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EVALUATION OF OVER THE COUNTER USE OF ANALGESIC DRUGS AMONG CONSTRUCTION WORKERS IN URBAN POPULATION IN TAMILNADU – A QUESTIONNAIRE BASED STUDY

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ABSTRACT:

Background: Over-Usage Of OTC drugs is high in India.. But the awareness of OTC among the construction workers remain far less from satisfactory.

Aims and Objectives: To evaluate the knowledge of over the counter usage of analgesic drugs among construction workers in Chennai.

Materials And Methods: A cross-sectional descriptive questionnaire based study conducted among Construction workers in Chennai-involving 100 workers.

Results: From the results obtained it is observed that the majority of construction workers had a poor knowledge about adverse effects and risks of OTC pain killers. Paracetamol is mostly used by the Construction workers (70%). 92% of workers reported that they had been purchasing medicine from a pharmacy on their own. 94% workers relied

on pharmacist's recommendation. 60% of workers reported that they preferred OTC mainly due lack of monetary reasons.

Conclusion:

Paracetamol is mostly used by the construction workers. A proper statutory drug control must be implemented, rationally restricting the availability of drugs to the public. So that it reduce the incidence of OTC drug-related Adverse effects and help in maintaining good health of the individual and society.

Keywords: Over the counter drugs, Diabetes, Construction workers, Analgesics, Paracetamol

Introduction:

According to WHO, for a product to be an OTC medicine, it should be marketed on prescription for at least 5 years. Time period for change of category from prescription to OTC varies from country to country. Before accepting switch of a given drug into OTC category, it is important to ensure that the drug did not cause serious adverse drug reactions with increasing frequency during the marketing period till then. (1)

In India, the medicines are listed under different schedules in the Drugs and Cosmetics Act and Drugs and Cosmetics Rule. Drugs listed in Schedules H, H1, and X should carry a label stating that these drugs are to be sold by retail only on prescription of a registered medical practitioner. The drugs listed in Schedule G (mostly antihistamines) must carry a mandatory text on the label stating, "Caution: it is dangerous to take this preparation except under medical supervision." (2)

It has to be stressed that in India, the phrase "OTC" has no legal recognition. Here, the term OTC is used for the way drugs are used (self-medication without prescription or allowed to be sold by pharmacists without the prescription of a Registered Medical Practitioner) rather than being a recognized official category of medicines unlike other countries.(3)

Due to uncontrolled use of OTC Analgesic drugs, signs and symptoms of underlying diseases are suppressed leading to incidence of delayed diagnosis, complications, treatment failure and drug resistance are increasing (4), These are major causes of concern worldwide particularly in developing countries where analgesics are often available without a prescription.

A cohort-survey analysis conducted among people indicated higher risk for ulcers compared to non-users of Analgesics and the risk for ulcers increased with the increased use of Analgesics. Bleeding as a result of peptic ulcer is commonly caused by intake of NSAIDs. Forty three percent patients used NSAIDs most frequently for muscles and skeletal pain. Elderly people are more prone to damage and adverse effects caused by OTC NSAIDs due to multiple drug regimen and alterations in the pharmacokinetics of drugs due to their age (5-8).

1.Aim

To evaluate the knowledge of over the counter usage of analgesic drugs among construction workers in Chennai.

2.Study Design and Study Centre A cross-sectional descriptive questionnaire based study conducted with construction workers in Chennai which involved 100 workers, this was started after obtaining prior permission from construction authorities.

2.1 Study Group: Inclusion Criteria:

- 1) Construction Workers of age 20 to 60 years of age were included in this study.
- 2) Construction workers willing to give written informed consent

Exclusion Criteria:

- 1) Construction workers not willing to give written informed consent Study Period: MAY 2022.

3. Methodology A complete enumeration of all the 100 workers as study subjects during the study duration was done. A pre-tested questionnaire was designed and all the subjects were explained regarding the study purpose and the instructions for completing the questionnaire. They were ensured that their identity will not be disclosed.

3.1 Questionnaire

A semi structured questionnaire was framed in English language after getting validation and they were explained in mother tongue. The questionnaire contain fifteen questions were related to knowledge of over the counter usage of analgesics.

USAGE OF OTC ANALGESICS AMONG CONSTRUCTION WORKERS IN CHENNAI						
GENDER	Male	Female				
Age	20-30	30-40	40-50	50-60		
Education	10th	12th	UG	PG		
Family Income		Less than Rs.10000		Rs.10000 to Rs.20000		More than Rs 20000
Are You suffering from any PAIN						
Never		Once a month		Once a week		Every day
HOW WILL YOU APPROCH TO RELIEVE YOUR PAIN?						
ASK YOUR DOCTOR TO PRESCRIBE		BUY YOURSELF AN OTC DRUG		OLD PRESCRIPTION		ALTERNATIVES (AYURVED

						A, SIDDHA)
OTC MEDICATION FOR PAIN CAN BE BOUGHT FROM A MEDICAL STORE ON THE ADVICE OF?						
DOCTOR		Pharmacist		Old Prescription		Known through Television
IF YOU BUY AN OTC DRUGFOR PAIN, YOU GET ADVICE ABOUT ITS USE FROM?						
DOCTOR		PHARMACIST		FROM THE LEAFLET		FRIENDS
WHICH OTC DRUG YOU PREFER TO TREAT PAIN?						
PARACETAMOL		BRUFEN		DICLOFENAC		OTHERS (SPECIFY THE NAME
IF YOU PURCHASE AN OTC FOR PAIN, YOUR PHARMACIST ASK YOU WHAT OTHERDRUG YOU ARE TAKING						
ALWAYS		SOMETIMES		NEVER		
IF YOU PURCHASE A PAIN KILLER WHAT ADVICE WILL BE GIVEN BY PHARMACIST?						
DOSES PER DAY		BEFORE/ AFTER FOOD		ANY ADVERSE EFFECT RELATED TO DRUG		
DID YOU EXPERIENCE ANY ADVERSE EFFECT HB OTC DRUGS?						
NO SIDE EFFECTS)		HAVE VERY FEW SIDE EFFECTS		HAVE SERIOUS SIDE EFFECTS (Jaundice,Hem atemesis		
AWARENESS OF SIDE EFFECTS DUE TO PAIN KILLER COME TO KNOW ABOUT IT THROUGH						
FROM DOCTOR		FROM PHARMACIST		THROUGH TELEVISION		THROUGH INTERNET
WHY DO YOU PREFER OTC INSTEAD OF GOING TO HOSPITAL?						

Distance		Time		Money		
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4.Results:

4.1 Gender:

Male	Female
60	40

4.2 Education:

Education	Number of Workers
Not educated	25
10 th	60
12 th	15
UG	0
PG	0

4.3 Income Data:

Income	Number of workers
More than Rs.20000	3
Rs.10000 to Rs.20000	37
Less than Rs.10000	60

4.4 How will you approach to relieve your pain?

Approach to pain relief	Number of workers
Consult Doctor	8
Pharmacist advise	12
Old Prescription	03
By Yourself	70
Alternatives	07

4.5 Which OTC Drug You Prefer To Treat Pain?

Preferred OTC drug	Number of workers
Paracetamol	70
Brufen	20
Diclofenac	10

4.6 Did You Experience Any Adverse Effect Of OTC Drugs?

Experience	Number of workers
No side effects	70
Very few	27
serious	03

4.7 Why do you prefer OTC Instead of going to Hospital?

Reason	No. Of Workers
Time	18
Money	60
Distance	22

5. Discussion:

The study was conducted in Urban Chennai among 100 construction workers (5). Gender wise 60% were males, while 40% were females. 94% of workers suffered from pain atleast once a month and 6% of workers experienced no pain. headaches and joint pain were the most common sites of pain ,50%and 23% respectively11.when I discussed about pain management, 96% of workers reported that they had been purchasing medicine from the pharmacy on their own and only 4% stated that they visited a physician and bought the prescribed medicine. Regarding the active ingredient in the pain medication, workers preferred medicines containing paracetamol were80% for headaches, followed by brufen(15%) and diclofenac (7%) for joint pain. Paracetamol is widely used as a pain killer for mild to moderate pain of both headaches and joint pain. Its available in 500 mg tablets and its taken upto four times a day. It is well tolerated and has few side effects. At doses higher than 4000 mg per day, it can cause liver damage. Long term use of analgesics is not advisable, if so person may experience serious adverse effects. 70% of workers reported that they had no adverse effects and 27% had very few side effects (GI upset) and only 3% experienced serious side effects requiring hospitalization, Workers reported that they mainly followed pharmacist's advice, and they were given inadequate information about interactions of pain killers with other drugs while purchasing OTC analgesics, pharmacist's recommendation on a particular analgesic influenced 95% of workers , 5% bought on the advice of doctor and, 3% followed their old prescription. Because of tight schedule of workers 80% of workers reported that they preferred OTC mainly because of time (18%), distance (22%) and money (60%).

6. Conclusion:

The objective of this survey was to highlight the various preferences of construction workers in Urban Chennai for an OTC drug along with their knowledge about its safety, contraindications and adverse effects for analgesics in particular. This descriptive survey shows that the majority of Construction workers had a poor knowledge about adverse effects of OTC analgesics and the knowledge of risks was not adequate. For example paracetamol is mostly used by the construction workers on survey. Due to the usage of minimal dose of paracetamol and frequency of pain once a month(70%) they didn't experience any serious side effects. If they had used in high doses they may get liver damage. In our survey, we did not get much information about the intensity of pain, so we can not statistically interpret that how much people suffer from acute and chronic pain. However, we consider that chronic pain was the most problematic pain for the construction workers. Moreover, self study just gives us an idea about the presence or absence of pain, not about its intensity. Thus, to avoid or minimize the dangers of OTC pain killers, firstly the workers should be educated about the dangers of indiscriminate use of analgesic medications. Secondly, the pharmacist must insist on drugs being supplied to them only with a valid prescription. Thirdly, a proper statutory drug control must be implemented, rationally restricting the availability of drugs to the public. These three measures will decrease the incidence of drug-related adverse effects and help in maintaining good health of individuals in the society.

7.Conflicts Of Interest

There is no conflict of interest among the authors

8.References

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