Demographic Variables and Screening Practices for Cardiovascular Disease Risk Factors among Female Civil Servant in Uyo, Akwa Ibom State

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ABSTRACT

The study sought to assess the demographic variables and screening practice for cardiovascular disease risk factors among female civil servant in Uyo, Akwa Ibom State. The descriptive design of a cross sectional type was used for the study. The study area was the entire Akwa Ibom State Secretariat Complex known as Idongesit Nkanga Secretariat. The population of this study consisted of 4803 female civil servants in the Akwa Ibom State secretariat complex, Uyo. Stratified random sampling techniques was used for the study. The main instrument used for the study was questionnaire. Split-half reliability test using Cronbach's statistical analysis to determine the consistency of the instrument. Reliability coefficient obtained was 0.91 and this was high enough to justify the use of the instrument. The data was analyzed using inferential and descriptive statistics with the help of SPSS version 20.0 at .05 level of significance. The study concluded that there is no significant relationship between the demographic variables of age and educational level of the female civil servant in Uyo and their practice of screening for cardiovascular risk factors detection. It was therefore recommended that healthcare professionals should themselves undergo the screening test so as to be able to educate others. They must be free from most of the modifiable risk factors to serve as encouragement to others

KEYWORDS: Practice, Screening, CVD, Risk Factors, Female Civil Servants.

INTRODUCTION

Cardiovascular disease (CVD) is a major health problem and a leading cause of mortality, morbidity and economic burden (World Health Organization, 2009). Worldwide the primary risk factors (hypertension, obesity, physical inactivity, poor diet, alcohol and smoking) are increasing as a result of urbanization (Mendis, Puska, & Norving, 2011). CVD risk screening in Nigeria is sub-optimal, even though evidence indicates early onset of disease burden, which in part contributes to the low life expectancy and quality of life of Nigerians (Fasanmade and Dagogo-Jack, 2015). One of the effective approaches to early identification of CVD risk is the utilisation of risk assessment models and these have been shown to be better than clinical judgment. Although the assessment of co-occurrence of risk factors for CVD is largely studied in diabetic patients (Balogun and Salako, 2011) the extent that these trends affect the seemingly healthy populations with impaired fasting glucose (IFG) in Nigeria.

The statistics about women heart disease is startling. CVD claims twice as many women's lives as does all types of cancer combined. Every 90secs a woman suffers a heart

attack. While the actual numbers of death from heart disease have declined among both men and women, more women die of CVD each year than men. In fact, rates of heart disease among younger women (aged 35-54) are actually increasing, a trend thought to be attributable to obesity. Rates are higher among black women and Hispanic women compared to Hispanic Caucasian and Asian women (Guameri, Oberg and StÖppler 2015).

STATEMENT OF THE PROBLEM

The prevalence of CVD is been felt within and globally. Early detection and prevention of risk factors can help to reduce the impact of CVD. People require knowledge to identify and address the level of practice of screening for cardiovascular disease risk factors. The high predominance of CVD risk factors among female civil servant in our state prompted the researchers interest due to the fact that they seem to be double burden bearers, they are bread winners, bear children and are looked upon to care for others in the homes, and in the process may neglect to care for themselves by subjecting themselves for screening to detect CVD risk factors. Also, due to this double burden the female civil servants may be subject to stress which can in turn raise the blood pressure. Therefore, the main purpose of this study is to assess the practice of screening for cardiovascular disease risk factors by the female civil servants in Uyo.

RESEARCH QUESTIONS

What is the level of practice of screening for cardiovascular disease risk factors by the female civil servants in Uyo.

HYPOTHESES

There is no significant relationship between the demographic variables of age and educational level and the practice of screening for cardiovascular risk factors detection.

LITERATURE REVIEW

Epidemiology of cardiovascular disease (CVD)

Chronic diseases are now the dominant contributors of the global burden of disease and cardiovascular disease (CVD) is the largest contributors of chronic disease cluster. National Academy of Science report (2010), reported that by 2005, the total number of cardiovascular disease deaths (mainly coronary heart disease, strokes and rheumatic heart disease) had increased globally to 17.5million from 14.4million in 1990. Of these, 7.6 million were attributed to coronary heart disease and 5.7 million to stroke. More than 80% of the death occurred in low and middle income countries. The World Health Organization (WHO) estimated there will be about 20million CVD deaths in 2015, accounting to 30% of all death worldwide. By 2030, researchers project that non-communicable diseases will account for more than 3/4 of deaths worldwide; CVD alone will be responsible for more deaths in low income countries than infectious disease (including HIV/AIDS, tuberculosis and malaria) maternal and prenatal conditions, and nutritional disorders combined (Beaglehole and Bonita 2008). Thus CVD is today the largest single contributor to global mortality and will continue to dominate mortality trends in future (WHO 2009).

Practice of Screening for CV

Cardiovascular screening is the practice of using tests or examination to see if a person is at risk of certain kinds of heart disease. Primary prevention of cardiovascular disease is aimed at risk factor identification and treatment as well as screen individual with vascular and cardiac test aimed at identifying early abnormalities likely to progress and to measure risk contributors susceptible to therapy. The screening tests are effective in uncovering unsuspected early cardiovascular disease in which targeted treatment could be effective in reducing the incidence of cardiovascular event in susceptible individuals. Cardiac disease which may lead to heart failure is commonly asymptomatic. The CVD screening included for assessment in the review were measurements of blood pressure (BP), weight, body mass index (BMI), waist circumference (WC), glucose, lipids, total cardiovascular risk score and history taking regarding smoking, physical activity, or nutritional intake (Cheong, 2017).

Blood pressure measurement: Hypertension is a common, preventable risk factor for the development of CVD and death. Individuals with HTN have a much higher risk of stroke, myocardial infarction, heart failure, peripheral vascular disease, and AAA than those without HTN. Additionally, treatment with lifestyle and pharmacologic therapy can effectively reduce blood pressure and CVD events.

Blood tests: It's important to remember that one blood test alone doesn't determine the risk for heart disease. A cholesterol test, also called a lipid panel or lipid profile, measures the fats (lipids) in blood. The measurements can indicate risk of having a heart attack or other heart disease. The test typically includes measurements of: total cholesterol; low-density lipoprotein (LDL) cholesterol; high-density lipoprotein (HDL) cholesterol; triglycerides and non-HDL cholesterol.

Genetic Screening: Family history plays an important role in assessing risk of CVD. In most cases, multiple genetic changes, which individually do not result in disease, are working together with environment and behavior to cause disease. Genetic testing can help determine which relatives are at risk for developing a condition but cannot predict whether it will develop or its severity.

Electrocardiography: Both resting and exercise ECG are used for the diagnostic evaluation of suspected CVD, which has led to the suggestion that ECG could also be used to screen asymptomatic persons to identify those who would benefit from earlier, more intensive management of modifiable risk factors, preventive interventions, or both.

Imaging: New imaging methods, such as magnetic resonance imaging and computed tomography to detect coronary calcifications or ultrasonography to measure CIMT, can be used to detect asymptomatic individuals at high risk of cardiovascular events.

Prevention of CVD

WHO (2012) published a pocket guideline on how to reduce the incidence of first and recurrent clinical events due to coronary heart disease (CHD) cerebrovascular disease (CeVD) and peripheral vascular disease in two categories of people namely:

1) People with risk factors who have not yet developed, clinically manifest CVD (primary prevention).

2) People with established CHD, CeVD or peripheral vascular disease (secondary prevention)

NHS choices (2014) recommends prevention strategies for adults and children who have not yet develop risk factors to avoid the development of risk factors and the actual establishment of CVD in later life. The recommendations are as follows:

Adults

Most risk factors for CVD are linked, which means that if one has one risk factor she will probably have others. For example, people who drink heavily usually have poor diets and are more likely to smoke. Obese people are also more likely to have other health problems such as diabetes, high cholesterol and high blood pressure. Addressing one risk factor such as giving up smoking will bring important health benefits. To significantly reduce the risk of developing CVD the following lifestyle habits should be considered: Alcohol intake; Diet; Weight; Exercise and physical activity and Smoking

Alcohol: An individual who drinks should limit his weekly intake to less than 21 units for men and less than 14 units for women. (NHS, 2014). A unit of alcohol is roughly equivalent to half a pint of normal strength larger or a single measure (25ml) of spirit. A small glass of wine (125ml) is about 1.5 units.

Diet: A low-fat, high fibre diet (including whole grains and at least five portions of fruits and vegetables a day) is recommended for a healthy heart. The diet should include no more than 6g (0.2 o_3 or one teaspoon) of salt a day. Too much salt increases the blood pressure. Limited amount of salty food such as ready-made meals and canned or tinned foods is recommended. Foods that are high in saturated fat increase the cholesterol level example of such foods are meat, sausages and fatty cuts of meats, butter and ghee, lard, cream, hard cheese, cakes and biscuits and foods that contain coconut or palm oil. On the other hand foods, high in unsaturated fat can help decrease cholesterol level. They are: oily fish, avocado, nuts and seeds rapeseed oil and olive oil.

Exercise and weight management: A combination of regular exercise and a caloric controlled diet can help the over-weight and obese to loose weights. The recommendation for adults is 30 minutes of moderate intensity aerobic exercise every day at least five days a week cycling or brisk walking are both examples of moderate intensity exercise. Swimming and running are also part of the exercise programme. If 150 minutes of moderate intensity exercise is not easy to achieve weekly, one can start at a level she feels comfortable e.g. 5-10 minutes of light exercise a day and gradually increase the duration and intensity as her fitness level improves.

Smoking: It is strongly recommended that all smokers must give up all smoking.

Medication: Medication is prescribed for individuals who have a particularly high risk of developing CVD. Medications that sometimes help to prevent CVD include:

- Blood pressure tablets such as angiotensin converting enzyme (ACE) inhibitors, which are used to treat high blood pressure.

- Statins: used to lower cholesterol level.
- Low dose aspirin: used to prevent blood clots.

Prevention of CVD in children

According to NHS (2014) research has clearly shown that the eating and drinking habits one get into as a child can continue into adulthood. Bad eating habits in children could lead to serious health problems later in life. Four points to consider are:

- Fat in the child's diet
- Salt in the child's diet
- Sugar intake of the child
- Amount of Exercise the child does

Salt: the daily recommended maximum amount of salt children should eat depend on their age.

- 1-3 years -2g of salt/per (0.8g sodium)
- 4-6years -3g of salt/day (1.2g sodium)
- 7-10years -5g of salt/day (2g sodium)
- 11years and over -6g of salt/day (2.4g)

It is easy to underestimate how much salt is contained in food. For example, a meal consisting of small fries, a hamburger and a coke contains 1.8g of salt, which is more than half the recommended daily limit for a five-year-old. Prepackaged and ready to eat foods particularly those not specifically designed for children often contain high levels of salt. For example, a 200g tin of tomato soup contains 1.4g of salt.

Fats and sugar:

Too much saturated fat and sugar in the child's diet can lead to high cholesterol, diabetes and high blood pressure in later life. High sugar can also cause tooth decay. Foods that are high is saturated fat and sugar include: chocolate, sweets, fast food such as fries, burgers, chickens, nuggets, fizzy drinks, ice cream, biscuits, crisps, processed foods, such as microwave meals, hot dogs and breakfast cereals that contain added sugar.

Exercise:

Many children are naturally active and full of energy but children who spend a lot of time doing activities that don't involve much physical activity such as watching television and playing computer games don't get the exercise they need. Children under 5 years who can walk on their own should be physically active everyday for at least 180minutes (3hours). This should be spread throughout the day and can be indoors or outside. This can include light activities such as standing up, moving around, rolling and playing, as well as more energetic activity such as skipping, hopping, running and jumping. For children and young people (aged 5 to 18years) it's recommended they do at least 60 minutes (1hour) of physical activity every-day. This should include a mix moderate-intensity activities such as cycling, and vigorous intensity activities, such

as running. This amount of exercise is enough to strengthen bones and muscles and can help prevent children putting on weight.

Gender discrepancies in CVD prevalence

According to Guameri, Oberg and StÖppler (2015), cardiovascular disease is the leading cause of death among women. However, women develop CVD on average about 10years later than men. It is thought that this difference is at least partially due to protective hormonal effects because women's risk catches up after menopause. Women who undergo early menopause either due to surgical removal of their ovaries or premature ovarian failure have similar rates of cardiovascular disease as age matched men. Researchers who study the gender differences in CVD often focus on the preventive role of estrogen. Estrogen has numerous effects on vascular tissue. It relaxes blood vessels lowering blood pressure (premenopausally). Estrogen blunts the effect of stress hormones (catecholamines) which are vasoactive and cause blood vessel constriction especially in times of stress. Estrogen is also a natural antioxidant. However, estrogen also promotes blood coagulation, which is not helpful. This is why women who use oral contraceptives are at an increased risk of thrombotic events (blood clots). The statistics on women and heart disease is alarming! Heart disease is the number one cause of death for women over 25 and kills 1 out of every 3 women. Heart disease is the leading cause of death for African, American, Latinas, Asian American, Pacific Islanders and American Indian. African American women are at highest risk for death among all racial ethnic and gender groups. Unquestionably the vast majority of CVD deaths in women are in middle age and elderly. Early menopause increases the risk of CVD (Wahrenberger 2009). Sex differences in clinical presentation, diagnosis and treatment outcome of cardiac disease have long been recognized. Since the mid-1980s the total number of deaths from CVD has been higher for women than men. Severe types of heart disease are more common in women than in men: stroke, hypertension, endothelial dysfunction and congestive heart failure. While men and women have similar rates of hospitalization due to heart disease, women tend to have longer hospital stays, receive less of the recommended assessment and treatment and experience greater long term disability (Guamen, Oberg and & stÖppler 2015).

The Framingham Risk score calculator

The Framingham risk score is one of the scoring systems used to determine an individual's chances of developing cardiovascular disease within the next 10 to 30years. Because it gives an indication of risk, it also indicates who is most likely to benefit from prevention. It is thus also useful for both the individual patient and for the clinician in helping decide lifestyle modifications and preventive medical treatments, and for patient education, by identifying men and women at increased risk for future cardiovascular events (Wilson & Basow 2010). The first Framingham Risk Score included age, sex LDL cholesterol, HDL, cholesterol, blood pressure (also whether the patient is treated for hypertension, diabetes and smoking. It estimated 10-year risk for coronary heart disease in American men and women of European and African descent. The updated version was modified to include dyslipidemia, age range, hypertension treatment, smoking and total cholesterol and it excluded diabetes because type 2 diabetes meanwhile was considered to be a CVD risk equivalent, having the same10-year risk as individuals with prior CHD. Patients with type I diabetes were considered separately with slightly less aggressive goals

while at increased risk no study had shown them to be at equivalent risk for CHD as those previously diagnosed coronary disease or type 2 diabetes.

In a National Survey carried out in Texas by American Heart Association (2013), to assess the awareness and knowledge of heart disease risk among women, findings showed that women's heart disease awareness was increasing, with the number of women aware that heart diseases the leading cause of death nearly doubling in the last 15 years when the first heart disease awareness study was carried out by the American Heart Association, but, that this knowledge still lags in minorities and younger women. Among the studies of most findings, researchers comparing women's views about heart disease in 1997, found that in 2012, 56 percent of women identified heart disease as the leading cause of death compared to 30% in 1997. In 1997, women were more likely to cite cancer than heart disease as the top killer (35% vs. 30%); but in 2012, only 24 percent cited cancer. In 2012, 36% of black and 34% of Hispanic women identified heart disease as the top killer – awareness levels that white women had in 1997 (33%). Women 25 – 34 years old had the lowest awareness rate of any age group at 44%. Among the women surveyed in 2012, researchers found that racial and ethnic minorities had higher level of trust in their health care providers compared with whites, and were also more likely to act on the information provided – dispelling the myth that mistrust of providers contributes to disparities. Compared with older women younger women were more likely to report not discussing heart disease with their doctors (6% among those 25 – 34years vs. 33% for those 65years and older).

A cross sectional study was conducted by Mohammed, Yhaya, Yusoff, Rao and Rao (2012), to determine the level of knowledge, attitude and practice on cardiovascular disease among women who attended outpatient clinic with family health specialists in Kelatan in North Est Coast Malaysia. A total of 448 women from 7 out of 14 clinics run by specialists, with age ranged between 25 and 65 years, were selected via systematic random sampling in the ration of 1:2 based on clinic attendance list. All the participants were given a set of validated KAP questionnaire to be completed within 15 minutes. Findings revealed that majority of the respondents had a good knowledge of CVD risk factors the highest proportion of correct answer for CVD risk factors were for smoking (87.1%) and high blood pressure (79.3%). However, they were not aware of cholesterol. The percentage of good practice in the study was about 50% which indicated that the behavior to reduce CVD risk was still not optimal. The self-reported practice regarding measuring of CVD risks was good in the study population which accounted for 64.3% for cholesterol, up to 92% for blood pressure and even high for body weight measurement. Among those who measured their CVD risk, majority measured their blood pressure (83.1%), blood sugar (74.1%), cholesterol (58.5%) on body weight (90%) regular within yearly or more intervals. The practice regarding common CVD risk screening is good most probably due to the Ministry of Health's policy that encourages all government servants to carry out CVD screening regularly in the wellness clinics.

In Kuwait, a study was conducted by Awad and AL Nafisi (2014) to assess the republic knowledge of cardiovascular disease and the risk factors. A cross sectional descriptive study was done using 900 subjects randomly selected. Findings had it that respondents' knowledge regarding CVD risks factors was moderate. The commonest factors identified by participants were smoking, obesity, unhealthy diet and physical inactivity. In a multivariate logistic regression analysis, independent predictors of better level of CVD knowledge were females, age 50 – 59 years, and high level of education. Thus, the researchers observed that there are

deficiencies in CVD knowledge among Kuwaiti population, which could run into insufficient preventive behaviours and suboptimal patient outcomes. There is therefore an apparent need to establish more widespread and effective educational intervention, which should be sensitive to the perception, attitudes and abilities of target individual, however, despite the low knowledge about types of CVD and its symptoms, respondents were much better knowledgeable of CVD risk factors, nearly half of them were aware of eight or nine factors. Although about half of the study participants have high knowledge of CVD risk factors, approximately one fifth of the respondents never had their blood pressure checked, about one quarter had never undergone assessment of their blood cholesterol or glucose levels, and almost a quarter of the hypertensive patients and over half of those with dyslipidaemia reported not take medications.

METHODS

Research Design

The descriptive design of a cross sectional type was used for the study.

Area of Study

The study area was the entire Akwa Ibom State Secretariat Complex known as Idongesit Nkanga Secretariat.

Population of study

The population of 4803 female civil servants whose offices are located in the State secretariat complex, Uyo, was used for the study.

Sample and Sampling Technique

A total sample size of 406 respondents was selected for the study using stratified random sampling technique. Out of this number (406), 363 questionnaires were correctly filled in and returned.

Instrumentation

The main instrument used in this study was questionnaire.

Validity of the Instrument

The face and content validity of the instrument was ascertained by experts in test and measurements.

Reliability of the Instrument

In order to ensure the reliability of the instruments, split-half reliability test using Cronbach's statistical analysis to determine the consistency of the instrument. A reliability coefficient of 0.91 was obtained.

Method of Data Analysis

Analysis of the data was carried out using computer software programme called Statistical Package for Social Sciences (SPSS) version 20.0. The data was analyzed using inferential and descriptive statistics.

RESULT AND DISCUSSION

Result

Research Question One

What is the level of practice of screening for cardiovascular disease risk factors by the female civil servants in Uyo.

Table 1: Practice of Screening Test for Cardiovascular Disease Risk Factors. n=363

	A	F	S	R	N	M±SD
Regular blood pressure check (at least twice a year)	57	85	139	63	19	3.27±1.08
Checking blood glucose level at least every year	32	41	106	108	76	2.57±1.19
Checking blood cholesterol level (at least once in the last three years)	26	25	74	87	151	2.14±1.23
Regular weight checking (at least every six months)	67	100	123	52	21	3.39±1.11
Regular general checkup in the clinic (at least yearly)	41	48	120	105	49	2.80±1.17
Poor (practice score ≤ 50%) *f*(%)					238(65.6)	
Good (practice score > 50%) *f*(%)					125(34.4)	

A=Always; F=Frequently; S=Sometimes; R=Rarely; N=Never; M=Mea; SD=Standard deviation; Frequency Item with (M>3), implies the participants had good practice on such item; otherwise, poor practice

Table 1 displayed the practice of screening tests for cardiovascular disease risk detection. The practice of regular weight checking (3.39±1.11) and regular blood pressure checking (3.27±1.08) was good while the practice of regular general checkup in the clinic (2.80±1.17), checking blood glucose level at least every year (2.57±1.19) and checking blood cholesterol level once in 3years (2.14±1.23) was poor. In general, majority (65.6%) of the women had poor practice of screening test for cardiovascular disease risk detection.

Research Hypothesis

There is no significant relationship between the demographic variables of age and educational level of the female civil servant in Uyo and their practice of screening for cardiovascular risk factors detection.

Table 2: Relationship between the demographic variables (age and educational level) and practice of screening test for cardiovascular risk factors. N = 363

Test	Practice of screening		Total	Chi-Square	Df	p-value
	Poor	Good				

Age	20-29 years	47(61.8)	29(38.2)	76(100.0)	.653	3	.884
	30-39 years	94(67.1)	46(32.9)	140(100.0)			
	40-49 years	69(66.3)	35(33.7)	104(100.0)			
	50+ years	28(65.1)	15(34.9)	43(100.0)			
	Total	238(66.6)	125(34.4)	363(100.0)			
Educational Level	Primary	4(44.4)	5(55.6)	9(100.0)	2.628	2	.269
	Secondary	56(62.2)	34(37.8)	90(100.0)			
	Tertiary	178(67.4)	86(32.6)	264(100.0)			
	Total	238(65.6)	125(34.4)	363(100.0)			

Table 2 displayed the relationship between age and educational level of the respondents and their practice of screening test for cardiovascular disease risk. For age, a p-value of .884 was obtained and for educational level, the p-value was .269. Therefore, the null hypothesis was accepted meaning that there was no significant relationship between demographic variables of age and educational level of the respondents and their practice of screening test for CVD risk factor detection. This implies that good practice was distributed equally to the different age groups: 20-29 years (38.2%), 30-39 years (32.9%), 40-49 years (33.7%) and 50+ years (34.9%); likewise, to the different educational levels: primary (55.6%), secondary (37.8%) and tertiary (32.6%).

DISCUSSION OF THE FINDINGS

Findings from the study as displayed on table 1 showed that in general, majority of the women (65.5%), had poor practice of screening test for cardiovascular disease risk detection. Regular weight checking and regular blood pressure checking had a good practice level (3.30 ± 1.11) and (3.27 ± 1.08) respectively. This may be attributed to the fact that they are simple non-invasive procedures and the respondents being mostly urban dwellers have often come across some individuals who go about with bathroom scales and digital sphygmomanometers checking people's weight ad blood pressure for a fee. However, it is not known accurate these devices are and how well the vendors can carry out the procedures. The above assumptions may find prove in the fact that the respondents' practice of regular general checkup in the clinic was poor (2.80 ± 1.17). it should be noted that blood sugar check and blood cholesterol check are invasive screening test recommended by skilled healthcare practitioners (e.g. doctors) who are only seen in the clinics. Little wonder then that the respondent practice of these screening tests is poor, (2.57 ± 1.19) and (2.14 ± 1.2) respectively. It is therefore surprising that the huge level of awareness of CVD risk factors and screening tests does not translate into high level of practice of screening tests to detect the risk of the disease.

The findings in this study support the findings in many other studies in the field. Awa and Al Nafisi (2014), found out in Kuwait that about half of the study participants have high knowledge of CVD risk factors, approximately one fifth of them never had blood pressure checked, about a quarter had never undergone assessment of their blood cholesterol or glucose levels. The widespread disparity between the awareness of risk factors and actions taken to identify and

eliminate them is a matter of great concern that points to intensified targeted information, education and communication measures aimed at addressing the menace.

However, a contrary discovery was made by Mohammed, Yhaya, Yusoff, Rao and Rao (2012), among women in North East Coast Malaysia where the self-reported practice regarding measuring of CVD risk was good, accounting for (64.3%) for cholesterol up to (92%) for blood pressure and even higher for body weight measurement. Among those who measured their CVD risk, majority measured their blood pressure (83.1%), blood sugar (74.1%), cholesterol (58.5%) or body weight (90%) regularly within yearly or more intervals.

The result of the data analysis in table 2 showed that, for age the computed X^2 value was .653 at 5% level of significance and degree of freedom 3, p-value was .884. For education level, the X^2 value was 2.628 and the p-value was. 269 at 2 degree of freedom and 5% level of significant. The value of p for both age and educational level were greater than 0.05, therefore there was no significant evidence to reject the null hypothesis. This indicated that there was no significant statistical relationship between the demographic variables (age and educational level) of the female civil servants in Uyo and their level of practice of screening test to detect CVD risk.

The result showed that good practice was distributed equally to the different age groups 20-29 years (38.2%), 30-39 years (32.9%), 40-49 years (33.7%) and 50+ years (34.9%). This therefore means that age of the respondents did not influence their level of practice of screening tests (p = .884). However, findings from the survey carried out by American Heart Association (2013) reported that younger women reported not discussing heart disease with their doctors (6% among those 25 – 34years compared with 33% among those who were 65years and older). This is because those in the younger population do not perceive their susceptibility to the disease.

The study also found that good practice was distributed equally to the different educational levels. This means that the respondent's level of practice of screening test is not related to their level of education (p = .269).

CONCLUSION

Despite increasing CV risk profile, having good knowledge of CVD risk factors seems to be a disconnect between CVD knowledge and CV risk. It is of good that women no matter their age range should have a better knowledge of the practice of screening for cardiovascular disease risk factors. The impact of CVD can be controlled effectively if patients are aware of their conditions and take precautionary measures. Medical personnel must themselves keep fit and be free from most of the modifiable risk factors of the disease to serve as a motivation for the women and general population. Therefore, the study reveals that there is no significant relationship between the demographic variables of age and educational level of the female civil servant in Uyo and their practice of screening for cardiovascular risk factors detection.

RECOMMENDATIONS

Based on the findings of the study, following recommendations are made:

1. Clinics and hospitals the screening tests, especially cholesterol should be made relatively free or of minimal cost to encourage its uptake.

2. Healthcare professionals should themselves undergo the screening test so as to be able to educate others. They must be free from most of the modifiable risk factors to serve as encouragement to others.

3. Biennial or yearly screening should be recommended for all civil servants as a condition for promotion.

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