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Health Seeking Behaviour among University Staff in Zaria, Kaduna State, Nigeria

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ABSTRACT

The health seeking behaviour of workers is a complex and multifaceted phenomenon that encompasses the actions and decisions individuals make in response to their health needs. This behaviour is influenced by various factors, including personal beliefs, socio-economic status, access to healthcare services, and workplace environments. Understanding the health seeking behaviour of University Staff is crucial for developing effective strategies to promote occupational health and well-being. The tool for data collection utilised by the study was 384 copies of close ended questionnaire. This was equally administered between academic and non-academic staff of the Ahmadu Bello University, Zaria. The aim of the study was to examine the health seeking behaviour among university staff in Zaria, Kaduna State, Nigeria. This was achieved through some specific objectives which were to: identify the demographic and socio-economic characteristics of respondents in the study area, evaluate the health status of the respondents in the study area, examine respondents' attitude to healthcare in the study area and to assess respondents' accessibility to healthcare in the study area. The data obtained was analyzed using descriptive statistics and the results showed that Malaria (48.4%) and typhoid (25.1%) were the most common ailments suffered by university staff. The results also showed that 93% of the respondents sought healthcare in events of ill health. To get to the place of treatment, 51% of the staff were transported by private vehicles, compared to those who went on foot (15.2%). To improve health-seeking behaviour among university staff, it is recommended that institutional policies should prioritise enhancing healthcare facilities, expanding health insurance coverage, and promoting awareness on preventive healthcare measures. Moreover, strategies to improve transportation and accessibility to healthcare facilities should be implemented to reduce the burden of delayed or inadequate medical care.

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INTRODUCTION

In general, health is the physical, mental and spiritual well-being as well as a sense of possessing possible energy. This general definition also implies the normal function of body tissues and organs and their adaptation with the physical and psychological environment (Poortaghi et al, 2015). Health or care seeking behaviour has been defined as any action carried out by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy (Olenja, 2003).

Health-seeking behaviour refers to the actions individuals undertake to preserve,

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achieve, or regain good health and prevent illness. This may involve accessing care at public or private healthcare facilities, self-medicating, or choosing not to use available health services (Mkhailef Hawi Al-tameemi et al, 2024). It is important to note that this includes decision making that is not homogenous among everyone as it is determined by different factors (Khadka et al 2022).

Similar to health-seeking behaviour, health care utilization is influenced by a myriad of factors; it is a dynamic concept that is again dependent on factors such as accessibility, comprehensiveness of care, and continuum of care (Yadav et al., 2022). University staff usually, are burdened with heavy workload stemming from the multifaceted problems within the system. This in turn significantly affects their health. In the light of this situation, it is expected that health and wellness should be maintained and monitored closely. It is to this end that this research is carried out among University Staff, to examine their response to health challenges.

Some of the questions this study intends to answer include:

1 What are the demographic and socioeconomic characteristics of respondents in the study area?
2 What is the health status of respondents in the study area?
3 What is the attitude to health in the study area?
4 How is the access to healthcare in the study area?

The aim of this study is to examine the health seeking behaviour among university staff in Zaria, Kaduna State, Nigeria. This was achieved through some specific objectives which are to:

1. identify the demographic and socio-economic characteristics of respondents in the study area
2. evaluate the health status of the respondents in the study area
3. examine respondents' attitude to healthcare in the study area
4. assess respondents' accessibility to healthcare in the study area

STUDY AREA

The Study area is Zaria, Kaduna State, located in the center of Northern Nigeria, more than 643.7km away from the sea. It lies between latitude 11^0 00" N - 11^0 12" N of the equator and longitude 7^0 36" E - 7^0 44"E of the Greenwich Meridian (see Fig 1). The establishment of several educational institutions gives the urban Zaria a cosmopolitan outlook. A few among the numerous institutions in Zaria include Ahmadu Bello University, Federal College of Education, Nuhu Bamalli Polytechnic, Nigerian College of Aviation Technology, to mention a Few. Primary, Secondary and Tertiary health facilities abound in Zaria to cater to the health needs of the populace; these include the Ahmadu Bello University Teaching Hospital, Gambo sawaba Health center, various primary health centers, and a host of others (Alfa & Aliyu, 2021)

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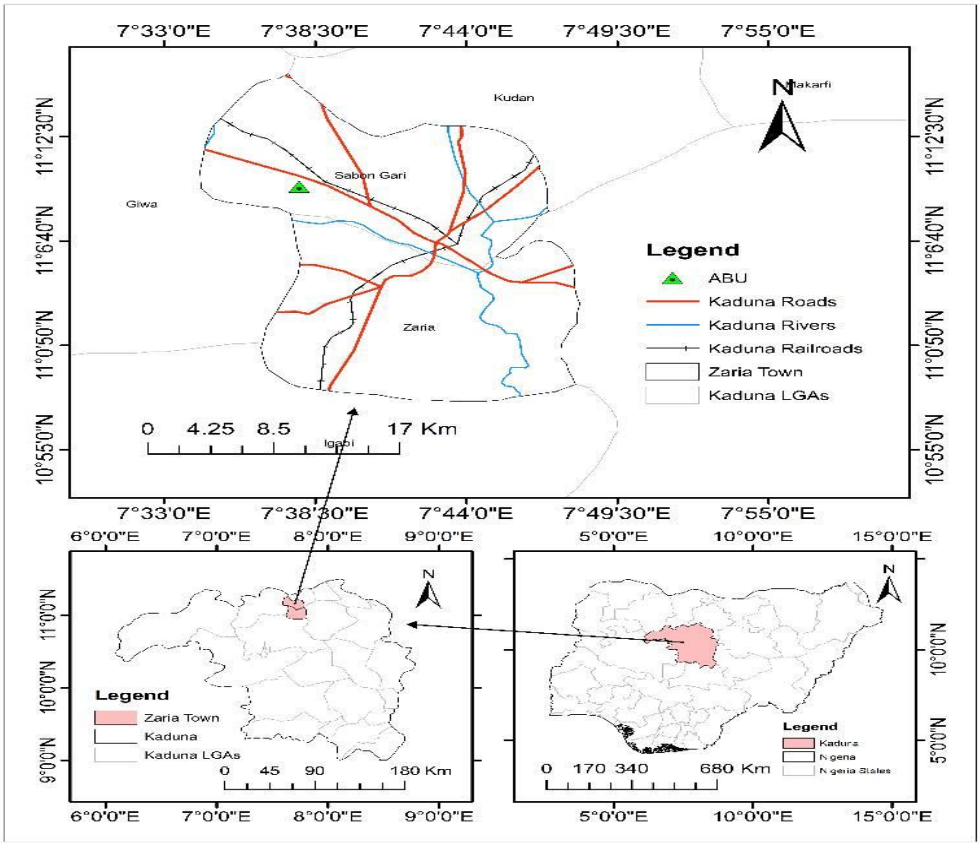

Fig 1: Map showing the Study Area
Source: Modified from the Administrative map of Zaria (2023)

MATERIALS AND METHODS

Respondents comprised of the academic and non-academic staff of the Ahmadu Bello University, Zaria. The staff strength of the university is 1400 academic staff and 5000 non-academic/support staff (African Center of Excellence for Neglected Tropical Diseases and Forensic Biotechnology (ACENTDFB), 2021). Using the Krejcie and Morgan model for sample size selection, a total of 384 copies of semi structured questionnaire were administered (Krejcie and Morgan, 1970). These copies of questionnaire were administered equally between the academic and non-academic staff, which amounted to197 copies of questionnaire each.

The equal administration of questionnaire to each group is justified by David et al. (2011) which stated that equal sample sizes are necessary to ensure that the results of the research remain unbiased by any individual characteristics that may be more common in one group compared to another. Equal sample sizes in comparative studies, are essential for ensuring that the results of the study are valid and reliable. Equal sample sizes also help to minimise the risk of random errors that can occur when making comparisons between groups of different sizes. Finally, it allows for a more accurate comparison of data, as the effect of any one group's data is not

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overwhelmed by the data from the other group (Chen, G. & Kulas, J. (2017)).

The questionnaire was administered by Faculty on Samaru campus. The selected Faculties were arranged alphabetically and every other Faculty was chosen for questionnaire administration as follows:

1. Agricultural sciences, Arts and languages,
2. Education, Engineering,
3. Environmental design,
4. Life sciences,
5. Medical sciences,
6. Physical sciences and
7. Social sciences

Table 1 Questionnaire administration to Academic and non-academic staff

Faculty	No of copies of questionnaire	
	Academic Staff	Non-academic Staff
Agricultural Science	38	38
Education	37	38
Environmental Design	37	38
Medical Sciences	37	38
Social Sciences	37	38
Total	384	

Source: Authors compilation (2024)

After questionnaire administration, a total of 347 were retrieved for analysis; 177 from academic staff and 170 from non-academic staff.

Data Analysis

The data obtained was analysed using descriptive statistics which include frequencies and percentages and were presented in the form of tables, pie and bar charts using IBM SPSS version 22 and Microsoft Excel.

RESULTS AND DISCUSSION

Sociodemographic characteristics of the respondents in the Study area.

The Socioeconomic characteristics of the respondents in the study area is imperative as it can provide insights and reasons behind choices made in relation to the health seeking behaviour of respondents. Table 2 shows the sociodemographic characteristics of the respondents in the study area.

Table 2: Socio-economic characteristics of the Respondents

Sex	Academic staff		Non-Academic staff		Total	
	Freq	%	Freq	%	Freq	%
Male	128	72.3	114	67.1	242	69.7
Female	49	27.7	56	32.9	105	30.3
Total	177	100	170	100	347	100
Age (years)						
Less than 25	3	1.7	8	4.7	11	3.2
26-30	29	16.4	28	16.5	57	16.4
31-35	28	15.8	40	23.5	68	19.6
36-40	32	18.1	28	16.5	60	17.3
41-45	28	15.8	20	11.8	48	13.8
46-50	15	8.5	18	10.6	33	9.5
51-55	20	11.3	14	8.2	34	9.8
Above 55	22	12.4	14	8.2	36	10.4
Total	177	100	170	100	347	100

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Sex	Academic staff		Non-Academic staff		Total	
	Freq	%	Freq	%	Freq	%
Religion						
Christianity	83	46.9	80	47.1	163	47.0
Islam	91	51.4	89	52.4	180	51.9
Traditional	3	1.7	1	0.6	4	1.2
Total	177	100	170	100	347	100
Marital status						
Never married	4	2.3	9	5.3	13	3.7
Married	144	81.4	137	80.6	281	81.0
Divorced	3	1.7	1	0.6	4	1.2
Widow/widower	26	14.6	23	13.5	49	14.1
Total	177	100	170	100	347	100
Education level						
O'Level	2	1.1	25	14.7	27	7.8
OND/NCE	1	0.6	39	22.9	40	11.5
HND/B.Sc.	29	16.4	84	49.4	113	32.6
M.Sc./M.Ed.	82	46.3	20	11.8	102	29.4
PhD	63	35.6	1	0.6	64	18.4
Others	-	-	1	0.6	1	0.3
Total	177	100	170	100	347	100
Residence						
Staff Quarters	60	33.9	27	15.9	87	25.1
Off Campus	117	66.1	143	84.1	260	74.9
Total	177	100	170	100	347	100

Source: Field work, 2024

Table 2 revealed that in both the academic and non-academic category, most of the respondents were male (69.7%) while 30.3% accounted for the females. This figure is supported by the report on Statistica (2023), where there are found to be more male staff in the university system in Nigeria, compared to female. The age distribution revealed that about 20% were of age 31-35 years, followed by those age 36-40 years (17.3%) while the least 3.2% were less than 25 years. Variation across the categories of staff shows that age 31-35 years (23.5%) and 36-40 years (18.1%) represented the highest for non-academic and academic staff respectively. Regarding religion, 51.9% are Muslim while 47% practice Christianity.

This is in accordance with the NDHS (National Demographic Health Survey) giving the percentage of Muslims to Christians in Kaduna State as 50.4% : 49.7% respectively (NPC, 2013). In terms of marital status, majority (81%) are married, followed by 14.1% who are widowed. Observable was the slight variation in these marital statuses between the academic and non-academic staff. The educational qualification showed that about 33% have HND/B.Sc. educational qualification, followed by 29% with M.Sc. /M.Ed. with others constituting certificate courses accounting for the least educational qualification.

It was observed that higher educational qualification such as PhD was more among the academic staff (35.6%) when compared with 0.6% for the non-academic staff. The place of residence indicated that approximately 75% live off campus while 25% live in staff quarters. Table 4.1 further revealed that a larger proportion of those that live in the staff quarters (33.9%) were academic staff as against 15.9% non-academic staff. However, it was found that the non-academic staff tends to live more off campus when compared with the academic staff.

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Income of Respondents

The income of individuals is an important factor in determining ones' socioeconomic status, and often determine access to some amenities such as healthcare facilities. Table 3 shows the income range of the respondents in the study area.

Table 3: Monthly Income of the Respondents

Monthly income	Academic staff		Non-Academic staff		Total	
	Freq	%	Freq	%	Freq	%
Less than N18,000	0	0	5	2.9	5	1.4
N18,001- N50,000	0	0	19	11.0	19	5.5
N50,001- N100,000	0	0	19	11.0	19	5.5
N100,001- N150,000	1	0.6	16	9.4	17	4.9
N150,001- N200,000	6	3.4	15	8.8	21	6.5
N200,001- N250,000	6	3.4	19	11.0	25	7.2
N250,001- N300,000	9	5.1	19	11.0	28	8.1
Above N300,000	153	86.4	60	34.9	213	61.3
Total	175	100	172	100	347	100

Source: Field work, 2024

Table 3 showed that majority of the respondents 62% earn above N300,000 as their monthly income,with over 70% of academic staff being in this category. It was observed that academic staff earn more hence this will give the academic staff more financial access to healthcare compared to non-academic staff. Higher income levels among academic staff suggest greater financial access to healthcare services, including consultations with private healthcare providers, specialist treatments, and preventive care. This may explain why a greater proportion of academic staff sought treatment at well-equipped healthcare facilities such as hospitals and clinics. In contrast, non-academic staff, with lower income levels, may be more constrained in their healthcare choices, leading to greater reliance on self-medication, pharmacy consultations, or public healthcare facilities, which may be less efficient and more congested.

Household size of respondents

The household, which represents the number of people within a housing unit, sharing their means of livelihood. Usually, larger households are more challenging to manage than smaller households. Table 3 shows a picture of the households managed by the respondents in the study area.

Table 3: Household Size of the Respondents

Household size	Academic staff		Non-Academic staff		Total	
	Freq	%	Freq	%	Freq	%
1-3	53	30.1	39	24.7	92	27.5
3-5	72	41.5	62	39.2	135	40.4
6-8	32	18.2	37	23.4	69	20.7
9-11	10	5.7	11	7.0	21	6.3
Above 11	8	4.5	9	5.7	17	5.1
Total	176	100	158	100	334	100

Source: Author, 202

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As shown in table 3, about 40% have a household size of 3-5 persons, followed by 27.5% with 1-3 household size while the least have above 11 persons which accounted for 5.1%. Also shown was that the non-academic staff generally have larger household size compared to among the academic staff. This might pose to be a challenge to maintain health in non-academic households, compared to academic households, as in comparison, the income of non-academic staff can be stretched thin to cover proper nutrition to prevent illness, and treatment on the event of sickness.

Cause of last ailment

The ill health last suffered by the respondents gives an insight into the general health conditions of the respondents in the study area. Table 4 gives a clearer picture.

Table 4: Last ailment Suffered

Health condition	Academic Staff		Non-Academic Staff		Total	
	Freq	%	Freq	%	Freq	%
Typhoid	39	22.0	48	28.2	87	25.1
Malaria	86	48.6	82	48.2	168	48.4
Diarrhea	5	2.8	7	4.2	12	3.5
Eye diseases	18	10.2	7	4.2	25	7.2
Tuberculosis	1	0.6	3	1.7	4	1.2
Diabetes	9	5.1	6	3.5	15	4.3
Tooth problem	16	9.0	11	6.5	27	7.7
Others	3	1.7	6	3.5	9	2.6
Total	177	100	170	100	347	100

Source: Author, 2024

Table 4 revealed that the most common medical ailment that the respondents do suffer of was malaria (48.4%). This result is not uncommon, as malaria is an endemic disease in Kaduna State (Umaru and Uyaiabasi, 2015). Typhoid fever affected 25.1% of the respondents at last ailment. It is not surprising that Malaria and typhoid fever are amongst the commonest diseases which sometimes co-infect as this concurs with the research by Sunday et al, (2022). A slight percentage difference was observed in these two common medical ailments between the academic and non-academic staff. Tuberculosis was identified as the least medical ailment suffered as it accounted for only 1. The other diseases representing the 9% include the non-communicable diseases such as high blood pressure.

Health seeking behaviour during illness

Table 5 sheds light in the respondents' response to ill-health. As evident in table 5, there were variations in the health seeking behaviour of respondents and their choice of treatment to utilise

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Table 5: Seek for Treatment during Ailment Suffered

Seek for treatment	Academic Staff		Non-Academic Staff		Total	
	Freq	%	Freq	%	Freq	%
Yes	171	96.6	152	89.4	323	93.1
No	6	3.4	18	10.6	24	6.9
Total	177	100	170	100	347	100
First source of treatment						
Clinic/hospital	131	76.5	106	69.7	237	73.4
Pharmacy	23	13.5	27	17.8	50	15.5
Traditional means	14	8.2	15	9.9	29	9.0
Self-treatment	3	1.8	4	2.6	7	2.1
Total	171	100	152	100	323	100

Source: Author, 2024

As indicated in Table 5, 93.1% of the respondents sought for medical treatment the last time they suffered from a medical ailment while only 6.9% did not seek for treatment. The academic staff were found to seek for treatment more (96.6%) compared with the non-academic staff (89.4%). The clinic/hospital and pharmacy shop are the commonest first source of treatment for medical ailment. It was observed that more academic staff visit the clinic/hospital compared to the non-academic staff for medical treatment. The traditional medical utilisation is gradually becoming more popular, with a total of 9% utilisation by both academic and non-academic staff. Self-medication, which is the most unpopular, had 7% of the respondents use this method of treatment

Means of Access to Health Facility and Access Time

Proximity to healthcare facilities have proven to have influence on utilisation by individuals. Table 6 shows the means of transportation available to the respondents and the travel time it takes to reach the health facility of choice.

Table 6: Means of Access to Health Facility and Access Time

Means	Academic Staff		Non-Academic Staff		Total	
	Freq	%	Freq	%	Freq	%
Foot	19	11.5	30	19.0	49	15.2
Bicycle	1	0.6	4	2.5	5	1.5
Motorcycle/tricycle	22	13.3	47	29.7	69	21.4
Commercial bus	9	5.5	25	15.8	34	10.5
Private car	114	69.1	52	33.0	166	51.4
Total	165	100	158	100	323	100
Access Time						
Less than 15mins	57	34.5	42	26.6	99	30.7
15-30mins	64	38.8	67	42.4	131	40.5
31-60mins	33	20.0	35	22.1	68	21.1
Above 60mins	11	6.7	14	8.9	25	7.7
Total	165	100	158	100	323	100

Source: Author, 2024

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A little over half (51.4%) of the respondents do use their private car as a means of transport to access their choice healthcare facility for medical treatment, followed by 21.4% that use motorcycle or tricycle (Table 4.6). The private car use as a means of transport to access the healthcare facility for treatment was more among the academic staff (69.1%) than the non-academic staff (33.0%), indicating a more comfortable ride to healthcare. The use of motorcycle or tricycle however, was more among the non-academic staff (29.7%), inferring a slower arrival at the healthcare facility.

On the access time, it was found that 40.5% accessed the healthcare facility within 15-30 minutes, while it took 30.7% less than 15 minutes to access the health facilities. About 7.7% of the respondents spent over an hour to access the health facility for medical treatment. According to the WHO standards (WHO, 2019), a healthcare facility should be within 5km proximity to residentials; this takes approximately 45 minutes by foot, 20 minutes by bike and 5 minutes by car. With reference to table 6 however, it shows that only 35.5% of the academic staff and 26.6% of the non-academic staff have access to healthcare within the WHO standards. Recent studies have highlighted the importance of travel time in accessing healthcare services. A study by Weiss et al 2020, found that globally, 8.9% of the population (646 million people) cannot reach healthcare within one hour if they have access to motorized transport, and 43.3% (3.16 billion people) cannot reach a healthcare facility by foot within one hour. These findings underscore the disparities in healthcare accessibility, especially in low-resource settings.

Utilisation of Personal Medical Consultant/Healthcare Service

The choice to utilise the services of a personal medical consultant is dependent on various factors. Table 7 sheds light on the respondents who use such services and those who don't. The reasons for their choices are however not captured in the table.

Table 7: Utilisation of Personal Medical Consultant/Healthcare Service

Personal Medical Service	Academic Staff		Non- Academic Staff		Total	
	Freq	%	Freq	%	Freq	%
Yes	97	54.8	60	35.3	157	45.2
No	80	45.2	110	64.7	190	54.8
Total	177	100	170	100	347	100

Source: Field Survey, 2024

Table 7 revealed that only 45.2% have personal medical consultant/healthcare worker they consult for their health matters while 54.8% agreed not to have. The variation shows that academic staff tend to have personal medical consultant/ healthcare services (54.8%) compared to 35.3% for the non-academic staff. This disparity may stem from the higher financial status of academic staff, hence their capability in affording such personal medical services.

A personal healthcare consultant plays a crucial role in providing individuals with tailored medical advice, facilitating access to specialised care, and ensuring continuity in health management. In Nigeria, the utilisation of personal healthcare consultants is predominantly observed among higher-income groups and professionals, particularly in urban centres where private healthcare services are more accessible. Studies have shown that individuals in low-income settings often depend on lay consultation networks, including family and friends, when making treatment-seeking decisions (Onuegbu et al., 2023).

Factors influencing the choice of healthcare facility used

The decision to utilise a healthcare facility or method of treatment in the case of illness

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depends on various factors. Table 8 sheds light on the factors in the study area.

Table 8: Factors Influencing the Choice of Healthcare

Factor	Academic Staff		Non-Academic Staff		Total	
	Freq	%	Freq	%	Freq	%
Satisfactory service	57	34.6	30	19.0	87	26.9
Close proximity	27	16.4	17	10.7	44	13.6
Affordability of services	8	4.8	21	13.3	29	8.9
Prompt attention	16	9.7	12	7.6	28	8.6
Availability of drugs	8	4.8	14	8.9	29	8.9
Politeness and courtesy of the health personnel	2	1.2	5	3.2	7	2.2
Place enrolled for NHIS	31	18.8	38	24.0	69	21.7
Availability of qualified health personnel	15	9.1	21	13.3	36	11.1
Others	1	0.6	0	0	1	0.3
Total	165	100	158	100	323	100

Source: Field work 2024

Table 8 reveals that satisfactory services by the healthcare providers (27.4%), followed by place enrolled for National Health Insurance Scheme [NHIS] (20.5%) are the main factors influencing the choice of healthcare facility for medical treatment. The provision of satisfactory services by the provider ranked the highest influence among the academic staff, compared to the non-academic staff which were more influenced by the place enrolled for NHIS. It was found that closeness to place of residence (house) and office did significantly influence the choice of a healthcare facility. Politeness and courtesy of the healthcare personnel was the least factor considered in the choice of healthcare facility for medical treatment although this was more among the non-academic staff.

CONCLUSION

This study provides valuable insights into the health-seeking behaviour of university staff in Zaria, Kaduna State. The findings indicate that the majority of staff actively seek healthcare services when ill, with hospitals and clinics being the primary sources of treatment (73%). However, disparities in accessibility, transportation, and income levels affect healthcare utilisation patterns, particularly between academic and non-academic staff. The study highlights the prevalence of malaria (48.1%) and typhoid (25.1%) as common health challenges among university staff, reinforcing the need for targeted health interventions. Additionally, financial constraints and geographical barriers remain significant factors influencing healthcare access.

To improve health-seeking behaviour among university staff, institutional policies should prioritise enhancing healthcare facilities, expanding health insurance coverage, and promoting awareness on preventive healthcare measures. Moreover, strategies to improve transportation and accessibility to healthcare facilities should be implemented to reduce the burden of delayed or inadequate medical care. By addressing these challenges, university staff can achieve better health outcomes, ultimately contributing to increased productivity and well-being in the workplace.

REFERENCES

African Center of Excellence for Neglected Tropical Diseases and Forensic Biotechnology (ACENTDFB) 2021 Draft Policy on Financial Conflict of Interest. Ahmadu Bello University, Zaria.

Corresponding author: Y. A. Arigbede
ytarigbede@gmail.com
Department of geography and Environmental Management, Ahmadu Bello University, Zaria.

Alfa, H. H., & AliyuAhmadu, M(2021). Analysis of Healthcare Facilities in Zaria Local Government Area, Kaduna, Nigeria. Quest Journals Journal of Research in Environmental and Earth Sciences 7(8) pp: 15-23

Khadka, S., Shrestha, O., Koirala, G., Acharya, U., & Adhikari, G. (2022). Health seeking behavior and self-medication practice among undergraduate medical students of a teaching hospital: A cross-sectional study. *Annals of Medicine and Surgery*, *78*, 103776.

Chen, G., & Kulas, J. (2017). The importance of equal sample size in comparative studies. International Journal of Psychological Studies, 9(1). doi: 10.5539/ijps.v9n1p119

David,I.,Adubisi,O.,Farouk,B. & Adehi,M.(2020).Assessing MSMEs Growth Through Rosca Involvement Using Paired t-Test and One Sample Proportion Test. *Journal of Social and Economic Statistics,9*(2) 30-42.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), 607-610.

Mkhailef Hawi Al-tameemi, M., Bahmanpour, K., Mohamadi-Bolbanabad, A., Moradi, Y., & Moradi, G. (2024). Insights into determinants of health-seeking behavior: a cross-sectional investigation in the Iraqi context. *Frontiers in Public Health* Vol *12* pp

National Population Commission. (2013). *Nigeria demographic and health survey 2013.* National Population Commission, ICF International.

Oberoi, S., Chaudhary, N., Patnaik, S., & Singh, A. (2016). Understanding health seeking behavior. *Journal of Family Medicine and Primary Care*, *5*(2), 463-464.

Olenja, J. (2003). Editorial Health seeking behaviour in context. *East African medical journal*, *80*(2), 61-62.

Onuegbu, C., Harlock, J., & Griffiths, F. (2023). Use, characteristics and influence of lay consultation networks on treatment-seeking decisions in slums of Nigeria: a cross-sectional survey. *BMJ Open*, 13(5), e065152.

Perks, C., Toole, M. J., & Phouthonsy, K. (2006). District health programmes and health-sector reform: case study in the Lao People's Democratic Republic. *Bulletin of the World Health Organization*, *84*(2), 132-138.

Poortaghi, S., Raiesifar, A., Bozorgzad, P., Golzari, S. E., Parvizy, S., & Rafii, F. (2015). Evolutionary concept analysis of health seeking behavior in nursing: a systematic review. *BMC health services research*, *15*, 1-8.

Umaru, M. L., & Uyaiabasi, G. N. (2015). Prevalence of malaria in patients attending the general hospital Makarfi, Makarfi Kaduna–State, North-Western Nigeria. *American journal of infectious Diseases and Microbiology*, *3*(1), 1-5.

Statistica (2023) Number of academic and non-academic personnel in Nigerian Universities in the academic year 2018/2019, by gender. Retrieved on 06-03-2023 at https://www.statista.com/statistics/1261098/staff-of-nigerian-universities-by-gender/

Sunday, E. S., Ifeoma, U. B., Ukamaka, O. E., & Erika, M. N. (2022). Malaria And Typhoid Co–Infection Among Patients Attending Some Selected Healthcare Facilities In Kawo Metropolis, Kaduna State, Nigeria.

Weiss, D. J., Nelson, A., Vargas-Ruiz, C. A., Gligorić, K., Bavadekar, S., Gabrilovich, E., ... & Hay, S. I. (2020). Global maps of travel time to healthcare facilities. Nature Medicine, 26(12), 1835-1838.

WHO (2019) Primary healthcare on the road to universal coverage: 2019 monitoring report.

Yadav, R., Zaman, K., Mishra, A., Reddy, M. M., Shankar, P., Yadav, P., ... & Kant, R. (2022). Health seeking behaviour and healthcare utilization in a rural cohort of North India. In *Healthcare* (Vol. 10, No. 5, p. 757). MDPI.

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