

# Knowledge and Attitudes of Paramedical Staff of the Sylvanus Olympio Hospital of Lome in Togo on Screening for Precancerous Lesions of the Cervix in 2023

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**Introduction:** In Togo, the specific mortality due to cervical cancer is considerable. As the paramedical staff most often represents the first contact health personnel, the general objective of our study was to assess the knowledge and attitudes of the paramedical staff of the Sylvanus Olympio University Hospital (CHU SO) on the means of screening for cervical cancer.

**Methods:** This is a descriptive cross-sectional study that took place from June 27 to July 27, 2023, among the paramedical staff of CHU SO. Data was saved in an Excel database. The statistical analysis was carried out using the open source software R. Based on the model of Essi et al., the assessment of the level of knowledge was quantified.

**Results:** All 306 respondents once heard about cervical cancer. In 69.9% of the cases, it was during their training. The HPV was cited as a risk factor in 80.4% of cases. They were aware of screening as a means of prevention in 96.7% of cases. This screening should be annual according to 45.5%. Fifty percent (50%) had judged the screening poorly conducted in Togo. This screening should be done by cervical smear test (92.9%), or by the IVA/IVL technique (10.4%). Overall, 56.2% of paramedical staff had a «wrong» attitude and 1.6% a «right» one.

**Conclusion:** At the end of our study, we notice an insufficiency in terms of knowledge and attitudes. Few participants were aware of the HPV test as a means of screening for cervical cancer. Strategies for improving skills are required. Hence there is a need for a continuous training for the paramedical staff in terms of cervical cancer and the establishment of efficient national programmes to prevent this cancer.

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## Introduction

According to Globocan, there were 604127 new cases of cervical cancer (CC) diagnosed worldwide in 2020 and 341831 deaths due to CC [1]. The highest regional incidence and mortality is found in sub-Saharan Africa, specifically in the East, Southern and Central Africa. In West Africa, the incidence of CC was 23 cases per 100,000 women with a mortality rate of 16.6% in 2020. It remains the second leading cause of cancer death in women in those countries where CC is often diagnosed at an advanced stage due to limited access to preventive measures (vaccination and screening) [1, 2].

In Togo, the specific mortality due to CC is considerable. Out of 1,500 cancer deaths, 17.5% are attributable to CC, which screening rate remains low [3]. Also, in 2020, 309 deaths (68%) were reported out of 455 CC cases [4]. CC is a cancer with well-known natural history. Indeed, the responsibility of Human Papilloma Virus (HPV) associated with slow development of precancerous and cancerous lesions offer the possibility to prevent CC through a prophylactic vaccine (primary prevention) or screening (secondary prevention). This cancer could disappear in countries that have the means to effectively implement these two types of prevention [2]. The importance of the role of caregivers in screening for CC has been amply demonstrated by several authors because of their central place in the care system and their primary role in informing and guiding patients [5].

The paramedical staff most often representing the first contact health personnel, the general objective of our study was to assess the knowledge and attitudes of the paramedical staff of the Sylvanus Olympio University Hospital (CHU SO) on the means of screening for CCU.

## Materials and Methods

This is a descriptive cross-sectional study that was conducted over a period of one month, from June 27 to July 27, 2023, among the paramedical staff at CHU SO. We included paramedics who were on site on the days of the survey and who gave informed consent to participate in the study. We have considered: certified nurses (104), registered midwives (52), laboratory technicians (32), operating room nurses (32), anaesthesia and intensive care technicians (25), physiotherapists (19), radiology technicians (14), medical assistants (7), certified nursing assistants (5), dental technicians (4), clinical psychologists (3), auxiliary midwives (3), pharmacy auxiliaries (3), speech therapists (2), a health mediator (1). We developed a questionnaire that was tested before the survey began. This questionnaire was completed during the interview with participants, while maintaining anonymity and confidentiality of respondents. The interview was conducted in the different departments where the subjects were working. Some have agreed to receive us during their off-duty time, others at break. After explaining the subject of our survey and the objectives we wanted to achieve, the questionnaires were read out and explained. One interview could take approximately 05 minutes. The data was recorded progressively in an Excel database. Statistical analysis was performed using the open source software R. Based on the model of Essi et al. [6], the assessment of knowledge level was quantified. It was returned in 4 levels (bad, insufficient, medium and good).

- Less than 50% correct = Bad
- Between 50% and 65% correct = Insufficient
- Between 65% and 85% correct = Average
- Over 85% correct = good

Regarding attitude, the analysis grid focused on 4 criteria (fair, approximate, erroneous and harmful).



- Less than 50% correct = bad
- Between 50% and 65% correct = wrong
- Between 65% and 85% correct answers = approximate
- Over 85% correct = correct.

The authorization N° 1200/2024/MSHP/CHU-SO/ DIR/DRH/SERV.PERS had been obtained from the Director of CHU SO. The design and implementation of our study took into account the ethical and legal requirements for medical research on human subjects: informed consent, information, storage and destruction of data. Written and signed consent was obtained for each staff surveyed.

## Results

### Knowledge of the paramedics on cervical cancer

All 306 respondents have heard of the CC.

In 69.9% of the cases, they have heard about CC once during their training. The HPV was cited as a risk factor in 80.4% of cases. They were aware of screening as a means of prevention in 96.7% of cases. Fifty-four per cent (54.1%) of them added that women should be screened between the ages of 25 and 65. This screening should be annual according to 45.5% (Table 1).

	Population	Percentage
Existence		
Yes	306	100
Source of information		
Training	214	69.9
Colleague	164	53.6
Medias	158	51.6
Sensitization	92	30.1
Relatives	54	17.6
Risks factors		
Infection by the HPV	246	80.4
Multiple partners	230	75.2
Early sexual intercourse	216	70.6
STI	174	56.9
HIV Positive status	110	35.9
Low socio-economic level	76	24.8
Multiple pregnancies	50	16.3
Means of prevention (n=306)		
Yes	275	89.9
No	31	10.1
Vaccine against the HPV	72	26.2
Screening	266	96.7
Screening methods (n=266)		
Cervical smear test	260	97.7
IVA	62	23.3
IVL	72	27.1
HPV Test	34	12.8
None	18	6.8
Screening age		

< 25 years old	74	27.8
[25-65 years old]	144	54.1
> 65 years old	5	1.9
I don't know	37	13.9
Screening frequency		
Yearly	121	45.5
Every three year	84	31.6
Every year for 2 yearsthen every 3 year	55	20.7
Timing of screening proposal		
If symptoms are present	74	27.8
In the absence of symptoms	192	72.2

**Table 1. Distribution of Paramedics According to Knowledge About CC.**

### Paramedical Staff's overall level of knowledge of CC screening

Forty-seven point zero percent (47.0%) of the paramedics surveyed had poor knowledge of CC screening (Figure 1).

**Figure 1. Distribution of Paramedical Staff According to their Overall Level of Knowledge about CC Screening Using the ESSI CAP Score [6].**

### Attitudes of paramedical staff towards CC screening

Fifty percent (50%) of the population found the screening to be poorly conducted in Togo. Ninety-seven one point one percent (97.1%) found the screening useful. As for systematic screening, 91.5% of respondents were in favour. This screening should be done by cervical smear (92.9%), or by the IVA/IVL technique (10.4%) (Table 2).

	Population	Percentage
Screening conducting		
Poorly organised	153	50,0
Well organised	89	29,0
Not available	32	10,5
Not interested	32	10,5
Total	306	100
Attitude		
Favorable	280	91,5
Non favorable	26	8,5
IVA/IVL		
Favorable	29	10,4
Non favorable	251	89,6
Cervical smear		
Favorable	260	92,9
Non favorable	20	7,1

**Table 2. Distribution of Paramedics According to their Attitude Towards Systematic Screening for Cervical Cancer.**

### Overall attitude of paramedical staff

Globally 56,2 % of the paramedical staff had a «wrong» attitude and 1,6% had a « right » attitude (Figure 2).

**Figure 2. Distribution of Paramedical Staff According to their Overall Attitude Towards Cervical Cancer Screening Using the ESSI CAP Score [6].**

## Discussion

In the end, 47.0% of the paramedical staff surveyed had a poor level of knowledge about CC screening, 28.8% an insufficient level and 22.9% an average level. Obossou et al. in 2021 in Benin [5], reported a low level of knowledge of screening methods by 5.3% of health professionals. This level was insufficient in 68.4%, average in 19.5% and good in 6.8%. Tebeu et al in 2020 [7], reported to the midwives of Brazzaville regarding CC screening, a very insufficient level of knowledge (50.88%); insufficient (8.77%), quality (38.60%) and very good (1.75%). Indeed, the inadequacy of continuous medical training on CC and also the fact that these continuous training are not made mandatory in the health system of Togo could explain our result. In addition, cancer is considered a death sentence in the general population. This belief is also common among caregivers who are reluctant to talk about it or to take an interest in it. After evaluating the overall attitude of paramedical staff on CC screening, only 1.6% had a correct attitude. Fifty-six point two percent (56.2%) had a negative attitude, 41.2% a rough attitude. Better attitude levels were reported by Tebeu et al. in 2020 in Brazzaville [7], where 58.77% had a very positive attitude level, 34.21% a positive attitude level and 4.39% a negative attitude level. These results may be explained by the fact that during our study, we included different categories of paramedics in contrast to theirs, which was performed only in midwives who are not strangers to this pathology.

Also, in Togo, there is no clear policy regarding CC screening. Screening is often done on an individual basis. The public screening campaigns are only organized from time to time by some associations, especially in the month of October. It is understood that 60.5% of the agents taking part in our study say that CC screening is poorly organized or non-available in Togo. Note that a significant percentage (10.5%) in our series claims to have no information on the conduct of screening for this cancer in Togo. In the series of Obossou et al. in Benin [5], 81.2% had found the screening to be poorly conducted, while 9.8% were not interested. As for systematic screening, 91.5% of the respondents were favorable to it, by cervical smear test FCU (92.9%), or by the technique of IVA/ IVL (10.4%). In the study by Obossou et al. [5], 94.7% of agents were in favour of systematic screening for CC. However, a larger proportion (85.7%) had opted for the IVA/IVL technique. This difference may be explained by the fact that, as our study is more recent, more and more health professionals recognize the effectiveness of cervical smear test compared to visual methods which is no longer to be demonstrated. Furthermore, the use of visual IVA/ IVL methods is not very common in our practices.

In conclusion, at the end of our study, which was conducted with paramedical staff of CHU SO on the screening of CC, we note a shortfall in terms of knowledge and attitudes. Few participants were aware of the HPV test as a means of screening for cervical cancer. This is a test not yet available in Togo.

But under its new guidelines, WHO now encourages countries to use HPV screening for cervical cancer because of their objectivity and effectiveness in comparison with visual methods or cytology. In view of these results, strategies for improving skills are needed. Hence the need for continuous training of paramedical staff in terms of CC. Indeed, an optimal cancer control requires a better knowledge of the disease, a good attitude of providers to treat and prevent the disease and an efficiency of national cancer control programs.

## Acknowledgments

### *Statement of Transparency and Principals*

- Author declares no conflict of interest
- Study was approved by Research Ethic Committee of author affiliated Institute.
- Study's data is available upon a reasonable request.
- All authors have contributed to implementation of this research.

### *Author Contributions*

Ameyo Ayoko Ketevi was responsible for the conception of the study; participated in the study design, undertook the field study, conducted the data collection, analysis, and interpretation; and wrote the manuscript.

Brenda Massan Adjeoda was participated in the study design, involved in the data collection, analysis, and interpretation.

Komlan Alessi Andele, Tchin Dare, Baguilane Douaguibe, Bingo M'Bortche, Abdoul Samadou Aboubakari, Koffi Akpadza were involved in the data collection, analysis, and interpretation.

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