Self-Medication Practices among Health Care Workers at Tertiary Hospital at Puducherry

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Abstract

The purpose of the study was to assess the self- medication practices among healthcare workers in south India famous hospital JIPMER, Puducherry. Study had the aim to assess the self- medication practices among health care workers , to know the common drugs used for self –medication and potential reasons contributing to self-medication practices among health care workers

The population included all staff nurses, pharmacists, radiology technicians, anaesthetists, laboratory technicians, health assistants and social workers who are working at different units of JIPMER Hospital, Puducherry. Proportionate sampling technique was used to select the sample for the present study. Sample consists of 296 health care workers in JIPMER hospital Puducherry. After getting permission from Nursing Research Monitoring Committee (NRMC) and Institute Ethical Committee (IEC), the healthcare workers of JIPMER were contacted to collect data. They were approached after the working hours, explanation about the study has been given to the healthcare workers and written informed consent has been obtained from them. Structured self-report questionnaire has been used to collect data. Each participant approximately took 30 minutes to answer the questionnaire. The findings of the study revealed that 88% of healthcare workers practicing self-medication and 12% were not practicing any form of self-medication. Majority of participant took medications like analgesics 246 (34.7) antipyretic 146 (20.3) antibiotic 78(10.8) antacid 66 (9.7).

Key words: *self-medication, Analgesics, health care worker*

Introduction

"One of the first duties of the physician is to educate the masses when not to take medicines".

-William Osler

Any alteration in health it is called a disease, every individual will experience even a mild infirmity in their life. The most effective method used to cure or prevent diseases will be medications. Medications are a drug or other form of preparations that is used to treat or prevent disease. Medications contribute to millions of untold healthcare success stories ever year- healing, ameliorating pain and symptoms, and sustaining life.

Self-medication(SM) is an issue with serious global implications[1]. Although over the counter drugs are meant for self-medication and are of proven efficacy and safety, improper use or abuse may lead to serious consequences, especially in paediatrics, geriatrics, pregnancy and lactation[2]

The World Health Organization (WHO) also has pointed out that responsible SM can help to prevent and treat ailments that don't require medical consultation and can provide a cheaper alternative for treating common illnesses. However, it is also recognized that responsible SM must be accompanied by appropriate health information[3] The practice of SM must be based on authentic medical information to avoid irrational use of drugs which, in turn can cause wastage of resources, increased resistance of pathogens and can lead to serious health hazards like prolonged sufferings, drug reaction and drug dependence[4].

Developing country like India[12], self-medication is commonly practiced as it is less expensive and due to availability of many drugs without prescription from a registered medical practitioner. The prevalence of self-medication is high all over the world with a rate of 68% in European countries and much higher in the developing countries with up to 59% in Nepal, 76% in India and 92% in Kuwait[5]. A study conducted on 307

health science students in Mekelle University. Moreover there were statistically significant differences between respondents who reported practicing self-medication based on gender, specific field of study and study year[9].

A cross-sectional observational survey was carried out among medical, pharmacy and nursing students of a tertiary care hospital, Pune. Out of 318 health science students, 88.0% were practicing self-medication whereas, 12.0% denied for taking medications on their own

A study conducted to assess the Self-medication patterns among medical students in South India as a sample of 200 students. Of the medical students surveyed, self-medication was reported among 92%. Of the respondents, 33% were unaware of the adverse effects of the medication and 5% had experienced adverse reactions. The majority (64%) of students advised medications to others, more often to family and friends[10].A two-period comparative cross-sectional study conducted to assess the Self-medication practice and factors influencing it among medical and paramedical students concluded that a significant increase was observed in number of students who took complete course of oral antibiotics[11].

Materials and method

Quantitative research approach this cross sectional study was conducted at JIPMER, Puducherry during the year 2017-2018, aimed to assess the self- medication practices and potential reasons contributing to self-medication & common drugs used for self-medication among the health care workers of JIPMER Hospital , Puducherry and to identify the socio demographic and clinical factors associated with the self-medication in health care workers. Inclusion criteria were person who has involved in health care work and aged between 18 to 60years. Health care workers who know to read English were included. Health care workers who are on regular follow-up for any illness were ecxluded from study. Sample size was estimated using the Epi data software for estimating a population with relative precision. The expected proportion of self-medication practice among health care professionals P=0.7(77.6%)[5] (Ali et al) and the sample size was estimated at 5% level of significance and 10% relative precision. The total required sample size was 295.

Propotionate sampling technique was used to select the subjects during data collection period investigator approached the participants with a brief introduction after getting due permission. The instrument used for the present study consisted of two parts which was prepared by researcher for the study consisted of 2 parts.

PART 1 was the proforma to collect the background variables. It includes the background variables of the healthcare workers which includes age, gender, educational qualification, area of work, health care experiences.

PART 2 consists of self –reported questionnaire which seek the information about practice of taking medication among health care workers which was developed by the investigators for research purpose.

Content validity was obtained from the experts from Psychiatric department , medicine department and from faculty of Nursing. Reliability also checked using test retest and split half method. After getting permission from Nursing Research Monitoring Committee (NRMC) and Institute Ethical Committee (IEC), the healthcare workers of JIPMER are contacted to collect data. They were approached after the working hours, and explanations about the study have given to the healthcare workers and written informed consent has been obtained from them. Structured self-report questionnaire have been used to collect data. Each participant approximately took 30 minutes to answer the questionnaire.

Data analysis was done using SPSS21. All statistical analyses carried out at 5% level of significance and p-value <0.05 will be considered as significant

Results

Totally 295 participants participated in the study. The findings reveal that majority of the participants are females 171(58%) and the males are 124(42%). Most of the participants have educational qualification of NURSING 130(44.1) and MBBS 99(33.6).Majority of participants are from clinical area of work 280(95).The mean age of the participants are 30 years.

Table 1: Frequency and percentage distribution of self-medication practice among health care workers n=295

Self-Medication Practice	Frequency (N)	Percentage (%)
YES	260	88
NO	35	12

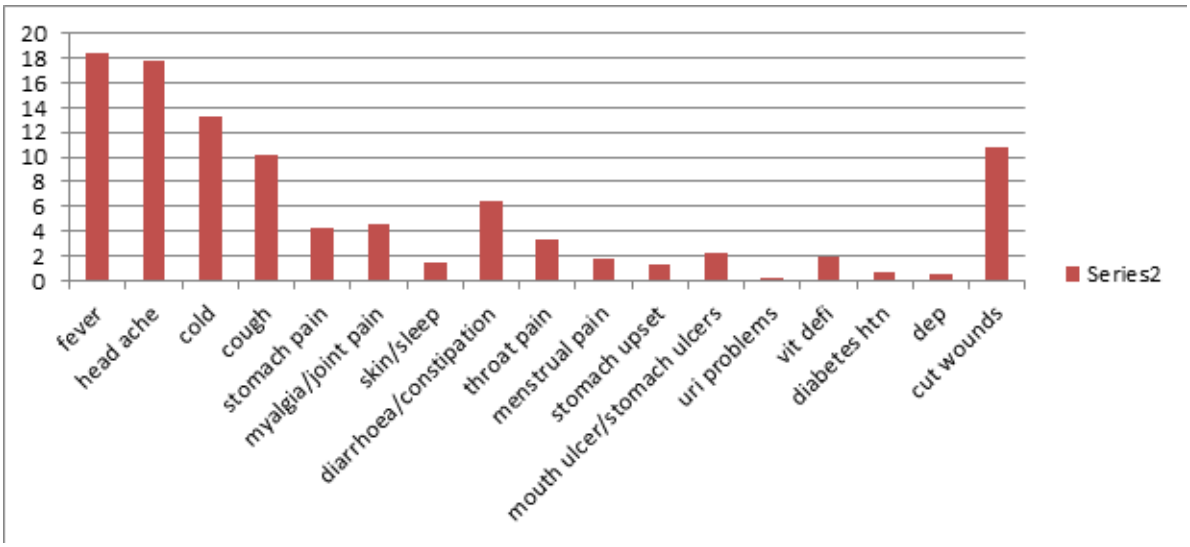

Fig1: Frequency and percentage distribution of the disease for self-medication n=295

Total responses=1255

Table 3: Frequency and percentage distribution of system wise ailments for self-medication practices

n=295

Total response=1246

Ailments	Frequency	Percentage (%)
respiratory ailments	335	27
gastro intestinal ailments	180	14.4
general ailments	691	55.4
Genitourinary ailments	25	2.0
diagnosed ailments	15	1.2

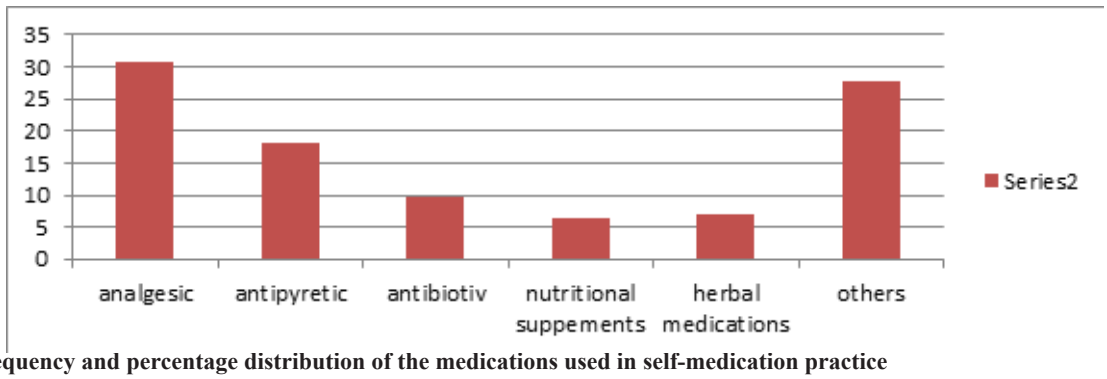

Fig 2:Frequency and percentage distribution of the medications used in self-medication practice

n=296

Total responses=801

Table 3: Frequency and percentage distribution for source of information in self-medication practice

Total response =335

Source of information	Frequency	Percentage (%)
Self-decision	182	54.3
Family members	14	4.1
Media(mass)	16	4.7
Pharmacist	38	11.3
Physician	60	17.9
Herbalist	9	2.6
Paramedical staffs	16	4.7

Above table shows the percentage and frequency distribution of source of information from which the participant have self-medication practice. Majority of participant gather information for self-medication by self-decision 182 (54.3) followed by physician 60 (17.9) pharmacist 38 (11.3)

Table 4: Frequency and percentage distribution for reason of self-medication practices n=295

Total responses=366

Reason For Taking Medication	Frequency	Percentage (%)
High cost for medications	27	7.4
not enough time to go to hospital	44	12.0
Fear of medical check-ups	8	2.9
Lack of trust in doctor	4	1.1
Pharmacist advice	10	2.7
Doctors old prescription	19	5.1
Advice from non-medical colleagues	1	0.2
Long distance to go to hospital	9	2.5
Long wait to see doctors	20	5.5
Advice from medical colleagues	104	28.4
Reluctant to consult for minor ailments	118	32.2
Can't stop medication	2	0.6
High cost for medication prescribed by doctors	27	7.4

Table 5: Association of Demographic variables with reason of self-medication as reluctant to consult doctor for minor ailments. n=295

Demographic variables	Reluctant to consult doctor for minor ailments Yes No		Chi square	P value
Sex Male Female	 77 113	 46 59	0.816	0.665
Educational qualification B pharm /Bsc/DMLT/MLT MBBS Medicine Nursing	 19 32 20 119	 4 67 23 11	109	0.000
Chronic illness Yes No	 21 169	 8 97	0.899	0.343
Area of work Clinical Non clinical	 179 11	 101 4	9.85	0.007

Discussion

A total of 295 healthcare workers were selected for the study using proportionate sampling method. The first objective of the study was to assess the self- medication practices among health care workers. The findings of the study revealed that 88% of healthcare workers practicing self-medication and 12% not practicing self-medication. The study conducted to evaluate and analyse the prevalence of self-medication practice among healthcare professionals in a private university, Malaysia. Among respondents, 77.6% were practicing self-medication supports the current study findings.[5]

The second objective of the study was to assess the common drugs used for self-medication among healthcare workers. The study findings showed that Majority of participant takes medications like analgesics 246 (34.7) antipyretic 146 (20.3) antibiotic 78(10.8) antacid 66 (9.7).This finding was supported by a study conducted at turkey[13] to assess the pattern of self-medication practices and drug use habits of among university students. The most common medicines that the students had consumed without prescription were analgesics by 39.5%, antibiotics by 36.9% and cold remedies by 24.0%.the rate of students who declared that they were familiar with rational use of antibiotics (RUA) was 45.9%[1]. Similar study findings showed that the participants used self-medications mainly for fever, headache, followed by spasmodic abdominal [symptoms11-12]

The third objective of the study was to assess the potential reasons contributing to self-medication practices among health care workers. The study findings showed that majority of participant has reasons of reluctant to consult for minor ailments 118 (32.2) advice from medical colleagues 104 (28.4) not enough time to go to hospital 44 (12) high cost of medication prescribed by doctors 27(7.4) high cost of medications 27 (7.4). A cross sectional study conducted to assess the self-medication practices among medical and pharmacy students at Jordan [17]. Compared to the general population rate of 42.5%, self-medication practice was reported by the students. Reasons for self-medication included previous disease experience (55.7%); minor ailments (55.3%); and having enough medical knowledge (32.1%). Medicines were used according to instructions obtained mainly from the leaflet (28.8%); pharmacist (20.7%); and university courses (19.7%)[9]

The fourth objective of the study was to find any association between the self -medication practices with selected demographic Variables. Areas of work and educational qualification associated with self medication

practice especially reluctant to see doctor. The study conducted about Prevalence of self-medication practices and its associated factors in Urban Puducherry, India results showed that sex, occupation, and age factors were found to be associated with self-medication[12].

Conclusion

On the basis of the findings of the present study it is recommended that similar study can be undertaken in a multi-centre level. A study can be conducted on awareness to the health care workers about self –medications problems and its consequences and importance of consulting doctors instead of taking self-medication

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