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A QUESTIONNAIRE STUDY ON USAGE OF SELF MEDICATION OF PARACETAMOL AMONG DENTAL UNDERGRADUATE STUDENTS IN A PRIVATE HOSPITAL

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Abstract

Aim: To survey about knowledge, attitude and practice of BDS undergraduate students towards self medication of paracetamol drugs.

Material and methods:

The present questionnaire based study was conducted in private hospital amongst undergraduate dental students. The study sample included a total of 200 students of second, third and final year. All participants were given with a preferred structured questionnaire which included 12 multiple choice questions. The questions were created in a manner to obtain information about types of drugs, frequency, symptoms, choice of analgesic, complication and knowledge on maximum dosage of paracetamol per day. The questionnaires were assessed by online survey (surveyplanet). Data management and statistical analysis were performed.

Result: In this study, we can see that 30% of respondents had reported that availability and 21% saving consultation time as their prime factor that lead for self medication of paracetamol. Moreover they were using it for symptomatic relief of pain. The most commonest drugs used by dental students was analgesics (50%), followed by antibiotics (22.5%), cough (15%) and remedies and antidiarrhoeal drugs (12.5%). In this study, it was found that majority of the dental students consider paracetamol as the choice of drug followed by ibuprofen, diclofenac and other drugs. Among the reasons for the use of analgesic, the most prevalent symptoms were headaches (34%), body pain (24%), fever (22.5%) and stomachaches (17.5%).

Conclusion: The specific sample study on dental students is a good reflection of the general population in terms of behavior. Paracetamol had been the most popular drugs among analgesics category used by the students. The significant reason behind this scenario due to easy availability of paracetamol. The study shows that most of the

students practice self medication of paracetamol. General public and university students should have good knowledge about paracetamol as it can also lead to liver toxicity on chronic use and moreover, Paracetamol is not always appropriate to be used to overcome health problems.

Keywords: Paracetamol, Liver toxicity, Pain, Availability.

Introduction

Self medication refers to consumption of drugs to cure self recognized illness without having prescription from medical practitioner¹. It includes use of drugs which can give both advantages and disadvantages to the individual².Self medication is frequently use in many people around the world³. Self medication behavior might lead to problems of misuse⁴ and Paracetamol is the commonest type of drug which is capable in self poisoning⁵. Paracetamol is one of the drug that is commonly prescribed for mild to moderate pain and pyrexia⁶. Not only patients having bronchial asthma, peptic ulcer diseases,hemophilia but also pregnant or breastfeeding women usually go for paracetamol as they cannot be treated with non-steroidal anti-inflammatory drugs (NSAIDS)⁷. It has a weak anti-inflammatory property but good anti-pyretic property.Eventhough the side effects have rarely occur in individuals but there are some cases reported about side effets of Paracetamol like stomach pain,nausea and skin rashes due to allergic reaction. In addition, overdosage use of paracetamol may lead to problems like liver damage and less renal tubular necrosis⁸. Eventhough side effects can be prevented at times but it may be deadly in the long run leading to various difficulties and pathologies⁹. Awareness programmes related to self medication of paracetamol should be exposed more to students in order to increase their level of attitudes towards self medication practices .

Material and Methods

The present questionnaire based study was conducted in private hospital amongst undergraduate dental students. The study sample included a total of 200 students of second,third and final year. All participants were given a structured questionnaire which has included 12 multiple choice questions. The questions were created in a manner to obtain information about types of drugs , frequency,symptoms, choice of analgesic ,complication and knowledge on maximum dosage of paracetamol per day. The questionnaires were assesed by online survey (surveyplanet). Data management and statistical analysis were performed .

Result and Discussion

More than half of the candidates had chosen 'yes' for the awareness of the antidote of paracetamol, side effects of paracetamol, attitude and reliability towards self medication [**Figure 1**] . In this study, the most commonest drugs

used by dental students was analgesics(50%), followed by antibiotics(22.5%),cough (15%) and remedies and antidiarrhoel drugs(12.5%) [Figure2]. Among the reasons for the use of analgesic, the most prevalent symptoms were headaches (34%),body pain (24%), fever(22.5%) and stomachaches (17.5%) [Figure 3]. In this study,more than half of the respondents had consume analgesics whenever they feel necessary . The other students took analgesics either once in a month, once in two weeks or once in a week [Figure 4].

In this study, it was found that majority of the dental students consider paracetamol as the choice of drug followed by ibuprofen, diclofenac and other drugs [Figure 5].Among factors like emergency use,availability,convenience and convenience, 30% of dental students consider availability, only 26% consider as emergency use, 23% and 21% consider convenience and saving in consultation time [Figure 6]. In case of consideration taken when choosing paracetamol,57% of the candidates consider availability while others consider brand ,price and safety as their main consideration when choosing paracetamol [Figure 7]. According to this study, it can be stated that more than half of the students did not develop complication after self medication of paracetamol [Figure 8]. Approxiamately 45% of the students had chosen the correct answer about the knowledge on maximum dose per day of paracetamol for adult [Figure 9] .

FIGURE 1

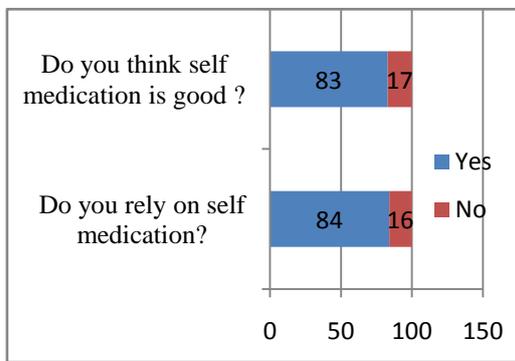


FIGURE 2

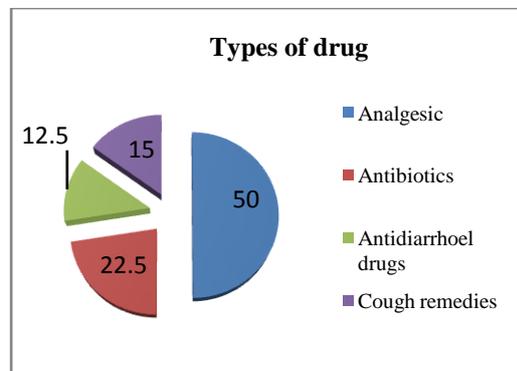


FIGURE 3

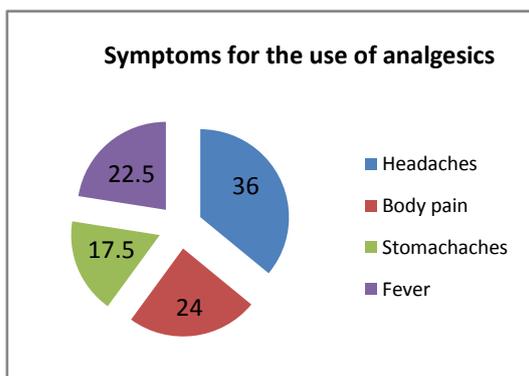


FIGURE 4

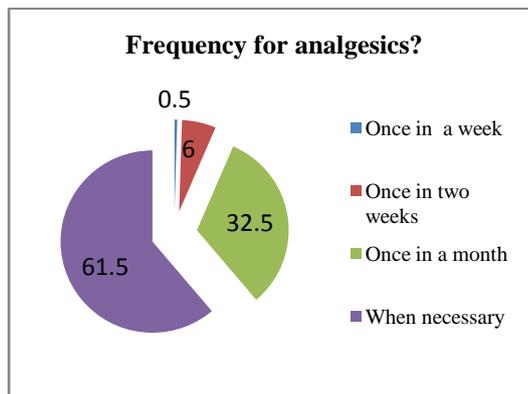


FIGURE 5

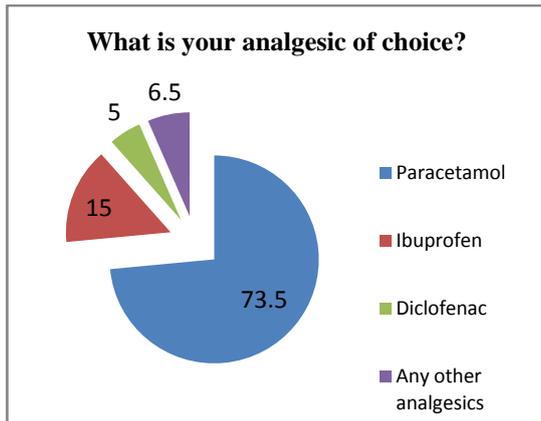


FIGURE 6

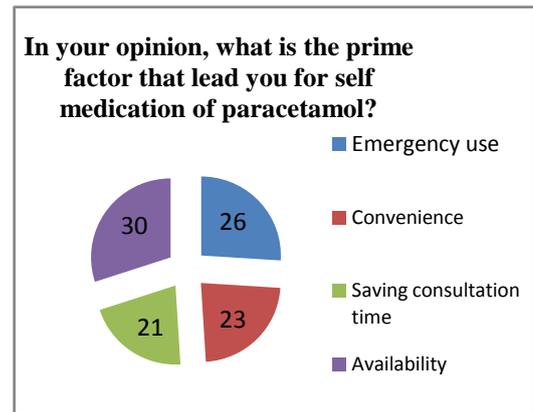


FIGURE 7

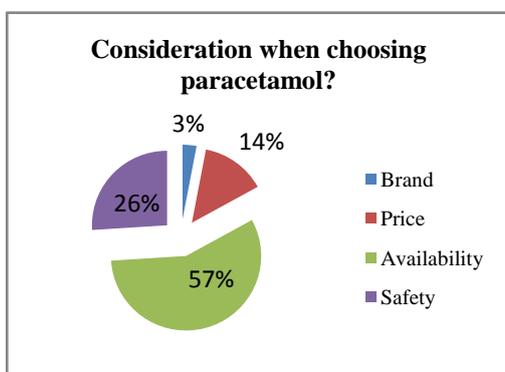


FIGURE 8

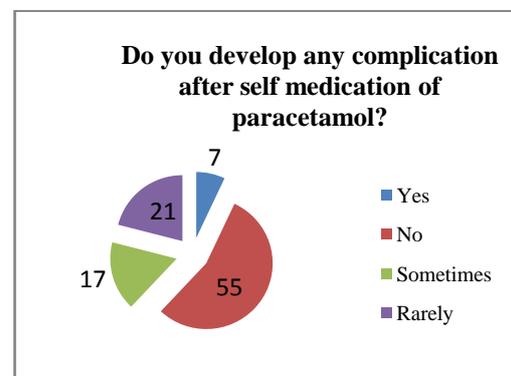
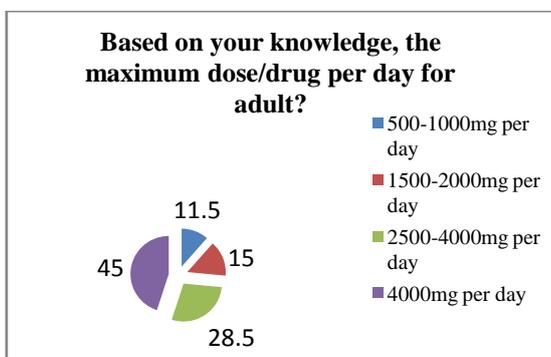


FIGURE 9



Discussion

Based on British National Formulary, paracetamol or known as acetaminophen is an over the counter drug (OTC) which are preferred for mild to moderate pain¹⁰. This drug is the commonest drug used in medical practice since it is well efficient and tolerated by most of the patients at their therapeutic doses. Nowadays, self medication practice has become popular for non educated as well as educated patients. The specific sample study on dental students is a good reflection of the general population in terms of behavior. In this study, analgesics was the commonest choice of drugs by the students followed by antibiotic, antidiarrhoeal drugs and cough remedies. This finding is accordance with the

*Fahmida Binti Abd Rahman*et al. /International Journal of Pharmacy & Technology*

study conducted by Shankar et al.¹¹ in 2002, Rituet al.¹², Sweileh.¹³ in 2008 and Shveta S et al.¹⁴ in 2011. Among analgesic type of drug, paracetamol was the most preferred by the respondents. This corresponds to previous study¹⁵. Practice of self medication of paracetamol are quite famous among the respondents since it is cheap and available in greater amounts. This result is quite similar to previous study¹⁶. Drug retail shop can be considered as part of the healthcare system which can be the first point of contact among patient population. Retail drug stores remain the most significant medium of distribution of drugs in India. Since there is no restriction of sale of paracetamol from pharmacy or retail drug shop, some people tend to misuse them. They tend to consume paracetamol without getting prescription merely to save consultation time. Moreover they were using it for symptomatic relief of pain. In addition, most of the respondents did not aware about the therapeutic doses of paracetamol. Poor knowledge about therapeutic doses of paracetamol may lead to excessive or inadequate low doses and may also contribute in suicidal incidents. Moreover, headaches was the most common reason that led some students to opt for self medication of paracetamol.

Conclusion: Most of us had experienced pain. It can be either short or long term pain. Paracetamol is particularly helpful in relieving some pain. The study shows that most of the students practice self medication of paracetamol. General public and university students should have good knowledge about paracetamol as it can also lead to liver toxicity on chronic use and moreover, paracetamol is not always appropriate to be used to overcome health problems.

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