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Self-Medication Practice among Student Nurses in Madonna University Elele, Campus Rivers State

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Abstract **Original Research Article**

The study determined the self-medication practice among student nurses in Madonna University Elele Campus. The aim of the study was to ascertain the extent or level of self-medication practice among student nurses in Madonna University Elele, Campus. Descriptive survey method was used and Dorathy Orem's self-care theory adopted. The study population comprises of 166 student nurses. After the distribution of the questionnaire 140 out of 166 student nurses returned their questionnaire. From the result of the study, it was discovered that 100 (71.5%) of the respondents understood self-medication as the use of drugs without medical prescription and supervision, 20(14.3%) of the respondents understood it to be the use of drugs to treat symptoms of illness, 10(7.1%) of the respondents understood self-medication to be use of drugs with regards to knowledge of such drugs, 10(7.1%) of the respondents understood self-medication to be use of medication as prophylaxis to illness, The reason why the respondents self-medicate was that, they considered the disease as being minor. 50(35.7%) of the respondents reported that they self-medicate often, 20(14.3%) rarely, 5(3.5%) never while 65(46.5%) practice self-medication whenever sick. While 20(14.3%) of the respondents claimed not to have experience any side effect. The effect they experienced was described to be life threatening. Finally recommendations were made and one of it is that government through the ministry of health should monitor the activities of patient drug dealers.

Keyword: Self-medication, Practice, Knowledge.

INTRODUCTION

Health is illustrated as physical psychological characteristics of wellbeing. Having the freedom and strength to avoid any of these elements will keep you healthy [1]. Health is an invaluable part of a human life, without it, people can become uninspired, de-motivated and unable to thrive for success. So some individual visit their doctors regularly to make sure they are in good shape, likewise, there are those who purchase insurance coverage so that they can receive the best health care in case if there is a need in future, while some others practice self-prescription/self-medication in other to measure up their health status with others, probably as a result of lack of money to visit hospitals.

Self-medication was defined by world self-medication industry [2] as the treatment of common health problems with medicine especially designed and labeled for use without medical supervision (prescription) and approved as self and effective for such use. It was also defined as a common form of self-care and consists of consuming a producer on one's own initiative, in an attempt to relive perceived symptoms or diseases [3]. Currently, in most homes, a large number of diseases are initially treated with easily obtained medicine in other to relive symptoms and such as headache, cold and muscle aches, among others [4].

Intrinsically, medicines have a symbolic value, which express the desire to modify the natural cause of disease. In this scenario, self-medication emerges from an attempt to mitigate harms to health and it can generate an irrational consumption, as well as consequences such as intoxication and poisoning cases [5]. Medicines for self-medication are often called "Non-Prescription" or "Over the Counter" (OTC) drugs and are available without a doctor's prescription through pharmacies. In some countries, OTC products are also available in supermarkets and other outlets [2].

Throughout the ages, people have sought solutions and answers to medical problems through self-medication that is through treating themselves. Today, as well many are often quick to treat their. Ailments without professional help. In an American

study, it is stipulated that in about 60% of the time this self-treatment involves over the counter medication [6].

The literature suggests that no sector of medical community is immune to the problem of drug abuse of which the worst offenders include nurses, physician, and pharmacist [6].

Empirical inquiries have thus uncovered substantial levels of illegal drug use among practicing nurses. Undoubtedly, nurses are among the health care practitioners with the greatest access to medications, like doctors, they possess an impressive knowledge of prescription of drugs and their uses in the treatment of various ailments [7].

Among health workers, there are factors related to the working environment and condition and access to medication. Nursing workers handle several types of medication in their daily practice and the easy access can favor self-prescriptions and self-medications.

Even having theoretical and practical knowledge about substances and their implications, these professionals are often times trying to rid of uncomfortable situations to better endure their day [8]. The workers who often have more one job, coupled with the complex work performed at hospitals, lead to the conclusion that these professionals might face difficult moment or crisis. Making the consumption of medications, a way to facilitate their lives [9]

In Brazil about 35% of marketed prescriptions or dispended medicines are inappropriately consumed and consequently about 20 thousand people die each year [2].

Although Brazilian studies have investigated the phenomenon of self-medication, the majority describes it among the elderly.

Among the few studies that investigated self-medications among health workers, the author and collaborators are highlighted. These studies identify a 32% prevalence of self-medications nurses, below only that identified for physicians 43%. Articles about the use of benzodiazepine among nursing students and workers were found in nursing publications. However, studies of self-medications among nursing workers were not found [9]; Therefore, this study is aimed to analyze the patterns of self-medication among student nurses in Madonna University Elele, Campus.

The purpose of study is to determine the pattern of self-medication among student nurses in Madonna University Elele Campus.

RESEARCH DESIGN

The research design adopted for this study is descriptive survey.

AREA OF THE STUDY

This research was carried out in Madonna University Elele, Campus, between 2014/2015 academic sessions.

TARGET POPULATION

The target population of the study is the totality of 4001evel and 5001evelstudent's nurses in Madonna University Elele, Campus. The population includes both male and female student nurses, and it consists of 286 student nurses in Madonna University Elele, Campus.

Using Yaro Yamane formula n = $\frac{N}{1+Ne^2}$(n= sample size, N=population size, e=the error. Sampling i.e. 0.05) in obtaining sample size, therefore a sample size of 166 was gotten and used.

Sampling Technique

The sample technique used is the simple random techniques whereby the 41evels were written on a piece of paper and folded, mixed up in a container so that each level will have equal chance of being selected without bias. At the end the two (2) target level were selected.

Instrument for data collection

The instrument that was used for data collection is a validated structured questionnaire, consisting of open and closed ended questions developed by the researcher. It comprises of two sections A and B.

Section A solicited for the respondent's bio-data, section B solicited for information on self-medication.

Validity of the Instrument

The questions were formulated based on research objectives: this is to ensure that its contents relates to the objectives of the study. The questionnaire was submitted for retting to the project supervisor, she made some necessary corrections which effected before distributing to the respondents.

Reliability of the instrument

Test re-test method was adopted in testing the reliability of the instrument. Fifteen copies of the questionnaire were distributed to fifteen (15) student nurses in Imo State University, Owerri with the help of a student from the school, though Imo State University was not part of the study population but shared similar characteristics with the study population.

One week later, the same people were revisited and given the same but fresh copies of the questionnaire to fill. The data collected from the first and second test were correlated using Pearson product moment correlation coefficient which showed high positive

correlation coefficient of 0.8.

METHOD OF DATA COLLECTION

A letter of introduction signed by the project supervisor was presented to the Head of nursing Department Madonna University Elele, Campus to allow the researcher collect information needed for the research work. Data was collected using questionnaire which the researchers administered on each visit, after detailed explanation of what the study entails to the respondents. One hundred and sixty six questionnaires were distributed to the respondents, the distribution and collection lasted for seven (7) days before the sample size was completed.

METHOD OF DATA ANALYSIS

Data collected were tallied and analyzed using frequency distribution, percentages and grand mean. Data were presented using tables.

Ethical Consideration

The study was conducted after obtaining approval from the head of department of nursing science Madonna University Elele, Campus. An informed voluntary consent was obtained from the subjects to be used for the study. The respondent right were respected, anonymity, confidentiality and privacy were equally maintained. Good interpersonal relationship was established with the respondents. The purposes of the study were clearly explained to the respondents with emphasis on voluntary participation, and that the respondents are free to withdraw from the study at any point. The respondents were not being exposed to any harm both physical and psychological.

DATA ANALYSIS

Table-1: Demographic variables of the respondents

Variable	Category	Frequency	Percentage %
Age bracket(in years)	16-20	30	27.1%
	21-25	65	46.4%
	26-30	35	25%
	31 & above	2	1.42%
Gender	Male	14	10%
	Female	126	90%
Year of study	400 level	64	45%
	500 level	76	54.3%

Table 1 above, showed the age group of the respondents 30(27.1%) are of the age 16 - 20, 65(46.4%) are of the age 21 - 25, 35(25%) are of the age 26 - 30, while 2(1.42%) are of the age 31 & above. The same table 1 showed the gender of the respondents, 14(10%) are male, while 126(90%) are female, also from the same table the year of study are 64(45%) are in 400 level while 76(54.3%) are in 500 level.

RESEARCH QUESTION 1

To what extent do student nurses at Madonna university practice self-medication?

Table-2: showing the responses on knowledge about self-medication

What do understand by self-medication?	frequency	Percentage %
Use of drugs to treat symptoms of illness.	20	14.3%
Use of drugs with regard to knowledge of such drugs.	10	7.1%
Use of medication as prophylaxis to illness.	10	7.1%
Use of drugs without medical	100	71.5%
Prescription and supervision?		
Total	140	100%

Table 2 reveals the respondents in relation to their understanding of the term of the self-medication. 20(14.3%) of the respondents understood it to be the use of drugs to treat symptoms of illness, 10(7.1%) of the respondents understood self-medication to be use of drugs with - regards to knowledge of such drugs, 10(7.1%) of the respondents understood self-medication to be use of medication as prophylaxis to illness, also 100(71.4%) of the respondents understood; self-medication as the use of drugs without medical prescription and supervision.

Table-3: Responses on whether the respondents have ever taken any drug without doctor's prescription?

Response	frequency	Percentage %
Yes	140	100%
No	0	0%
Total	140	100%

Table 3 showed that all the respondents 140(100%) have taken drugs without doctor's prescription.

Table-4: Responses on the main reason why respondents take drugs without prescription

Options	frequency	Percentage (%)
Delay in seeing a doctor.	5	3.5%
Disease considered beingminor	50	35.7%
Do not like being called a patient.	5	3.5%
Have knowledge of pharmacology	50	35.7%
Accessibility and availability of drugs	20	14.3%
i Have access to drugs.	5	3.5%
! Total	140	100%

Table 4, above, showed that 5(3.5%) of the respondents practice self-medication because of Delay in seeing a doctor, 50(35.7%) of the respondents were involved in self-medicate as a result Disease considered being minor 5(3.5%) of the respondents practiced self-medication because they don't want to be called a patient, also 50(35.7%) of the respondents practiced self-medication because of they have knowledge of pharmacology, whereas 20(14.3%) practiced self-medicate because of accessibility and availability of drugs, while 5(3.5%) practiced self-medication because they have access to drugs.

Table-5: Responses on how often they practice self-medication

Options	frequency	Percentage (%)
Often	50	35.7%
Rarely	20	14.3%
whenever sick	65	46.5%
Never	5	3.5%
Total	140	100%

Table 5 result showed that most of the respondents 50 (35.7%) practiced self-medication often, while 20(14.3%) practiced self-medication, rarely, Also 65(46.5%) of the respondents practiced self-medication whenever sick, and 5(3.5%) has never practice self-medication.

Research Question 2: What are the patterns of self-medication that nursing students indulge in?

Table-6: Responses on the forms/route of drug administration the respondents have used.

Options	Frequency	Percentage %
Orally	70	50%
Intravenously	20	14.3%
Intramuscular	40	28.5%
Suppository	5	3.5%
Topically	5	3.5%
Total	140	100%

Table 6 shows that 70(50%) of the nursing students self-medicate using oral route, 20(14.3%) intravenously, 40(28.5%) of the respondents practiced self-medication intramuscularly while tropical route 5(3.5%), as well 5(3.5%) of the respondents self-medicate using anal route (suppository).

Table-7: Respondent's pattern of self-medication

Options	frequency	Percentage (%)
Sharing of drugs with other people prescription	20	14%
Buying drugs from chemist.	50	35.7%
Stocking drugs and using drugs as required.	30	21.5%
Re-use of previous prescription to collect more drugs.	30	21.5%
Collect from the school hospital	10	7.1%
Total	140	100%

Table 7 shows that from 20(14.3%) of the respondents share drugs from other people's prescription, 50(36%) of the respondents buys drugs from the chemist shops, 30 (21.5%) of the respondents stock drugs and use them as required, and the same number of the respondents self-medicated from re-use of previous prescription to collect more drugs, while 10 (7.1%) of the respondents collect from the school hospital.

Research Question 3: what are the drugs commonly used without doctor's prescription

Table-8: Respondents commonly used drugs for self-medication

Drugs	Frequency	Percentage (%)
Analgesics	15	11.7%
Antibiotics	20	14.3%
Anti-malaria	50	35.7%
Anti-helminthics	10	7.1%
NSAID	10	7.1%
Anti-pyretic	5	3.5%
Expectorants	10	7.1%
Antacids	5	3.5%
Laxatives	5	3.5%
Anti-histamine	5	3.5%
Others specify	5	3.5%
Total	140	100%

Table 8: Respondents commonly used drugs for self-medication. Table 8 shows the commonest drugs used for self-medication ,analgesic 15(10.7%), antibiotics 20(14.3%), anti- malaria 50 (35.7%), anti-helminthes 10(7.1%), Non-steroidal anti- immflamatory drug(NSA!D) 10(7.1%), and also Expectorant were 10 (7.1%), while anti-pyretic, antacid, laxatives, and histamine drugs were 5 (3.5%) respectively.

Research Question 4: What medical conditions/illness has you practiced self-medication?

Table-9: Responses on the conditions/illness for which self-medication is practiced by the respondent

Disease conditions	Yes (%)	No (%)	Total
malaria	111(79.3%)	29(20.7%)	140
Headache	135(96.4%)	5(3.5%)	140
Diarrhea	90(64.3%)	50(35.7%)	140
Sore throat	113(80.7%)	27(19.3%)	140
Vomiting	128(91.4%)	12(8.6%)	140
Ear problem	72(51.4%)	64(48.6%)	140
Body pain	129(92.1%)	11(7.8%)	140
Abdominal pain	117(83.6%)	23(16.4%)	140
Cough	130(92.8%)	10(7.2%)	140
Catarrh	132(94.3%)	8(5.7%)	140
Skin disease	91(65%)	49(35%)	140
infections	110(78.6%)	30(21.4%)	140
Menstrual pain	138(98.6%)	2(1.4%)	140
Others specify	120(85.7%)	20(14.3%)	140
Total	1616	344	
Average	115.4(82.4%)	24.6(17.6%)	

The above table indicated that the number of respondents that responds to yes to malaria 111(79.3%) and no to malaria 29(20.7%), yes to headache 135(96.4%) no to headache 5(3.5%), yes to diarrhea 90(64.3%) no to diarrhea 50(35.7%), yes to sore throat 113(80.7%) no to sore throat 27(19.3%),yes to vomiting 128(91.4%) no to vomiting 12(8.6%), yes to ear problem 72(51.4%) no to ear problem 68(48.6%), yes to body pain 129(92.1%) no to body pain 11(7.8%), yes to abdominal pain 117(83.6%) no to abdominal pain 23(16.4%), yes to cough 130(92.8%) no to cough 10(7.2%), yes to catarrh 132(94.3%) no to catarrh 8(5.7%), yes to skin disease 91(65%) no to skin disease 49(35%), yes to infections 110(78.6%) and no to infection 30(21.4%), yes to menstrual pain 138(98.6%) no to menstrual pain 2(1.4%), and finally number that respond to yes in others specify 120(85.7%) and no to others specify 20(14.3%).

Research Question 5: Can self-medication result to any danger?

Table-10: Responses on whether there are dangers of self-medication

Response	Frequency Percentage%	
Yes	115	82.1%
NO	25	17.8%
Total	140	100%

The table above showed that 115(82.1%) of the respondents think that there are dangers associated with self-medication, while 25(17.8%) of the respondents claimed that there is no danger associated with self-medication.

Table-11: Respondent's noticeable side effect associated with self-medication

Side effects	Yes (%)	No (%)	Total
Blurred visions	71(61.7%)	44(38.3%)	115
Nausea	92(80%)	23(20%)	115
Resistance	75(65.2%)	40(34.8%)	115
Peptic ulcer	30(26.1%)	85(73.9%)	115
Addiction	40(34.8%)	75(65.2%)	115
Candidiasis	42(36.5%)	73(63.5%)	115
Liver failure	49(42.6%)	66(57.4%)	115
Drowsiness	77(67%)	38(33%)	115
Total	476	444	
Average	59.5(51.7%)	55.5(48.3%)	

The table revealed the effects commonly noticed by the respondents and the number of respondents that indicate yes in blurred visions 71(61.7%) and no to blurred vision 44(38.3%), yes to nausea 92(80%) and no to nausea 23(20%), yes to resistance 75(65.2%) no to resistance 40(34.8%), yes to peptic ulcer 30(26.1%) no to peptic ulcer 85(73.9%), yes to addiction 40(34.8%) no to addiction 75(65.2%), yes to candidasis 42(36.5%) and no to candidiasis 73(63.5%), yes to liver failure 49(42.6%) and no to liver failure 66(57.4%), and finally to drowsiness yes 77(67%) and to no 38(33%).

Table-12: Showing the number of the respondents, who have experienced any of the side effect listed above

Responses	frequency	Percentage %
Yes	110	78.5%
No	30	21.5%
Total	140	100%

The table revealed that 110(78.5%) of the respondents have experienced the above listed side s, while 30(21.5%) of the respondents claimed not to have experienced any side effects.

Table-13: Responses showing the result of the side effect, the respondents experienced

The effect experience	frequency	Percentage %
Simple	50	35.7%
Mild	30	21.5%
Negligible	20	14.3%
Life threatening	10	7.1%
Total	110	100%

The table shove showed that 50(35.7%) of the respondents described their experienced side of self-medication as simple, while 30(21.5%) described it as being mild, also 20(14.3%) described theirs as being negligible while 10(7.1%) of the respondents described the effect they experienced as being life threatening.

DISCUSSION

Research question one sought to find out the extent or level of self-medication among student nurses in Madonna University Elele campus. The table 3 revealed the findings of this study discovered that 100.

(71.4%) of the respondents understood self-medication as the use of drugs medical prescription and supervision, 20(14.3%) of the respondents understood it as the use of drugs to treat symptoms of illness, 10(7.1%) of the respondents saw it as the use of medication as prophylaxis to illness while remaining

10(7.1%) of the respondents understood it to bethe use of drugs with regards to knowledge of such drugs respectively. The findings also showed that 140(100%) of the respondents had taken drugs without doctor's prescription.

From the same table it also details than 50(35.7%) of the respondents self-medicated as a result disease considered being minor, another 50(35.7%) said that they self-medicated because they had knowledge of pharmacology, and 20(14.3%) of the respondents practiced self medicationbecause of availability and accessibility of drugs. These were the major reasons Madonna university student nurses gave for practicing self-medication.

The findings of this study is in line with Auta [4] where the common reasons given by the respondents for engaging in self-medication was as a result of the disease being minor(31.7%) and they had knowledge of pharmacology (23.5%) the same table also showed that the respondents practiced self-medication, 65(46.5%) whenever sick, 50(35.7%) often, 20(14.3%) rarely and 5(3.5%).This is in disagreement with what Chinwe [10] said that they took drugs at intervals.

Furthermore, in the discussion of the findings from research question 2, as was illustrated in table 7 revealed that 70(50%) of the student nurses self-medicate orally, 40(28.5%) of the respondents self-medicated using intra muscular and tropical routes 5(3.5%) as well as 5(3.5%) suppository.

Same question also found out the respondents sources of drugs in self-medication .this study found that 20(14.3%) of the respondents shares drugs from other people's prescription, 50(35.7%) respondents got drugs from the chemist, 30(21.5%) stock drugs and use them as required, likewise those that used previous prescription to collect more drugs and 10(7.1%) of the respondents collect drugs from the school hospital. This is in line with Abay *et al*. [1] which states that the respondents obtained drugs from the pharmacy/ pharmacy shops and from drugs leftover from previous stocks.

In continuation of the discussion of the findings of this study, Research question 3 was used to determine the drugs that are commonly used by the student nurses in Madonna University Elele campus, without prescription the findings from this study discovered that drugs used include analgesics15(10.7%) antimalarial 50(35.7%), antibiotics 20(14.3%), anti-helminthics 10(7.1%), NSA1D10(7.1%),and expectorant were 10(7.1%) while laxatives, anti-pyretic, antacid and antihistamine were 5(3.5%)respectively. This findings is in line with Abdelmonem *et al*. [10] said that 41(33.1%) and 76(43.4%) had used antibiotics and malaria drugs in self-medication practice.

In the same manner, in order to determine the medical condition that made the student nurses indulge in self-medication, research question 4 was ascertained that the medical condition in which the respondents practiced self-medication mostly are malaria 111(79.3%), while headache [135(96.4%), also cough130(92.8%) and catarrh 132(10.7%). in line with the study carried out by latino[9] he noted that malaria (20%) cough (15%) and catarrh (11.5%) respectively were the medical conditions that the respondents normally self-medicate.

In addition to determine the problems associated with the practice Research question 5 was used and the findings of the study showed that in relation to the problems associated with the practice of self-medication as shown in table 11 that 115(82.1%) of the respondents were aware of the danger associated with self-medication practice, while 25(17.8%) of the respondents claimed not to be aware of the dangers associated with self-medication practice. The side effect of self-medication resistance75(65.2%), addiction 40(34.8%), nausea 92(80%), drowsiness 77(67%).This findings is in agreement with the findings of the study done by Chinwe [7] that (82%)were aware of the dangers of self-medication while (18%) were not aware of the drugs reaction (44%) misdiagnose and in appropriate treatment (66%) of exacerbation of existing symptoms while(6%) were aware of such dangers of over dosage or under drug abuse among others, also in question 5 which showedthat 110(78.5%)of the respondents have experience the side effect while30(21.5%)of the respondents said that they have not experience the side effects. 10(7.1%) described the side effect they experience as life threatening, 50(35.7%) described it as simple, 30(21.5%) described it as mild, while 20(14.3%) described the side effect as being negligible.

CONCLUSION

The study discovered that 120(85.7%) of the respondents understood self-medication as the use of the drugs without medical prescription and supervisor, 140(84%) of the respondents had taken without doctor's prescription and believed that these drugs relived them of their ailments. The major reason why they self-medicate was as a result of the disease which 50(35.7%) considered to be minor while the remaining 50(35.7%) of the respondents had knowledge of pharmacology and the availability and accessibility of drugs accounted for 20(14%). The researcher also found out that 50(35.7%) of the respondents self-medicate often, 65(46.5%) self-medicate whenever and 20(14.3%) rarely.

The knowledge of the dangers of self-medication did not affect its practice among the respondents because they considered it as being negligible while most of the respondent considered self-medication as unhealthy practice since they were aware of the dangers and would not advocate its propagation.

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