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RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE AND PRACTICE OF PARAMEDIC STUDENTS IN THE THIRD YEAR IN TOLIARA CITY (MADAGASCAR) ON CERVICAL CANCER

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ABSTRACT

Introduction: Cervical cancer affects many African women, particularly in younger women. It is however preventable if it is detected early. Better knowledge by health personnel, especially paramedics being the first responsible in rural areas, on the prevention of this cancer would reduce its frequency. The aim was to assess the knowledge, the attitude and the practice of paramedic students in the third year on cervical cancer. ***Method:*** It was a cross-sectional descriptive study, Knowledge, Attitude and Practice (KAP) survey on May 3, 2017 in Toliara city. The study population was female student midwives and nurses in the third year of training. Included were the institutions which accepted the survey request and the female students who were registered, present during our visit, and consenting to the survey. ***Results:*** The survey involved 169 female students, 132 from private institutions and 37 from public institutions. Fifteen percent of students had good general knowledge about cervical cancer. Eleven percent of female students had found more than three risk factors for cervical cancer. One hundred and nine students (64%) were aware of HPV vaccine. One-third of the students knew that Pap smear is a means of screening for cervical cancer. Regarding their attitudes, 78% of students thought they would have to screen for cervical cancer. About their practice, 14% of them had already made a screening. ***Conclusion:*** KAP of paramedic students on cervical cancer remain insufficient. Trainers should adapt their teaching with the new Bachelor, Master and Doctorate system with a focus on prevention, to have qualified paramedics.

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INTRODUCTION

Cervical cancer is a global burden. In 2018, there were 569,847 new cases of cervical cancer in the world. Its incidence is higher in developing countries because of insufficient screening (Bray *et al.,* 2018). In Madagascar, like many African countries, cervical cancer remains the second most common gynecological cancer after breast cancer (Ranaivomanana *et al.,* 2013; Hasiniatsy *et al.,* 2017; Garba *et al.,* 2013). Its incidence in the Oncology Department of the Joseph Ravoahangy Andrianavalona University Hospital Center (JRA/UHC) had tripled between 1996 and 2006 (Hasiniatsy *et al.,* 2011). Cervical cancer is the 4th leading cause of cancer death among women in the world, with an estimated 311,365 deaths in 2018. Nearly 90% of deaths occur in developing countries, particularly in Africa (Bray *et al.,* 2018). Currently, the age of diagnosis of cancers is getting younger (Fidler *et al.,* 2017; Harioly Nirina *et al.,* 2018), especially that of cervical cancer mainly due to risky sexual behavior (World Health Organization, 2017; Maalej *et al.,* 1996; Toure *et al.,* 2011). This cancer is primarily related to a chronic HPV (Human Papilloma Virus) infection sexually transmitted. The natural history of cervical cancer is very well known, allowing for primary and secondary prevention. There are HPV vaccines (Haute Autorité de Santé, 2013) recommended in girls 9 to 14 years old before they start sexual activity with two doses at six-month intervals and in those aged 15 or over with three doses at intervals of 0, 1 to 2 and 6 months (World Health Organization, 2016). Pap smear is the standard screening test for cervical cancer, recommended for women between 25 and 65 years old who are vaccinated or not against HPV (Haute Autorité de Santé, 2013; Rousselin *et al.,* 2017). Other tests are also available, such as Visual Inspection with Acetic Acid (VIA) and Visual Inspection using Lugol's Iodine (VILI), which are the most used in African countries (Dumont *et al.,* 2017; Leno *et al.,* 2017). Treatments are surgery, concurrent chemoradiotherapy and brachytherapy

(Haute Autorité de Santé, 2013; Sabbah, 2015). Despite the existence of vaccination against HPV and the possibility of screening, cervical cancer remains a public health problem in Madagascar. Thus, this study targets paramedics in the third year of training who will play a very important role in prevention especially in rural areas. The aim of this study was to assess the knowledge, attitude and practice of paramedics in the third year on cervical cancer.

METHODS

It was a cross-sectional descriptive study, KAP survey. The survey was done on May 3, 2017 at public and private paramedical training institutes in Toliara city. The study population was female student midwives and nurses in the third year of training. Included were the institutions which accepted the survey request and the female students who were registered, present during our visit, and consenting to the survey. Students who didn't complete the questionnaires were excluded. An application for authorization to investigate was sent to the heads of the paramedical institutes. All the students surveyed were informed about the purpose of the study and protected by the anonymity and confidentiality of their answers. Data was collected through the distribution of anonymous questionnaires that were completed and picked up on site. The parameters studied were the sociodemographic characteristics of the students, their knowledge about cervical cancer, their attitude towards cervical cancer and their screening practice.

RESULTS

The total number of female students in the study sites was 304. The students surveyed were 220 from the five paramedical training institutes that accepted the study, 169 of which were included in the study. They came from private institutions in 78% of cases (n = 132) and 22% (n = 37) from public institutions. The majority (75%, n = 126) were in the 21 to 25 age group. They were single in 82% of cases, married in 12% of cases and concubines in 6% of cases. There were 102 midwives (60% of respondents) and 67 nurses (40% of respondents). Eighteen students (11%) had more than three good answers on risk factors for cervical cancer and 22 (13%) had not found any good answers. One hundred and forty-seven students (87%) said that HPV is sexually transmitted. Students who reported there is an HPV vaccine were 109 (64%). Eighty-three students (49%) stated that the recommended age for screening is from 25 years old. Others responded after first sexual intercourse (39%) and at menopause (12%). The Pap smear was cited as the screening test for 61 students (36%), the VIA for 15 students (9%) and the VILI for 5 students (3%). Twenty-one students (12%) had found three good answers on the clinical signs of cervical cancer. Twenty-four percent of students had a good knowledge of cervical cancer. Figure 1 represents the distribution of students according to the assessment of their knowledge of cervical cancer. Regarding the students' attitude towards cervical cancer, 104 students (62%) thought they had no risk of having cervical cancer. Those who thought they should be vaccinated against HPV were 51% (n = 87). Those who thought they should be screened for cervical cancer accounted for 78% (n = 131). Screening for cervical cancer is essential according to 29% of students and a means of prevention according to 23%. The students' attitude towards cervical cancer was right in 12% of cases. Those with an incorrect attitude were 52% of cases. Table 1 represents the distribution of female students according to the assessment of their attitude towards cervical cancer.

Table I. Distribution of students according to the assessment of their attitude towards cervical cancer

Assessment of attitude towards cervical cancer	Total n=169	Percentage (%)
False	88	52
Approximate	61	36
Right	20	12

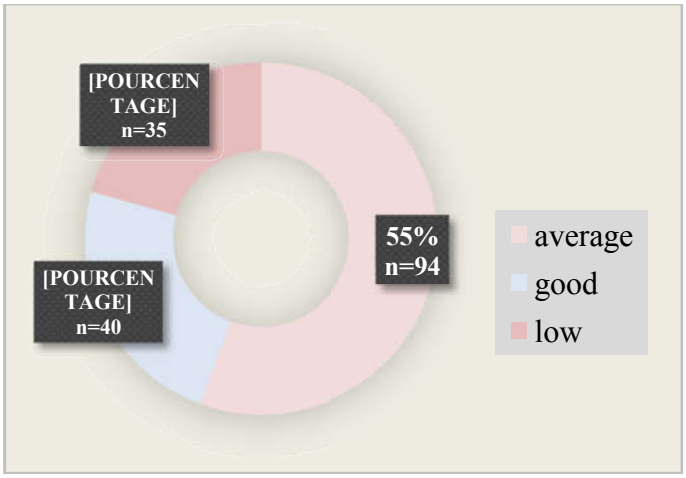

Figure 1. Distribution of students according to the assessment of their knowledge of cervical cancer

About the practice, 23 students (14%) had already been screened for cervical cancer. One hundred and forty-six female students (86%) had never been screened. The reason for not performing screening was essentially the absence of symptoms in 53 students (36% of non-screened students). Figure 2 shows the reasons for not performing cervical cancer screening. Twenty students (12%) had adequate practice on cervical cancer.

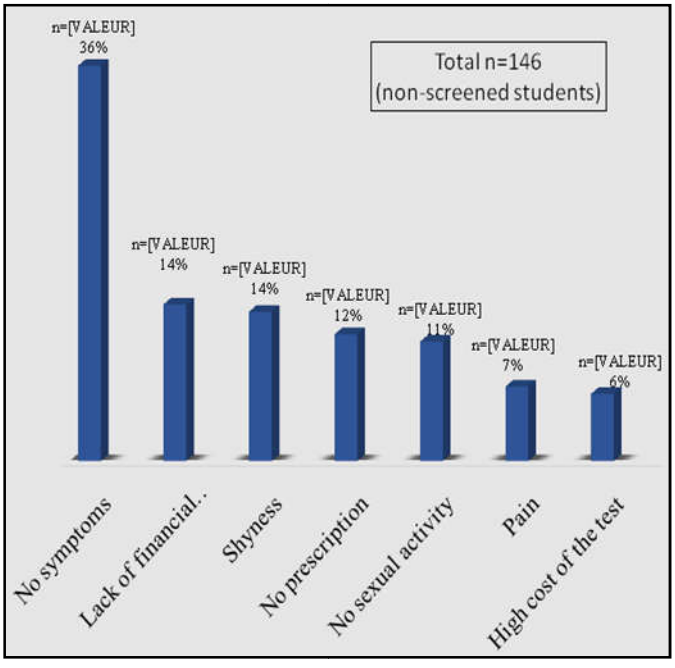

Figure 2. Distribution of students according to the reasons for not performing cervical cancer screening

DISCUSSION

This was the first KAP survey of paramedic students on cervical cancer carried out in Toliara city. Nevertheless, there was a considerable exclusion rate of 23% of respondents. Moreover, during our literature review, few studies were published on the assessment of the knowledge of paramedic students about this cancer. Most of them concerned doctors, nurses and midwives, high school students or women in general. Among the 169 students included in the study, 78% came from private institutions. This rate can be explained on the one hand by the high number of private paramedical training institutes in Toliara city and on the other hand by the existence of entrance examination to the public paramedical training institute limiting number of students. In our study, 11% of respondents had found more than three good answers on risk factors for cervical cancer. This rate is lower than that of Ratsiralovanirina in Fianarantsoa, who reported that among the 112 health workers surveyed, including 61 doctors and 51 paramedics, 43% found at least six correct answers (Ratsiralovanirina, 2011). The majority of respondents (87%) in our study stated that HPV is sexually transmitted. This result is high compared to those of Ouedraogo and Ratsiralovanirina, with 50.5% and 49% of the paramedics surveyed respectively (Ratsiralovanirina, 2011; Ouédraogo *et al.,* 2012). Students who reported the existence of HPV vaccines were 64% according to our study. Our result is between that of Ouédraogo (Ouédraogo *et al.,* 2012) with a rate of 53.3% of paramedical students and that of Berraho (Berraho *et al.,* 2013) with a rate of 74.6% of physicians interviewed. In our study, 49% of students said that the best age for cervical cancer screening was from 25 years old. This response is consistent with the literature (Haute Autorité de Santé, 2013). However, according to a study performed by Hsairi among students at the end of medical studies, the majority (70.2%) suggested to start screening at the first sexual intercourse (Hsairi *et al.,* 2007).

The Pap smear was cited by 36% of the students as a means of screening for cervical cancer. Similarly, a study in Ouagadougou showed that 39.8% of health providers had a good knowledge of screening methods (Sawadogo *et al.,* 2016). According to our study, students who found three good answers on clinical signs of cervical cancer accounted for 12% of respondents. Our result is comparable to that of Ouédraogo in Ouagadougou reporting 10.3% of all paramedic students (Ouédraogo *et al.,* 2012). While Kouamo reported a good knowledge of clinical signs of cervical cancer in health care providers in Bamako, including 87.43% of state graduates midwives and 69.23% of state graduates nurses (Kouamo, 2005). Regarding the assessment of knowledge, a quarter of the students had a good knowledge of cervical cancer. This low rate could be explained by insufficient time to teach cervical cancer, misunderstanding of the theoretical course or gap in practical training. Students who thought they would have to screen for cervical cancer accounted for 78%. This rate is higher among health providers in Ouagadougou, who gave favorable opinions on routine screening among women in 95.6% (Sawadogo *et al.,* 2016). The reasons why cervical cancer screening should be performed were essentially the fact that it is essential according to 29% of students and a means of prevention according to 23% of students. While according to the study of Ouedraogo, 88.7% of paramedic students said that the value of screening is the prevention of cervical cancer (Ouédraogo *et al.,* 2012). As for the attitude assessment, only 12% or 20 students had a correct attitude towards cervical cancer. Students with an incorrect attitude were 52% of cases. These could be explained by the fact that only a quarter of them had a good knowledge of cervical cancer. In our study, only 14% of respondents had already screened for cervical cancer. On the one hand, the knowledge around this pathology is a factor associated with screening (Faye *et al.,* 2017). This low screening rate could then be explained by the lack of knowledge of the students and the misbehavior of more than half of the students. On the other hand, the majority of students (75%) were in the 21 to 25 age group. Thus, they were not in the target population. This low rate was also observed in the Ouédraogo's study in Ouagadougou, in which it reported 14% screening among state midwives and nurses students (Ouédraogo *et al.,* 2012). It is the same among the population of the Antsiranana region of Madagascar with a participation rate of 18% (Dumont *et al.,* 2017). The reasons for non-screening were mainly the absence of symptoms in 53 students (36% of non-screened students), the lack of financial resources for 21 students (14%) and shyness in 20 students (13%). They could be explained by the ignorance of the principles of screening, the unfavorable socio-economic level and the existence of mores subsisting in some regions of southern Madagascar. Regarding the assessment of the practice, only 20 students (12%) had an adequate practice. This could be explained by the sequence of students' poor knowledge and attitude towards cervical cancer.

Conclusion

The knowledge of paramedic students about cervical cancer was insufficient. Thus, their attitude towards this pathology and their practice in screening are poor. An improvement in their training should then be envisaged, adapting their teaching with the new Bachelor, Master and Doctorate education system with a focus on prevention. It will allow to have paramedics qualified in their future function and main actors in the reduction of the incidence of this pathology.

REFERENCES

Berraho M *et al.* 2013. «Connaissances et pratiques des médecins vis-à-vis du cancer du col de l'utérus et de l'infection HPV à Fès », *Santé Publique*, (Vol. 25), p. 351-357. DOI 10.3917/spub.253.0351

Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. 2018. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortalityworldwide for 36 cancers in 185 countries. *CA Cancer J Clin.,* 68(6): 394‑424.

Dumont A, Bessières N, Benbassa A, Razafindrafara G, Rabearison F, Philippe HJ. 2017. Dépistage du cancer du col utérin en milieu rural à Madagascar : faisabilité, couverture et incidence. *J GynecolObstet Hum Reprod.,* 46(4):327-32.

Faye A, Mbengue ET, Tal-Tal A. 2017. Facteurs associés au dépistage du cancer du col de l'utérus en milieu rural Sénégalais. *Rev Epidemiol Sante Publique,* 65:S77.

Fidler MM, Gupta S, Soerjomataram I, Ferlay J, Steliarova-Foucher E, Bray F. 2017. Cancer incidence and mortality among young adults aged 20–39 years worldwide in 2012: a population-based study. *Lancet Oncol.,* 18(12):1579-89.

Garba SM, Zaki HM, Arfaoui A, Hami H, Soulaymani A, Nouhou H, et al. 2013. Épidémiologie des cancers au Niger, 1992 à 2009. *Bull Cancer (Paris).,* 100(2):127-33.

Harioly Nirina MO. M, *et al.* 2018. Leucémie myéloïde chronique à Madagascar. *Bull Cancer,* https://doi.org/10. 1016/j.bulcan.2018.01.012

Hasiniatsy NRE, Rabarijaona L, Rafaramino F. 2011. Evolution des aspects épidémiologiques du cancer du col utérin dans le service d'oncologie d'Antananarivo, Madagascar. *J Afr Cancer,* 3:3-7.

Hasiniatsy NRE, Ramahandrisoa AVN, Refeno V, Rakoto FA, Rafaramino F. 2017. Épidémiologie des cancers pris en charge en oncologie médicale à l'hôpital militaire d'Antananarivo, Madagascar. Bull Cancer (Paris)., 104(12):902-4.

Haute Autorité de Santé, Dépistage et prévention du cancer du col de l'utérus. Actualisation du référentiel de pratiques de l'examen périodique de santé (EPS). Juin 2013, https://www.has-sante.fr/portail/jcms/c_1623735/fr/depist age-et-prevention-du-cancer-du-col-de-l-uterus

Hsairi M. *et al.* 2007. «Connaissances et attitudes des étudiants en fin d'études médicales vis-à-vis des dépistages des cancers du col utérin et du sein », *Santé Publique*, (Vol. 19), p. 119-132.DOI 10.3917/spub.072. 0119

Kouamo EI. 2005. Connaissances, attitudes et pratiques des prestataires de santé à Bamako relatives au cancer du col de l'utérus et du sein [Thèse]. Médecine: Bamako, 100p.

Leno DWA, Diallo FD, Camara AY, Magassouba M, Komano FD, Traore A, *et al.* 2017. Analyse des résultats des campagnes de dépistage du cancer du col de l'utérus à Conakry, Guinée. *Bull Cancer (Paris).,* 104(12):914-20.

Maalej M, Daoud J, Messaad J, Frikha H, Benna F, Hechiche M, et al. 1996. Le cancer invasif du col utérin chez la femme jeune en Tunisie. *Bull Cancer/Radiothérapie,* 83(3):158-63.

Ouédraogo WG. *et al.* 2012. Connaissances, Attitudes et Pratiques relatives aux lésions précancéreuses et cancéreuses du col de l'utérus : le cas des élèves sages-femmes, maïeuticiens et infirmier(e)s d'état des écoles de formation de base de Ouagadougou [Thèse]. Médecine: Ouagadougou, 60p.

Ranaivomanana AHM, Hasiniatsy NRE, Randriamalala NR, Rafaramino F. 2013. Les cancers vus au service d'oncologie du CHU/JRA. *Rev méd Madag,* 3(2):288-93.

Ratsiralovanirina MA. 2011. Le cancer du col de l'utérus à Fianarantsoa : Connaissance Et Attitude du Personnel de Santé [Thèse]. Médecine: Antananarivo, 96p.

Rousselin A, Dion L, Racin A, Lavoué V, Levêque J, Timoh KN. 2017. La pratique du frottis cervico-vaginal avant 25 ans. *Gynécologie Obstétrique Fertil Sénologie,* 45(5):309-15.

Sabbah L. Cancer du col de l'utérus. 2ème édition. Paris: Elsevier Masson; 2015. https://www.sciencedirect.com/ science/article/pii/B9782294745294000094

Sawadogo YA, Kiemtoré S, Kain DP. *et al.* 2016. Connaissances, attitudes et pratiques des prestataires de santé face au cancer du col utérin dans les centres de santé de référence de la ville de Ouagadougou, Burkina Faso. *African Journals On Line AJOL,* 39:1-2.

Toure M, Aboudi I, Didi-Kouko Coulibaly J, Toowlis A, Echimane KA. 2011. Aspects épidémiologiques, anatomo-cliniques et thérapeutiques du cancer du col utérin dans le service de cancérologie du CHU de Treichville à Abidjan. *Med Afr Noire.,* 50(12):473-78.

World Health Organization, 2016. Guide to introducing HPV vaccine into national immunization programmes. Genève: OMS.

World Health Organization/Regional office for Africa. Cervical cancer common amongst African women. 2017, http://www.afro.who.int/health-topics/cancer

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