularly HPV. However, in our study the women recruited were mainly at primary level (28.01%) and women not attending school (27.68%). This situation confirms the low level of schooling of women in the northern region of Cameroon and can be a deterrent risk factor, unlike the study conducted by Haliloglu *et al.*, reported that 54.71% of women were secondary and Tchounzou *et al.* in 2015 Women were predominantly university-educated [19].

In our study, 57.82% were housewives; 11.72% were health workers and the rest were traders, farmers, and others. This distribution reflects

Table 4. Distribution of women by age of first sex intercourse.

Age of first sex intercourse	effective	Percentage (%)
[13-18]	212	69,06
[19-30]	95	30,94
Total	307	100

Table 5. Distribution of women according to the number of birth.

Parity	Effective	Percentage
0	36	11,73
[1- 4]	115	37,73
[5-15]	156	50,81
Total	307	100

Table 6. Knowledge of women on cervical cancer.

	Effective	Percentage
Women who have heard about cervical cancer	223	72.26%
Women never heard about cervical cancer	84	27.36%
Women who are knowing HPV as a cause of cervical cancer	33	10.74%
Women who are not knowing HPV as cause of cervical cancer	274	89.25%
Women who knowing regular screening as a mean of prevention	45	14.65
Women screening before on cervical cancer	09	2.93
Women who are never heard about cervical cancer screening campaign	294	95.76

the low socio-economic status of women in the northern region of Cameroon and can be a risk factor.

The mean age of first sexual intercourse was 17.52 ± 2.80 years with extremes of 13 and 30 years. Most women in our study (69.06%) had their first sexual intercourse between 13 and 18 years. Early intercourse can be justifying by socio-cultural factors such as the early marriage of the girl in the region.

The mean parity of our study population was 3.89 ± 2.91 ; 50.81% of women have parity between 1 and 4 and 37.46% have parity of 5 or more. Many studies have identified parity as an important risk factor of cervical cancer [20]. This parity appears to be high especially as women in our study population were relatively young and in childbearing age.

Cervical cancer despite its ravages in the world is still poorly known by many people. This is also true in our study population, where 27.36% have never heard about cervical cancer. This may be obvious given their low level of schooling. However, 223 women or 72.26% have already heard of cervical cancer. This seems to be the common problem found in other parts of the country such as Maroua, Buea and in other countries such as Gabon, Thailand [6,19,21,22]

Participants were unaware of HPV and its relationship with cervical cancer. Only 10.74 of our study population identified HPV as a major risk factor of cervical cancer. This is like the results found in Songea's rural area by James in 2011 [23] where just 10 women mentioned the human papilloma virus as the leading cause of cervical cancer. This reflects the level of knowledge of these women that makes it impossible to prevent infection by vaccination because the relation between HPV and cervical cancer is misunderstood.

Many women are unaware of methods of preventing cervical cancer. 85.35% were probably unaware, this because the lack of adequate information. Regular screening was mentioned by 14.65% of our population as a preventing method.

In this study, just 09 women or 2.93% were screening before. This is a problem in African countries where women have not used screening tests. This situation is found too in Ethiopia, where similar studies show that 6.5% have used a screening test [24]. Women in developing countries, particularly those in sub-Saharan Africa, do not routinely seek screening for precancerous lesions. The direct consequence of this reality is therefore an increase in the prevalence of precancerous and cancerous lesions contrary to that observed in developed countries [16]. The most common reasons for non-screening were ignorance at 95.76%.

Conclusion

In this study, we noted that women living in the Northern Cameroon region have weak knowledge about the cause, means of preventing cervical cancer. This shows us that there is a real need for public awareness of this cancer. This awareness may be adapted with the local language in the northern region considering to the high rate of women who are not schooling. Although there is no pathologist in the northern region, informed women can be screened when traveling to large metropolises such as Douala and Yaounde where there are pathologists. They may also be more readily adherent to screening campaigns organized by the National Cancer Control Committee, although these screening campaigns remain sporadic.

Authorship contribution

All authors contributed to the design, preparation, editing, and

final review of the manuscript.

Acknowledgments

Authors thank the collaborators of their respective institutions for the comments on the manuscript.

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