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Influence of Demographic Attributes on Attitude of Civil Servants in South-West Nigeria toward Diabetes Mellitus

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Abstract

The study investigated the influence of demographic attributes on attitude of civil servants in South-west Nigeria toward diabetes mellitus. The study specifically investigated the influence of age and gender on attitude of civil servants in South-west Nigeria toward diabetes mellitus. The survey design of the descriptive type of research was adopted. A sample size of one thousand two hundred and twenty-four (1,224) civil servants who were of the executive cadre was used for the study. The simple random and non-proportionate sampling techniques were used for the study. The instrument used for the study was a self-structured closed ended questionnaire designed by the researchers. The face, content and construct validity of the instrument were ensured. The reliability of the instrument was also ensured and a reliability co-efficient of 0.86 was obtained. The data

gathered from the administration of instrument were analysed using inferential statistics of Analysis of Variance (ANOVA) and t test. Two (2) hypotheses were formulated to guide the study and were tested at 0.05 level of significance. The analysis was completed through the use of the 20.0 version of the Statistical Package for Social Sciences (SPSS) software. From the findings of the study the researchers concluded that the demographic attributes of age and gender had influence on the attitude of civil servants in South-west Nigeria toward diabetes mellitus. They recommended among other things that family members should take up responsibility in educating people of different age categories within the family who put up attitude that will place them at risk of diabetes mellitus.

Keywords: Attitude, Age, Gender, Condition, Kinetics

Introduction

In any attempt to unveil the mystery behind the prevalence of any disease, the attitude of the people concerned needs to be put into consideration. Attitude could be viewed as a particular way of responding to people, thoughts or issues irrespective of the circumstances involved. Attitude is spontaneous hence it is predictive in nature. This means that the attitude of a person or group of people can be foretold based on their antecedents. Also, the attitude of a people can go a long way to determine health outcomes such as disease prevention, prevalence of a disease, management of health condition and so on.

The attitude of civil servants in South-west Nigeria can go a long way to determine the prevalence of diabetes mellitus. Diabetes mellitus is one of the non-communicable diseases that are most prevalent in the world today. It is a condition predicated upon a person's level of kinetics involvement. The civil servants being a group with low kinetics involvement are prone to the condition but their attitude toward the condition can make a difference. However, attitude of civil servants in South-west Nigeria toward diabetes mellitus could be influenced by demographic attributes such as age and gender.

Literature Review

Studies have proven that diabetes mellitus is prevalent all over the world. It used to be common in the Western countries but now it is prevalent in Africa as well due to the Western life style that has been adopted by many, even in South-west Nigeria. According to Saeedi *et al.* (2019) ^[7] in 2019, a total of 463 million people were estimated to be living with diabetes mellitus globally, this number is expected to increase to 578 million in 2030 and 700 million in 2045. Diabetes mellitus is a metabolic

condition which arises as a result of too much sugar in the blood over a period of time. According to Britannica (2019) ^[2] diabetes mellitus is a disorder of carbohydrate metabolism characterized by impaired ability of the body to produce or respond to insulin and thereby maintain proper levels of sugar (glucose) in the blood.

Civil Servants in South-west Nigeria most especially those in the executive cadre are prone to diabetes mellitus due to their low kinetics involvement during office hours which span across 8 hours. Their attitude toward work and toward life generally can make a lot of difference. This is because a positive attitude toward health related matters will produce positive result and vice versa. Pak (2019) ^[6] stated that a number of studies suggested that having an optimistic attitude, that is general feeling that good things will happen may be connected with health benefits, such as improved cholesterol levels, a boost in your immune response and a lower risk of death from conditions like heart disease. Kassahun and Mekonen (2017) ^[4] in their study on knowledge, attitude, practices and their associated factors towards diabetes mellitus among non-diabetes community members. Found that there was significant positive associations between attitude and practice level. That individuals with positive attitude towards diabetes mellitus will implement diabetes risk reduction activities easily.

If attitude of civil servants in South-west Nigeria toward diabetes mellitus is to be critically looked into, one would expect every civil servant to put up a positive attitude towards diabetes mellitus, considering its health and economic benefits but this is not the case. It is assumed that demographic attributes such as age and gender could be responsible for the variance in attitude put up by civil servants in South-west Nigeria toward diabetes mellitus. Attitude as a tendency to act in a particular way concerning certain situations is based on the premonition of that person concerning such events, issues, situations, person or thing. Premonition is based on life experience and life's experience to a large extent depends on age. The older one grows, the more experienced one becomes as touching the issues of life. This might lead to different attitude concerning different issues of life, health inclusive.

Therefore, there is the tendency for older civil servants to show different attitude concerning diabetes mellitus related matters compared to their younger colleagues. In a study carried out by Simmons in (2019) ^[9] it was revealed that many of the diabetes mellitus patients showed a positive attitude toward diabetes mellitus. This could be because the bulk of the patients were between the age of 45 to 70 years of age. As one grows older, his perception, predisposition and so on about life changes. This could reflect in the attitude of the patients toward diabetes mellitus. This is not peculiar to diabetics alone but can also be accounted for in the lives of non-diabetic. However, Borba *et al.* (2019) ^[11] were of a contrary view. They discovered in their study that most of the elderly with diabetes mellitus interviewed had negative attitude toward self-care. This could be as a result of time of diagnosis which could make them become more casual in their approach toward their self-care. Moreover, in situations where the elderly involved does not have a significant other to be of help in the management of his condition, he might just be able to do the little he can about his condition.

One's attitude which can be said to be an embodiment of his perception, predisposition and so on about issues may differ

between both sexes. This may be as a result of the understanding of societal expectations for different sexes. Societal roles have a lot to do when it comes to the way people reason and their priorities in life. That of men may differ from that of women. As a result it is possible for male civil servants in South-west Nigeria to put up a different attitude as regards diabetes mellitus from that of woman.

Siddiqui *et al.* (2013) ^[8] posited that men and women have different attitudes and behaviours related to diabetes mellitus care. This might not be far-fetched from the fact that men and women in most cases have different perception about life, health related matters inclusive. Luo (2019) ^[5] posited that low optimism and high (negativity) and hostility were associated with risk of incident diabetes mellitus among postmenopausal women, independent of major health behaviours depressive symptoms.

This is a clear indication that gender has a role to play when it comes to attitude towards issues of life. One can rightly say that the attitude of a particular gender among civil servants in South-west Nigeria towards diabetes mellitus is quite different from the other. In a study on gender differences in attitudes and attributes of people using therapeutic shoes for diabetes foot complications by Jarl *et al.* (2019) ^[3]. It was revealed that women had worst general health, lower internal locus of control regarding ulcer prevention and more negative attitudes toward therapeutic shoes. This could be as a result of their gender. The interest, perception and disposition of the female gender is quite different from that of the male. This could be seen in the way both gender handle the issues of life. Hence, the attitude of male civil servants in South-west Nigeria toward diabetes mellitus will defer from that of their female counterpart and vice-versa.

The focus of this study was on civil servants, this is because they form the bulk of the work force of the nation. A healthy civil service will translate to a high level of national productivity. Whereas a civil service with a high number of diabetics will translate to increase in the prevalence of diabetes mellitus alongside its numerous complications and national underproductivity. Though research has proved that civil servants in South-west Nigeria have positive attitude toward diabetes mellitus, yet we still have a significant percentage of them with negative attitude. Hence the need to investigate the influence of age and gender on their attitude toward diabetes mellitus.

Research Objectives

The objectives of the study were to:

1. Investigate the difference in attitude relating to diabetes mellitus among civil servants of different age categories in South-west Nigeria.
2. Investigate the difference in attitude relating to diabetes mellitus between Civil Servants of different gender in South-west Nigeria.

Research Hypotheses

The following hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in attitude relating to diabetes mellitus among Civil Servants of different age categories in South-west Nigeria.
2. There is no significant difference in attitude relating to diabetes mellitus between Civil Servants of different gender in South-west Nigeria.

Methodology

Survey design of descriptive type of research was used for this study. This research design was of importance because it enabled the researchers to elicit needed information from the respondents. The population of the study comprised all the Civil Servants in South-west Nigeria. A sample size of one thousand two hundred and twenty-four (1,224) civil servants who belong to the executive cadre was used for the study. The simple random sampling technique was used to sample three (3) states in South-west Nigeria. Ten (10) Ministries were selected from each of the selected states using simple random sampling techniques to make a total of thirty (30) ministries. Thereafter the respondents were selected from each of the selected ministries using non-proportionate stratified sampling technique. The instrument used for the study was a self-structured close ended questionnaire designed by the researchers. The face and content validation of the instrument was conducted by two (2) experts. The construct validity of the instrument was

ensured using Cronbach’s Alpha and a co-efficient of 0.88 was obtained. The split half method of determining reliability was used. In order to determine the co-efficient of reliability, Pearson’s Product Moment Correlation (PPMC) along with Spearman Brown’s formula were used for the analysis and a co-efficient of 0.86 was obtained. Data gathered through the research instrument were analysed with the use of inferential statistics of Analysis of Variance (ANOVA) and t test. The analysis was computed through the use of Statistical Package for Social Sciences (SPSS) software version 20.0. The hypotheses were tested at 0.05 level of significance.

Results

Hypothesis 1

There is no significant difference in attitude relating to diabetes mellitus among civil servants of different age categories in South-west Nigeria.

Table 1: ANOVA for difference in attitude relating to diabetes mellitus among civil servants of different age categories in South-west Nigeria

Source	Type III Sum of Squares	df	Mean Square	f _(cal)	f _(tab)	Sig.
Corrected Model	18.403(a)	1	18.403	207.162		.000
Intercept	1159.483	1	1159.483	13051.985	3.64	.000
Age	18.403	1	18.403	207.162		.000
Error	35.357	1222	.089			
Total	1408.000	1224				
Corrected Total	53.760	1223				

a. R Squared = .342 (Adjusted R Squared = .341)

The result of analysis presented in table 1 revealed $f_{(cal)} = 207.162$, $df = (1, 1222)$, $f_{(tab)} = 3.64$ and $P\text{-value} = 0.00$ at 0.05 level of significance. This means that the hypothesis that there is no significant difference in attitude relating to diabetes mellitus among civil servants of different age categories in South-west Nigeria was rejected based on the fact that $f_{(cal)}$ (207.162) was greater than $f_{(tab)}$ (3.64) and $P (0.00) < 0.05$ level of significance. The post-hoc table below showed the direction of differences observed in the attitude of civil servants of different age categories on diabetes mellitus in South-west Nigeria.

Table 2: Scheffe Post hoc test for differences observed in attitude of civil servants of different age categories on diabetes mellitus

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
21 – 39	40 – 59	-.577*	.049	.000	-.674	-.480
	60 and above	1.000*	.051	.000	-1.099	-.901
40 – 59	21 – 39	.577*	.049	.000	.480	.674
	60 and above	.423*	.023	.000	-.468	-.379
60 and above	21 – 39	1.000*	.051	.000	.901	1.099
	40 – 59	.423*	.023	.000	.379	.468

* The mean difference is significant at the .05 level.

The result of post hoc test presented in table 2 revealed that civil servants with age 60 years and above had the highest and positive attitude toward diabetes mellitus. This was closely followed by civil servants between 40–59 years and

civil servants between the age of 21-39 years had the least attitude toward diabetes mellitus.

Hypothesis 2

There is no significant difference in attitude relating to diabetes mellitus between civil servants of different gender in South-west Nigeria.

Table 3: t test statistics for difference in attitude relating to diabetes mellitus between civil servants of different gender in South-west Nigeria

Variables	N	Mean	Standard Deviation	df	t _(cal)	t _(tab)	P-Value
Male	764	1.85	0.36	1222	13.86	1.96	0.00
Female	460	1.52	0.50				

P < 0.05 (Significant)

The result shown in table 3 revealed that the t critical value indicated 1.96. The t calculated value indicated 13.86. The mean response of male and female civil servants showed 1.85 and 1.52 respectively. The standard deviation of male and female civil servants showed 0.36 and 0.50 respectively. The degree of freedom showed 1222. The number of male civil servants showed 764 while the number of female civil servants showed 460. The null hypothesis that there is no significant difference in attitude relating to diabetes mellitus between civil servants of different gender in South-west Nigeria was rejected based on the fact that the t calculated value of 13.86 was greater than t critical value of 1.96. Hence, male civil servants had positive attitude relating to diabetes mellitus than their female counterparts in South-west Nigeria.

Discussion

The finding revealed that there was difference in attitude relating to diabetes mellitus among civil servants of different age categories in South-west Nigeria. The finding contradicted the statement of Simmons (2019)^[9] that many of the diabetes mellitus patients showed a positive attitude toward diabetes mellitus. However, the finding was in line with the view of Borba *et al.* (2019)^[1] who discovered in their study that most of the elderly with diabetes mellitus interviewed had negative attitude toward self-care. This could be as a result of time of diagnosis which could make them become more casual in their approach toward their self-care. Moreover, in situations where the elderly involved does not have a significant other to be of help in the management of his condition, he might just be able to do the little he can about his condition.

The finding revealed that there was difference in attitude relating to diabetes mellitus between civil servants of different gender in South-west Nigeria. The finding was in line with the opinion of Siddiqui *et al.* (2013)^[8] that men and women have different attitude and behaviour related to diabetes mellitus care. The finding also supported the view of Luo (2019)^[5] that low optimism and high (negativity) and hostility were associated with risk of incident diabetes mellitus among postmenopausal women, independent of major health behaviours and depressive symptoms. The finding also supported the position of Jarl *et al.* (2019)^[3] who revealed that women had worst general health, lower internal locus of control regarding ulcer prevention and more negative attitude toward therapeutic shoes. This could be as a result of their gender. The interest, perception and disposition of the female gender is quite different from that of the male.

Conclusion

Based on the findings of this study, the following conclusions were drawn; that there was difference in attitude relating to diabetes mellitus among civil servants of different age categories in South-west Nigeria; that there was difference in attitude relating to diabetes mellitus between civil servants of different gender in South-west Nigeria. The variation in attitude of civil servants in South-west Nigeria toward diabetes mellitus can be said to be as a result of the variation in their age and gender.

It is important that civil servants in South-west Nigeria put up a positive attitude towards diabetes mellitus in order to curb the prevalence. Hence, the researchers recommended that family members should take up responsibility in educating people of different age categories within the family who put up attitude that will place them at risk of diabetes mellitus. Also, that health workers should initiate gender-based counselling programmes among civil servants on the need to shun attitude that will place them at risk of diabetes mellitus.

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