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**PERCEPTION OF SELF MEDICATION AMONG THE UNIVERSITY STUDENT OF KOLKATA**

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**ABSTRACT**

Self medication is defined as the use of medication by a Patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner. Self-care, including self-medication, has been a feature of healthcare for many years. The World Health Organization has emphasized that self medication must be correctly taught and controlled. Major problems related to self medication is wastage of resources, increased resistance of Pathogens, and generally entails serious health hazards such as adverse reaction and prolonged suffering. The main objective of the present study is to find out the awareness and consciousness of Hazards of Self medication among the University students of Kolkata. The present study has been carried out among the university students of Kolkata. 340 individuals of both sexes have been considered for this cross-sectional study aged between 20 and 23 years living in the metropolitan area of Kolkata. This type of study, using a self administered questionnaire, is largely dependent upon information given by respondents. However, given the high level of response, the results should closely approximate the behavior of the young University students of Kolkata and surroundings. Few participants consulted pharmacists for information on drugs. Students with a previous experience and with mild illness were more likely to practice self medication. This has implications, because many diseases have similar symptoms and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment. Out of 340 respondents not a single respondent had proper knowledge about complete profile of the drug which was taken up by self medication practice.

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**INTRODUCTION**

Self medication is defined as the use of medication by a Patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner. Self-care, including self-medication, has been a feature of healthcare for many years. Self-medication is a term used to describe the use of drugs (including alcohol) or other self-soothing forms of behavior to treat untreated and often undiagnosed mental distress, stress and anxiety, including mental illnesses and/or psychological trauma. As different drugs have different effects, they may be used for different reasons. According to the self-medication hypothesis (smh), the individuals' choice of a particular drug is not accidental or coincidental, but instead, a result of the individuals' psychological condition, as the drug of choice provides relief to the user specific to his or her condition.

Some mental illness sufferers attempt to correct their illnesses by use of certain drugs. Depression is often self medicated with alcohol, tobacco, cannabis, or other mind-altering drug use. While this may provide immediate relief of some symptoms such as anxiety, it may evoke and/or exacerbate some symptoms of several kinds of mental illnesses that are already latently present, and may lead to addiction/dependence, among other side effects of long-term use of the drug. Due to the different effects of the different classes of drugs, the smh postulates that the appeal of a specific class of drugs differs from person to person.

In fact, some drugs may be averse for individuals for whom the effects could worsen affective deficits. The World Health Organization has emphasized that self medication must be correctly taught and controlled. Major problems related to self medication is wastage of resources, increased resistance of Pathogens, and generally entails serious health hazards such as adverse reaction and prolonged suffering. Antimicrobial resistance is a current problem worldwide particularly in developing countries where antibiotics are often available

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without a prescription. While responsible self medication may generate substantial net benefit flows to economies through saving in travel and consultation time and the direct financial cost of treatment. Pharmacists have a key role to play in providing them with assistance, advice and information about medicines available for self-medication. Advertising is helpful in informing people about medicines that are available without prescription. Some conditions are necessary for these benefits to be realized. These conditions aim at ensuring the safety of taking self medicated drugs.

They include the following: the drugs used are those indicated for conditions that are self recognizable; the user should know how to take or use the drugs; the effects and possible side-effects of the drug as well as ways of monitoring these side effects are well communicated to the user; possible interaction with other drugs is known by the user; duration of the course of the drugs is known by the user and when the user must seek professional intervention. Study on self medication shows that it is influenced by many factors such as education, family, society, law availability of drugs and exposure to advertisements. A high level of education and professional status has been mentioned as predictive factor for self medication. Self medication is an area where governments and health authorities need to ensure that it is done in responsible manner, ensuring that safe drugs are made available over the counter and the consumer is given adequate information about the use of drugs and when to consult a doctor.

### Objective of the Present Study

The main objective of the present study is to find out the awareness and consciousness of Hazards of Self medication among the University students of Kolkata.

## MATERIALS AND METHODS

The present study has been carried out among the university students of Kolkata. 340 individuals of both sexes have been considered for this cross-sectional study aged between 20 and 23 years living in the metropolitan area of Kolkata. Data for the present study has been collected by using specially prepared and pre-tested schedule. Short term interview has been taken on the eating disorder and awareness among the participants of the study. Then data has been checked and computed accordingly. Analysis done by using the office 2007 (excel) and SPSS (version 10.0).

## RESULTS

Table 1 shows that there is a tendency for a major percentage of subjects of purchasing medicine without consulting any doctor. And such tendency is observed more within the females than males. Among some very common physiological problems like headache, body pain, fever, indigestion etc. males suffer mostly from headache and fever/cough and cold. On the other hand females also suffer from headache but instead of fever/cough and cold different types of body pains give those troubles.

**Table 1. Preference between Chemist Shop and Doctor for Any Physiological Problem**

| Male = 200   |            |        |            | Female = 140 |            |        |            |
|--------------|------------|--------|------------|--------------|------------|--------|------------|
| Chemist Shop |            | Doctor |            | Chemist Shop |            | Doctor |            |
| Number       | Percentage | Number | Percentage | Number       | Percentage | Number | Percentage |
| 142          | 70.83%     | 58     | 29.17%     | 88           | 62.97%     | 52     | 37.03%     |

Beside the aforesaid common diseases many males and females are prone to allergy and also have thyroid problem.

**Table 2. Awareness Regarding Generic Name of Medicine**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 75     | 37.5%      | 125    | 62.5%      | 16     | 11.11%     | 124    | 88.89%     |

Awareness regarding generic name of any medicine is not good among the participants.

**Table 3. Idea about the Doses and Course of Medicine**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 58     | 29%        | 142    | 71%        | 41     | 29.62%     | 99     | 70.38%     |

The subjects are not at all aware of the doses of medicine that they have taken not even they felt necessity to maintain the course. Here also the males are a little bit more aware than the females.

**Table 4. Idea about Drug Resistance**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 82     | 41%        | 118    | 59%        | 104    | 74%        | 36     | 26%        |

The above table shows that there is more or less awareness regarding drug resistance among both male and female.

**Table 5. Idea about drug allergy**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 108    | 54.17%     | 92     | 45.83%     | 52     | 37.03%     | 88     | 62.97%     |

The data shows that males are much aware of drug allergy where as females are not so aware in this regard.

**Table 6. Idea about the Batch No of Medicines**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 100    | 50%        | 100    | 50%        | 57     | 40.74%     | 83     | 59.26%     |

A very poor percentage of awareness regarding batch no. of medicine within both males and females can be seen from the above table. In most of the case they have not seen the proper batch number do not demand the bill against the purchase of medicines.

**Table 7. Asking for Bill from the Medicine Shop**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 92     | 45.83%     | 108    | 54.17%     | 67     | 48.14%     | 73     | 51.86%     |

After purchasing of medicine most of the person is not interested of asking for bills. Though the results shows that females are a little bit more concern than males of asking for a bill.

**Table 8. Checking the Expiry Date of Medicines**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 183    | 91.67%     | 17     | 8.33%      | 130    | 92.6%      | 10     | 7.4%       |

Most of the male and females are very much cautious about the expiry date of medicines. They always verify the date of expiry during purchase of medicines.

**Table 9. Taking Medicines Influenced by Advertisements**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 17     | 8.33%      | 183    | 91.67%     | 21     | 14.81%     | 119    | 85.19%     |

Advertisements do not have much influenced among the subjects for buying medicines. However some of them still follow the commercials and purchase the medicines as per their advice.

**Table 9. Using Slimming Capsule**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 8      | 4.17%      | 192    | 95.83%     | 5      | 3.7%       | 135    | 96.3%      |

A negligible percentage of persons are interested of using slimming capsule or such similar type of medicines. Most of them generally avoid such medicines.

**Table 10. Faith in Homoeopathy**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 75     | 37.5%      | 125    | 62.5%      | 31     | 22.22%     | 109    | 77.78%     |

The survey reveals that a minor portion of both mail and females have their faith on homoeopathy medicines. 37.5% among 24 male and 22.22% among 27 female have faith in homoeopathy. But they also take allopathic treatment.

**Table 11. Consulting Doctor Before Taking Homoeopathy Medicines**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 67     | 33.33%     | 133    | 66.67%     | 95     | 66.67%     | 45     | 33.33%     |

The persons who use homoeopathy medicines, don't always concern any doctor before taking those medicines.

**Table 12. Faith in Ayurvedic and Unani Treatment**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 8      | 4.16%      | 192    | 95.83%     | 10     | 7.4%       | 130    | 92.6%      |

Though few persons showed their interest in ayurvedic or unani medicines the majority of people totally avoid such medicines. 4.16% among male and 7.4% among female have faith in Ayurvedic and Unani Treatment. But they also take allopathic treatment.

**Table 13. Consulting Doctor Before Taking Ayrvedic / Unani Medicines**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 0      | 0          | 200    | 100%       | 100    | 50%        | 100    | 50%        |

It is very clear from the survey that a very least percentage of people, who have faith in ayurvedic or unani treatment, consult any such doctor before taking the medicines.

Few names has been collected from the patients and also validated from the medicine shops i.e. those who has the faith on allopathy are Rantac, Gelusil, Zinetac, Entroquinol, Acedolin for indigestion, Norflox tz, Metrogl for loose motion, Saridon, Dispirin, Amrutanjan for headache, Grilinctus, Calpol, Crocin Nise, D'cold, Vicks Action-500 for fever and cough and cold, Volini for muscle pain, Those who have faith in homoeopathy treatment, frequently use, Beledona Brionia for fever, Magpho for indigestion, Pulsatilla for loose motion.

**Table 14. Faith on Quack Doctor**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 0      | 0%         | 200    | 100%       | 0      | 0%         | 140    | 100%       |

Very interestingly neither a single male nor a female is interested to consult any quack doctor when he/ she suffer from any disease.

**Table 15. Consumption of Medicine for Hair & Skin Treatment**

| Male   |            |        |            | Female |            |        |            |
|--------|------------|--------|------------|--------|------------|--------|------------|
| Yes    |            | No     |            | Yes    |            | No     |            |
| Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| 25     | 12.5%      | 175    | 87.5%      | 42     | 29.62%     | 98     | 70.38%     |

In the questions of taking any medicines, prescribed by the beauticians, for hair or skin treatment a very poor positive response was seen. Still the interested females exceed the nos. of interested males.

Some of them have some other kind of problem such as allergy, body pain or others and the medicines they use like Pyrigesic for fever/ headache, Allegra180 for allergy, Chest cold for body pain, dry cough, wet cough, Femocid40 for indigestion, Eltroxin for thyroid, Dolamide, It is depicted from the list that a number of medicines has been taken without proper prescription which might be very fatal for the people.

**DISCUSSION**

This type of study, using a self administered questionnaire, is largely dependent upon information given by respondents. However, given the high level of response, the results should closely approximate the behavior of the young University students of Kolkata and surroundings. Few students consulted pharmacists for information on drugs. Students with a previous experience and with mild illness were more likely to practice self medication. This has implications, because many diseases have similar symptoms and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment. Out of 340 respondents not a single respondent had proper knowledge about complete profile of the drug which was taken up by self medication practice. They were not even properly aware of the dose of drug, duration of therapy, toxic dose of drug, active constituents, indications and side effects of commonly used medicine like Paracetamol used in self medication. Another alarming observation was that many students use entroquinol for indigestion, Nise, D'cold, Vicks Action-500 for fever and cough and cold, those have been banned in the EU and/or USA, but continue to be sold in India. Entroquinol, ban for damage to sight, Nise ban for causing liver failure, D'cold, Vicks Action-500 ban for causing stroke. Most of the students apply self medication without knowing the proper doses of medicines. There can be creating many problems if taking most common medicines without knowing the proper doses or the allergenic problem or some other percussion.

Like in case of kind of kidney disease it is necessary to stay away from Rantac as it may worsen the situation. It is not advisable to consume alcohol if taking Rantac as if may react and be toxic for the liver and kidney; Before taking Zantacs, should be cautious about immune system problems, kidney problems, liver problems, lung diseases (e.g., asthma, chronic obstructive pulmonary disease-COPD), and other stomach problems because Zantacs may worsen the situation; Over doses of Gelusil Chewable Tablets, norflox-Tz, metrozyl, acedolin can cause severe allergic reactions like rash; hives; itching; difficulty breathing; tightness in the chest; swelling of the mouth, face, lips, or tongue; loss of appetite; muscle weakness; nausea; slow reflexes; vomiting; Over doses of Paracetamol, brand Name like calpol, crocin can cause potentially fatal liver damage and, prolonged daily use increases the risk of upper gastrointestinal complications such as stomach bleeding; Over doses of Dispirin can causes worsening of asthma, nausea, stomach or intestinal discomfort, indigestion, increased bleeding time, Ulceration or bleeding in the stomach or intestines. Unbalanced doses oh homoeopathy and ayurvedic medicines also cusses serious problems. Major reasons of self medication at student level were time saving, did not need advice from prescriber for minor illness, economic, fear from crowd at clinic. Most of the respondent has positive attitude in self medication in minor illness. However, minor illness symptoms may cause major illness if not diagnosed properly. Most of the fatal diseases have symptoms like fever, body ache, and headache.

**Conclusion**

This project shows that the majority of students had a poor knowledge about appropriate medication while the knowledge of the benefits and risks was not adequate. Thus, to avoid or minimize the dangers of self medication, firstly the students should be educated about the dangers of indiscriminate use of drugs. Secondly, the physician should be more judicious in prescribing, and must insist on drugs being supplied by the chemist only on a valid prescription. These, two measures would definitely reduce the incidence of drug-related mishaps and help in maintaining good health of the individual and society.

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