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

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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 of 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 group above 45 years in which female are in greater use. Self-medication is most commonly used in participants who are having joint pain (51%), muscle pain (29%), headache (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 after 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 aware of about analgesics. This research is carried out mainly in the context to raise awareness of the dangers of medication of analgesics. There is need to aware public that pharmacist can explain about drugs; their side effects.

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.

RANDOMISED STUDY ON PREVALENCE AND AWARENESS OF SELF-MEDICATION OF ANALGESICS

Key words: Analgesics, Self-Medication, Unawareness, Prevalence, Pharmacist.

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. Analgesics used most commonly are categorised as OTC drugs. Over use of these drugs causes side effects and 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 about classification of OTC products and prescription category drugs. It is necessary to aware pharmacist to 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

METHODS:
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 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.

QUESTIONNAIRE FOR SELF-MEDICATION WITH MEDICATION
1. NAME
2. AGE
3. SEX

4. Your highest level of education?
   - Primary
   - Middle
   - High
   - 12 years
   - 14 years
   - 16 years
   - 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 everyday

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 any others,........................................

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 any others,........................................

14. According to you which of the following drugs were used for self medication
    - Analgesics
    - Antimicrobials
    - Multivitamins
    - Antispasmodics
    - Decongestants
    - Lozenges
    - If any others,........................................

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

<table>
<thead>
<tr>
<th>NO.OFSUBJECTS</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>144</td>
<td>70%</td>
</tr>
<tr>
<td>Male</td>
<td>82</td>
<td>26.5%</td>
</tr>
</tbody>
</table>

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

FIG 4 REASONS FOR SELF MEDICATION

<table>
<thead>
<tr>
<th>INDICATION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint pains</td>
<td>51%</td>
</tr>
<tr>
<td>Muscle pain</td>
<td>29%</td>
</tr>
<tr>
<td>Headache</td>
<td>28%</td>
</tr>
<tr>
<td>Back pain</td>
<td>24%</td>
</tr>
<tr>
<td>Body pain</td>
<td>21%</td>
</tr>
</tbody>
</table>

FIGURE 3 INDICATION
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.

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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.

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