STUDY ON USE OF SELF MEDICATION AMONG RURAL AND URBAN PEOPLE OF KODAD, TELANGANA, INDIA

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ARTICLE INFO

ABSTRACT

Self medication is a major form of self-care. It involves the use of medicinal products by the consumer to treat self recognized disorder, symptoms, recurrent disease or minor health problems. It is independent of age for both males and females(5). Medicines for self medication are often called Over the Counter (OTC) drug, which are available without a Doctors prescription through pharmacies, mostly in the less developed countries. Recent development of the pharmaceutical companies contribute to a wide spread availability of OTC Medicine. The study was conducted in Rural and Urban areas of Kodad, Telangana state, nalgonda dist, 508206. In these areas there are several type of people for eg: some of the people are educated, some are illiteracy, some are workers etc. The study was done in for the 200 people of different age groups of male and female. It was found that the urban people (54.74%) of male, (12%) of the female are taking self medication. In the rural people the (45.26%) of male and (43%) of the female are taking self medication and among the educated people those who are studying ssc below they are taking self medication for about (24.21%) in male and (29.09%) female are female and those who are studying 12th class (14.75%) male and (26%) of female students among the degree students in male are (58.94%) and the female are (58.18%). The students of above degree in male are about (2.10%) and (12.72%) of female students and it was seen that mostly (17.89%) of male and (10.90%) of female taking self medication for fever and for both fever and headache are (32.65%) of male and (25.26%) of female for fever and acidinity and it was seen that people who are taking self medication they are using common sources of medication like pharmacy store (20%) and from grocery shop is (29.09%), and from other persons is about (27.27%). It was observed that since >5 years he (75%) of the people are taking self medication and (50%) of the people they are taking from 2-5 years and (65%) of people taking self medication more than 2 years. It was found that most of the people are taking self medication because of their personal convenience (45%), and also due to the long wait for check up (20%) and some of other reasons like lack of time, lack of money and others. It also found that (41.05%) of male and (23.63%) of female are having knowledge about the drugs, and (53.68%) of male and (74.54%) of female are not having knowledge about the drugs. It was observed that complications occurred due to self medication about (12.63%) of male and female didn’t occurred any complications and (24%) of the people given self medication to the children and (82%) of people not given self medication to their children.

INTRODUCTION

Self medication is a major form of self-care (Annonymus et al, 1996). It involves the use of medicinal products by the consumer to treat self recognized disorder, symptoms, recurrent disease or minor health problems, (Afolabi et al, 2008; Abdelmoneim et al, 2005; Dayani et al, 2009). It is independent of age for both males and females (Davies et al, 1994). Medicines for self medication are often called Over the Counter (OTC) drug, which are available without a Doctors

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prescription through pharmacies, mostly in the less developed countries (Pwar NV et al, 2009; Kamat VR et al, 2005). Recent development of the pharmaceutical companies contribute to a wide spread availability of OTC Medicine (Hussain A et al, 2008). There is also the potential for misuse and abuse of such products (Ali SE et al, 2010, Wazaifya M et al, 2005). A major problem of self medication with antimicrobials is the emergence of human pathogens resistance worldwide particularly in developing countries, where antibiotics are often available without a prescription (Chalker et al, 2001). Its irrational use increases the risk of adverse events, bacterial infection, Hypersensitivity, Drug withdrawal symptom and of masking disease which can delay correct diagnosis (Bernal BSR et al, 2010). Self medication is a global problem, 47.6% prevalence of self medication has been reported among the infant in Nigeria. Self-medication is the treatment of common health problems with medicines specially designed and labeled for use without medical supervision and approved as safe and effective for such use1. According to W.H.O’s definition self-medication is “selection and use of medicines by individuals to treat self-recognized illnesses or symptoms. Medicines for self-medication are often called ,, non-prescription” or ,,over the counter (OTC) ,, products and are available without a doctor’s prescription through pharmacies. Medicines that require a doctor’s prescription are called prescription products (Sapkota et al, 2010 World-wide survey of consumers, 2006).

**Symptoms**
- Fever
- Abdominal Pain
- Head Ache
- Cough

Many of the simple medications are available for routine use and are sold in Drug store and supermarket also. Self medication is a common practice and internationally has been reported as being on rise and can produce a good result and be a convenient practice for patient. Self medication particularly with antibiotics has been widely reported leading the WHO to call attention to the dangers of self medication as a cause of antibiotic resistance.

In country like India there is a wide range of drugs coupled with inadequate health service result in increase proportion of drug used as a self medication compared to prescribed drugs.

Why do people use self Medication? The Modern consumers (patients) wish to take a greater role in the maintenance of their own health and are often competent to manage (uncomplicated) chronic and recurrent illnesses (not merely short-term symptoms) after proper medical diagnosis and with only occasional professional advice, e.g. use of histamine H 2 receptor blocker, topical corticosteroid, antifungal and oral contraceptive. They are understandably unwilling to submit to the inconvenience of visiting a doctor for what they rightly feel they can manage for themselves, given adequate information (World-wide survey of consumers, 2006). Self medication is very common and a number of reasons could be enumerated for it (Bennett et al, 2003; Chang FR et al 2003). Urge of self care, feeling of sympathy towards family members in sickness, lack of health services, poverty, ignorance, misbelieves, extensive advertisement and availability of drugs in other than drug shops are responsible for growing trend of self medication. (Worku S et al, 2003).

Source of information leading to self-medication: It is said that every patient has at least two prescribers- his doctor and himself while many have additional prescribers in the form of friends and well-wishers. Pharmacists, household members, friends and relatives, advertisements, product information leaflet, prior experience with OTC drugs etc are some of the major sources of information leading to self-medication (Phlake VD et al, 2006).

Over the counter (OTC) drugs: The phrase OTC has no legal recognition in India, all the drugs not included in the list of “prescription-only drugs” are considered to be non-prescription drugs (or OTC drugs) (David. E. Webber et al, 2009). The growth of Indian OTC market has outperformed globally. It has been observed that the global OTC market over the past 8 years has grown rapidly and is expected to continue. India currently ranks 11th in the global OTC market size6. It is estimated that it will reach 9th position within five years. As of now Indian OTC market is estimated to be worth USD 1,793 million with an annual growth rate of 23% per annum. It is expected to grow at a CAGR (Cumulative Annual Growth Rate) of approximately 18% till 2013-149.

Why do parents use self medication to their children? Parents who self-medicating their children are more likely than adults who medicate themselves to say they do so because the illness isn’t serious enough to warrant a visit to the doctor (88% parents of children under 18 vs. 78% adults in general) (Organisation of Pharmaceutical Producers of India, 2010).

1. Parents are also more likely than adults in general to believe that nonprescription Medications are just as effective as prescription drugs.
2. Adults who self-medicate are more likely than parents who medicate their children to say they do so in order to save money (70% adults in general vs. 57% parents of children under 18) or avoid a trip to doctor’s office (78% adults in general vs. 65% parents of children under 18).

How do people get information for self medication? There are various sources from where people get information like, a pharmacist, Household members, product information leaflet, friends, relatives (not healthcare professionals), advertisements.

**Advantages of self-medication**
- Cost savings to health care budgets through reduced physician visits and reduced medicine budget costs.
- Reduce pressure on medical services where health care professionals are inadequate.
- Increase in availability of health care to population living in rural/remote areas.
- Enable patients to control their own chronic conditions.
- Help to prevent and treat symptoms and ailments that do not require a doctor.
- Economic gain by saving in travel, consultation fee and time.
Disadvantages of self-medication
- Self-medication may lead to severe health hazards such as adverse reactions and prolonged suffering.
- Wastage of resources.
- Adverse reactions and prolonged suffering.
- Hypersensitivity, allergic reactions, drug with drawl symptoms and masking disease which can delay correct diagnosis.
- Usage of an overdose or for a longer duration of time may lead to serious health discrepancies.
- In case of multiple drug users self-medication may result in drug-drug interactions.

Awareness in public
- Public should be educated about self-medication regarding the following aspects:
  - Self-medication should not be performed for children, elderly and pregnant women.
  - Recognizing the symptoms and choosing drugs for treatment.
  - Choice of appropriate product, its formulation and dose, duration of use.
  - To follow the directions for use of the product as mentioned on the label.
  - Contra indicative conditions in which self-medication drugs are not safe for use.
  - Potential risks involved in self-medication
  - To immediately consult a physician when unduly symptoms develop during the course of OTC drugs.
  - Take the advice of the pharmacist regarding the usage of the OTC drugs during purchase.
  - Know possible side effects and possible interactions with other drugs and food.

METHODOLOGY

Study Setting
Telangana is the capital city of Hyderabad. We collected the data from the people of rural and urban areas of Kodad. In Telangana state, Kodad, Nalgonda dist. People of Rural and Urban areas has the Development Authority, Government of Telangana, the city has a wide range of population. The present work is a prevalence of self-medication. The study was carried out among the general population of rural and urban areas of Kodad, Ananthagiri and Thammara conducted a survey of self-medication.

Study design
The study was conducted in Rural and Urban areas of Kodad, Telangana state, nalgonda dist, 508206. In these areas there are several type of people for eg: some of the people are educated, some are illiteracy, some are workers etc. The study was done in for the 200 people of different age groups of male and female.

RESULT
Table 1 represents the self medication in rural and urban areas of males and females. In the urban area the self medication is more (52%), respectively in the rural the medication of the male and female is (43%). Female takes the medication in urban is very low(12%).

| Table 1 Distribution of Male and Female According To Areas. |
|-----------------|-----------------|-----------------|
| Gender          | No. Urban       | Rural           |
| Male            | 95 (52%)        | 43%             |
| Female          | 55 (12%)        | 43%             |

Table 2 represents that the number of people taking their self medication. Males are more self medicated i.e, (88), respectively the female is (51). The less number of people are rejected for self medication males are (7), females (4).

| Table 2 Estimation of self medication in male and female |
|-----------------|-----------------|-----------------|
| Self Medication | Male            | Female          |
| Yes             | 88 (92.6%)      | 51 (92.72%)     |
| No              | 7 (7.3%)        | 4 (7.2%)        |

Table 3 shows the age distribution in males and females in the rural and urban areas. The maximum number of people in males are about the age having >40 is (39), respectively the age 21-30 is about (31) and the female is (16). Age 31-40 are having equal in i.e, 17 an 15, The age <20 of male are (8), female is (11). The distribution of the female in the age 21-30 is (16), correspondingly in the age >40 of female is (13).

| Table 3 Age distribution in males and females |
|-----------------|-----------------|-----------------|
| Age in Years    | Males           | Females         |
| <20             | 8               | 11              |
| 21-30           | 31              | 16              |
| 31-40           | 17              | 15              |
| >40             | 39              | 13              |

Table 4 shows that the people in rural and urban areas. The maximum educated people are male, they are about degree (56) and the female is (21) and respectively >10 is (23) and (16). And above degree in female is (7) and male is (2), and the 12th in male is (14) and female is (11).

| Table 4 Education percentage of Males & Females |
|-----------------|-----------------|-----------------|
| Education       | Males           | Females         |
| <10             | 23 (24.2%)      | 16 (29.0%)      |
| 12              | 14 (14.7%)      | 11 (20%)        |
| Degree          | 56 (58.9%)      | 21 (38.18%)     |
| >Degree         | 2 (2.1%)        | 7 (12.7%)       |

Table 5 represents that the taking of the medicines in several sources depending up on their needs. Pharmacy store leads the main source of taking the medicines in males (72) and in the females for about (37), respectively the grocery shop in males is about (11) and the female is about (9), and taking from the pharmacy and the grocery shop is the male about (3) and female (1). The source from the other persons in males is (3) and females are (6). The less number of people are they don’t take the medicines from any source males are (6) and females (2).

| Table 5 Source of self medication |
|-----------------|-----------------|-----------------|
| Source          | Male            | Female          |
| Pharmacy Store  | 72 (75.7%)      | 37 (67.2%)      |
| Grocery Shop    | 11 (11.5%)      | 9 (16.3%)       |
| Other Persons   | 3 (3.15%)       | 6 (10.9%)       |
| Both O/P        | 3 (3.1)         | 1 (1.8)         |
| None            | 6 (6.3)         | 2 (3.6)         |
Table 6 Habits of Male and Females

| Habits    | Male | Female |
|-----------|------|--------|
| Smoking   | 11   | 1      |
| Alcohol   | 16   | 1      |
| Both S&A  | 24   |        |
| None      | 41   | 55     |
| Others    | 3    |        |

Table 6 represents the habits of the male and female. The female persons are having no habits (55), and the males are having (41). The alcohol consumers are about (16), and smokers are about (11), respectively both alcohol and smoking takers are about (24) and the others are (3).

Table 7 Period of self medication in male and female

| Period of Medication | Male | Female |
|----------------------|------|--------|
| >5yrs                | 50 (52.6%) | 13 (23.6%) |
| 2-5yrs              | 16 (16.8%) | 17 (30.9%) |
| <2yrs               | 23 (24.2%) | 23 (41.8%) |
| None                | 6 (6.3%) | 2 (3.6%) |

Table 7 shows the collected data of self medicating since from years in rural and urban areas. In males from >5 years are taking about (50), and females are (13). Since from 2-5 years the females are taking about (17) respectively males are (16) from <2 years male and female are about (23), and non medicated in males are (6) and in females are (2).

Table 8 Knowledge about the drugs in male and female

| Knowledge about Drugs | Male | Female |
|-----------------------|------|--------|
| Yes                   | 39 (41%) | 13 (23.6%) |
| No                    | 51 (53.6%) | 41 (74.5%) |
| None                  | 5 (5.7%) | 1 (1.8%) |

Table 8 describes the knowledge about the drugs of male and female of rural and urban areas. The maximum number of people they doesn’t know about the drugs are the male (51), and female is (41). The knowledge about the drugs in male are (39), female are (13), the none people male are (5), female (1).

Table 9 Complications due to self medication in Males & Females

| Complications | Yes | No | None |
|---------------|-----|----|------|
| Males         | 12.6 | 82.1 | 5.2 |
| Females       | 10.9 | 87.2 | 1.8 |

Table 9 describes the knowledge about the drugs of male and female of rural and urban areas. The maximum number of people they doesn’t know about the drugs are the male (51), and female is (41). The knowledge about the drugs in male are (39), female are (13), the none people male are (5), female (1).

Table 10 Reasons for Self Medication in Males & Females

| Reasons               | Males | Females |
|-----------------------|-------|---------|
| Illness is Major      | 14    | 14      |
| Unavailable of Physician | 10     | 6       |
| Lack of Money         | 8     | 7       |
| Personal Convenient   | 32    | 7       |
| Longwait for Checkup  | 10    | 6       |
| None                  | 5     | 1       |
| Illness is Major & Lack Of Time | 6     | 3       |

Table 10 represents the complications due to self medication in male and female. The (78) of the people in male are they didn’t get any complications due to medicines respectively in females about (48) they didn’t get occur any complication, the none people in male are(5) and in female are(1).

Table 11 Types of Diseases in Males & Females

| Types of Diseases | Males | Females |
|-------------------|-------|---------|
| Fever             | 17    | 6       |
| Acidity           | 2     | 3       |
| Headache          | 9     | 10      |
| Others            | 11    | 4       |
| Both Fever & Headache | 31  | 24      |
| Fever & Acidity & Headache | 4   | 2       |
| None              | 6     | 1       |
| Acidity & Headache| 2     | 4       |
| Fever & Acidity   | 10    | 1       |
| Acidity & Others  | 3     |         |

Table 11 represents the diseases for which self medication has been taken by the people in rural and urban areas. The maximum amount of people their own self medication in males is fever and headache (31) and the females are (24). For the fever in males about (17) and in female females is (6). In males for headache there are about (9) and in females (10). For the acidity in males is (2), females are (3), and for the other diseases they take medication is in males are about (11) and females(4), respectively for F&A&H in males are (4) and in females are (2), consequently for the fever and headache in males are (10)and the females are (1).

DISCUSSION

A survey is conducted for self medication in the region Kodad and the surrounding rural and urban areas. A survey is conducted among 200 people the males are 130, female are 70. The survey is conducted among the people of college students and mostly uneducated persons, shopkeepers and labours etc. It was conducted based on questionaries.

It was found that the urban people (54.74%) of male, (12%) of the female are taking self medication. In the rural people the (45.26%) of the male and (43%) of the female are taking self medication and among the educated people those who are studying ssc below they are taking self medication for about (24.21%) in male and (29.09%) are female and those who are studying 12th class(14.75%) male and (26%) of female students among the degree students in male are (58.94%)and the female are (38.18%).The students of above degree in male are about (2.10%)and (12.72%) of female students and it was seen that mostly (17.89%) of male and (10.90%) of female taking self medication for fever and for both fever and headache are (32.65%) of male and (25.26%) of female are taking self medication. For fever and acidity (10.52%) of male and (1.81%) of female are taking medication. Mostly (2.10%) of male and (3.15%) of female taking self medication for acidity and it was seen that people who are taking self medication they are using common sources of medication like pharmacy store (20%) and from grocery shop is (29.09%), and from other persons is about (27.27%). It was observed that since >5 years he (75%) of the people are taking self medication and (50%) of the people they are taking from 2-5 years, and (65%) of people taking self medication more than 2years.It was found that most of the people are taking self medication because of their...
personal convenience (45%), and also due to the long wait for checkup (20%) and some of other reasons like illness is minor, lack of time, lack of money and others. It also found that (41.05%) of male and (23.63%) of female are having knowledge about the drugs, and (53.68%) of male and (74.54%) of female are not having knowledge about the drugs. It was observed that complications occurred due to self medication about (12.63%) of male and female didn’t occurred any complications and (24%) of the people given self medication to the children and (82%) of people not given self medication to their children.

CONCLUSION

As per review on several research papers it is showing that self medication is a global problem and causing health effects on patients. From our study on prevalence of self medication among rural and urban peoples in Kodad, Telangana showed large number of peoples taking self medication. Moreover, it is found that it is causing some health problems. Finally, we can conclude about the rule of community pharmacist and they can help in absence of physicians to decease the health related problems due to self medication.

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How to cite this article:
Shagamreddy Sai Reddy and Nagunath.S.2017, Study on Use of Self Medication Among Rural And Urban Peopleof Kodad, Telangana, India. Int J Recent Sci Res. 8(5), pp. 17209-17213. DOI: http://dx.doi.org/10.24327/ijrsr.2017.0805.0305

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