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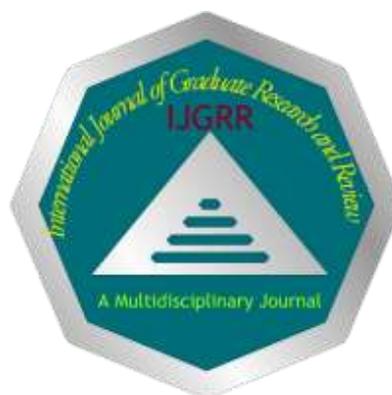
Self-medication among staff nurses in Jinnah hospital Lahore

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Abstract

Self-medication is a growing phenomenon which is repeatedly used of medication without any prescription which a person considers that drug is appropriate for her or his. Sometime these drugs affect appropriately for the time being but later on these cause adverse reactions or affects and sometimes further resistance. Now days, self-medication is a negative social evil which is the central focus of today's health system. Consumer must have appropriate information regarding drug which he or she is going to use. This practice is also very common among staff nurses as well as other health care providers as they though they know much about the treatment and medication **Aim:** study objective is to assess the self-medication practices prevalence, causes, reason and effects. **Design:** A descriptive approach is used to assess the mentioned variables. **Method:** 104 respondents were asked data was used to analyze by using special analyses method, descriptive study design was used to assess the practice of self-medication among staff nurses. Sample size was selected by using a formula. Self-administrative questionnaire was used and analyzed by the SPSS version 16. **Result:** Self-medication fall extra burden on utilization of medication, by cause different health related side effects, and here are number of contributing factors, this phenomenon is very high in the developing countries as people have easy access to the medication and also due to the high illiteracy rate.

Keywords: Self-Medication(SM); Staff Nurses

Introduction

Self-medication is characterized by the definition of utilization of medications by people to treat self-perceived or self-analyzed conditions or side effects. Self-medication is taken for the treatment of self without restorative supervision (Banerjee and Bhadury, 2012). The WHO clarifies that self-medication can bolster dodge and treat sicknesses that don't need restorative discussion and offers a low-valued substitute for treating regular ailments (Donkor *et al.*, 2012). Self-medication expands the odds of unlawful utilization of medications and medication reliance and veils the signs and side effects of fundamental infection, and it consequently makes an issue in diagnosing the illness and builds tranquilize resistance (Banerjee and Bhadury, 2012)

Concentrating on self-prescription uncovers that it is affected by a number of components, for example, instruction, family, society, law, accessibility of medications and introduction to ads, mellow ailment, past

experience of treating comparable sickness, monetary contemplations and an absence of accessibility of medicinal services work force (Osemene and Lamikanra, 2012; Sawalha, 2015).

Solutions for self-medicine are frequently called 'nonprescription' and are accessible without a specialist's remedy through drug stores. Self-pharmaceutical, which is constrained to over the counter (OTC) drugs, may give significant focal points to economies by sparing cash of voyaging and discussion time, thus monetary weight of treatment is decreased (Gutema *et al.*, 2011)

In developing nations, lacking wellbeing administrations along with simple accessibility of assortment of medications are simply the fundamental drivers of expanded extent of self-medication (Banerjee and Bhadury, 2012).

The study, demonstrated that wrong self-medicine brings about wastage of assets, builds protection of pathogens and by and large suggests genuine wellbeing risks, for example,

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unfavorable medication responses, delayed enduring and medication reliance (Banerjee and Bhadury, 2012; Shah *et al.*, 2014).

Shockingly, particularly in developing nations, proficient social insurance is moderately costly and now and again not promptly accessible settling on self-medicine a conspicuous decision of human services benefit. Additionally, it has been seen that numerous medications that must be acquired with solution in developed nations are OTC in developing nations.

Likewise, uncovered that self-drug is the all that is more broadly rehearsed by the young. Different elements are engaged with self-pharmaceutical which are financial elements, way of life, simple accessibility of medications, trust in dealing with specific sicknesses through self-mind, and more prominent accessibility of therapeutic items, socio-statistic, epidemiological, accessibility of human services and wellbeing proficient, law, commercial; abnormal state of training and expert status (Sawalha, 2015).

Investigation of self-medicine rehearse among attendants is essential as they are a fragment of the populace that is taught as they work and live in social insurance offices where drugs are endorsed by specialists and administered by nursing staffs, involvement with time and information about medications for treating different illnesses more often than not, prompt abuse without appropriate prescriptions (Fadare and Tamuno, 2011; Osemene and Lamikanra, 2012).

Basically self-medication started from the commonly used medication that are analgesics with the spread in their spectrum to the anti-biotic no doubt there is a biger reality and restriction upon the use of self-medication but there is still exist the need of education to the whom who use self-well-being drugs as well as drug addicts regarding the advantages as well as disadvantages of the self-used drugs (Osemene and Lamikanra, 2012)

Literature Review

Self-medication can be characterized by the definition of utilization of any medication so as to treat self-analyzed afflictions with no authentic medicinal supervision (Pereira *et al.*, 2012). Self-pharmaceutical practices are regular in developing nations for the reason of comfort, availability, social conventions and saw sparing of time and cash to counsel a doctor (Ali *et al.*, 2010; Shah *et al.*, 2014).

Nonetheless, unseemly utilization may bring about wellbeing perils, for example, drag out torment, unfavorable medication response and increment in antimicrobial resistance (Hussain and Khanum, 2008).

Attendants are defenceless to self-medicine and self-solution by virtue of taking care of and approaching distinctive sorts of medications in their future practices. A

Problem Statement few investigations directed on medical attendants have demonstrated that a sizeable populace of them encounter self-prescription with anti-microbial (Ali *et al.*, 2010; Hussain and Khanum, 2008)

An investigation led in a College Healing center in India detailed anti-infection self-medicine as a regular practice among therapeutic and nursing (Hussain and Khanum, 2008). In spite of the fact that reviews have specified self-solution rehearses in Pakistan among college students however no investigation has been led to comprehensively investigate anti-microbial self-pharmaceutical practices (Goel and Gupta, 2013)

Self-prescription is a continuous practice in numerous age gatherings and in various societies, and is characterized as a man's unconstrained choice and utilization of any solution considered proper to cure their own particular wellbeing problem (Pereira *et al.*, 2012).

This training can cause unseemly antimicrobial protection, unfavorable responses to drugs, medicate cooperation, the danger of veiling transformative illnesses, and increment costs for the wellbeing framework (Mumtaz *et al.*, 2011).

The thought processes in self-solution incorporate related knowledge with the manifestation or sickness, the conviction that one knows about the malady, restricted money related assets to suitable treat a medical issue, absence of time to look for medicinal help, and individual mentality in regards to the ailment. The normal variables related with self-medicine are ladies, higher age gathering, physically dynamic, liquor utilization, and individuals with wellbeing insurance (Al-Hussaini *et al.*, 2014)

Given the epidemiological greatness and negative effect of this training, self-pharmaceutical among Attendants in the territory of social insurance are viewed as a vital general medical issue.

Studies demonstrate that commonness rates run from 38.0% to 97.8%, contingent upon the understudies' nation of root, graduation course, or the reminiscent time of self-prescription (Kumar *et al.*, 2013).

Self-medication is a burring point of research and need great concern. But, now a day this thing is very common in health care professional as they spend to long hours in treating or caring the patient so they feel off in acting like patient or assumes patient behavior and in such scenario these phenomena are very common in nurses as they have knowledge and information regarding medicines. Basically these phenomena have become a norm in nurses that need to be discussed. Complications of self-medication include wrong self-diagnosis, long delays in getting medical care when needed, less common but severe side effects, lethal drug interactions, wrong way of administration, wrong dosage, faulty choice of therapy, masking of a lethal disease

and danger of drug dependence and drug abuse. To there is a growing phenomenon came in to front that there is a big difference between doctor prescription and pharmaceuticals sells. This thing not only common in health care providers like nurses but raising among other public, so, it become need of hour to contradict this otherwise this wave will spread everywhere that will not only put pressure to the emergencies departments but also cost a lot of lives as well.

Objective
The objective of this study is to identify the practices associated with self-medication among nurses.

Research Methodology

Study Design
A descriptive cross-sectional research design will be used for this study to assess the knowledge and attitude towards Self-medication among Nurses in Jinnah Hospital.

Setting
Setting of the study will be conducted in Jinnah hospital Lahore.

Target Population
My target population will be the nurses of Jinnah hospital Lahore, the participants will belong to different socioeconomic levels and different demographical backgrounds, the participants will be male and female.

Sample Size and Sampling Techniques
Data will be collected from the participant through self-administered Questionnaire and the participants will be selected through simple random sampling method, the sample size for this study will be 101 which is calculated from the Slovins formula of sampling which is mentioned here.

If Total number of students 140

If N=Population, n=Sample size, E= Margin of error

$n=N/\{1+ (N)(E)^2\}$

$n=140/1+ (134) (0.05)^2$

$n=140/1+ (134) (0.0025)$

$n=140/1.335$

$n=104$

Research Tool
A self-administered and modified version questionnaire was adopted from the article "Knowledge, Attitude and Practice of Self-Medication among Medical Students Raj Kumar Mehta, Sujata Sharma**"** (Gyawali *et al*., 2015) will be used to collect data from the participants.

Questionnaire consists of three different sections, Section-A is consisting of demographic data which includes Name (optional), Age, sex, institute, department, semester about the participant.

The other Section which is B is Made up of questions related to the assessment of knowledge which have 10 questions, the participants are granted to answer these questions by the help of 5 points Likert scale from strongly agree to strongly disagree (Gyawali *et al*., 2015)

And the end section C includes 10 questions regarding the assessment of attitude and the participants will have to answer the questions according to 5 Likert scale (Gyawali *et al*., 2015)

A pilot study of the questionnaire will be done before floating the questionnaire in the participants.

Data Collection Plan
Data collection plan is one of the main sources to collect data. A self-administered questionnaire will be used to collect data from the study participants. There will be given a free hand to complete it and return it.

Data Analysis
Data analysis will be done by SPSS v23.0. Statistical computer software for data analysis. This is a descriptive study and all the descriptive statistics will be obtained through the SPSS software

Including Criteria
- ✓ Staff Nurse in Jinnah Hospital Lahore
- ✓ Willing to participate
- ✓ Those who understand English

Excluding Criteria
- ✓ Other than Nurses In Jinnah Hospital Lahore
- ✓ Outsiders from Jinnah Hospital Lahore

Time Framework
This study will take approximately 2-3 months.

Informed Consent
Consent will be taken from all the participants and free choice will be offered to the participants to take part in the study or to refuse to participate. Participants will also have the right to mention his/her name or not.

Ethical Consideration
Participant are given enough information about research will be provided to participants with help of full consent and this will be get via a consent form attached to the questionnaire. Confidentiality will consider by informing participants. The right of participants will be protected by Nuremberg Code of Ethics.

Hypotheses
H0.: There is no association between gender and level of attitude.

H1: There is significant association between gender and level of attitude

H0.: There is no association between age group and level of attitude.

H2: There is association between age group or level of attitude.

H0.: There is no association between marital status and level of attitude

H3: There is association between marital status and level of attitude

Results and Discussion

Table. 1 Shows that the sexes characteristics of the responder belong to this study are 10.58% and 89.42% female.

Table. 2 Shows that Out of 104 respondents concerning age, 78.85%were in age group of 20-35 years, 19.23%were in age group of 36-45 years and 1.923% was in age group 46-55 years. The mean age was of 37.8±3.5 years.

Table 3 Shows that respondents belong to this study were 47.12% married and 52.88% single.

Table 4 Shows that respondents related to the nursing diploma qualification are 88.46% and Post RN of 11.54%.

Table 1: Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	11	10.6	10.6	10.6
	Female	93	89.4	89.4	100.0
	Total	104	100.0	100.0	

Table 2: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-35 years	82	78.8	78.8	78.8
	36-45 years	20	19.2	19.2	98.1
	46-55 years	2	1.9	1.9	100.0
	Total	104	100.0	100.0	

Table 3: Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	55	52.9	52.9	52.9
	Married	49	47.1	47.1	100.0
	Total	104	100.0	100.0	

Table 4: Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nursing Diploma	92	88.5	88.5	88.5
	Post RN	12	11.5	11.5	100.0
	Total	104	100.0	100.0	

To assess the attitude towards Self-medication among medical students the criteria was formed positive and negative. Respondent's scored more than thirty and less than thirty fall in the group positive and negative respectively.

Fig. 5 shows that out of 104 respondents' 58.7% respondent's had positive attitude and 41.3% had negative attitude which indicate that majority of respondents had positive attitude towards Self-medication.
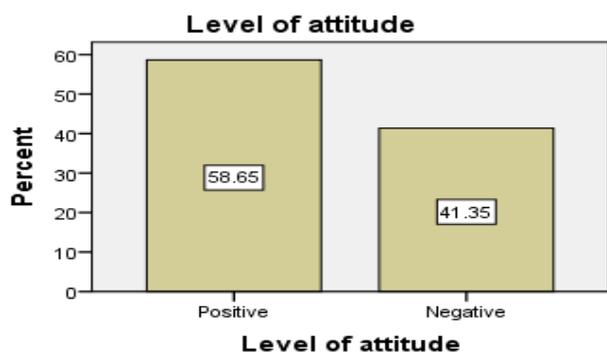

Fig. 5: Level of attitude

Fig. 6 Shows that the respondents are 16(15.4%) strongly disagree with question, 16(15.4%) disagree with question, 23 (22.1%) are unsure, 19 (18.3%) are agree and 30(28.8%) are strongly agree.
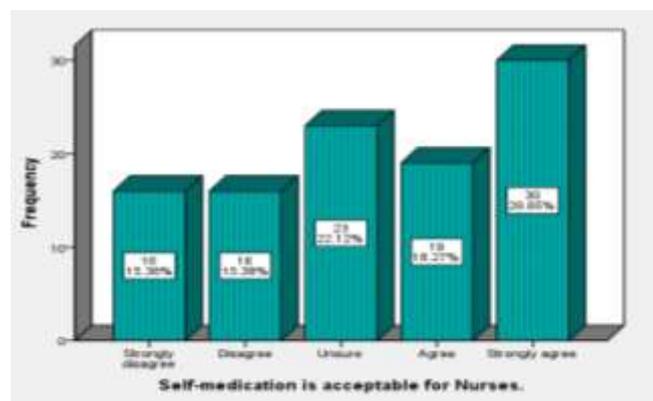

**Fig. 6:** Self-medication is acceptable for nurses
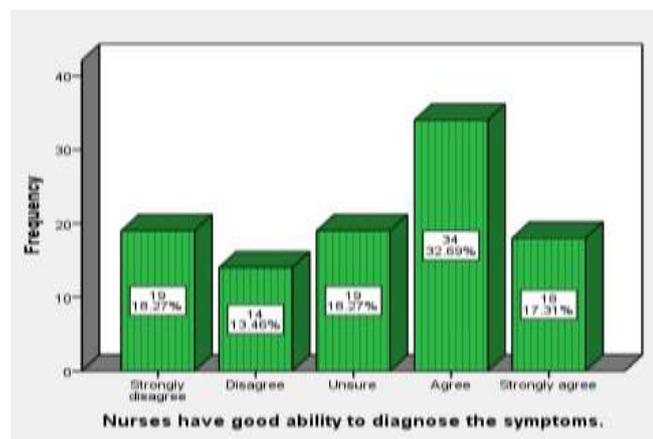
Fig. 7: Nurses have good ability to diagnose the symptoms.

Fig. 7 shows that the respondents Self-medication is acceptable for nurses are 19(18.3%) Strongly disagree with question, 14(13.5%) Disagree with question, 19 (18.3%) are unsure, 34 (32.7%) are agree, 18(17.3%) are strongly agree.

Fig. 8 shows that the respondents are 17(16.3%) Strongly disagree with question, 21(20.2%) Disagree with question, 21 (20.2%) are unsure, 22(21.2%) are agree, 23(22.1%) are strongly agree.
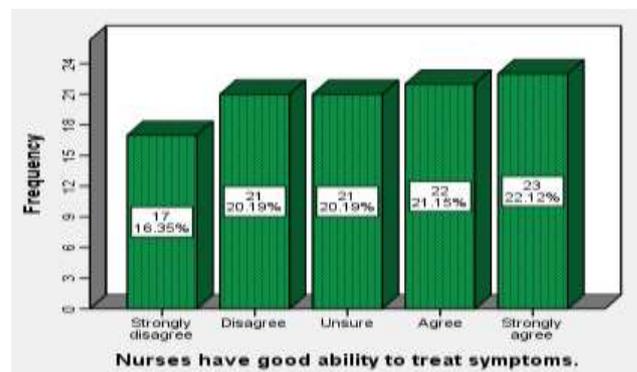

**Fig. 8:** Nurses have good ability to treat symptoms
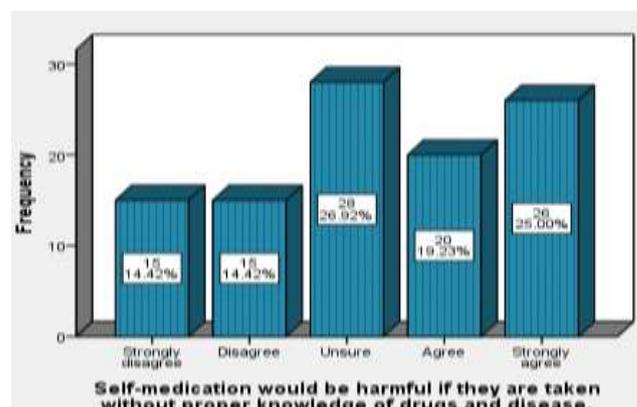
Fig. 9: Self-medication would be harmful if they are taken without proper knowledge of drugs and diseases

Fig. 9 shows that the respondents are 15(14.4%) Strongly disagree with question, 15(14.4%) Disagree with question, 28 (26.9%) are unsure, 20 (19.2%) are agree, 26(25.0%) are strongly agree.
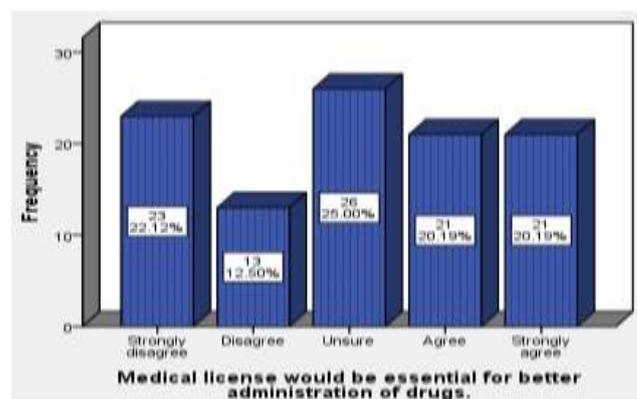

Fig. 10: Medical licence would be essentialfor better administration of drugs

Fig. 10 shows that the respondents are 23(21.1%) Strongly disagree with question, 13(12.5%) Disagree with question, 26 (25.0%) are unsure, 21 (20.2%) are agree, 21(20.2%) are strongly agree**.**

Fig. 11 shows that the respondents are 22(21.2%) Strongly disagree with question, 18(17.3%) Disagree with question, 14(13.5%) are unsure, 21 (20.2%) are agree, 29(27.9%) are strongly agree.
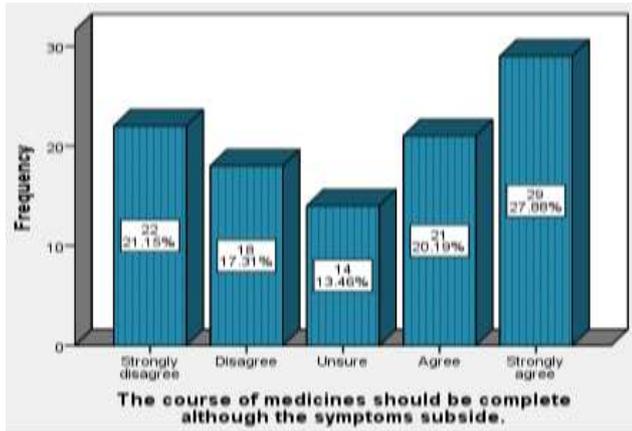

Fig. 11: The course of medicines should be complete although the symptoms subside.

Fig. 12 shows that the respondents are 25(24.0%) Strongly disagree with question, 17(16.3%) Disagree with question, 22 (21.2%) are unsure, 21 (20.2%) are agree, 19(18.3%) are strongly agree.
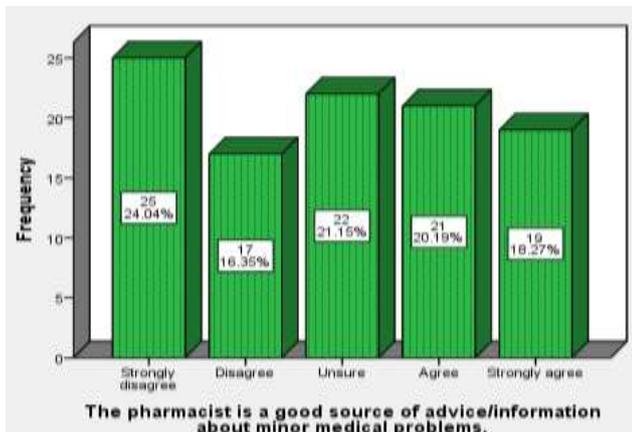

Fig. 12: The pharmacist is a good sourse of advice/information about minor medical problem.

Fig. 13 shows that the respondents are 20(19.2%) Strongly disagree with question, 24(23.1%) Disagree with question, 21 (20.2%) are unsure, 21 (20.2%) are agree, 18(17.3%) are strongly agree.

Fig .14 shows that the respondents are 21(20.2%) Strongly disagree with question, 25(24.0%) Disagree with question, 20 (19.2%) are unsure, 17 (16.3%) are agree, 21(20.2%) are strongly agree.
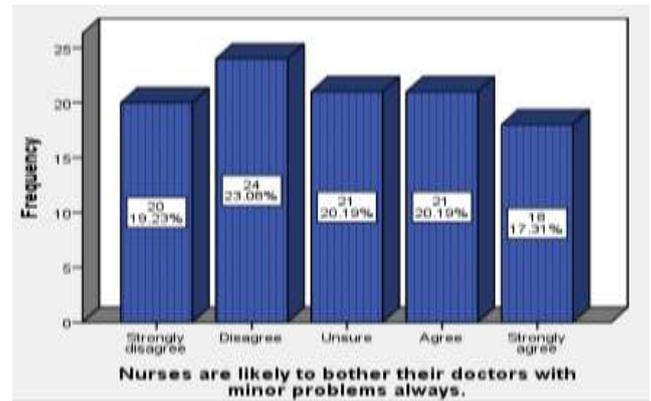
Fig. 13: Nurses are likely to bother their doctors with minor problems always
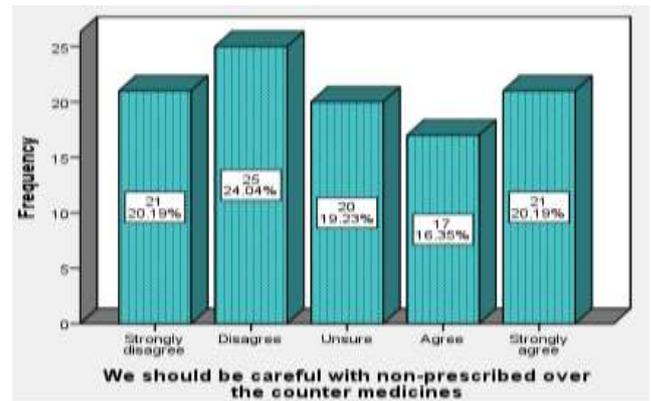
Fig. 14: We should be careful with non-prescribed over the counter medicine.

Fig. 15 shows that the respondents are 18(17.3%) Strongly disagree with question, 20(19.2%) Disagree with question, 23(22.1%) are unsure, 19(18.3%) are agree, 24(23.1%) are strongly agree.
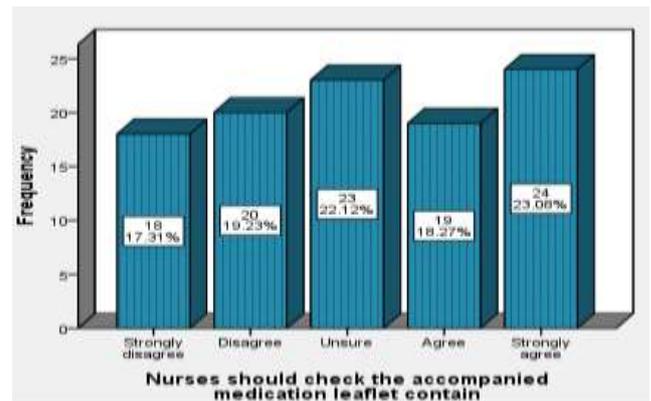
Fig. 15: Nurses should check the accompanied medication leaflet contain.

Tab. 16 Shows that there was no significant difference between level of attitude and gender (p=0.723), which indicates that, level of attitude is equal in male and female

Tab. 17 shows that there was no significant difference between level of attitude and age groups (p=0.797), which indicates that, level of attitude is equal in all age group

Table 16: Comparison of level of attitude among different gender.

| Gender	Level of attitude		Total	p-value
	Positive	Negative		
Male	7	4	11	
	11.5%	9.3%	10.6%	0.723
Female	54	39	93	
	88.5%	90.7%	89.4%	
Total	61	43	104	
	100.0%	100.0%	100.0%	

Table. 17: Comparison of level of attitude among different age groups

Age groups	Level of attitude		Total	p-value
	Positive	Negative		
20-35 years	47	35	82	
	77.0%	81.4%	78.8%	
36-45 years	13	7	20	
	21.3%	16.3%	19.2%	0.793
46-55 years	1	1	2	
	1.6%	2.3%	1.9%	
Total	61	43	104	
	100.0%	100.0%	100.0%	

Tab. 18 shows that there was a significant difference between level of attitude and marital status (p=0.004), which indicates that, level of attitude is more positive among married than single respondents.

Table 18: Comparison of level of attitude among different marital status

Marital status	Level of attitude		Total	p-value
	Positive	Negative		
Single	25	30	55	
	41.0%	69.8%	52.9%	
Married	36	13	49	0.004
	59.0%	30.2%	47.1%	
Total	61	43	104	
	100.0%	100.0%	100.0%	

Tab. 19 shows that there was no significant difference between level of attitude and qualification levels (p=0.204), which indicates that, level of attitude is equal in all qualification levels

Total 19: Comparison of level of attitude among different qualification levels

Qualification	Level of attitude		Total	p-value
	Positive	Negative		
Nursing Diploma	56	36	92	
	91.8%	83.7%	88.5%	
Post RN	5	7	12	0.204
	8.2%	16.3%	11.5%	
Total	61	43	104	
	100.0%	100.0%	100.0%	

Tab. 20 shows that Cronbach's alpha is 0.19, which indicates a medium level of internal consistency for our scale with this specific sample.

Table 20: Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	n of Items
0.19	0.18	10

Table 21: Respondent Attitude Regarding Self-Medication

Statements	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
Self-medication is acceptable for nurses.	16(15.4%)	16(15.4%)	23(22.1%)	19(18.3%)	30(28.8%)
Medical students have good ability to diagnose the symptoms.	19(18.3%)	14(13.5%)	19(18.3%)	34(32.7%)	18(17.3%)
Medical students have good ability to treat the symptoms.	17(16.3%)	21(20.2%)	21(20.2%)	22(21.2%)	23(22.1%)
Self-medication would be harmful If they are taken without proper knowledge of drug and disease.	15(14.4%)	15(14.4%)	28(26.9%)	20(19.2%)	26(25.0%)
Medical license would be essential for better administration of drugs.	23(22.1%)	13(12.5%)	26(25.0%)	21(20.2%)	21(20.2%)
The course of medicines should be complete although the symptoms subside.	22(21.2%)	18(17.3%)	14(13.5%)	21(20.2%)	29(27.9%)
The pharmacist is a good source of advice /information about minor medical problems.	25(24.0%)	17(16.3%)	22(21.2%)	21(20.2%)	19(18.3%)
Medical student are likely to bother their doctors with minor medical problems always.	20(19.2%)	24(23.1%)	21(20.2%)	21(20.2%)	18(17.3%)
We should be careful with non-prescribed over the counter medicines.	21(20.2%)	25(24.0%)	20(19.2%)	17(16.3%)	21(20.2%)
Medical student should check the accompanied medication leaflet contain.	18(17.3%)	20(19.2%)	23(22.1%)	19(18.3%)	24(23.1%)

The aim of the research is to explore self-medication practices among the staff nurses their corresponding factors or their leading complications as well as such mal practice preventive measures. The study will also determine to what extent such practices are being practicing and which the most using drug like painkillers and antipyretics are. Out of 104 respondents 89.4% females and 10.6% females.78.85% are belong to 20-35 year of age 19.23% are of 36-45 year of age 1.923% of 46-55 year of age . Married difference between respondents 47.12%were married and were unmarried 52.88%. Respondents have different level of attitude 68.65 are of positive attitude and 41.35% have negative attitude toward the variable. Study revealed that Medicines are used to cure the minor ailment or major complication to get relief but if these are to be taken wrong manner cause severe adverse effects and lead to the further complications by self. "Self-medication refers to using drugs that have not been prescribed, recommended or controlled by a licensed healthcare specialist". self-medication is not a safe practice. this have a lot of risk with it like wrong route of administration, adverse reactions, expire medicines administration or especially wrong medicine administration risk to be dependent and abusive also included. (Talevi, 2010). abuse. The most practicing drug medication drug which is to me self-mediated is different type of pain killers as well as antipyretics. Self-medication for the insomnia is also on the top. in this study there is a significant relation between different age group of staff nurses. the reason which came in to front about the self-medication is that nurses have knowledge and information about drugs they thought they can treat themselves so on the behaves of this they start such type of practices and that later on become permanent and with adverse effects as well. This phenomenon is not only common in the nurses but, the other people also conduct this by using their previous experiences, experiments and advise. Nurses conduct this as they only know one side of the medication yes because not every nurse conduct this but those who practice it will be justify by saying they don't know really the other hand of the medicine that are complications, reactions , adverse effects. This mal practice can only be controlled when there will be no access to the medication without prescription. Furthermore, the result of the study will exhibit the percentage of the nurses who are practicing self-medication. Self-medication is a growing phenomenon which is increasing day by day Barros *et al*., 2009. Different researcher explicit that nurses must be made aware regarding self-medication in order toenhance their role in self-medication.

Conclusion

Self-medication not allowed to any health care profession either they are nurses or other. No doubt nurses are the corner stone of drug dispensing to the patient that also include to the main demand of their work .As they get older in their profession and experienced they start thinking that they can treat themselves most analgesics , anti-pyretic and anti-biotic. But, this practice need to be demised from the base the conclusion from this study is that a significant number of nurses practice self-medication. The findings of the study showed that majority of the respondents were practicing self-medication. Source of the drugs is the medical store. Common source of information for self-medication are previous prescription of doctors

Limitations
The study has some limitation with it that is as

- ➢ Time consuming
- ➢ Cost consuming
- ➢ Cultural differences
- ➢ Non cooperative nurses
- ➢ Difficulty in data collection

Recommendation

Health care professionals must accept the fact at the time of need that they are ill and they require treatment like other patients. The beginners in the health department as well as the student nurses must be give information on the start in order to develop an attitude to diminished the self, education phenomena this issue must be give stress in order to fully eradicate.

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