Assessment of health professionals'knowledge standardin the municipality of Parakou in 2016.

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Abstract

Introduction: Health professionals owe themselves to the knowledge of strong medical care that is constantly being revised and updated. The goal of this study is to evaluate the knowledge standard of health professionals in Parakou.

Methods: This was a cross-sectional, descriptive and analytical study that lasted three months from May 25th to August 25th, 2016. It focused on Parakou health professionals. Sampling is an exhaustive census. The data are collected using a questionnaire. The standard of knowledge of some diseases was studied, drawing on a CAP study model proposed by Essi and al.

Results: The average age of the respondents was 35.4 ± 7.4 years. The majority of participants (39.3%) had a sentant of more than 10 years. Nearly half had good knowledge of the risk factors for hypertension and diabetes. Two out of five were moderately aware of the modes of transmission of viral hepatitis B. 28.4% had a good knowledge of how to detect for cervix cancer.

Conclusion: Half of Health professionals ofParakou had a good knowledge of the risk factors for hypertension and diabetes; but less so for modes of transmission of viral hepatitis and cervix cancer detection tests.

Key words: Health professionals, knowledge, diseases, Parakou.

Introduction

The health professional exercises his skills and judgment, provides a service related to the maintenance, improvement of the health of people, or the treatment of wounded sick and disabled persons by providing them with care. They operate an important role in prevention, education for health and health promotion. To improve health condition of the population, health professionals (general practitioners or specialists, midwives, nurses, physiotherapists, etc.) must have a strong knowledge of medical care constantly revised and updated for a good supportof thecommunities they care for. According to a group of Moroccan researchers, the prevalence of chronic diseases is higher in developing countries and are risks not sufficiently taken into account [1].

This study aims to assess the standard of health professionals' knowledge f in the municipality of Parakou in 2016.

Methods

We conducted a descriptive and analytical cross-sectional study with prospective data collection for three months from May 25 to August 25, 2016. It took place in public and private health facilities in the municipality ofParakouin northern Benin. And focused on health professionals (doctor, midwife, nurse or laboratory technician) working in both public and private health facilities who gave their free consent. The sampling method is non-probabilistic by a comprehensive census.

Data collection was done using a questionnaire. The variables studied were socio-professional characteristics (age, sex, seniority, qualification) and knowledge standard of some diseases. The knowledge was evaluated by drawing on a CAP study model proposed by Essi et al [2]. Thus the assessments are made as follows:

- Less than 50% of correct answers = Insufficient knowledge

- Between 50% included and 65% excluded from correct answers = Average knowledge
- Between 65% included and 85% excluded from correct answers = Good knowledge
- Over 85% of correct answers = Excellent knowledge

We chose six diseases on which we assessed the standard of knowledge of health professionals because of their endemic aspect or their increased frequencies. These were malaria, viral hepatitis B, hypertension, diabetes, and cancer of the cervix and breast.

The analysis of the data wascarried out withEPI software info version 7. The quantitative variables are expressed on averagewith the standard deviationwhile the qualitative variables in frequency. The frequencieswerethencomparedwithPearson's Chi - 2 or Fisher's exact test as appropriate. For all comparisons the differenceisconsideredsignificant for a $p \leq 5\%$.

Results

Socio-professionalcharacteristics of the respondents.

211 healthprofessionalswereinvolved, 120 of themwerefemale. The sex ratio (M / F) was 0.8. The averageagewas 35.4 ± 7.4 yearswithextremes of 22 and 64 yearsold. Thoseaged 35 to 40 were in the majority (28.9%). Just over 2 out of 5 participants came fromhospitals and healthcentersrepresented 48.3%. The majority of participants (39.3%) hada seniority of more than 10 years. Table II shows all the socio-professionalcharacteristics of the respondents.

Table I: Distribution of respondents by socio-professional characteristics, Parakou in 2016.

	Numbers	Percentage
Ages (years)		
≤ 25	19	9.0
] 25-35]	87	41.3
] 35-45]	87	41.3
>45	18	8.5
Health training		
Hospitals	92	43.6
Public health centres	64	30.3
Privatehealth centres	55	26.1
professional Class		
Nurse	102	48.3
Midwife	41	19.4
Physician	36	17.1
laboratory technician	32	15.2
Seniority		
≤ 5 years	70	33.2
5 – 10 years	58	27.5
> 10 years	83	39.3

Knowledge about the concerned diseases

Nearly half of the health professional had a good understanding of the risk factors for hypertension and diabetes; about 2 out of 5 respondents were moderately aware of the transmission modes of viral hepatitis B. 60 (28.4%) had a good knowledge of cervical cancer detection and 204 (96.7 %), insufficient knowledge of breast cancer (see Table II).

Table II: Distribution of respondents according to knowledge of diseases, Parakou in 2016.

Standard knowledge	Numbers	Percentage
Preventionmeansofmalaria		
insufficient	104	49.3
Average	44	20.9
Good	63	29.9
Excellent	-	-
Transmission modes of viral hepatitis B		
Insufficient	66	31.3
Average	126	59.7
Good	19	9.0
Excellent	-	-
Risk factors for hypertension and diabetes.		
Insufficient	51	24.2
Average	65	30.8
Good	95	45.0

Excellent	-	-
Cervix cancer detection test		
Insufficient	89	42.2
Average	34	16.1
Good	60	28.4
Excellent	28	13.3
Breast cancer detection means		
Insufficient	204	96.7
Average	07	3.3
Good	-	-
Excellent	-	-

Standardknowledge association about diseases and qualification of respondents

There was a statistically significant link between the professional qualification of the respondents and their standard of knowledge about the means of preventing malaria (p= 0.00), as well as the means of detection for cervical cancer (p = 0.02). On these two pathologies, physicians had a better knowledge compared to other professional categories.

Table III: Association between knowledge standard of diseases and the qualification of health professionals in the municipality of Parakou in 2016.

Knowledge	**Knowledge**		**Nurse**		**Midwife**		**Laboratrytechnician**		**P**
	N	**%**	**n**	**%**	**n**	**%**	**n**	**%**	
Malaria prevention									**0.00**
Insufficient	5	13.9	62	60.8	21	51.2	16	50	
Average	7	19.4	20	19.6	8	19.5	9	28.1	
Good	24	66.7	20	19.6	12	29.3	7	21.9	
Transmission modes of viral hepatitis B									**0.18**
Insufficient	10	27.8	34	33.3	16	39	6	18.8	
Average	20	55.6	58	56.9	24	58.5	24	75	
Bonne	6	17.6	10	9.8	1	2.4	2	6.3	
Risk factors for hypertension and diabetes									**0.15**
Insufficient	10	27.8	26	25.5	7	17.1	8	25	
average	10	27.8	33	32.4	16	39	6	18.8	
Good	16	44.4	43	42.1	18	43.9	18	56.3	
Cervix cancer detection test									**0.02**
Insufficient	13	36.1	32	31.4	24	58.5	20	62.5	

Average	5	13.9	23	22.5	5	12.2	1	3.1	
Good	11	30.6	33	32.5	8	19.5	8	25	
Excellent	7	19.4	14	13.7	4	9.8	3	9.4	
Breast cancer detection									**0.21**
Insufficient	0	0	6	5,9	1	2,4	0	0	
Average	36	100	96	94.1	40	97.6	32	100	

Discussion

The goal was to evaluate the knowledge standard of health professionals in the municipality of Parakourelated tosome endemic pathologies. To do this, a descriptive and analytical cross-sectional study with prospective collection of data was conducted on a sampling of 211 health professionals working in public and private health centres in this city.

Females predominated with a sex ratio (M / F) of 0.8. In 2011, Gounongbé and al had already noted this female predominance (sex ratio = 0.6) among health professionals in the Parakou-N'dali health zone [3]. The same was true among health care workers in Cotonou in 2000 in the study conducted by Acakpo and al where the sex ratio was 0.9 [4]. This same observation had been related by other studies; Laraqui and al [5] in 2002 in Morocco, Pocheron and al [10] in 2007 in France who had all reported a sex ratio of 0.8 and the Luciane team [1] in 2011 in São Paulo, Brazil (sex ratio = 0.7). The feminization of the medical profession remains persistent.

The average age of our respondents was 35.4 ± 7.4 years. A similar result (38.2 ± 8.1 years) is obtained by Codjo and al among health professionals from the two hospitals of Parakou in 2015 [6], and from Lomé health workers in Togo in 2010 (37. 9 ± 10.7 years) [7]. However, it is lower than that reported by Boutahiri and al in Morocco in 2011 (45.65 ± 8.92 years) [8]. Regarding the standard of knowledge, overall, 66 (31.3%) of the subjects had insufficient knowledge about the mode of transmission and the means of prevention of viral hepatitis B. In this proportion, the physicians' share is 15.2%. In a Mexican study of nursing staff (2014), the prevalence of low level was much higher (76%) [9]. Wecan not say that our respondents have a better knowledge of viral hepatitis B than their Mexican counterparts because of the presence in the sample of physicians. Their participation in the study would have made the rate of knowledge deficiency high on hepatitis B virus.

Overall, less than half of those surveyed 95 (45%) had a good understanding of the risk factors for hypertension from diabetes, which itself is a risk factor for high blood pressure. But there is not a significant difference between the standard of physicians who in this area are more qualified agents than the others. Laboratory technicians were higher than physicians. Even if it is of all medical categories, good knowledge of the risk factors of hypertension should be at a much higher level. They have a rate of good knowledge equal to that of midwives could be explained by the fact that the latter because of the obsession with renal vascular syndromes, have been noted during consultations. Several studies have shown a high prevalence of cardiovascular risk factors among health professionals [1, 8]. Boutahiriand al in a study conducted in 2011 among health workers in Morocco reported a frequency (50%) close to that of Parakou respondents [8]. There is a need for awareness of risk factors to avoid or reduce the risk of hypertension.

Breast and cervix cancers are curable when the diagnosis is made early and management is immediate. Standard of knowledge were average for all and range from 96 to 100% of agents for breast cancer detection. We would expect physicians and midwives to get a better score, but none of them are at least good. We aretried to ask the question about the possible existence of means in the questionnaire.

In the struggle to reduce the prevalence of cervix cancer, only 28.4% of health workers in all categories had a good knowledge of cervix cancer detection tests. Nurses are more knowledgeable (32.5%) on how to detect for physicians (17.1%) and midwives (19.4%). But paradoxically, for breast cancer detection, average knowledge is excellent (between 94.1% to 100%). We are trying to say that this pathology is not a concern for healthcare professionals in North Benin. Obstetricians who should have a better score, are the least knowledgeable. Compared with physicians in Bamako (Mali) in 2005, the standard of knowledge of cervix cancer detection is far higher (78.8%) [10]. But it must be remembered that the Bamako study did not take place in obstetric and gynecological services.

Conclusion

This study found that almost half of physicians of Parakou had a good understanding of the risk factors for hypertension and diabetes. About two out of five had average knowledge of modes of transmission of viral hepatitis B. All categories combined, our health professionals, especially midwives, did not have a good knowledge of cervix cancer detection tests. This situation should hail the training schools for health workers and their employers. Programs for retraining health professionals are needed.

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