



## A Prospective Randomised Study on Prevalence and Awareness of Self Medication of Analgesics among Tertiary Care Hospital

V.Prudhvi\*, R.Sravani, D.Beulah, Ch.Anantha

Department of Pharmacy Practice, A.M Reddy Memorial College of Pharmacy Narasaraopet.

### ABSTRACT

Self-medication is described as obtaining and consuming one (or) more drugs or medications without the advice of physician either diagnosis, prescription (or) surveillance of the treatment. The main aim of research is to estimate the prevalence of self-medication analgesics among hospitalized patients along with causes of illness and symptoms that lead to self-medication. The study was conducted in a tertiary care hospital. A total sample of 226 subjects was investigated by using a self-questionnaire form. Based on findings the prevalence of irrational use of analgesics are about 65% of females (n=144) and 37% of males (n=82). Self-medication was more prevalent among the group above 45 years in which females are in greater use. Self-medication is most commonly used in participants who are having joint pain (51%), muscle pains (29%), head ache (28%), back pain (21%). Among them 21.26% are having confidence on knowledge of medication. During self-medication with analgesics patients stop taking medicine after symptoms disappeared (62.30%), a few days of recovery (13.11%), after completion of course (18.85%), after consulting doctor/pharmacist (4.92%). Overuse of analgesics causes kidney and heart problems. 72.72% does not know causes and uses analgesics frequently. Of the total participants only 43.52% are in aware that pharmacist will explain about medication usage. This research is carried out mainly in the context to raise awareness of the dangers of self-medication of analgesics. There is a need to aware public that pharmacist can explain about drugs, their side effects.

### Key words:

Analgesics, Self-Medication, Unawareness, Prevalence, Pharmacist.

### Article History:

Received On: 29.01.2019

Revised On: 17.02.2020

Accepted On: 20.02.2020

### \*Corresponding Author

Name: V.Prudhvi

Email: vpr965@gmail.com

DOI: <https://doi.org/10.37022/WJCMR.2020.02016>

### INTRODUCTION

Self-medication is an old problem worldwide and is defined as use of the drugs for the treatment of self-diagnosed disorders or symptoms (or) continued use of a drug prescribed by a physician for chronic or recurrent symptoms<sup>5</sup>. Analgesics used most commonly are categorised as OTC drugs<sup>1</sup>. Overuse of these drugs causes side effects and is harmful. The main purpose of the study is to estimate the prevalence of self-medication with analgesics among hospitalised patients and aware the patients about irrational use of analgesics, assessing the causes of illness, symptoms that lead self-medication by self-prepared questionnaire form. Most commonly used analgesics are paracetamol, diclofenac, and acetaminophen. It is necessary for a pharmacist to be fully aware of the classification of OTC products and prescription category drugs. It is necessary to aware that pharmacist serve as the only guide and advisor to the patients which are not prescribed by the doctor.

### METHODOLOGY AND METHODS

#### MATERIALS:

Informed consent form

Patient data self-questionnaire form

The present study was conducted in tertiary care hospital in patient wards of 200-bedded tertiary care centre located in Guntur district of Andhra Pradesh. The present study is a prospective study. It was carried out for a period of 6 months. The data included about the patient demographics, data collected from the patient by interviewing the patient through questionnaire form and from past history. Data collected is documented in a suitably designed data collection form developed for the study. The identified side effects during self-medication of analgesics were noted.

### ETHICAL CONSIDERATIONS

The ethical clearance for the study was approved by the institutional ethical committee.

### INCLUSION CRITERIA

Patients who admitted in hospital of age above 45 years.

Having a history of taking self-prescribed drugs mainly analgesics. Who are willing to participate in the study.

### EXCLUSION CRITERIA

Patients under 20 years, Pregnant, lactating mother. Paediatrics, Patients who are not willing to participate in the study.

### DATA COLLECTION FORM

Data collection form was designed to collect, document and analyse data which included about severity of usage of drugs, knowledge about medication, instructions on package, side effects occurring due to analgesics usage are included.

### SELF MEDICATION OF ANALGESICS DOCUMENTATION FORM

Self-medication questionnaire form included the data containing patient demographics, knowledge about health-related lectures, severity of drugs usage, indications, stopping of usage of drugs and idea about pharmacist.

### QUESTIONNAIRE FOR SELF-MEDICATION WITH MEDICATION

1. NAME
2. AGE

3. SEX

4. Your highest level of education?

- Primary
- Middle
- High
- 12years
- 14years
- 16years
- M.S/M.phil
- Ph.D

5. Are you taking health related lectures?

- No
- yes
  - Physician
  - Pharmacist
  - If others, from whom?.....

6. Are you suffering from any pain?

- Almost
- Less than once a month
- About once a month
- Several times a month but not every week
- At least once a week
- Almost every day

7. Whether taken self-medication or not

- Yes
- No

8. If yes, whether practiced self medication

- Always
- Sometimes
- rarely

9. For what pain you ever worry?

- Head
- Back
- Crosses
- Joints
- Muscles
- Teeth
- Abdominal
- Other, what.....

10. OTC medication for pain(without prescription)can be bought from a pharmacy/medical store on advise of

- Doctor
- Pharmacist
- Known by television, radio, magazine or newspaper
- Other, what?.....

11. If you buy an OTC drug for pain(without a prescription),you get advice about its use from

- Doctor
- Pharmacist
- Read the leaflet
- You ask relatives/friends/acquaintances

12. According to you which of the following were the reasons in favour of self medication?

- No need to visit the doctor for minor illness
- Quick relief
- Time saving

• Confidence on your knowledge about medicines

• Economical

• Ease and convenience

• Learning opportunity

• Crowd avoidance

• If others,.....

any

13. According to you what were the indications for self medication?

- Headache
- Fever, cough, cold, sore throat
- Stomach ache
- Menstrual symptoms
- Vomiting
- Diarrhoea
- Ocular symptoms
- If others,.....

any

14. According to you which of the following drugs were used for self medication

- Analgesics
- Antimicrobials
- Multivitamins
- Antispasmodics
- Decongestants
- Lozenges
- If any others.....

any

15. What was your reason of self-medication with analgesics? (check more than one if applicable)

- Cost saving
- Convenience
- Lack of trust in prescribing doctor
- Others (specify)

16. What did you consider when selecting analgesics? (check more than one if applicable)

- Type of analgesic
- Brand of analgesic
- Price of analgesic
- Indications for use
- Adverse reactions
- Others

.....

17. Did you ever check the instructions that come with the package of analgesics for self-treatment?

- Yes, always
- Yes, sometimes
- Never
- If Never, please go to Question 19

18. How much did you understand the instructions?

- Fully understood
- Partly understood (percentage :.....%)
- Did not understand at all

19. How did you know the dosage of analgesics? (check more than one if applicable)

- By checking the package insert
- By consulting a doctor
- By consulting a pharmacist
- By consulting family members/friends

- From the newspapers, magazines, books, or TV programs
- From the Internet
- From my previous experience
- By guessing the dosage by myself

20. Have you ever found out that you had taken the same analgesics with different names at the same time?

- Yes
- No

21. When did you normally stop taking analgesics? (check more than one if applicable)

- After a few days regardless of the outcome
- After symptoms disappeared
- A few days after the recovery
- After analgesics ran out
- At the completion of the course
- After consulting a doctor/pharmacist
- Others .....

22. Please write down the names of analgesics you have ever taken for SELF-MEDICATION:

A. B. C. D. E.

23. What is (are) the common adverse reaction(s) of analgesics? (check more than one if applicable)

- Nausea
- Vomiting
- Diarrhea
- Rash
- Drug resistance

## RESULTS

### USAGE OF SELF MEDICATION

| NO.OFSUBJECTS | Number | Percentage |
|---------------|--------|------------|
| Female        | 144    | 70%        |
| Male          | 82     | 26.5%      |

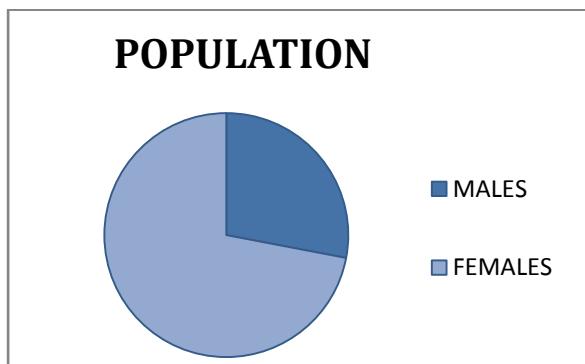
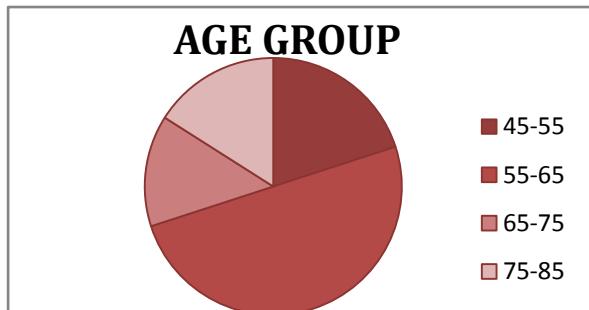
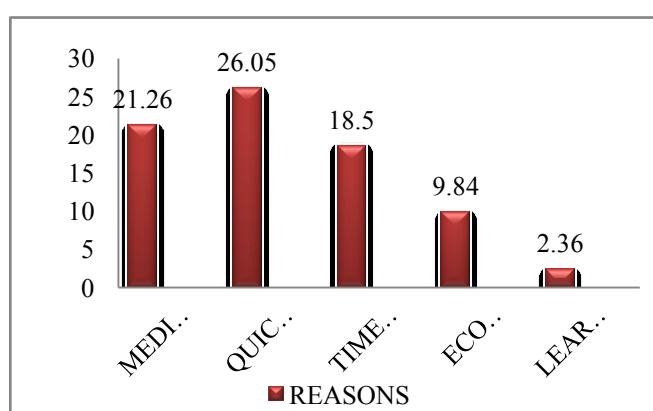
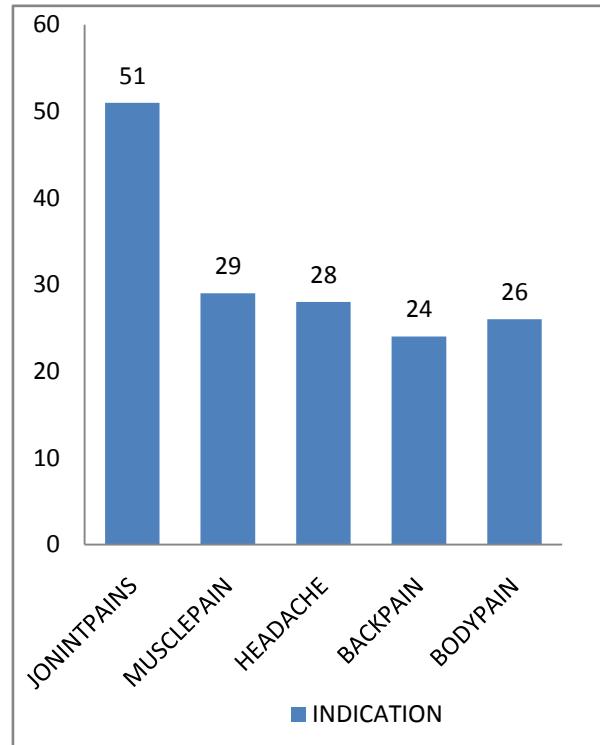


FIG 2: AGE GROUP OF 55-65 ARE IN GREATER USE



### INDICATIONS OF SELF MEDICATION USAGE

| INDICATION  | PERCENTAGE |
|-------------|------------|
| Joint pains | 51%        |
| Muscle pain | 29%        |
| head ache   | 28%        |
| Back pain   | 24%        |
| Body pain   | 21%        |



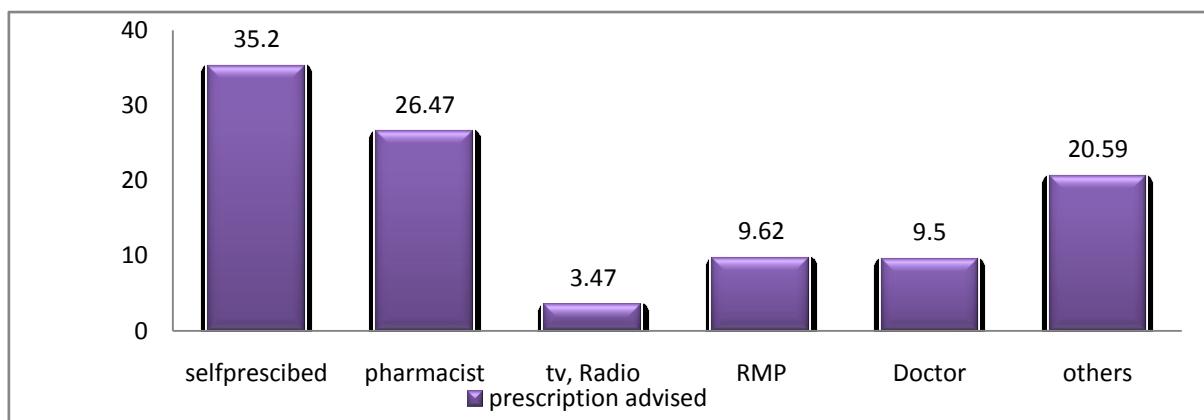


FIGURE 5 PRESCRIPTION USAGE

**USAGE OF DRUGS:**

|                 |        |
|-----------------|--------|
| Analgesics      | 48.29% |
| Decongestants   | 20%    |
| Losenzes        | 12.68% |
| Anti-microbials | 6.83%  |
| Multivitamins   | 8.78%  |
| Antispasmodics  | 3.41%  |

**DISCUSSION**

During this study it was observed that self-medication with analgesics females of age 55-65 are in greater use and because of quick relief, time saving and economic problems. Due to over usage of analgesics causing kidney and heart problems 72.72% are unaware of side effects and uses frequently. At present kidney and heart diseases had increased due to over usage of drugs pain killers .56.48% are not in aware that pharmacists have an idea about explaining of drugs and their side effects .so there is need to aware the people about pharmacist that he is expert in explaining about drugs and their side effects.

**CONCLUSION**

The study reflects a fair picture of the most commonly experienced side effects of self-medication of analgesics. Among the total subjects 48.29% are in greater use of analgesic drugs paracetamol, acetaminophen, diclofenac for joint pains. Among them 72.72% known that over usage causes kidney problems but still uses it .so there should be awareness about causes of irrational use of analgesics and role of pharmacist in health care system.

**ACKNOWLEDGEMENT**

I the investigator of this study want to thank my doctors and staff who supported me during the study and permitting us to carry out our study and cooperation extended by them throughout the study period.

**CONFLICTS OF INTEREST**

We the authors of this study declare that this manuscript has not been submitted to another journal or any other publishing venue .the authors have no affiliation with any organisation with a direct or indirect financial interest in the subject matter discussed in the manuscript.

**REFERENCES:**

- OZKAN OZLEMENTAL -use of analgesics in adults with pain complaints -prevalence and associated

factors -rev saude publica {online} 2009 vol.43 pp140-146.

- saber azami -aghdasg -prevalence and cause of self-medication -2015 dec 44(12): 1580-1593.
- WHO/EDM/QSM/001- guide lines for the regulatory assessment of medicinal products for use in self-medication -2000.
- Mensur shafie -prevalence and determinants of self-medication practice among house-holds.
- C.O omolase -self medication amongst general out patients in a community hospital med .2007 december 5(2): 64- 67 .
- Mamta rani, knowledge, attitude, beliefs and use of over the counter drug products among medicinal graduates vol no6.
- Ruizme et al; -risks of self-medication practices - 2010 oct 5(4).
- Mandauri pramil Tiwari – self medication pattern among elderly patients in north India public hospital 2008(1)(1-26-29).
- subhashini et al: prevalence of self-medication among people attending oral health outreach programmes 21-2017.
- panda a et al: drug related problems associated with self-medication -2016 september.
- fiston et al: self-medication among patients admitted to the emergency department of university vol 25-2013/2.
- secoli Sr et al self-medication practices among elderly people.
- jerez-roig et al : prevalence of self-medication and associated factors in an elderly population 2014.
- mehuys et al -self medication with over the counter analgesics -a survey of patients characterists and concerns about pain medicationfeb 20(2) :215-223.
- francis SA et al -switching of prescription drugs to the over the counter drugs 2005 -22(5)-361-70.
- deborah tolulope esan - assessment of self-medication practices and its associated factors dec 2018 volume.
- kalaiselru Selvaraj prevalence of self-medication practices and its associated factors -jan -march 32-36.
- darshana bennadi -self-medication - a current challenge dec 2013 feb 2014 5(1):19-23.
- poteous t et al how and why are non-prescription analgesics 2005 ,22(1) 78-85.