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Common Illness Behaviour, and Preferred Treatment Options among Inhabitants of a Rural Community in Enugu State, Nigeria

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Abstract: Factors that influence behaviour when ill, include; culture, beliefs, knowledge, values, finances, time, materials, educational level, and influence of other people. Illness behaviour is the ways in which given symptoms may be differently perceived, evaluated, and acted (or not acted) upon by persons. This descriptive, cross-sectional study was conducted at Opi town, Nsukka Local Government Area, Enugu State, Nigeria. Inhabitants of the town, that presented for medical outreach programme in 2019 participated. Most of the respondents (94.2%) were aged 20 to 79 years, with majority being females (76.5%). All belonged to Igbo tribe, and Christians; while 70% were married. Majority had primary level education (38.7%). Overall, 68.3% would seek medical care as first reaction to illness. Most respondents sought medical care at the Patent and Proprietary Medicine Vendour (PPMV) shop (47.3%). Up to 45.7% always paid their medical bill without difficulty, while 11.5% were never able to pay their medical bill without difficulty. Also, 29.2% always sought for help before paying medical bills, but 24.7% never sought for help before paying for medical bills. In comparing orthodox medical care with traditional treatment, 65.4% perceived orthodox medical care as always being superior to traditional treatment, while only 2.1% did not perceive orthodox medical care as being superior. Majority of the inhabitants of Opi town will usually seek medical care when ill, and PPMV shop is most frequently patronized. Most people in Opi town also have the perception that orthodox medical care is superior to traditional treatment.

Keywords: Illness, Behaviour, Treatment, Options, Rural, Community

INTRODUCTION

Illness can be said to be a disease, or state of being unwell; while behavior essentially, is the specific way of acting, in response to a stimulus [1]. Behaviour can further be explained as total reactions of an individual, that is accessible to an external observer [2]. Behaviour involves psychological processes like emotions, and it is what people do, and what drives them to act in certain ways [3]. Some factors that could influence behaviour of individuals when ill, include; culture, beliefs, knowledge, values, finances, time, materials, educational level, and influence of other people [2].

The concept of illness behaviour was first proposed in 1960, by two pioneering scholars; David Mechanic, and Edmund H. Volkart. They saw illness behaviour as “the ways

in which given symptoms may be differently perceived, evaluated, and acted (or not acted) upon by different kinds of persons [4]. However, in 1986, David Mechanic modified this definition as "the varying ways individuals respond to bodily indications, how they monitor internal states, define and interpret symptoms, make attributions, take remedial actions and utilize various sources of informal and formal care" [5].

It is good to note that there are five stages of illness behaviour, but every individual must not pass through the five stages, when ill. These stages are [3];

1. Symptom experience stage, during which the initial symptoms are experienced, with the individual denying that anything is wrong with him, though later accepts.
2. Assumption of sick role stage, during which the individual seeks confirmation of illness from family and friends.
3. Medical care contact stage, during which advice is sought from a health care professional.
4. Dependent-patient role stage, during which the patient now depends on the health professional to bring him back to health.
5. Recovery or rehabilitation stage, during which the patient recovers and goes back to work; or he is rehabilitated if necessary.

Illness behaviour, as described above is different from health behaviour; though some scholars tend to believe that they are the same, thus confusing them. Health behaviour is about the actions and steps taken to maintain health, and prevent one from getting ill [6]. Some researchers however, gave a very popular definition of Health behaviour in 1966; and this definition is still wildly accepted as very correct. They defined Health behaviour as "*Any activity undertaken by a person believing himself to be healthy, for the purpose of preventing disease or detecting it in an asymptomatic stage*" [7].

Currently in Nigeria, and as has also been documented in many countries, including medically advanced countries, the main options that ill patients adopt are; Western/Orthodox medicine, Folk/Traditional medicine, and Prayer/Spiritual healing [8]. The options available to those who choose Western/Orthodox medicine are self-medication, use of Patent Medicine dealers, use of public health facility, and use of private health facility. On the other hand, Folk/Traditional medicine option could be the use of herbal medication, or consultation with traditional religion priest/fortune teller. However, rural dwellers in many African countries practice and believe in the efficacy of herbal medicine [9].

Findings from this study would provide information about rural inhabitants' illness behaviour in Enugu state, and other states in the Southeastern geopolitical zone of Nigeria, that share the same socio-cultural characteristics. The findings could be used in planning intervention that would address the identified gaps.

The main objective of the study was to assess the common illness behaviour pattern, and preferred treatment options among inhabitants of a rural community in Enugu state, Nigeria. Specifically, the study looked at the effect of socio-demographic variables on their illness behaviour pattern, and preferred treatment options.

METHODOLOGY

Study Area

This study was conducted during a medical outreach project organized by medical students of Enugu State University College of Medicine, on May 9, 2019. The respondents were members of Opi community, in Nsukka Local Government Area of Enugu state; who were the beneficiaries of the medical outreach project. The outreach was held in the premises of the local Catholic Church.

Opi town is made up of three autonomous communities, with most of the inhabitants being farmers or traders [10,11]. The population as at 2018 was about eleven thousand, two hundred and thirty seven (11,237) [12]. The town has a Primary Health Centre, where many of the inhabitants access health care.

Study Design

The study design employed, was descriptive, cross sectional study.

Study Population

The study was conducted among adult inhabitants of Opi town, that presented themselves for medical outreach project on May 9, 2019. All adults that came for the outreach project, and freely gave their consent; were enlisted as respondents. At the end of the exercise, two hundred and forty three (243) respondents were interviewed.

Study Instrument

Interviewer-administered questionnaire was used. The questionnaire had just two sections made of socio-demographic variables; and five questions on pattern of illness behaviour and preferred treatment options.

Data Collection Method

Exit interview was conducted for all the adult patients that were strong enough to comprehend, and respond to questions. Final year medical students that were trained for that purpose, interviewed the respondents, and completed the questionnaire as the patients were leaving the drug collection section. Two hundred and forty three (243) respondents were interviewed.

RESULTS

Socio-Demographic Characteristics

Majority of the patients were aged between 20 to 79 years (94.2%), with respondents aged 40 to 59 years being the highest number (36.6%). Female respondents were 76.5%, while male respondents were 23.5%. All the respondents belong to Igbo tribe in Nigeria, and were Christians, while 70% were married. Those with primary level education were 38.7%, and more than any other group. No formal education group were 23.0%, while 20.0% had secondary level education. Only 18.1% had tertiary education. Farming was the occupation

with the highest number of respondents (37.7%), among the other occupations. It was followed by those that identified as "Business men/women" (20.6%), which were people who trade on a reasonable scale in various commodities, or perform contract job.

Table 1: Socio-demographic characteristics

Variable	N (243)	% (100)
Age (At Last Birthday)		
< 19	6	2.5
20 – 39	61	25.1
40 – 59	89	36.6
60 – 79	79	32.5
80 and above	8	3.3
Sex		
Female	186	76.5
Male	57	23.5
Tribe		
Igbo	243	100.0
Yoruba	0	0.0
Hausa	0	0.0
Marital Status		
Married	170	70.0
Single	40	16.5
Divorced/Separated	1	0.4
Widowed	32	13.2
Religion		
Christian	243	100.0
Muslim	0	0.0
Traditional Religion	0	0.0
Educational Status		
No formal education	56	23.0
Primary level	94	38.7
Secondary level	49	20.2
Tertiary level	44	18.1
Occupation		
Farmer	92	37.9
Teacher	31	12.8
Student	18	7.4
Businessman/woman	50	20.6

Petty Trader	27	11.1
Civil Servant	2	0.8
Artisan	5	2.1
Retiree	8	3.3
Nothing/Unemployed	3	1.2
Apprentice	2	0.8
Shoemaker	1	0.4
Seamstress	1	0.4
Welder	1	0.4
Entertainer	1	0.4
Driver	1	0.4

Respondents' Usual First Reaction When One Discovers that He/She, or Loved Ones are Ill

All the age groups were consistent in most people seeking medical care, as first reaction to illness. Overall, 68.3% of the respondents would seek medical care as first reaction to illness, 21.8% would pray for divine healing, 7.0% would observe the illness for some time before going for treatment, while 2.9% would first worry about medical bill, before taking any step. None of the respondents would first seek someone else's advice before doing anything.

More females (24.7%), than males (12.3%) would first pray for divine healing before seeking for medical care. However, slightly higher percentage of males (71.9%) than females (67.2%), would seek medical care first. Slightly more percentage of males (3.5%) than females (2.7%) would worry about medical bill first; while more percentage of males (12.3%) than females (5.4%), would observe the illness for some time, before going for treatment.

More percentage of widowed respondents (31.3%) would first pray for divine healing before seeking medical care. They were followed by married respondents (21.8%), and single respondents (15.0%). Most of the respondents were married (70%), and up to 68.8% of them would first seek medical care, 5.9% would first observe the illness for sometime before going for treatment, and 3.5% would first worry about medical bill. Among the 16.5% of respondents that were single, 75.0% of them would first seek medical care, while 7.5% would observe the illness for sometimes, before going for treatment. Widowed respondents were 13.2% of the total number of respondents. Among them, 56.3% would first seek medical care, while 12.5% would prefer to first observe the illness for sometimes, before going for treatment. Only one divorced/separated respondent participated in the study.

Highest percentage of respondents with tertiary education (75.0%) would first seek medical care. Those with secondary, and primary level of education had very close scores in this aspect (69.4% and 70.2% respectively. Many of those with no formal education (58.9%), would also first seek medical care. More respondents with primary level education (25.5%), would pray for divine healing first. Next was the group with no formal education (23.2%), then those with secondary level education (18.4%), and finally, those with tertiary level education (15.9%). With respect to observing the illness for sometime before going for treatment, 10.7% of respondents with no formal education chose that option. They were

followed by those with tertiary education (9.1%), those with secondary education (8.2%), and finally those with primary education level (3.2%).

Table 2: Respondents' usual first reaction when one discovers that he/she, or loved ones are ill

Age (At Last Birthday)	Worry about medical bill	Pray for divine healing	Seek medical care	Observe the illness for sometimes before going for treatment	Seek someone else's advice	Total
< 19	0 (0.0%)	2 (33.3%)	3 (50.0%)	1 (16.7%)	0 (0.0%)	6 (100.0%)
20 - 39	1 (1.6%)	10 (16.4%)	47 (77.0%)	3(4.9%)	0 (0.0%)	61 (100.0%)
40 - 59	1 (1.6%)	21 (23.6%)	60 (67.4%)	7 (7.9%)	0 (0.0%)	89 (100.0%)
60 - 79	5 (6.3%)	18 (22.8%)	51 (64.6%)	5 (6.3%)	0 (0.0%)	79 (100.0%)
80 and above	0 (0.0%)	2 (25.0%)	5 (62.5%)	1 (12.5%)	0 (0.0%)	8 (100.0%)
Total	7 (2.9%)	53 (21.8%)	166 (68.3%)	17 (7.0%)	0 (0.0%)	243 (100.0%)
Sex						
Female	5 (2.7%)	46 (24.7%)	125 (67.2%)	10 (5.4%)	0 (0.0%)	186 (100.0%)
Male	2 (3.5%)	7 (12.3%)	41 (71.9%)	7 (12.3%)	0 (0.0%)	57 (100.0%)
Total	7 (2.9%)	53 (21.8%)	166 (68.3%)	17 (7.0%)	0 (0.0%)	243 (100.0%)
Marital status						
Married	6 (3.5%)	37 (21.8%)	117 (68.8%)	10 (5.9%)	0 (0.0%)	170 (100.0%)
Single	1 (0.42.5%)	6 (15.0%)	30 (75.0%)	3(7.5%)	0 (0.0%)	40 (100.0%)
Divorced/ Separated	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Widowed	0 (0.0%)	10 (31.3%)	18 (56.3%)	4 (12.5%)	0 (0.0%)	32 (100.0%)
Total	7 (2.9%)	53 (21.8%)	166 (68.3%)	17 (7.0%)	0 (0.0%)	243 (100.0%)
Educational level						

No formal education	4 (7.1%)	13 (23.2%)	33 (58.9%)	6 (10.7%)	0 (0.0%)	56 (100.0%)
Primary level	1 (1.1%)	24 (25.5%)	66 (70.2%)	3(3.2%)	0 (0.0%)	94 (100.0%)
Secondary level	2 (4.1%)	9 (18.4%)	34 (69.4%)	4 (8.2%)	0 (0.0%)	49 (100.0%)
Tertiary level	0 (0.0%)	7 (15.9%)	33 (75.0%)	4 (9.1%)	0 (0.0%)	44 (100.0%)
Total	7 (2.9%)	53 (21.8%)	166 (68.3%)	17 (7.0%)	0 (0.0%)	243 (100.0%)

Usual Place for Medical Care

Respondents aged 19 years and below, that participated in the study were only 2.5% of the total number of respondents, while those aged 80 years and above were only 3.3%. More than half of respondents aged 20 to 39 years (52.5%) sought medical care from the Patent Medical vendour, while 44.9% of those aged 40 to 59 years, and 44.3% of those aged 60 to 79 years did the same. With respect to using public health facilities, respondents aged 40 to 59 years recorded 30.3%, closely followed by those aged 60 to 79 years (29.1%), and 26.2% for those aged 20 to 39 years. Recorded usage of private health facilities was also somewhat similar, with those aged 60 to 79 years recording 25.3%, those aged 40 to 59 years recorded 22.5%, and those aged 20 to 39 years recorded 21.3%. Only one respondent aged 60 to 79 years agreed to seeking medical care at traditional medicine healer's place, while only two respondents aged 40 to 59 years agreed to visiting prayer house for treatment.

Almost equal percentage of males and females reported using patent medicine vendour as preferred treatment option when ill (47.4% and 47.3% respectively). Slightly higher percentage of females (30.1%), than males (24.6%) prefer public health facilities when ill. However, slightly more percentage of males (24.6%) than females (22.0%) prefer using private health facilities. One male and one female prefer prayer house, while only one male make use of traditional medicine healer. About half of the respondents who are single (52.5%) usually go to patent medicine vendour for treatment, while 48.2% of married respondents do same. Fewer percentage of widows (34.4%) go to patent medicine vendours. The two respondents that go to prayer house are married.

Half (50.0%) of the respondents with primary level education usually seek medical care at the patent medicine vendour's place, while as high as 61.2% of those with secondary level education do same. Fewer number of those with no formal education (39.3%), and tertiary level education (36.4%) make use of patent medicine vendour, when compared to those with primary and secondary level education. The next preferred choice was public health facility for 37.5% of those with no formal education, and 26.6% of those with primary education. Fewer secondary school level respondents (16.3%), and 34.4% tertiary education level respondents use patent medicine vendours. The highest percentage of those that made use of private health facility were those with tertiary level education (27.3%), followed by secondary level (22.4%) and primary level (22.3%); and finally, respondents with no formal education (19.6%). Only one person with no formal education made use of traditional medicine healer, while another person with no formal education made use of prayer house.

Table 3: Usual place for medical care

Age (At Last Birthday)	Public Health Facility	Private Health Facility	Patent and proprietary Medicine Vendor	Traditional Medicine Healer	Prayer House	Total
< 19	0 (0.0%)	2 (33.3%)	4 (66.7%)	0 (0.0%)	0 (0.0%)	6 (100.0%)
20 - 39	16 (26.2%)	13 (21.3%)	32 (52.5%)	0 (0.0%)	0 (0.0%)	61 (100.0%)
40 - 59	27 (30.3%)	20 (22.5%)	40 (44.9%)	0 (0.0%)	2 (2.2%)	89 (100.0%)
60 - 79	23 (29.1%)	20 (25.3%)	35 (44.3%)	1 (1.3%)	0 (0.0%)	79 (100.0%)
80 and above	4 (50.0%)	0 (0.0%)	4 (50.0%)	0 (0.0%)	0 (0.0%)	8 (100.0%)
Total	70 (28.8%)	55 (22.6%)	115 (47.3%)	1 (0.4%)	2 (0.8%)	243 (100.0%)
Sex						
Female	56 (30.1%)	41 (22.0%)	88 (47.3%)	0 (0.0%)	1 (0.5%)	186 (100.0%)
Male	14 (24.6%)	14 (24.6%)	27 (47.4%)	1 (1.8%)	1 (1.8%)	57 (100.0%)
Total	70 (28.8%)	55 (22.6%)	115 (47.3%)	1 (0.4%)	2 (0.8%)	243 (100.0%)
Marital status						
Married	53 (31.2%)	32 (18.8%)	82 (48.2%)	1 (0.6%)	2 (1.2%)	170 (100.0%)
Single	8 (20.0%)	11 (27.5%)	21 (52.5%)	0 (0.0%)	0 (0.0%)	40 (100.0%)
Divorced/Separated	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Widowed	9 (28.1%)	12 (37.5%)	11 (34.4%)	0 (0.0%)	0 (0.0%)	32 (100.0%)
Total	70 (28.8%)	55 (22.6%)	115 (47.3%)	1 (0.4%)	2 (0.8%)	243 (100.0%)
Educational level						
No formal education	21 (37.5%)	11 (19.6%)	22 (39.3%)	1 (1.8%)	1 (1.8%)	56 (100.0%)
Primary level	25 (26.6%)	21 (22.3%)	47 (50.0%)	0 (0.0%)	1 (1.1%)	94 (100.0%)
Secondary level	8 (16.3%)	11 (22.4%)	30 (61.2%)	0 (0.0%)	0 (0.0%)	49 (100.0%)
Tertiary level	16 (34.4%)	12 (27.3%)	16 (36.4%)	0 (0.0%)	0 (0.0%)	44 (100.0%)

Total	70 (28.8%)	55 (22.6%)	115 (47.3%)	1 (0.4%)	2 (0.8%)	243 (100.0%)

Payment of Medical Bills without Difficulty

Overall, 45.7% of respondents always paid their medical bills without stress, 42.8% sometimes paid their medical bills without difficulty, while 11.5% never paid their medical bills without difficulty. Among respondents aged 20 – 39, 40 – 59, and 60 – 79 years, there was no much difference in percentage of those that always paid their medical bills without difficulty. Respectively, they recorded 44.3%, 44.9%. and 45.6%. With respect to sometimes paying medical bills without difficulty, they recorded 45.9% for 20 – 39 years age group, 43.8% for 40 – 59 years age group, and 39.2% for 60 – 79 years age group. Those aged 60 – 79 years scored highest in the aspect of never paying medical bill without difficulty (15.2%). They were followed by those aged 40 – 59 years (11.2%), and finally, those aged 20 – 39 years (9.8%).

Highest percentage of males (49.1%) reported that they always paid their medical bills without difficulty, while females reported 44.6%. Also, more percentage of males (14.0%), never paid their medical bills without difficulty, when compared to female (10.8%). More females (44.6%) sometimes paid their medical bills without difficulty, when compared to males (36.8%). With respect to marital status, only one respondent was divorced or separated. More widowed respondents (46.9%) reported that they always paid their medical bill without difficulty, while 45.9% and 42.2% of those that were married and single, respectively reported same. More of those that were single (47.5%) reported that they sometimes paid their medical bills without difficulty, while 43.5% and 34.4% of those that were married and widowed, respectively did same. With respect to "never paying medical bills without difficulty", highest percentage of respondents that were widowed (18.8%) never paid their medical bills without difficulty, when compared to other groups. Fewer married respondents (10.6%), and single ones (10.0%) also never paid their medical bills without difficulty.

The ability of respondents to always pay their medical bill without stress, appears to have increased with increasing educational level; with those with no formal education recording the least (37.5%), followed by those with primary level education (44.7%), secondary level education (46.9%), and finally those with tertiary level education (56.8%).

Table 4: Payment of medical bills without difficulty

Age (At Last Birthday)	Always	Sometimes	Never	Total
< 19	3 (50.0%)	3 (50.0%)	0 (0.0%)	6 (100.0%)
20 - 39	27 (44.3%)	28 (45.9%)	6 (9.8%)	61 (100.0%)
40 - 59	40 (44.9%)	39 (43.8%)	10 (11.2%)	89 (100.0%)
60 - 79	36 (45.6%)	31 (39.2%)	12 (15.2%)	79 (100.0%)
80 and above	5 (62.5%)	3 (37.5%)	0 (0.0%)	8 (100.0%)
Total	111 (45.7%)	104 (42.8%)	28 (11.5%)	243 (100.0%)
Sex				

Female	83 (44.6%)	83 (44.6%)	20 (10.8%)	186 (100.0%)
Male	28 (49.1%)	21 (36.8%)	8 (14.0%)	57 (100.0%)
Total	111 (45.7%)	104 (42.8%)	28 (11.5%)	243 (100.0%)
Marital status				
Married	78 (45.9%)	74 (43.5%)	18 (10.6%)	170 (100.0%)
Single	17 (42.5%)	19 (47.5%)	4 (10.0%)	40 (100.0%)
Divorced/Separated	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Widowed	15 (46.9%)	11 (34.4%)	6 (18.8%)	32 (100.0%)
Total	111 (45.7%)	104 (42.8%)	28 (11.5%)	243 (100.0%)
Educational level				
No formal education	21 (37.5%)	27 (48.2%)	8 (14.3%)	56 (100.0%)
Primary level	42 (44.7%)	37 (39.4%)	15 (16.0%)	94 (100.0%)
Secondary level	23 (46.9%)	22 (44.9%)	4 (8.2%)	49 (100.0%)
Tertiary level	25 (56.8%)	18 (40.9%)	1 (2.3%)	44 (100.0%)
Total	111 (45.7%)	104 (42.8%)	28 (11.5%)	243 (100.0%)

Help Seeking before Paying for Medical Bills

Many respondents aged 60 – 79 years (38.0%) always sought for help before paying for medical bills. They were followed by those aged 40 – 59 years (29.2%), and finally those aged 20 – 39 years (18.0%). Slightly more percentage of females (29.6%), than males (28.1%) reported that they always sought for help before paying for their medical bills. More percentage of females (46.8%) also said that they sometimes sought for help before paying for medical bills, as against 43.9% of males that gave the same response. However, higher percentage of males (28.1%) reported that they never sought help, before paying their medical bill, as against 23.7% of females that gave the same response.

Highest percentage of respondents that are widowed (46.9%) reported that they always sought for help before paying their medical bill, but were the least when it came to "sometimes" sought help (31.3%), and "never" sought help (21.9%). Married respondents were the next highest group to report that they always sought help (27.6%), while 20.0% of those that were single gave the same response. Most married ones reported that they "sometimes" sought help (49.5%), while most single ones reported that they "never" sought help (35.0%).

Table 5: Help seeking before paying for medical bills

Age (At Last Birthday)	Always	Sometimes	Never	Total
< 19	1 (16.7%)	4 (66.7%)	1 (16.7%)	6 (100.0%)
20 - 39	11 (18.0%)	29 (47.5%)	21 (34.4%)	61 (100.0%)
40 - 59	26 (29.2%)	43 (48.3%)	20 (22.5%)	89 (100.0%)
60 - 79	30 (38.0%)	31 (39.2%)	18 (22.8%)	79 (100.0%)

80 and above	3 (37.5%)	5 (62.5%)	0 (0.0%)	8 (100.0%)
Total	71 (29.2%)	112 (46.1%)	60 (24.7%)	243 (100.0%)
Sex				
Female	55 (29.6%)	87 (46.8%)	44 (23.7%)	186 (100.0%)
Male	16 (28.1%)	25 (43.9%)	16 (28.1%)	57 (100.0%)
Total	71 (29.2%)	112 (46.1%)	60 (24.7%)	243 (100.0%)
Marital status				
Married	47 (27.6%)	84 (49.4%)	39 (22.9%)	170 (100.0%)
Single	8 (20.0%)	18 (45.0%)	14 (35.0%)	40 (100.0%)
Divorced/Separated	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Widowed	15 (46.9%)	10 (31.3%)	7 (21.9%)	32 (100.0%)
Total	71 (29.2%)	112 (46.1%)	60 (24.7%)	243 (100.0%)
Educational level				
No formal education	24 (42.9%)	24 (42.9%)	8 (14.3%)	56 (100.0%)
Primary level	25 (26.6%)	45 (47.9%)	24 (25.5%)	94 (100.0%)
Secondary level	14 (28.6%)	21 (42.9%)	14 (28.6%)	49 (100.0%)
Tertiary level	8 (18.2%)	22 (50.0%)	14 (31.8%)	44 (100.0%)
Total	71 (29.2%)	112 (46.1%)	60 (24.7%)	243 (100.0%)

Perception of Orthodox Medical Care, Compared to Traditional Treatment

Very few respondents belonged to the age groups 19 years and below (2.5%), and 80 years and above (3.3%). Most respondents across all the age groups perceived orthodox medical care as being always superior to traditional treatment (65.4%). Disregarding the few aged 80 years and above, those belonging to the age group 40 – 59 years recorded the highest perception of orthodox medicine always being superior (69.7%). Only 3.8% of those aged 60 – 79 years and 1.6% of those aged 20 – 39 years perceived orthodox medical care as not being superior to traditional treatment. Overall, 15.6% perceived orthodox medical care as being occasionally superior, 9.9% were not sure, while 7.0% perceived orthodox medical care as being superior most of the time.

Almost equal percentage of females (65.6%), and males (64.9%) believe that orthodox medical practice is always superior to traditional medical practice. However, more percentage of females (16.7%) believe that orthodox medical practice is only occasionally superior to traditional treatment, when compared to males (12.3%). Very few respondents believe that orthodox medical care is not superior to traditional treatment (3.5% of males, and 1.6% of females).

Disregarding the only one respondent that was divorced/separated, married respondents recorded the highest score of 67.6% among the other marital status groups, for those that believe that orthodox medical care is always superior to traditional treatment. They were followed by those widowed (62.5%), and finally the single respondents (57.5%). With respect to orthodox medical care being occasionally superior to traditional treatment,

22.5% of single respondents held that belief. They were followed by those that were widowed (18.8%), and finally married ones (13.5%). Among the different educational levels, respondents with primary level education scored highest (71.3%) with respect to orthodox medical care always being superior to traditional treatment. Those with tertiary education, secondary education, and no formal education, respectively scored 68.2%, 65.3%, and 53.6%. More of those with no formal education (23.2%) believed that orthodox medical care is only occasionally superior to traditional treatment, when compared to the other groups. They were followed by secondary level education (20.4%), tertiary level education (11.4%), and finally primary level education (10.6%).

Table 6: Perception of Orthodox medical care, compared to Traditional treatment

Age (At Last Birthday)	Always superior to Traditional treatment	Superior to traditional treatment most of the time	Not sure which is superior	Occasionally superior to traditional treatment	Not superior to Traditional treatment	Total
< 19	4 (66.7%)	1 (16.7%)	0 (0.0%)	0 (0.0%)	1 (16.7%)	6 (100.0%)
20 - 39	40 (65.6%)	4 (6.6%)	6 (9.8%)	10 (16.4%)	1 (1.6%)	61 (100.0%)
40 - 59	62 (69.7%)	6 (6.7%)	7 (7.9%)	14 (15.7%)	0 (0.0%)	89 (100.0%)
60 - 79	46 (58.2%)	6 (7.6%)	11 (13.9%)	13 (16.5%)	3 (3.8%)	79 (100.0%)
80 and above	7 (87.5%)	0 (0.0%)	0 (0.0%)	1 (12.5%)	0 (0.0%)	8 (100.0%)
Total	159 (65.4%)	17 (7.0%)	24 (9.9%)	38 (15.6%)	5 (2.1%)	243 (100.0%)
Sex						
Female	122 (65.6%)	14 (7.5%)	16 (8.6%)	31 (16.7%)	3 (1.6%)	186 (100.0%)
Male	37 (64.9%)	3 (5.3%)	8 (14.0%)	7 (12.3%)	2 (3.5%)	57 (100.0%)
Total	159 (65.4%)	17 (7.0%)	24 (9.9%)	38 (15.6%)	5 (2.1%)	243 (100.0%)
Marital status						
Married	115 (67.6%)	12 (7.1%)	18 (10.6%)	23 (13.5%)	2 (1.2%)	170 (100.0%)
Single	23 (57.5%)	3 (7.5%)	3 (7.5%)	9 (22.5%)	2 (5.0%)	40 (100.0%)
Divorced/Separated	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Widowed	20 (62.5%)	2 (6.3%)	3 (9.4%)	6 (18.8%)	1 (3.1%)	32 (100.0%)

Total	159 (65.4%)	17 (7.0%)	24 (9.9%)	38 (15.6%)	5 (2.1%)	243 (100.0%)
Educational level						
No formal education	30 (53.6%)	5 (8.9%)	7 (12.5%)	13 (23.2%)	1 (1.8%)	56 (100.0%)
Primary level	67 (71.3%)	6 (6.4%)	9 (9.6%)	10 (10.6%)	2 (2.1%)	94 (100.0%)
Secondary level	32 (65.3%)	4 (8.2%)	3 (6.1%)	10 (20.4%)	0 (0.0%)	49 (100.0%)
Tertiary level	30 (68.2%)	2 (4.5%)	5 (11.4%)	5 (11.4%)	2 (4.5%)	44 (100.0%)
Total	159 (65.4%)	17 (7.0%)	24 (9.9%)	38 (15.6%)	5 (2.1%)	243 (100.0%)

DISCUSSION

This study was conducted during a rural medical outreach project organized by final year medical students of Enugu State University College of Medicine, on May 9, 2019. There were more respondents aged 40 – 59 years, females, married respondents, respondents with primary level education, and farmers, than respondents in the other similar groups (table 1)

One's first reaction when ill or when loved ones are ill, largely depended on the perception of the illness; which in turn is influenced by the prevailing socio-cultural factors [13]. It is expected that in poor rural communities, with poorly educated and unenlightened population; worrying about the medical bill, praying for divine healing, observing the illness for sometime, or seeking someone else's advice; would have taken precedence over immediately seeking medical care. These were not the predominant findings in this study; rather, majority of the respondents (68.3%) stated that they would seek medical care. It is possible that this finding was as a result of improved education, civilization, and advanced orthodox medical practice; as documented in some previous studies [14,15]. The highest percentage of respondents aged 20 – 59 years, first choosing to seek medical care, could be because they constituted the bulk of active workforce, and hence would be eager to get well and go back to work (Table 2). This view however requires further research work.

Patent and Proprietary Medicine Vendours (PPMVs) are persons who are licensed to retail orthodox pharmaceutical products for profit purposes, though they are not formally trained as pharmacists [16]. In Nigeria, PPMVs are the main source of treatment for common illnesses [17]. This was re-enforced by the finding in this study that the highest percentage of respondents usually sought treatment at the PPMVs shop (47.3%), when compared to other places such as public health facilities (28.8%), and private health facilities (22.6%) (Table 3). However, public health facility was the next most commonly used place for seeking medical care, after the PPMVs; with greater percentage of females using public health facilities than male. This finding is similar to what was found among rural dwellers in Ghana [18]. Some other studies in Nigeria also found that more people opted for public health facilities [19]. This could be because public health facilities are more affordable, when compared to private health facilities.

Contrary to wide held belief that rural dwellers significantly patronize traditional and alternate medicine healers, this study found that only one respondent, who was a male (0.4%) used the services of traditional medicine healers. This is in sharp contrast to finding in Imo state of Nigeria in 2024, where out of four hundred and sixteen (416) respondents, up to 93 (22.3%) patronized traditional medicine healers [20]. In this same Imo state study, up to 8.9% of respondents patronized spiritual houses, while only two persons (0.8%) of respondents in this study did the same. It is possible that there were more spiritual activities and influences in the Imo state studied community, than we had in Opi community of Enugu state. Curiously, educational level of respondents did not have the expected effect on the choice of the usual places where medical care was sought, especially with respect to using public health facilities. One would have expected that people with higher level of education would have opted more for public health facilities. The finding however was that those with no formal education made more use of public health facilities (37.5%), followed by those with tertiary level education (34.4%); then those with primary level education (26.6%), and finally those with secondary level education (16.3%) (Table 3). It is possible that certain other factors peculiar to the Opi community could have contributed to this. This however requires further research work to authenticate.

It has been shown that in sub-Saharan Africa, people find it difficult to pay for, and access health services, as a result of poor financial standing [21,22]. Usually in developing countries, health care financing is done through government funding, health insurance, international donor support, and private health expenditure by the patients [23]. In Nigeria, as high as 66.8% of total health expenditure is financed through private sources; out of which 95.5% is through out-of-pocket (OOP) expenditure [24]. Ease of payment of medical bills, certainly depends on the resources available to the patient. It was found in this study that 45.7% of respondents always paid their medical bills without difficulty, while 42.8% sometimes paid their medical bills with difficulty (Table 4). This is not very different from the finding in a rural area of Ekiti state, Nigeria; where 57.4% of respondents always paid their medical bill without difficulty, while 42.6% sometimes paid their medical bills with difficulty [25]. Level of education appears to have enhanced respondents' ability to pay for medical bills without difficulty. The ability to always pay without difficulty, steadily improved with increasing level of education, with 37.5% of those with no formal education being able to do that, while 56.8% of those with tertiary education were able to always pay without difficulty. For those with primary, and secondary level education, 44.7% and 46.9% respectively were always able to pay without difficulty. Up to 11.5% of respondents were never able to pay medical bills without difficulty. This probably could be a pointer to the level of poverty in the Opi rural community.

The noted considerable stress, that households undergo in sub-Saharan Africa before paying for health care [21,22]; probably manifested in, as high as 29.2% of respondents in this study, who always sought help before paying for medical bill; while 46.1% sometimes sought for assistance before paying for medical bills (Table 5). Widows, when compared to married and single respondents, had the highest percentage of persons that always sought for help before paying for medical bills (46.9%). This is possibly because the loss of a spouse commonly, considerably reduces the income of the surviving spouse [26].

In African countries, most rural dwellers believe in the efficacy of traditional treatment [9], hence one would have expected that most respondents in this study would have perceived orthodox treatment as not being superior to traditional treatment. This

however was not the finding. Many of the respondents in this study perceive orthodox medicine as always being superior to traditional treatment (65.4%), while 15.6% and 7.0% also perceive traditional treatment as being "occasionally", and "most of the time"; respectively superior to traditional treatment. Only a meager 2.1% of the respondents perceived orthodox medical care as not being superior to traditional treatment. Some literature however showed that though most parts of Africa and other developing countries significantly patronize traditional medical care, people in many locations predominantly prefer orthodox medical care because of reasons such as easier physical accessibility, religious beliefs, and perceived high toxicity of herbal medication [27,28]. Some of these reasons could have contributed to high percentage of persons that perceived orthodox medical care, as always being superior to traditional medical care in this study.

CONCLUSION

Some findings in this study are not classical of what is expected in typical rural area in sub-Saharan Africa. In this study, most respondents' first reaction when ill was to seek medical care, majority could always pay for medical bill without difficulty, and only one respondent (0.4%) patronized traditional healers. Noteworthy also is the fact that most respondents perceived orthodox medical care as being superior to traditional treatment. However, as expected, highest percentage of respondents patronized patent and proprietary medicine vendors.

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