



Preventive Behaviour Towards Cardiovascular Diseases And Associated Factors Among Health Workers In The University Of Port Harcourt Teaching Hospital, Rivers State

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ABSTRACT

Recent events have shown that many health workers are developing cardiovascular problems and some have died suddenly while on duty or shortly after closing from work. This study investigated the preventive behaviour towards cardiovascular diseases and associated factors among health workers in University of Port Harcourt Teaching Hospital, Rivers State. A descriptive survey design was adopted with a target population consisting of 2500 health workers UPTH. A multi-stage sampling procedure was used to select a sample size of 400 for the study. The instrument for data collection is a structured questionnaire, with a reliability coefficient of 0.68. Completed questionnaires were collected, coded and analyzed using percentage and Chi-square (X^2) at 0.05 level of significance. The result of the study showed that, more of the respondents (67.5%) had good preventive behaviour while 32.5% had poor preventive behaviour towards cardiovascular diseases. It was concluded that health workers in UPTH had good preventive behaviour towards cardiovascular diseases and the factors associated with their behaviour were age, gender and professional qualification. It was recommended that, health institutions should ensure that their staffs adhere to cardiovascular disease preventive measures.

Keywords: Behaviour, Cardiovascular diseases, health workers, prevention

INTRODUCTION

A healthcare worker must remain healthy and strong to be able to function effectively and maximally in their profession but, some pay less attention to their own health due to their responsibility to save lives and alleviate sufferings. However, recent events have shown that many health workers are developing cardiovascular problems and some have died suddenly while on duty or shortly after closing from work. This development is a hindrance to the performance of their duty of saving lives. According to World Health Organization (2017), cardiovascular diseases are the names for the group of disorders of heart and blood vessels. Also, American Heart Association (AHA) (2014) defined cardiovascular disease as heart and blood vessels disease. World Health Organization (2017) during World Heart Day reported that cardiovascular diseases (CVDs) take lives of 17.7 million people every year, 31% of all global deaths. The report further stressed that 75% of CVD deaths occur in low-income and middle-income countries while 80% of the CVDs are due to heart attacks and strokes.

Cardiovascular diseases are the number one cause of death globally as more people die from CVDs than from any other cause. Achalu, (2010) supported this when he asserted that hypertension which is one of the risks factors of cardiovascular disease is one of the most serious health problem or illness in the world

today. However, it is on record that 90% of cardiovascular diseases are preventable yet, its effect is evident among individuals including healthcare workers. Preventive behaviour towards cardiovascular diseases is key to avert the aftermath of such diseases. Seedat (2015) specified that, risky behaviour is the main reason for poor control of blood pressure. On the other hand, certain factors can predispose an individual to cardiovascular diseases. The Nigeria Cardiac Society (NCS) (2016) asserted that possible predisposing factors of cardiovascular diseases include, female sex, high socioeconomic class, sedentary lifestyle, a high energy diet and age above 40years.

Age is one of the most important risk factor in developing cardiovascular or heart disease with appropriately a tripling of risk with each decade of life. Coronary fatty streaks can begin to form in adolescence. It is estimated that 82 percent of people who die of coronary heart disease are 65 and older. One of the multiple explanations proposed to explain why age increases the risk of cardiovascular/heart diseases are related to serum cholesterol level. In men, this increase levels off around age 45 to 50years. In women, the increase continues sharply until 65years. Aging is also associated with changes in the mechanical and structural properties of the vascular wall, which leads to the loss of arterial elasticity and reduced arterial compliance and may subsequently lead to coronary artery disease.

Men are at greater risk of heart disease than premenopausal women. Once a woman is past menopause; it has been argued that a woman's risk is similar to men. According to World Health Organization, sex contributes to approximately 40% of the variation in sex ratio of coronary heart disease mortality. One of the proposed explanations for gender differences is hormonal difference. In women, Estrogen is the predominant sex hormone which has protective effects on glucose metabolism and haemostatic system and may have direct effects in improving endothelial cell function. Estrogen production decreases after menopause and this may change the female lipid metabolism thereby decreasing the HDL cholesterol while increases LDL and total cholesterol level. There are also noticeable difference in body weight, height, body fat distribution, heart rate, stroke volume and arterial compliance among men and women.

Prevention they say is better than cure. It is best to prevent occurrences of cardiovascular diseases because it is life threatening and its management is expensive. Thus, health care workers must not ignore their cardiovascular health. Even in literature, those focusing on the health of healthcare workers is scarce. However, Nedie et al. (2001) in their study on: Job stress and cardiovascular diseases with health workers, discovered that Doctors and nurses are more likely to develop cardiovascular complications as a result of job stress compared to the rest of workers. Thus, it becomes imperative to carry out this study to investigate the preventive behaviour towards cardiovascular diseases and associated factors among health workers in University of Port Harcourt Teaching Hospital, Rivers State. Specifically, the study considered the:

1. Preventive behaviour towards cardiovascular diseases among health workers in UPTH.
2. Association between age and preventive behaviour towards cardiovascular diseases among health workers in UPTH.
3. Association between gender and preventive behaviour towards cardiovascular diseases among health workers in UPTH.
4. Association between professional qualification and preventive behaviour towards cardiovascular diseases among health workers in UPTH.

METHODOLOGY

The study was carried out in the UPTH, a tertiary-care health facility, Rivers State, Niger Delta region of Nigeria. The facility, apart from treating patients, also teaches medical and paramedical students and personnel, and conducts medical-oriented researches at both undergraduate and graduate levels. A descriptive survey design was adopted; because the study is not amendable to variable manipulation (Will, 2014). The target population was the estimated 2500 health workers in the University of Port Harcourt Teaching Hospital, while the 400 respondents were recruited, using the Taro-Yamene Formula. The respondents were stratified into doctors, nurses, laboratory scientists, pharmacists and social health workers, with random selection employed in each stratum. The instrument for data collection is a structured questionnaire, which was in two sections; A and B. Section A had information on demographic

characteristics, while B elicited information on health workers' preventive behaviour cardiovascular disease on a modified Likert scale. A face validity of the instrument was determined by experts in related area, while its reliability was confirmed by administering 20 sample copies of the questionnaire on health workers at the Military Hospital in Rivers State, which is homogenous to the study population. A reliability coefficient of 0.68 was obtained. Similarly, permissions for the study was obtained from the Department of Human Kinetics and Health Education and the Ethical Units of the School of Graduate Studies and Legal Unit of the University of Port Harcourt and University of Port Harcourt teaching Hospital respectively, while Consent was obtained from the participants. Completed questionnaires were collected, coded and analyzed using percentage and Chi-square (X^2) at 0.05 level of significance.

RESULTS

The results of the study are presented below:

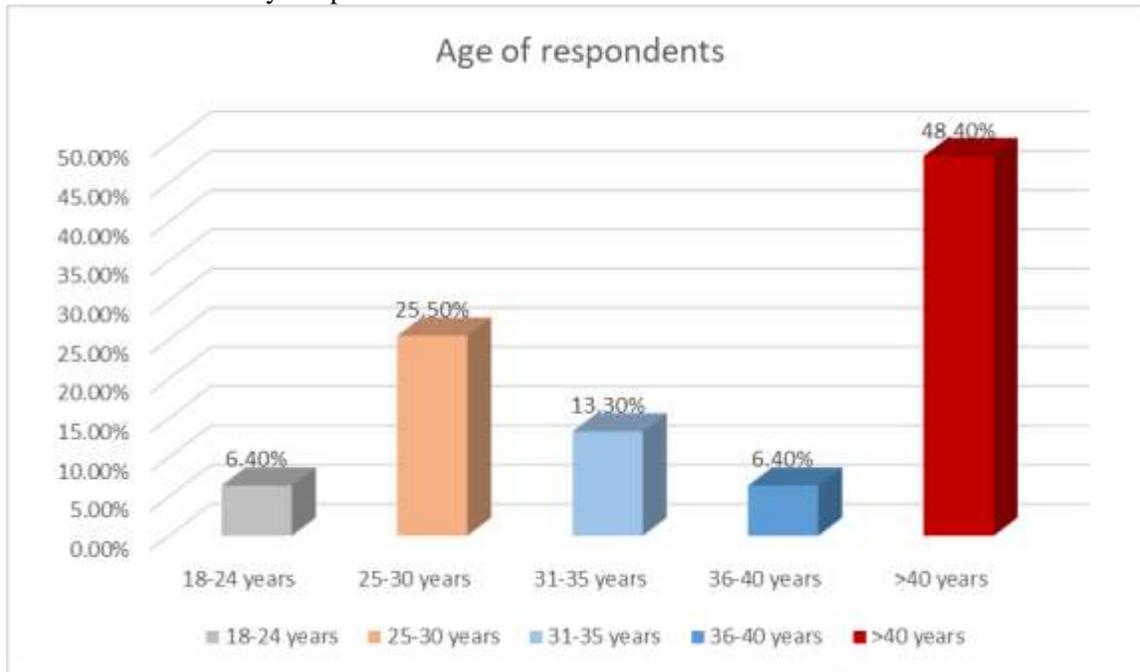


Fig 1: Percentage distribution of respondents' age

The age of the respondents showed the following; 22(6.4%) were between the ages of 18-24 years, 88(25.5%) were between the ages of 25-30 years, 46(13.3%) were between 31-35 years, 22(6.4%) years, while 167(48.8%) were above 40 years old.

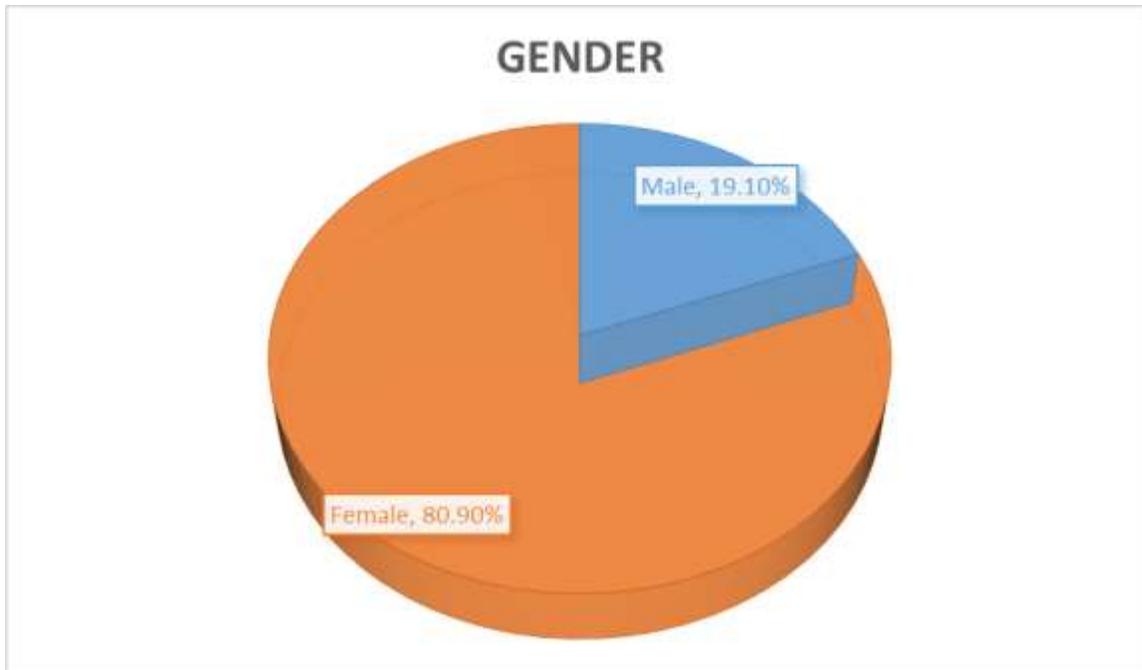


Fig 2: Percentage distribution of the gender of respondents

66 (19.1%) were males while 279 (80.9%) were females.

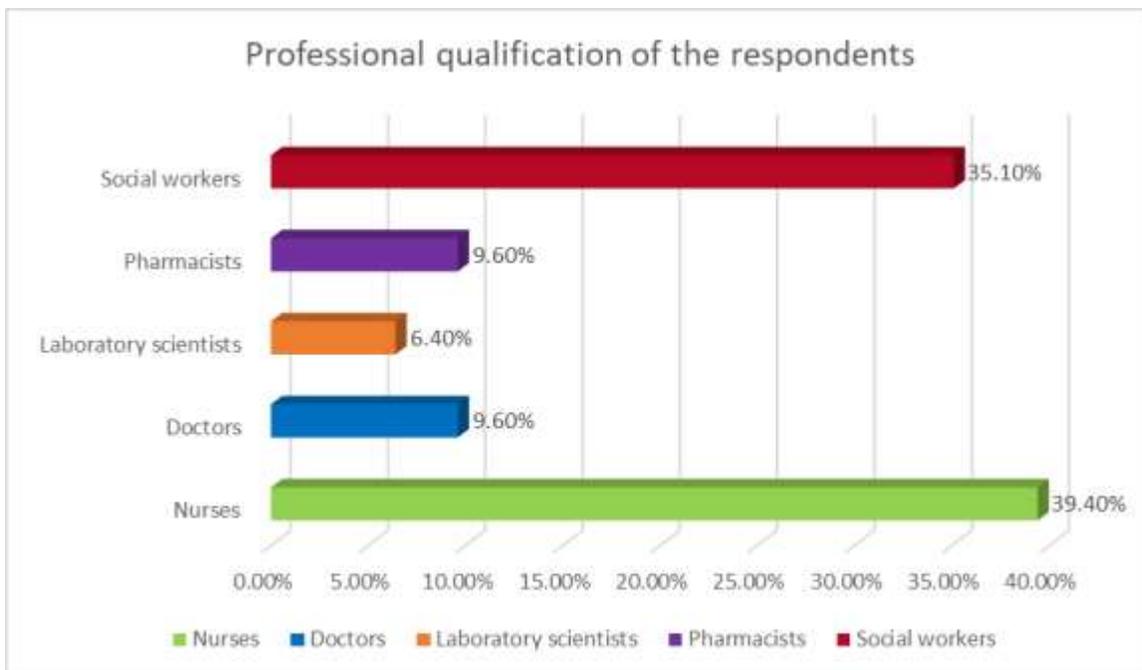


Fig 3: Professional qualification of the respondents

The Fig 3 illustrated that 136(39.4%) were nurses, 33(9.6%) were doctors, 22(6.4%) were laboratory scientists, 33(9.6%) were pharmacists, while the remaining 121(35.1%) respondents were medical social workers.

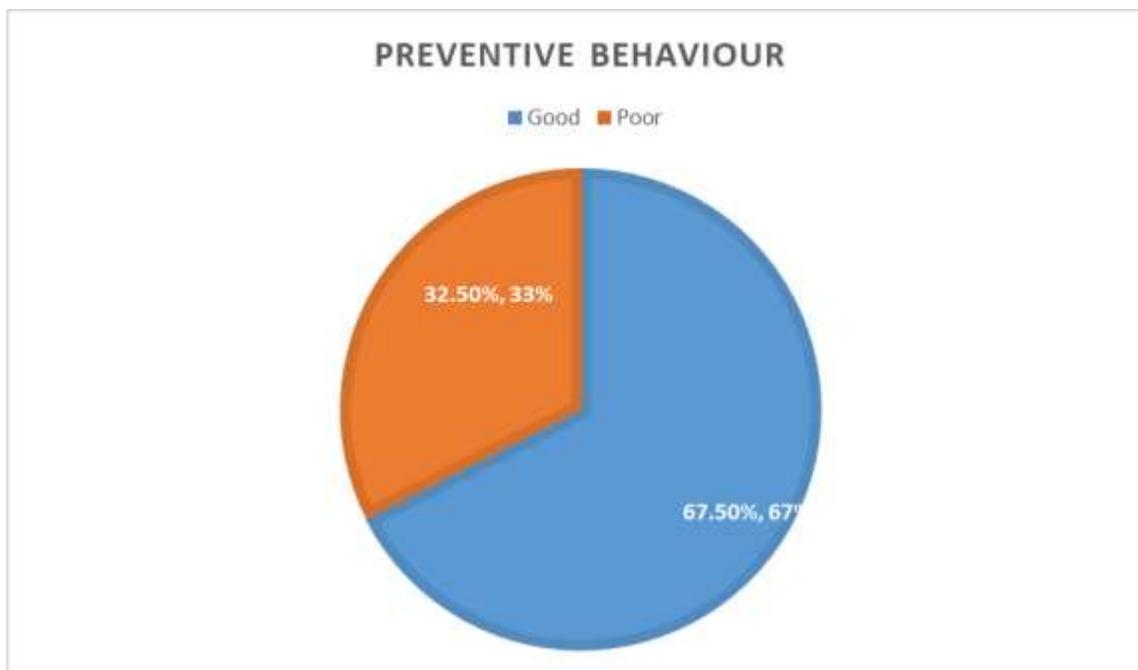


Fig 4: Preventive behaviour towards cardiovascular diseases

The result in the fig above showed that, more of the respondents (67.5%) had good preventive behaviour while 32.5% had poor preventive behaviour towards cardiovascular diseases.

Hypothesis 1: There is no significant association between gender and preventive behaviour towards cardiovascular diseases among health workers in UPTH

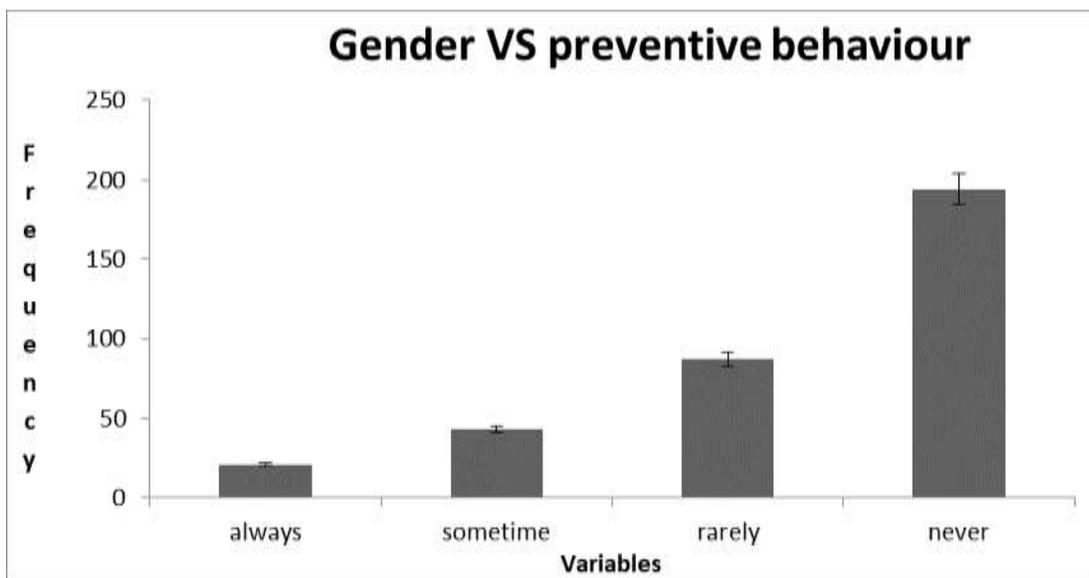


Fig 5: Association between gender and preventive behaviour

The calculated chi-square value is 3.32 while the tabulated is 2.50, at a p-value of 0.05. Since the tabulated is less than the calculated, it is statistically not significant. The null hypothesis is accepted. There is thus, no significant relationship between gender and the behaviour towards cardiovascular diseases preventive measures in the University of Port Harcourt Teaching Hospital.

Hypothesis 2: There is no significant association between gender and preventive behaviour towards cardiovascular diseases among health workers in UPTH

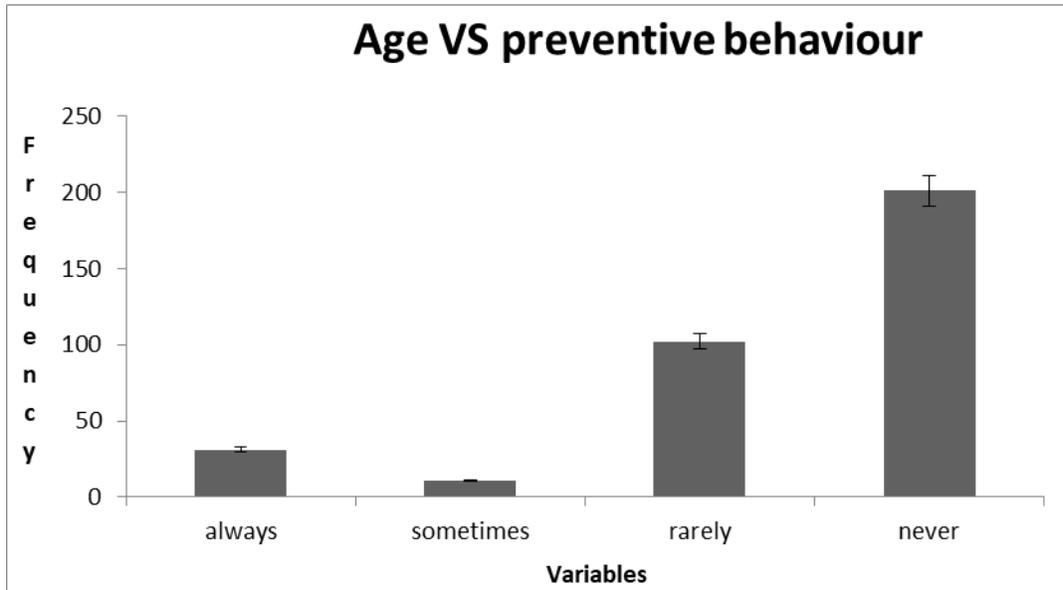


Fig 6: Association between age and preventive behaviour towards cardiovascular diseases among health workers in UPTH

The calculated value is 3.32 while the tabulated is 2.50, at a p-value of 0.05. Since the tabulated is less than the calculated, it is statistically not significant. The null hypothesis is accepted. There is thus, no significant relationship between age and the compliance of cardiovascular diseases preventive measures in the University of Port Harcourt Teaching Hospital.

Hypothesis 3: There is no significant association between gender and preventive behaviour towards cardiovascular diseases among health workers in UPTH

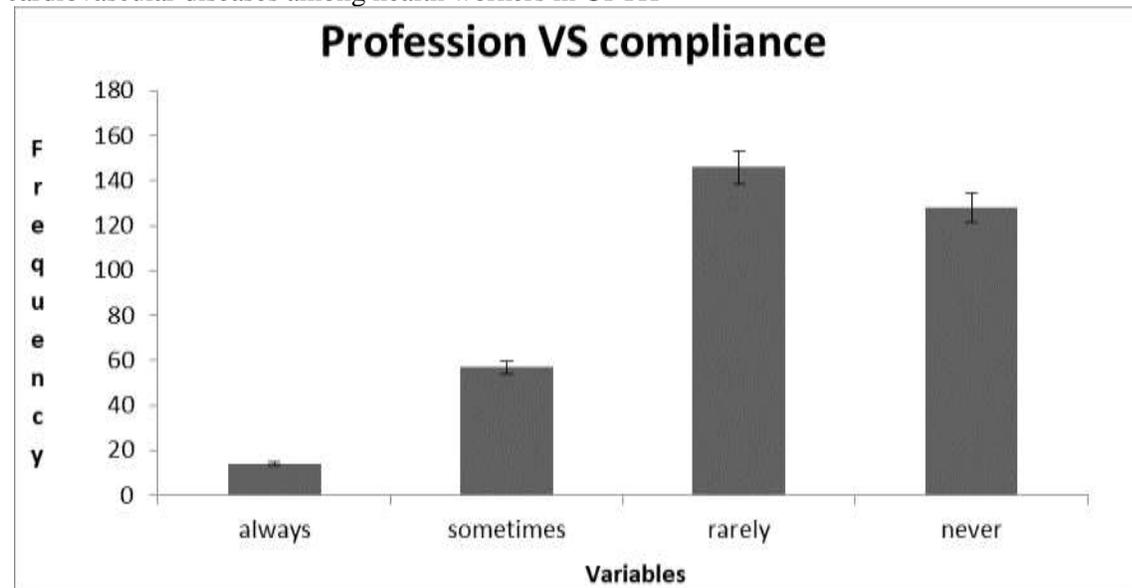


Fig 7: Association between professional qualification and preventive behaviour towards cardiovascular diseases among health workers in UPTH

The calculated value is 3.13 while the tabulated is 2.50, at a p-value of 0.05. Since the tabulated is less than the calculated, it is statistically not significant. The null hypothesis is accepted. There is thus, no significant relationship between profession and the compliance of cardiovascular diseases preventive measures in the University of Port Harcourt Teaching Hospital.

DISCUSSION OF FINDINGS

The finding of the study showed that 67.5% of the respondents had good preventive behaviour towards cardiovascular diseases but, a substantial proportion (32.5%) had poor preventive behaviour. This indicates that although health care workers are aware of what cardiovascular diseases are, their risk factors and signs and symptoms, some did not comply with it to the letter. This could be attributable to negligence, on one part, and lack of will to abide by it. They have a grounded knowledge as to what cardiovascular diseases are, but their reluctance has made them to shun the attitudes that will prevent them from falling prey to it, and hence, living a healthy lifestyle. This agrees with what was observed by Alikor and Nwafor (2016). Their study revealed that there is an increase in obesity in the Niger Delta region of Nigeria, due to sedentary life style.

In this study, the role played by age and sex was also considered, and most of the participants agreed in the affirmative that they play significant roles in the acquisition of cardiovascular diseases. of important note is the fact that they understood that older people are more prone to the acquisition of these disease conditions and that the female sex come down with the diseases more than their male counterparts, especially, when the females grow above 65 years of age, while in the younger ages, men are more prone to the disease conditions than their female counterparts. This agrees with what the World Health Organization (2017) put forward, in respect to age and sex, and the acquisition of cardiovascular diseases.

CONCLUSION

Based on the findings of the study, it was concluded that health workers in UPTH had good preventive behaviour towards cardiovascular diseases and the factors associated with their behaviour were age, gender and professional qualification.

RECOMMENDATIONS

The following recommendations were made:

- Health institutions should ensure that their staffs adhere to cardiovascular disease preventive measures.
- Employees should always put up indicators that will remind them of these health disorders, and also remind their wards and clients of the implications of not adhering to them.
- There should be regular communication between health care workers between their wards and clients about cardiovascular diseases, its risk factors, preventive measures and how and when to seek help.

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