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Awareness

Knowledge of, and Attitude to Cardiovascular Disease Risk Factors Among Members Of The Nigerian Armed Forces

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ABSTRACT [ENGLISH/ANGLAIS]

The incidence of cardiovascular disease (CVD) is rapidly increasing at an alarming rate worldwide. Despite this many populations in developing countries have inadequate knowledge and poor attitude towards CVD risk factors. This study reported the knowledge of and attitude to CVD risk factors among members of the Nigerian armed forces. This cross-sectional study was carried out among 82 members of the Nigerian armed forces between the ages of 30 to 60 years (49±9.) with an average of 26.8±7.4 years spent in service. Each eligible and willing participant was administered a CVD risk factor knowledge and attitude assessment questionnaire. The outcome of the study showed that only 75.6% of the respondents were enlightened about CVDs. Smoking was readily identified by 70.6% as a risk factor, 87% identified stress as a risk factor while 41.6% of respondents identified obesity. Sedentary life-style and poor dietary intake use were least identified with only 16.6% and 6.4% of respondents respectively identifying them. Forty two (51.2%) admitted taking alcohol, most taking more than ten units a week and of these, only 12 were willing to quit. 93.9% engaged in exercise (mostly running). 52.4% take vegetables and fruit on a regular basis, 34.5% checked their body weights regularly And only 5% of all the respondents visited the hospital or clinic for routine medical check-up. The study indicated that majority of the study participants had an impressive knowledge of CVD risk factors. However, their attitude towards CVD risk factors is poor.

Keywords: Knowledge, Attitude, Cardiovascular disease and Risk Factors

RÉSUMÉ [FRANÇAIS/FRENCH]

L'incidence des maladies cardiovasculaires (MCV) augmente rapidement à un rythme alarmant dans le monde entier. Malgré cela, de nombreuses populations dans les pays développés ont une connaissance insuffisante et mauvaise attitude envers les facteurs de risque de MCV. Cette étude a rapporté la connaissance et l'attitude à l'égard des facteurs de risque de MCV chez les membres de l'armée nigérienne. Cette étude transversale a été réalisée auprès de 82 membres des forces armées nigériennes entre les âges de 30 à 60 ans (49 ± 9.) avec un âge moyen de 26,8 ± 7,4 ans passés au service. Chaque participant admissible et prêt a été administré une connaissance des facteurs de risque cardiovasculaires et l'évaluation attitude questionnaire. Les résultats de l'étude ont montré que seulement 75,6% des répondants ont été éclairés sur les maladies cardiovasculaires. Le tabagisme a été facilement identifiés par 70,6% comme facteur de risque, 87% de stress identifié comme un facteur de risque tandis que 41,6% des répondants ont identifié l'obésité. Mode de vie sédentaire et une mauvaise utilisation apport alimentaire ont été moins identifié avec seulement 16,6% et 6,4% des répondants respectivement les identifier. Quarante deux (51,2%) ont admis la prise d'alcool, la plupart prenant plus de dix unités par semaine et de ceux-ci, only 12 étaient prêts à cesser de fumer. 93,9% engagés dans l'exercice (pour la plupart en cours d'exécution). 52,4% prennent des fruits et légumes sur une base régulière, 34,5% vérifié leur poids corporel régulièrement And seulement 5% de tous les répondants ont visité l'hôpital ou à la clinique de routine check-up médical. L'étude a révélé que la majorité des participants étudiés avaient une connaissance impressionnante de facteurs de risque de MCV. Cependant, leur attitude à l'égard des facteurs de risque de MCV est pauvre.

Mots-clés: Facteurs connaissances, attitudes, les maladies cardiovasculaires et des risques

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INTRODUCTION

The incidence of cardiovascular diseases (CVDs) is rapidly increasing at an alarming rate worldwide [1-4]. The Major risk factors for CVDs include obesity, hypertension, Type 2 diabetes mellitus, physical inactivity, increased waist-hip ratio, elevated high-

density lipoprotein cholesterol, smoking and excessive alcohol consumption [5].

Past studies have revealed that demanding occupations such as the military are associated with significant adverse on psychological, and physical health status the personells [6]. Military personnel's are also reported to be exposed to high pressure of duty related stress, mental

strain and trauma [6, 7]. In Nigeria, the military culture has a traditionally fostered the habit of heavy smoking, high alcohol consumption and increased risk-taking [8]. . One of the strategies commonly employed for the prevention and management of cardiovascular disease is education of patients and the public [9]. Knowledge and awareness of risk factors of CVDs are essential for behavioral change [9-11]. Generally, limited data exist that report the knowledge of and attitude to CVD risk factors among the Nigerian armed forces, Hence this study.

MATERIALS AND METHODS

Study design and subjects

This investigation was a cross-sectional design to determine the knowledge, of and attitude towards cardiovascular disease risk factors. The study sample were Eighty two (82) military personnel (Army, navy and Airforce) that underwent resettlement course (2/2009) at the Nigerian Armed Forces Resettlement Center, Oshodi [12]. All willing and consenting respondents (military personnel’s) were administered a self-designed CVD knowledge and awareness questionnaire which sought information regarding knowledge of cardiovascular diseases risk factors and attitude towards CVD risk factors as well as demographic parameters (age, sex, arm of service, duration of service),.

Data analysis

Descriptive statistics of mean, frequency, percentages, standard deviation and were used to summarize the data.

RESULTS

Of the enrolled eighty two respondents, two (2.5%) were females and eight (97.5%) were males. The participants were aged between 30 to 60 years with mean age 49±9 years. The summary of the age grouping and gender distribution of subjects are presented in Table 1. The outcome of the study showed that only 75.6% of the respondent were enlightened about CVDs. Smoking was readily identified by 70.6% as a risk factor, excessive alcohol use by 52.8%, 87% indentified stress as a risk factor while 41.6% of respondents identified obesity. Sedentary life-style and poor dietary intake use were least identified with only 16.6% and 6.4% of respondents respectively identifying them. On the average 31% of the respondents have good knowledge on primary risk

factors CVDs and 34% good knowledge on secondary risk factors for CVDs. Some of respondents 31.7% and 34.2% reported their major source of enlightenment was television and television/radio respectively as presented in table 2.

Table 3 shows the overall attitude of the respondent towards some risk factors for CVDs. Fifty one point two percent admitted taking alcohol, most taking more than ten units a week and of these, only 12 were willing to quit. 93.9% engaged in exercise (mostly running). 52.4% take vegetable and fruit on a regular basis, while only 34.5% checked their body weights regularly. Only 5% of all the respondents visited the hospital or clinic for routine medical check-up.

Table 1: This table shows age and gender distribution

		N (%)
Age Groups		
	30-35years	6(7.5%)
	36-40years	8(10%)
	41-45years	14(17.5%)
	46-50years	10(12.5%)
	51-55years	24(30%)
	56-60years	22(27.5%)
Gender		
	Female	2(2.5)
	Male	80(97.5)

%=percentage. N=number

DISCUSSION

As estimated by WHO [13], among the 58 million deaths in the world in 2005, non-communicable diseases accounted for 35 million, which is double the number of deaths from all communicable diseases (including HIV/AIDS, tuberculosis and malaria), maternal and perinatal conditions, and nutritional deficiencies combined. To the best of our knowledge this is the first report from Nigeria to report the knowledge and attitude towards cardiovascular risk factors among the armed forces population.]. Majority of the respondents in this study were above the age of 50 years , this can be attributed to where the sample population of the study was drawn (ie. a training center where about to retire/disengaging military personnel undergo resettlement course). Majority (97.5%) of the respondents were found to be males, this may be because the military profession is viewed as a predominantly male occupation especially in a developing country like Nigeria.

Table 2: This table shows the knowledge of the respondents

	Yes (%)	No (%)
Knowledge		
Enlightened on CVD	62(75.6%)	20(24.4%)
Knowledge on the Causes of CVD	54(65.8%)	28(34.2%)
Source of Enlightenment on CVD risk factors		
Television		26 (31.7%)
Radio		10(12.2%)
Radio/television		28(34.2%)
Health workers		18(22.9%)
Others		0
	Good	Poor
Knowledge of primary risk factors	26(31.7%)	56(68.3%)
Knowledge of secondary risk factors	34(41.5%)	48(58.5%)

Table 3: This table shows attitude towards cardiovascular diseases

Variables	Frequency (Percentage)
Attitude	
I .CIGARETTE SMOKING	
None smokers	54(68.6%)
Less than 10 sticks (day)	16(26.8%)
Above 10 sticks (day)	6 (7.6%)
II .ALCOHOL CONSUMPTION	
Yes	42(51.2%)
No	40(48.8%)
III .PHYSICAL ACTIVITY	
Running (aerobics)	67(81.79%)
Walking (Brisk)	10(12.2%)
No	5(6.1%)
IV .DIET	
Table salt intake	34(41.5%)
Vegetable/fruit intake	43(52.4%)
Excessive Fat diet	5(6.1%)
V .PREVENTIVE MEARSURES	
Routine Medical check (hospital)	5 (6%)
Regular blood pressure monitoring	20(24.5%)
Weight check	28(34.5%)
Others (Traditional medicine/herbal, Prayers)	29(35.5%)

The findings of this study indicated that the knowledge and attitude towards cardiovascular risk factors of the respondents is considerably lower when compared with previous report on civilian population in a Nigerian university community [14, 15]. This discrepancy may be due to access to information, high educational attainment that is available to a typical university setting compared

to less access to research findings, information and lack of educational pursuit that may be attributed to the military personnel's. . The outcome of this study the ther respondents have an overall good knowledge of CVDs. However, considering that the members of armed forces are generally expected to be one of the healthiest populations as indicated in previous studies[5,8, 16],

This good knowledge of cardiovascular disease and its risk factors among them cannot be overlooked because of the poor attitude that have been reported in this study. The outcome of this study also revealed that majority of the respondents do not undergo regular routine medical checkup. This may be due to their attitude as indicated in a previous study of Nigerian soldiers which stated that good knowledge of risk factors does not necessary translate to behavioral change[8]. The prevalence of cigarette smoking as indicated in this study is in line with previous findings among military personnel's [8]. The high alcohol consumption among the respondents of this study is also in line with findings of studies conducted among military personnels in Nigeria [17]. This may be due to the fact that there is no strong legal implication and high prevalence and increasing incidence of alcohol consumption in Nigeria [18] which may explain why many of them are unwilling to quit. The High physical activity status as reported by the respondents in this study can be related to the nature of military occupation which is characterized by regular sporting and physical exercises[5,8,] the poor dietary attitude reported in this study is in line with findings of previous studies among the different Nigerian populations [19].

CONCLUSION

The study concluded that majority of the respondents had a good knowledge of CVD risk factors. However, their attitude towards CVD risk factors is poor. Therefore, it is suggested that adequate information on complication of CVDs as well as mandatory routine medical checkup be included to the strategies for health surveillance of members of the armed forces population during their service period.

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CONFLICT OF INTEREST

No conflict of interest was declared by authors.

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