

# Assessment of The Determinants of Wellness Seeking Behaviour Among Adults in Imo and Abia States, Nigeria

Uka-Kalu Chioma Ezinne; Oparaocha, E.T.

**Abstract:** The rationale for this research was to assess the determinants of wellness seeking behaviours among adults in Abia and Imo States, Nigeria. The research was guided by three null hypotheses. Specifically, the research was directed to ascertain whether there is significant effect of demographic factors on wellness seeking behavior among the adults in Imo and Abia States, whether there is significant effect of health service-based factors on wellness seeking behaviour among the adults in Imo and Abia States and if there is significant effect of socioeconomic factors on the wellness seeking behaviour among adults in Imo and Abia States. The study sampled 2,400 adults in total and 1,200 adults in each state using multi-stage and random sampling technique. The study was underpinned by one theory, which is: Health Belief Model. From the study results, the following were noted: there is a significant effect of health service-based factors on wellness seeking behaviour among the adults in Imo and Abia States, there is a significant effect of demographic factors on wellness seeking behavior among the adults in Imo and Abia States and there is a positive significant effect of the socioeconomic factors on the wellness seeking behaviour among adults in Imo and Abia States.

**Keywords:** Wellness seeking behaviour; Adults, Determinants; Imo State; Abia State, Nigeria.

## I. INTRODUCTION

Wellness seeking behaviour is situated within the broader concept of health behaviour, which encompasses activities undertaken to maintain good health, to prevent ill health, as well as dealing with any departure from a good state of health (Mackian, 2003). Wellness seeking behaviour is “any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy” (Olenja, 2004). The wellness seeking behaviour of a people determines how health services are used and in turn the health outcomes of populations (Shaikh and Hatcher, 2005). Factors that determine wellness seeking behaviour may be physical, socio-economic, cultural, or political. Indeed, the utilisation of a health care system may depend on educational levels, economic factors, cultural beliefs, and practices. Other factors include environmental conditions, socio-demographic factors, knowledge about the facilities, gender issues, political environment, and the health care system itself (Katung, 2001; Ogunlesi and Olanrewaju, 2010).

A key determinant for wellness seeking behaviour is the organisation of the health care system (Shaikh and Hatcher, 2005). In many health systems, particularly in developing

countries such as Nigeria, illiteracy, poverty, under funding of the health sector, inadequate water and poor sanitation facilities have a big impact on health indicators. In addition, cost of services, limited knowledge on illness and wellbeing, and cultural prescriptions are a barrier to the provision of health services. These challenges, which are significant in Nigeria’s health system, affect the wellness seeking practices of the people. Health care services are a major component towards providing quality living, it is a common problem that such services have posed a greater challenge on the health seeking behaviour of both young and aged adult individuals in Abia and Imo States. Health Care is a top social problem facing the adults: today the lack of awareness of health care services has posed a threat to the health of adults, poor implementation of National Health Policy, inadequate and poor health care facility management are some of the factors affecting the wellness seeking behaviour of the adults, particularly those residing in rural areas. Majority of the adults in the study area (Abia and Imo States) are currently facing issues of non-payment of salaries and the aged adults often experience age related illnesses such as blood pressure, cardiac problems, diabetes, joint pains, kidney infections, cancer and tuberculosis that take a long time to treat and may affect their wellness seeking behaviour. Adults are found to have patronized traditional healers, resorted to self-medication using local herbs or visit chemists’ shops whenever they are sick. This study therefore seeks to assess wellness seeking behaviour among adults in Abia and Imo States, Nigeria. Studies that have attempted to describe factors that significantly affect health seeking behaviour during illness episodes can be broadly classified into two groups (Geldsetzer *et al.*, 2014; Moyer *et al.*, 2014). The first group are studies which emphasize the utilization of the formal system, or the wellness seeking behaviour of people. The second group comprises those studies which emphasize the process of illness response, or wellness seeking behaviour (Coughlan *et al.*, 2013; Webair and Bin-Gouth, 2013). None of these prior studies focused on the study areas for the present study, hence the essence of this study. To achieve the aim of the study, three hypotheses were formulated in their null forms as below:

*Hypothesis 1:* There is no significant effect of demographic factors on wellness seeking behavior among the adults in Imo and Abia States.

*Hypothesis 2:* There is no significant effect of health service-based factors on wellness seeking behavior among the adults in Imo and Abia States.

*Hypothesis 3:* There is no significant effect of the socioeconomic factors on the wellness seeking behavior among adults in Imo and Abia States.

II. METHODOLOGY

The study adopted the descriptive survey design approach. According to Orodho (2012), the descriptive survey design is effective, and easy to conduct, and it also ensures ease in accessing information. The descriptive survey design was useful in collecting information about people’s attitudes, opinions, habits, or perceptions about issues under investigation. The target population for the study comprised of adults in Imo and Abia States, Nigeria. For the purpose of the study, the adults were taken to be people above 18 years of age. Based on the 2006 National Population Census and an annual estimated growth rate of 2.8% for this age group (18 years and above), the estimated population was 4,978,758 in Imo State and 4,112,230 in Abia State. Therefore, the study target population was a total of 9,090,988 people.

The sample size in this study was determined using Taro Yamane’s statistical method. The formula presented mathematically is:

$$n = \frac{N}{1+N(e)^2}$$

where:

n = sample size

N = population size

e = marginal error (0.05)

With a target population size of 9,090,988, the sample size was calculated as below:

$$n = \frac{9,090,988}{1 + 9,090,988(0.05)^2} = \frac{9,090,988}{22,728.47} = 399.98$$

Therefore, 400 people was the minimum sample size in the study. however, to account for questionnaires that were returned, and the ones returned but were not properly filled, 1200 adults (three times the sample size) were selected in Imo and Abia states respectively to give a total of 2400 adults.

Multi-stage and simple random sampling techniques were used in collecting data. Creswell (2005) defined random sampling as a subset of individuals that are randomly selected from a population. The goal was to obtain a sample that is representative of the larger population.

Each state was statutorily divided into 3 senatorial zones and has 27 Local Government Areas (LGAs) in Imo state and 17 LGAs in Abia state. The LGAs in each state is stratified by senatorial zone and locality. In the first stage, a representative urban and rural LGA was first selected by simple random sampling (by balloting without replacement) from each

senatorial zone). LGAs in Abia and Imo states were further stratified into Districts/Area organized by postal codes. In the second stage, one District was selected by simple random sampling by balloting without replacement from each selected LGA. Districts within the LGAs were further stratified into villages. In the third stage, one village was selected by simple random sampling by balloting without replacement from each selected District.

From a notable landmark in a selected village, households were identified, and eligible respondents were selected moving in a clockwise direction. Two eligible participants (of opposite sex) were selected per household until a total of 67 participants were selected from each village (see Figures 1 and 2).

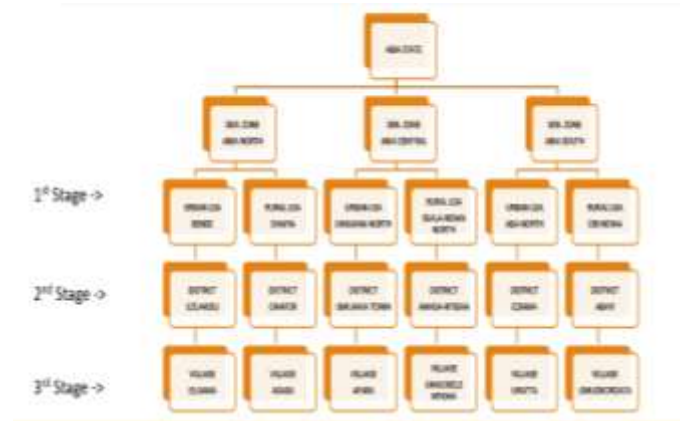


Figure 1: Multistage sampling in Abia State

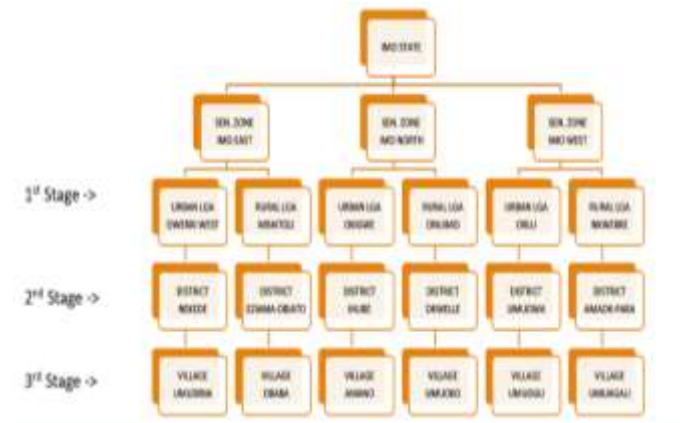


Figure 2: Multistage sampling in Imo State

In collecting the data, Wellness Behaviours Inventory (WBI) (Sirois, 2019) questionnaires was adopted and modified by the researcher. The first section of the questionnaire collected the demographic data from the respondents while the other sections contained the item statements to be responded to. To establish the reliability of the instrument, the split-half method was used. In the split-half method, the total number of items is divided into two halves (odd and even), and a correlation taken between the two halves using a correlation coefficient. A correlation co-efficient of about 0.52 was judged high enough for the instrument to be assumed reliable. Data from

the answered questionnaires was analyzed qualitatively. All questionnaires were coded before analysis. Data was analyzed using descriptive statistics to obtain frequencies and percentages. 50% and above was accepted while below was rejected. The results were presented in tables and chart form. The software used for analysis of the data was IBM-Statistical Package for Social Sciences (SPSS) Version 21.

To ensure anonymity of the participants, they were not required to write their names on the questionnaires.

### III. RESULTS AND DISCUSSION

Table 1: Analysis of Respondents' Rate

Questionnaires	Respondents	Percentage (%)
Returned (Abia state)	1100	46
Not returned (Abia state)	100	4
Returned (Imo state)	900	37
Not returned (Imo state)	300	13
Total Distributed	2400	100.0

Source: Author's Fieldwork Computation, 2022

The survey was conducted on 2400 respondents (see Table 1) (1200 in Abia state and 1200 in Imo state). The questionnaires returned from Abia state were 1100 representing 46% and 100 (4%) were missing, in Imo state 900 were returned representing (37%) and 300 (13%) were not returned.

Table 2a: Respondents' Demographic Characteristics

Characteristic s	Category	Frequenc y	Percentag e	Cumulativ e Percent
Sex	Male	1225	61.25	61.25
	Female	775	38.75	100.0
Marital Status	Single	839	41.95	41.95
	Married	920	46	87.95
	Divorced	241	12.05	100.0
Age	18-29	171	8.55	8.55
	30-39	231	11.55	20.1
	40-49	221	11.05	31.15
	50-59	611	30.55	61.7
	60-69	213	10.65	72.35
	70-74years	123	6.15	78.5
	75-79years	321	16.05	94.55
	80 years and above	109	5.45	100
Educational Qualification	no formal education	13	0.7	0.7
	Primary	132	6.6	7.3
	Secondar y	961	48.1	55.4
	Tertiary	894	44.6	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the demographics is shown in Table 2a. The table displays that of the two thousand (2000) respondents, 1225 (61.25%) were male, whereas 775 (38.75%) were female. Hence, we had more male respondents than female in the study. In addition, from the total number of respondents surveyed 839 (41.95%) were single, while 920 (46%) were married and 241 (12.05%) were divorced. This shows that most respondents were married. In addition, among the (2000) respondents, 171 (8.55%) were of age 18 to 29 years, 231 (11.55%) were between age 30 to 39 years, 221 (11.05%) were between 40 to 49 years, 611 (30.55%) were between 50 to 59 years, 213 (10.65%) were between 60 to 69 years, 123 (6.15%) were 70 to 74 years, 321 (16.05%) were between 75 to 79 years while 109 (5.45%) were 80years and above. According to this analysis, most respondents were between 40 to 49 years old. Finally, there were 13(0.7%) with no formal education, 132 (6.6%), with primary education, 961 (48.1%) with secondary education, while 894 (44.6%) people had tertiary education. This implies that most respondents had at least a secondary education.

Table 2b: Main occupation of the respondents

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Occupation	Subsistence farmer	79	3.95	3.95
	Commercial farmer	107	5.35	9.3
	Small-scale business	193	9.65	18.95
	Large-scale business	205	10.25	29.2
	Pastoralist	96	4.8	34
	Private employment	255	12.75	46.75
	Civil service	385	19.25	66
	Transport industry	81	4.05	70.05
	Tourist industry	161	8.05	78.1
	Casual labourer	109	5.45	83.55
	Domestic work/Home duties	210	10.5	94.05
	Unemployed	119	5.95	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent occupation is shown in Table 2b. The table displays that of the two thousand (2000) respondents, 79(3.95%) were subsistence farmers, 107 (5.35%) were commercial farmers, 193 (9.65%) were into small-scale business, 205 (10.25%) were into large scale business, 96 (4.8%) were pastoralists, 255 (12.75%) were private companies' employees, 385(19.25%) were civil servants, 81 (4.05%) were in the transport industry, 161 (8.05%) were in the tourism industry, 109 (5.45%) were casual labourers, 210 (10.5%) were domestic workers or home wives and lastly 119(5.95%) were unemployed. Hence, we had more respondents who were civil servants.

Table 2c: How much the respondents earned monthly

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Income	< 5,000	129	6.45	6.45
	5,000 - 10,000	269	13.45	13.9
	11,000 – 50,000	521	26.05	45.95
	51,000 – 100,000	601	30.05	76
	101,000 – 200,000	282	14.1	90.1
	201,000 – 500,000	107	5.35	95.45
	> 500,000	91	4.55	100

Source: Author’s Fieldwork Computation, 2022

The frequency distribution of money earned monthly is shown in Table 2c. The table displays that of the two thousand (2000) respondents, 129(6.45%) earned less than 5,000, 269 (13.45%) earned between 5000-10000, 521 (26.05%) earned between 11,000-50,000, 601 (30.05%) earned between 51,000-100,000, 282 (14.1%) earned between 101,000-200,000, 107 (5.35%) earned between 201,000- 500,000, 91 (4.55%) earned above 500,000. With these data, we have more people earning between the range of 51,000-100,000 compared to the other categories.

Table 3: Sources of income to respondents’ household

Characteristics	Category	Regular income (Each month)	Not regular income (Some months)	Infrequent (rarely)	Frequency	Percentage	Cumulative Percent
Source of income	Husband	908	-	-	908	45.4	45.4
	Wife	-	772	-	772	38.6	84
	Children	-	-	53	53	2.65	86.65
	Others in household	-	13	-	13	0.65	87.3
	Others from outside the household	-	-	179	179	8.95	96.25
	Another source (specify):	-	75	-	75	3.75	100

Source: Author’s Fieldwork Computation, 2022

The frequency distribution of the respondents’ household source of income is shown in Table 3. The table displays that of the two thousand (2000) respondents, 908(45.4%) were husband with regular income, 772 (38.6%) were wife with no regular income, 13 (0.65%) were other people in the household with no regular income, 179 (8.95%) were others from outside the household with infrequent income, 75 (3.75%) were income from other sources. With this data, the husbands are the main people who provide a source of income for household with a regular income every month.

The frequency distribution of the respondent spending is shown in Table 4. The table displays that of the two thousand (2000) respondents, 753 (37.65%) spent their money on food, 109 (5.45%) spent their money on clothing, 234 (11.7%) spent their money on housing, 211 (10.55%) spent their money on healthcare, 121 (6.05%) spent their money on education/training, 231 (11.55%) spent their money on transport, 189 (9.45%) spent their money on labourers, 105 (5.25%) spent their money on leisure, 47 (2.35%) spent their money on other things. Hence, we have more respondents who spent their money on Housing/rent.

Table 4: What the respondents spent money on the most

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Area	Food	753	37.65	37.65
	Clothing	109	5.45	43.1
	Housing/rent	234	11.7	54.8
	Healthcare	211	10.55	65.35
	Education/training	121	6.05	71.4
	Transport	231	11.55	82.95
	Labourers	189	9.45	92.4
	Leisure	105	5.25	97.65
	Others	47	2.35	100

Source: Author’s Fieldwork Computation, 2022

Table 5: Religion the respondents practiced

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Area	None	321	16.05	16.05
	Christianity	1322	66.1	82.15
	Islam	102	5.1	87.25
	Traditional	255	12.75	100
	Other (specify):	0	0	100

The frequency distribution of the respondents’ religion is shown in Table 5. The table displays that of the two thousand (2000) respondents, 321(16.05 %) did not practice any religion, 1322 (66.1%) practiced Christianity, 102 (5.1%)

practiced Islam, and 255 (12.75%) practiced traditional forms of religion. With this data, majority of the respondents were Christians.

Table 6: Areas the respondents lived

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Area	Urban	1851	92.55	92.55
	Rural	149	7.45	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondents' area is shown in Table 6. The table displays that of the two thousand (2000) respondents, 1851(92.55%) lived in urban area and 149 (7.45%) lived in rural area. Thus, we had more respondents living in the urban area.

Table 7: Housing category

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Housing	Own your house	621	31.05	31.05
	Rent your house	921	46.05	77.1
	Do not own house, but do not pay rent	391	19.55	96.65
	Other: specify	67	3.35	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent Housing category is shown in Table 7. The table displays that of the two thousand (2000) respondents, 621(31.05%) lived in their own house, 921 (46.05%) lived in a rented house, 391 (19.55%) lived in a place that they neither own nor pay a rent, 67 (3.35%) lived elsewhere/do not fall into any of these categories. Looking at this data, we have more respondents living in a rented house.

Table 8: Respondents Current Health Ratings

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Rating	Poor	287	14.35	14.35
	Fair	476	23.8	38.15
	Good	806	40.3	78.45
	Excellent	431	21.55	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent current health is shown in Table 8. The table displays that of the two thousand (2000) respondents, 287(14.35%) had a poor health condition, 476 (23.8%) had a fair health condition, 806 (40.3%) had a good health condition and 431 (21.55%) had an excellent health condition. Hence, it can be deduced that most of the respondents had a good health condition.

Table 9: Respondents health rating in the past year

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Rating	Poor	431	21.55	21.55
	Fair	655	32.75	54.3
	Good	733	36.65	90.95
	Excellent	181	9.05	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent past year's health rating is shown in Table 9. The table displays that of the two thousand (2000) respondents, 431(21.55%) had a poor health condition in the past year, 655 (32.75%) had fair health condition in the past year, 733 (36.65%) had good health condition in the past year and 181 (9.05%) had an excellent health condition in the past year. With this data, it can be deduced that most respondents had a good health condition in the past year.

Table 10: Responses to being ill in the past 3 months

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Answer	Yes	1421	71.05	71.05
	No	579	28.95	100

The frequency distribution of the respondents' illness status in the past three months is shown in Table 10. The table displays that of the two thousand (2000) respondents, 1421 (71.05%) said they had been ill in the past three months, 579 (28.95%) said they had not been ill in the past three months. With this data, it can be inferred that most respondents had been ill in the past three months as at the time of the study.

Table 11: Awareness of what was making respondents ill

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Illness	Do not know	117	5.85	5.85
	Malaria	565	28.25	34.1
	Diarrhea	194	9.7	43.8
	Common cold	213	10.65	54.45
	Skin infections	132	6.6	61.05
	HIV/AIDS	0	0	61.05
	Sexually transmitted infection	11	0.55	61.6
	Respiratory infection	150	7.5	69.1
	Other	618	30.9	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent health illness causes is shown in Table 11. The table displays that of the two thousand (2000) respondents, 117 (5.85%) did not know the causes of their illness, 565(28.25%) had malaria, 194 (9.7%) had diarrhea, 213 (10.65%) had common cold, 132 (6.6%) had

skin infections, 0 (0%) had HIV/AIDS, 11(0.55%) had STD, 150 (7.5%) had respiratory infection, 618 (30.9%) had other illness causes. With this data, it can be said that most respondents had other causes of illness not listed that made them ill.

Table 12: How Respondents knew what was making them ill

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Diagnosis	Self-diagnosis	428	21.4	21.4
	Friend, neighbour or household member told me	341	17.05	38.45
	Person in a chemist shop or pharmacy	234	11.7	50.15
	Clinic/hospital/medical person	679	33.95	84.1
	Traditional healer	233	11.65	95.75
	Others	85	4.25	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondents' health diagnosis is shown in Table 12. The table displays that of the two thousand (2000) respondents, 428 (21.4%) were self-diagnosed, 341 (17.05%) were diagnosed by friend, neighbour or household member, 234 (11.7%) were diagnosed by someone in the chemist, shop or pharmacy, 679 (33.95%) were diagnosed by clinic/hospital/medical personnel, 233 (11.65%) were diagnosed by traditional healer while 85 (4.25%) were diagnosed by other means. Looking at the data, it can be said that most people were diagnosed by clinic/hospital/ or medical personnel.

Table 13: Responses on if respondents sought any treatment

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Answer	Yes	1993	99.65	99.65
	No	7	0.35	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent answers to treatment is shown in Table 13. The table displays that of the two thousand (2000) respondents, 1993 (99.65%) affirmed that they sought for treatment and 7 (0.35%) did not seek any treatment. Hence, more people sought for treatment after their diagnoses.

Table 14: How respondents sought for treatment

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Place	Treated self	113	5.65	5.65
	Chemist Shop or Pharmacy	453	22.65	28.3
	Government Hospital or health centre	242	12.1	40.4
	Private	336	16.8	57.2

	hospital or health Centre			
	Government clinic or dispensary	219	10.95	68.15
	Private clinic or dispensary	321	16.05	84.2
	Traditional healer	209	10.45	94.65
	Other (specify):	107	5.35	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent place of treatment is shown in Table 14. The table displays that of the two thousand (2000) respondents, 113 (5.65%) respondents treated themselves, 453 (22.65%) were treated by a chemist shop or pharmacy, 242 (12.1%) were treated by government hospital or healthcare, 219(10.95%) were treated by government clinic or dispensary, 321 (16.05%) were treated by private clinic or dispensary, 209 (10.45%) were treated by traditional healers and 107 (5.35%) were treated through other means. With this analysis, it can be deduced that many respondents were treated by chemist shop or pharmacy.

Table 15: Ability to get all the needed treatment

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Answer	Yes	1987	99.35	99.35
	No	13	0.65	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent answers to whether they were treated well is shown in Table 15. The table displays that of the two thousand (2000) respondents, 1987 (99.35%) were treated well while 13 (0.65%) were not treated well. Hence, it can be said that more respondents were treated well.

Table 16: Reasons why respondents did not receive all the needed treatments

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Reason	Felt better	751	37.55	37.55
	Too expensive	577	28.85	66.4
	The entire course of treatment was not available	331	16.55	82.95
	Others	232	11.6	94.55
	Don't know	109	5.45	100

Source: Author's Fieldwork Computation, 2022

The frequency distribution of the respondent which shows the reasons why the respondents were not treated well is shown in Table 16. The table displays that of the two thousand (2000) respondents, 751 (37.55%) said they felt better, 577 (28.85%) said the treatment was too expensive, 331 (16.55%) said the

entire course of treatment was not available, 232 (11.6%) cited other reasons while 109 (5.45%) could not say why they could not get all the needed treatment.

Table 17: Responses on who initiated treatment seeking in respondents household when they are sick

Characteristics	Category	Frequency	Percentage	Cumulative Percent
Reason	Myself	851	42.55	42.55
	My spouse	986	49.3	91.85
	My children	95	4.75	96.6
	Others	68	3.4	100

Source: Author’s Fieldwork Computation, 2022

The frequency distribution of the respondents about who initiates treatment in a household is shown in Table 17. The table displays that of the two thousand (2000) respondents, 851 (42.55%) were initiated by the patients themselves, 986(49.3%) were initiated by their spouses, 95 (4.75%) were initiated by their children while 68 (3.4%) were initiated by others. Looking at these answers, it can be said that more respondents’ treatments were initiated by their spouses.

Table 18: Descriptive Statistics of the Respondents’ Perceptions

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge on wellness seeking behaviour	2000	9.10	20.20	13.8406	2.77614
Practice of wellness seeking behaviour	2000	15.06	33.13	23.1518	4.66901
Health service base factor	2000	9.10	19.20	13.8618	2.81761
Valid N (listwise)	2000				

Source: Author’s Fieldwork Computation, 2022

Respondents’ descriptive statistics are listed in relation to Knowledge on wellness seeking behaviour, Practice of wellness seeking behaviour and Health service base factor as obtained from 2000 respondents. The range of Knowledge on wellness seeking behaviour is from 9.10 to 20.20 points, with a mean of 13.8406 and a standard deviation of 2.77614, indicating that respondents on average agreed with the question about Knowledge on wellness seeking behaviour. In relation to Practice of wellness seeking behaviour, we obtained information from 2000 respondents; the range of Practice of wellness seeking behaviour is from 15.06 to 33.13 with a mean of 23.1518 and a standard deviation of 4.66901, this means that respondents on average settled with the question about Practice of wellness seeking behaviour. We also obtained information from 2000 respondents related to Health service base factor, this Health service base factor ranges from 9.10 to 19.20, with a mean of 13.8618 and a standard deviation of 2.81761, indicating that respondents on average agreed with the health service base factor questions.

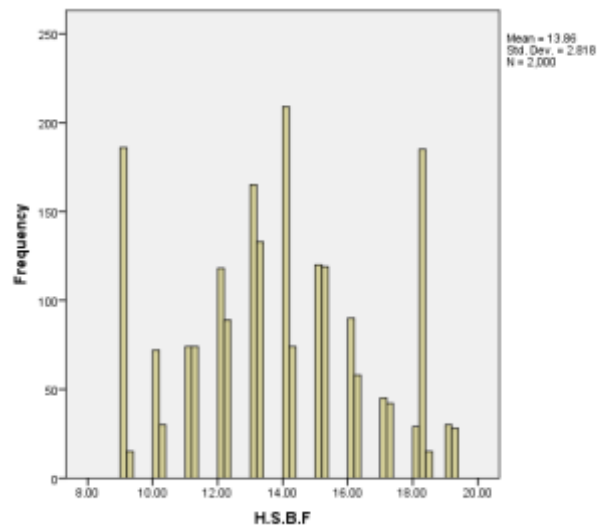


Figure 4: Histogram of perceived Health service-based factor

(Source: Author’s Fieldwork Computation, 2022)

The histogram for health service-based factor shows that most of the scores were moving to the right but are reasonably normally distributed with most of the scores happening at the focal point pointed outwards the extremes.

*Test of Multicollinearity*

Table 19: Correlation among the independent variables

Correlations			
		Knowledge on wellness seeking behaviour	Practice on wellness seeking behaviour
Knowledge on wellness seeking behaviour	Pearson Correlation	1	.985**
	Sig. (2-tailed)		.000
	N	2000	2000
Practice of wellness seeking behaviour	Pearson Correlation	.985**	1
	Sig. (2-tailed)	.000	
	N	2000	2000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Author’s Fieldwork Computation, 2022

When the independent variables show a high degree of correlation, it is said that there is multicollinearity, and the correlation coefficient is at least 0.7. When this happens, one must be careful to include these highly correlated variables in the regression model, so it is usually recommended to delete one of the variables. Therefore, this research inspects the degree of correlation between the three independent variables, a bivariate regression was executed in Table 19, which tests for correlation, the highest correspondence coefficient in the table is 0.985. It shows that there is a problem of high correlation between the variables of wellness seeking behaviour (i.e., knowledge on wellness seeking behaviour and

practice of wellness seeking behaviour). Therefore, all variables are well-maintained.

Table 20: Analysis of Variance - Test of Practice of Wellness Seeking Behaviour

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15336.042	1	15336.042	57389.566	.000 <sup>b</sup>
	Residual	533.920	1998	.267		
	Total	15869.962	2000			
a. Dependent Variable: Health Service Based Factor						
b. Predictors: (Constant), Practice of Wellness Seeking Behaviour						

The ANOVA table was also used to test for overall model significance using the F-statistics and its associated probability value. With a likelihood value less than 0.05, it implies that there is significant and positive relationship between Health services-based factor and practice of wellness seeking behaviour. The linear regression's F-test has the null hypothesis that there is no linear correlation between the two variables (in other words  $R^2=0$ ). With  $F = 57389.566$  and 2000 degrees of freedom the test is highly significant, thus we can assume that there is a linear correlation between the variables in our model.

Table 21: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983 <sup>a</sup>	.966	.966	.51694
a. Predictors: (Constant), Practice of Wellness Seeking Behaviour				

Source: Author's Fieldwork Computation, 2022

The model summary reported the  $R^2$  value of 0.966, which implies that 98.3% of the total variations in practice of wellness seeking behaviour are clarified by the multiple regression model while the rest is due to chance of errors. This goodness of fit is high enough, for that reason we can infer that there is no first order undeviating autocorrelation in the data.

Table 22: Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficient	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.127	.058		2.178	.030
	Practice of Wellness Seeking Behaviour	.593	.002	.983	239.561	.000
a. Dependent Variable: Health Service Based Factor						

Source: Author's Fieldwork Computation, 2022

The coefficient table above reports the model coefficient results and its t-values. After observing the significance value of one independent variable (Practice of wellness seeking behaviour) to be less than 0.05, we can say that there is significance effect of practice of wellness seeking behaviour on health service based. The t-test finds out that both intercept and variables are important i.e., our coefficient is highly constant (it is less than 0.001).

#### IV. DISCUSSIONS OF FINDINGS

*Hypothesis 1: There is no significant effect of demographic factors on wellness seeking behavior among the adults in Imo and Abia States.*

This hypothesis was investigated by finding the correlation between the variables. The results show that there is a significant correlation between demographic factors and wellness of individual persons in the two states chosen, this is consistent with the study of Engeda *et al.* (2016) who found that age was significantly associated with visiting modern health care facility. Sun *et al.* (2013) found that health literacy is also affected by prior knowledge and age, the effect from prior knowledge is positive and that from increasing age is negative. Demographic factors such as age is a factor which varies the health care seeking behavior from person to person. Engeda *et al.* (2016) demonstrated that the more the educational level of people is, the better their understanding of diseases processes, availability of diagnosis, treatment options, and the risk of delay in medical care seeking will be. Sun *et al.* (2013) explained that education is one of the powerful tools that affect seeking of health services.

*Hypothesis 2: There is no significant effect of health service-based factors on wellness seeking behaviour among the adults in Imo and Abia States.*

It can be deduced from the outcomes that there is a significant correlation of health service-based factors on wellness seeking behaviour. Quality of health services has an influence on patient satisfaction. This is in accordance with the opinion expressed by Batbaatar *et al.* (2016) that the indicator of the quality of health services has a strong and positive influence on patient satisfaction. The same opinion is expressed by Lankarani *et al.* (2016) which states that patient satisfaction is an indicator of service quality and efficiency of health services. Patient satisfaction will lead to patient confidence in a health service and will have an effect on positive patient behavior such as unwilling to switch to other health care facilities and will recommend to others (Naidu, 2009). It assumed that if the patient has a high perception of the quality health service, they will be more satisfied with the services provided. This finding was consistent with Al-Damen, (2017), which stated that the quality of health service affected by patient satisfaction. Patient's satisfaction is assumed that the values in certain services provided by the officer are attached to the patient's memory and will differ in each individual so this will increase the patient's willingness to recommend, increase trust, loyalty and reduce the number of



complaints, therefore quality of service often considered a preliminary to patient satisfaction (Shan *et al.*, 2016).

*Hypothesis 3: There is no significant effect of the socioeconomic factors on the wellness seeking behaviour among adults in Imo and Abia States.*

The results of the third hypothesis test show that there is an affirmative correlation of socioeconomic factors on the wellness seeking behaviour among adults in Imo and Abia States. The field data shows that socio-economic factors are a major determinant for shaping health seeking behavior of a locality in Imo and Abia state. Other studies also confirmed that socioeconomic indicators were the single most pervasive determinant of health seeking behaviour (Ahmed, 2005) overriding age and sex, and in case of health-care costs, types of diseases as well. Lack of finance is one of the reasons to not to access any health services or not seeking help (Qasim *et al.*, 2014). Moreover, a household's relative poverty status, as reflected by wealth quintiles, was a major determinant in health-seeking behavior (Amin *et al.*, 2010). Some studies yielded the results that demonstrated the decision to engage with a particular medical channel is affected by a variety of variables including age, access to services and perceived quality of service, the social status, the attitude of health care providers, socio-economic constraints (Afolabi *et al.*, 2013). It is also demonstrated in this study that perception about the income interference in seeking treatment for perceiving illness according to employment sector has a significant relationship, which shapes the health-related seeking behaviour of the households.

## V. CONCLUSION

From the study results, the following were noted:

- i. There is a significant effect of health service-based factors on wellness seeking behaviour among the adults in Imo and Abia States
- ii. There is a significant effect of demographic factors on wellness seeking behavior among the adults in Imo and Abia States
- iii. There is a positive significant effect of the socioeconomic factors on the wellness seeking behaviour among adults in Imo and Abia States.

Respondents' characteristics such as occupation, having lower household sizes, source of income and religion were significantly associated with appropriate health seeking behaviour. Providing good services, affordability of such services and proximity were considered the most important service characteristics in seeking health seeking behaviour. Thus, policy formulation and implementation should be directed towards improving access to healthcare services. This can be done by increasing the number of health facilities in under-served areas. The quality of care provided at health facilities also requires attention as mentoring, supportive supervision and other measures could be embarked upon in order improve quality of care. Issues concerning affordability of such health services can be addressed by up-scaling the

coverage of the National Health Insurance Scheme, the country's flagship insurance scheme. This would provide financial protection for households with lower socioeconomic status in order to encourage use of appropriate healthcare sources during illness episodes.

## REFERENCES

- [1] Afolabi, M.O., Daropale, V.O., Irinoye, A.I., & Adegoke, A.A. (2013). Health-seeking behaviour and student perception of health care services in a university community in Nigeria. *J of Sci Res* 5: 5. DOI:10.4236/health.2013.55108
- [2] Ahmed, M.S., Tomson, G., Petzold, M., & Kabir, N.K. (2005). Socio-economic status overrides age and gender in determining health seeking behavior in rural Bangladesh. *Bulletin of the World Health Organisation*. <https://www.researchgate.net/publication/7990447>
- [3] Al-Damen, R. (2017). Health care service quality and its impact on patient satisfaction. Case of Al-Bashir Hospital, *International Journal of Business and Management*, 12(9): 136.
- [4] Amin, R., Shah, M.N., & Becker, S. (2010). Socioeconomic factors differentiating maternal and child health seeking behavior in rural Bangladesh: A cross-sectional analysis. *Int Journal for Equity in Health*. <https://equityhealthj.biomedcentral.com/articles/10.1186/1475-9276-9-9>
- [5] Batbaatar, E. (2016). Determinants of patient satisfaction: a systematic review, *Perspectives in public health*, pp. 1–13.
- [6] Coughlan, M., Cronin, P. and Ryan, F. (2013). *Doing a Literature Review in Nursing, Health and Social Care*. London: Sage.
- [7] Creswell, J.W. (2005). *Research Design: A qualitative, quantitative and mixed method approaches*. London: Sage Publication Inc.
- [8] Engeda (2016). Health seeking behaviour and associated factors among pulmonary tuberculosis suspects in Lay Armachiho District, Northwest Ethiopia: A Community-based study. *Hindawi Publishing. Corporation. Tuberculosis Research and Treatment*. <http://dx.doi.org/10.1155/2016/789270>
- [9] Geldsetzer, P., Williams, T. C., & Kirolos, A. (2014) The recognition of and care seeking behaviour for childhood illness in developing countries: a systematic review. *PLoS One*, 9(4):e93427.
- [10] Katung, P. Y. (2001) Socio-economic factors responsible for poor utilization of primary health care services in rural community in Nigeria. *Niger J Med*. 10:28-29.
- [11] Lankarani, K.B. (2016). Satisfaction Rate Regarding Health-care Services and Its Determinant Factors in South-West of Iran: A Population-based Study. *International journal of preventive medicine*, 7: 122.
- [12] Mackian, S. (2003). A review of health seeking behaviour: problems and prospects. [online] Available at: [https://assets.publishing.service.gov.uk/media/57a08d1de5274a27b200163d/05-03\\_health\\_seeking\\_behaviour.pdf](https://assets.publishing.service.gov.uk/media/57a08d1de5274a27b200163d/05-03_health_seeking_behaviour.pdf).
- [13] Moyer, C. A., Adongo, P. B., & Aborigo, R. A. (2014) how social factors influence facility-based delivery in Rural Northern Ghana. *Maternal and child health. The Pan African medical journal*. 16.
- [14] Naidu, A. (2009). Factors affecting patient satisfaction and healthcare quality, *International Journal of Health Care Quality Assurance*, 22(4): 366–381
- [15] Ogunlesi, T. A., & Olanrewaju, D. M. (2010). Socio-demographic Factors and Appropriate Health Care-seeking Behavior for Childhood Illnesses. *J Trop Pediatr*. 56(6):379-385.
- [16] Olenja, J. (2004). Editorial Health seeking behaviour in context. *East African Medical Journal*, 80(2). doi:10.4314/eamj.v80i2.8689.
- [17] Orodho, J. A. (2012). Techniques of writing research proposals and reports in education and social sciences. Maseno/Nairobi: Kanzejja HP Enterprises.
- [18] Qasim, M., Bashir, A., Anees, M.M., Khalid, M., & Ghan, U.M. (2014). Socio economic effect on health seeking behavior of women (review paper). *Advances in Agriculture, Sciences and*

- Engineering Research. Science Education Development Institute, Nigeria. <http://www.ejournal.sedinst.com>
- [19] Shaikh, B. T., & Hatcher, J. (2005) Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. *J Public Health (oxf)*. 1:49-54.
- [20] Shan, L. (2016). Patient satisfaction with hospital inpatient care: Effects of trust, medical insurance and per Praktik Mandiri Dokter, dan Praktek Mandiri Dokter Gigi, *Kemenkes*, 33: 3–8.
- [21] Webair, H. H., & Bin-Gouth, A. S. (2013) Factors affecting health seeking behavior for common childhood illnesses in Yemen. *Patient Preference & Adherence*. 7.