

Knowledge, Attitudes and Practices of Health Care Staff Related to COVID-19 in The Guinean Cardiologist Environment

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ABSTRACT

The objective of this study was to assess the level of knowledge, attitude and practices of the staff of the cardiology department Ignace Deen in the face of a suspected case of COVID-19 infection. The SARS-CoV-2 coronavirus epidemic is responsible for very high morbidity in the world. The World Health Organization classifies it as a public health emergency. Guinea, through the National Health Security Agency (ANSS) recorded its first case of COVID-19 infection on March 12, 2020. Since the country has known 6,141 cases, including 37 cases of death among which are the staff health. The surveys were carried out at the cardiology department of the Ignace Deen National Hospital among all professional categories of the department. Health professionals included doctors, nurses and surface technicians (boys and girls in the ward). We conducted an analytical cross-sectional study that ran from June 1 to 30, 2020. During our study, 60 participants answered our questions. The average age of our participants was 33.5 ± 5 years with the extremes of 25 and 66 years old. The male gender predominated in this study, i.e. 73.7% against 26.3% of the female gender. Doctors were the most represented professional category, i.e. 66.7%, followed by nurses 25% and surface technicians with 8.3%. Our result corroborates the study carried out by Usman Rashid Malik et al. in Pakistan, doctors and nurses were the most represented health workers, at 37.4% and 29.4% respectively. Faced with this pandemic, of which no one knows the outcome, particular emphasis must be placed on training in the prevention and control of infections for staff, which is one of the strong links in the fight against this pandemic and the availability of personal protective equipment.

Keyword

Knowledge, Attitude, Practices, COVID-19, Personal, Cardiology, Guinea.

Introduction

The SARS-CoV-2 coronavirus epidemic is responsible for very high morbidity worldwide. It is classified as a public health emergency by the World Health Organization [1]. COVID-19 has been identified as a new and contagious primary atypical (viral) pneumonia that has been reported to have caused similar clusters of outbreaks to the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and the Middle East Respiratory

Syndrome Coronavirus (MERS-CoV) [2,3]. The most common clinical signs are fever, cough, acute respiratory distress, decreased or normal white blood cells, fatigue and inability to resolve within 3-5 days of antibiotic treatment [4]. The World Health Organization (WHO) declared the emerging coronavirus 2019 (COVID-19) disease an international public health emergency on 30 January 2020 [5]. In that the COVID-19 epidemic was unique in terms of high pathogenicity and mortality compared to previous coronavirus epidemics [6-8]. Guinea, through the national health security agency (ANSS), registered its first case of COVID-19 infection on 12 March 2020. Since then, the country has seen 6141 positive cases including 37 cases of death among which are health

workers [9]. Healthcare workers are essential workers defined as paid and unpaid persons working in healthcare facilities who may be exposed directly or indirectly to patients or infectious substances [10]. As healthcare workers are exposed to healthcare-associated infections, the scarcity of available data on this subject has led to the objective of this study, which was to assess the level of knowledge, attitude and practices of the staff of the Ignace Deen cardiology department in the face of a suspected case of COVID-19 infection.

Materials and Methods

The surveys were carried out at the Cardiology Department of the Ignace Deen National Hospital, and covered all professional categories in the department. The health professionals included doctors, nurses and surface technicians (ward boys and girls).

We conducted an analytical cross-sectional study which ran from June 1 to June 30, 2020, and the study population consisted of the staff of the cardiology department.

The information collected concerned the socio-demographic characteristics of the providers (age, sex, position, length of time in the current position), their knowledge of suspected cases of COVID-19 (symptoms, identification of a suspected case of COVID-19, whether or not they had received training in infection prevention in the context of COVID-19), their attitudes and practices when faced with a suspected case of COVID-19 received in the department, the personal protective equipment available and the behaviour adopted when faced with suspected cases of COVID-19. The data was doubly captured and then analysed using EPI Info 7.1.5 software. Free and informed consent was obtained from each participant before the questionnaire was administered.

Results

During our study, 60 participants answered our questions. Table 1 shows the socio-demographic characteristics of the nursing staff in the cardiology department. The average age of our participants was 33.5 ± 5 years with the extremes of 25 and 66 years. The male gender predominated in this study, i.e. 73.7% compared to 26.3% of the female gender. In table 2, staff knowledge is described. Table 3 shows the attitudes and practices of the staff when faced with a suspected case of COVID-19.

Table 1: Socio-demographic characteristics of cardiology staff.

Parameters studied	Case	%
Like		
Male	44	73,3
Female	16	26,7
Professional category		
Doctor	40	66,7
Nurse	15	25
Surface technician	5	8,3
Work experience		
Less than 6 months	5	8,3
Between 6 months and 1 year	10	16,7
More than one year	45	75

Table 2: Cardiology staff knowledge in the face of a suspected case of VIDOC-19.

Settings	case	%
Definition given to COVID-19		
Respiratory symptoms +Temperature at 38	60	100
Subject having had contact with confirmed case	50	83,3
Subject who has stayed in a COVID case centre19 confirmed	15	25
Don't know	5	8,3
Symptoms cited related to COVID-19		
Fever	60	100
Cough	60	100
Nausea/Vomiting	5	8,3
Loss of Taste	25	41,7
Sense of smell disorder	50	83,3
Breathing difficulty	32	53,3
Céphalée	47	78,3
Nasal discharge	38	63,3
Others ^x	40	66,7
Knowing the mode of transmission		
Yes	40	66,7
No	20	33,3
Having received training on infection control in COVID settings-19		
Yes	15	25
No	45	75

Table 3: Attitudes and practices of cardiology staff when faced with a suspected case of VIDOC-19.

Settings	Case	%
Attitude to a suspicious case of COVID-19		
Referral to a COVID care centre19	40	66,7
Informing the ANSS	5	8,3
Don't know	15	25
Hand hygiene before and after each procedure		
Yes	55	92
No	5	8
Physical distance		
Yes	50	83
No	10	17
Personal protective equipment available		
Yes	10	16,7
No	50	83,3
Type of personal protective equipment available		
Mask	60	100
Facial screen	5	8,3
Gloves	60	100
Blouse	10	16,7
Having received a suspicious case of COVID-19		
Yes	20	33,3
No	40	66,7
If Yes, practical in the face of a suspicious case of COVID-19		
Referral to a COVID care centre19	18	30
Informing the ANSS	2	3,3
Treat the symptoms first	0	0

Discussion

During our study, 60 participants out of 70 staff members answered our questions, a participation rate of 86%. This high rate of participation in this survey could be explained by the fact that the COVID-19 pandemic has created a great deal of interest among healthcare personnel in order to assess their level of knowledge,

their attitude and their practices when faced with a suspected case of COVID-19 in order to better protect themselves. The average age of our participants was 33.5 ± 5 years with the extremes of 25 and 66 years. The male gender predominated in this study, i.e. 73.7% compared to 26.3% of the female gender.

Doctors were the most represented professional category with 66.7%, followed by nurses with 25% and surface technicians with 8.3%. Our result corroborates that in the study conducted by Usman Rashid Malik et al [11] in Pakistan, doctors and nurses were the most represented health care workers with 37.4% and 29.4% respectively.

This study, the first of its kind at the Ignace Deen Cardiology Department, shows a good level of knowledge of COVID-19. On the other hand, many studies have shown a low level of knowledge by the nursing staff, as is the case in Egypt, Iran and Greece [12,13,14]. During our study, only one confirmed case of COVID-19 was recorded in the Ignace Deen cardiology department, i.e. 1.4%, thus justifying the very low contagion rate of its staff, unlike in China, where 2050 cases of COVID-19 were reported among healthcare workers on 20 February 2020; the majority of cases were due to a lower level of knowledge and experience in managing the disease [15].

The present study shows that the vast majority had a good attitude and practice when faced with a suspected case of COVID-19 because hand hygiene was carried out by 92%, wearing masks was systematic by 100% and physical distancing was respected by 83% of the staff. The same observation was made [11] in Pakistan. Unlike in Greece, where only 1 in 4 health professionals had a hand washing routine before and after interaction with the patient [13]. Thus good knowledge of the disease has a far-reaching influence on the attitudes and practices of health care staff, as our result illustrates.

The majority of staff who received a suspicious case referred to a COVID-19 management centre or informed the National Health Security Agency. In addition, staff did not have sufficient personal protective equipment available.

Conclusion

This study allowed us to assess the level of knowledge, attitudes and practices of cardiology staff in the context of the COVID-19 pandemic. In the face of this pandemic, the outcome of which is unknown, particular emphasis must be placed on the infection prevention and control training of personnel, which is one of the strong links in the fight against this pandemic, and the availability of personal protective equipment.

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