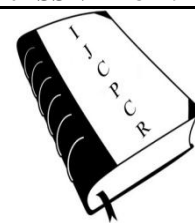




## International Journal of Current Pharmaceutical & Clinical Research



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### KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) OF SELF-MEDICATION AMONG ENGINEERS WORKING IN BGSIT, B G NAGAR, MANDYA, KARNATAKA.

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#### ABSTRACT

According to WHO's definition, "self-medication is the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms". Self-medication is the selection and use of non-prescription medicines by individuals' own initiatives to treat self-recognized illnesses or symptoms. It is practiced significantly worldwide even though its type, extent and reasons for its practice may vary. Aim to assess the knowledge, attitude and practice of self-medication among engineers working in BGSIT, B G Nagar. A cross-sectional questionnaire-based study was conducted among engineers of B G S Institute of Technology, B G Nagar, Mandya, Karnataka. The prevalence of self-medication among the engineers was 66.30%. Male and female participants were equal (50% each). The self-medication treatments were taken for 1 week among 44 persons (72.13%), for 2 weeks among 15 persons (24.59%) and for one month and longer than a month by one person each (1.63%). These self-medications were maximally obtained from the Pharmacy (68.85%) following relatives & friend (19.67%). Antibiotics was used as self-medication by 39 persons (63.93%), among them 30 persons (76.92%) used antibiotics for about a week. 34 persons (55.73%) gave the reason for self-medication as health problem is not serious, 22 persons (70.96%) gave the reason against self-medication as due to risk of adverse effects, 38 persons (62.29%) seek professional help because of severe pain. 78.3% disagreed that all medications have adverse effects, 96.7% agreed that concomitant use of drugs can be dangerous, 63% agreed that no drug can be used during pregnancy, 83.7% disagreed that mild medical problems do not require drug treatment and 77.2% agreed that self-medication can mask signs & symptoms of disease so the physician can overlook them easily. Our study shows that self-medication is widely practiced among engineers of the institute. In this situation, awareness should be created and education to be given to them regarding advantages and disadvantages of self-medication.

**Key words:** Self-medication, Knowledge, Attitude, Practice, Engineers.

#### INTRODUCTION

Self-medication involves the use of medicinal products by the individuals to treat self-recognized disorders or symptoms or the intermittent or continuous use of a medication prescribed by a physician for chronic or recurring diseases or symptoms [1].

World Health Organization has defined self-medication as "use of pharmaceutical or medicinal products by the consumer to treat self-recognized disorders or symptoms, the intermittent or continued use of a medication previously prescribed by a physician for

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chronic or recurring disease or symptom, or the use of medication recommended by lay sources or health workers not entitled to prescribe medicine [1].

Self-medication involves acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one’s social circle or using leftover medicines stored at home[2]. Self-medication thus forms an integral part of self-care, which can be defined as the primary public health resource in the health care system. It includes self-medication, non-drug self-treatment, social support in illness and first aid in everyday life [1]. The youth are highly influenced by the media and the internet which promote self-medication behaviour [3]. The increased advertising of pharmaceuticals poses a larger threat of self-medication to the younger population in general. This raises concerns of incorrect self-diagnosis, drug interaction and use of drugs other than for the original indication [4].

The increase in the quantities and varieties of pharmaceuticals worldwide eases the accessibility of medicine by consumers, thereby giving options for its misuse. Self-medication is associated with risks such as misdiagnosis, use of excessive drug dosage, prolonged duration of use, wastage of resources and increased resistance to pathogens [5]. Further there is an increase in the promotion of self-medication products, which has enhanced consumer and patient awareness of the availability of products [6]. It has been suggested that self-prescription is also prevalent among practising physicians [7].

A study conducted at All India Institute of Medical Sciences, New Delhi observed that self medication was considerably high among undergraduate medical & paramedical students in India & it increased with medical knowledge [8]. There is a paucity of literature on the prevalence of self-medication and their attitude towards the same. Hence the present study was conducted to assess the prevalence of self-medication among the engineers of BGS Institute of Technology, B G Nagar, Mandya district, Karnataka and to assess their perception and attitude regarding the practice of self-medication.

**MATERIALS AND METHODS**

**Study design:** The study conducted was a cross-sectional, questionnaire-based study.

**Study setting:**

The study was conducted in BGS Institute of Technology, B G Nagar, Mandya district, Karnataka during the period of January – March 2015 after obtaining permission from the Institutional ethics committee, Adichunchanagiri Institute of Medical Sciences, B G Nagar.

**Study participants**

During the study, faculties from engineering college participated.

**Aims and Objectives**

To assess the knowledge, attitude and practice of self-medication among engineers of BGSIT, B G Nagar, Mandya district, Karnataka.

**Study procedure**

Prior permission was obtained from the ethics committee of the institution for conducting the study. The purpose of the study was explained to the participating staffs and confidentiality was ensured. After obtaining informed consent, they were asked to fill up a printed, semi-structured questionnaire.

Out of 100 faculties, 92 completed questionnaires were considered for the study. The questionnaire contained questions regarding practice of self-medication, whether they sought self-medication in the preceding 6 months, illness for which the medication was used, source of drug information, the reason for not consulting a healthcare professional, whether any antibiotics were used, if used for how many weeks, reasons for seeking self-medications, whether concomitant use of drugs can be dangerous or not, whether drugs can be used during pregnancy, whether mild medical problems do not require drug treatment and their attitude towards self-medication.

**Statistical analysis**

The returned questionnaires were checked for completeness of data. Descriptive data were expressed as percentages.

**RESULTS**

A total of 92 faculties were assessed for their knowledge, attitude and perception regarding self-medication behaviour out of which 50% were males and 50% were females. The prevalence of self-medication among the engineers was 66.3% (n=92).

**Table 1. Use of self medication in the past year**

	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	61	66.30
No	31	33.69
Total	92	100

**Table 2. Duration of the treatment used**

	Frequency	Percentage (%)
1 week	44	72.13
2 week	15	24.59
1 month	1	1.63
Longer than a month	1	1.63
Total	61	100

**Table 3. From where self-medication obtained**

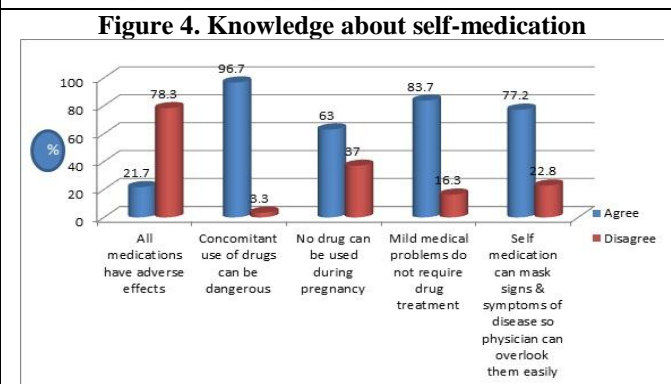
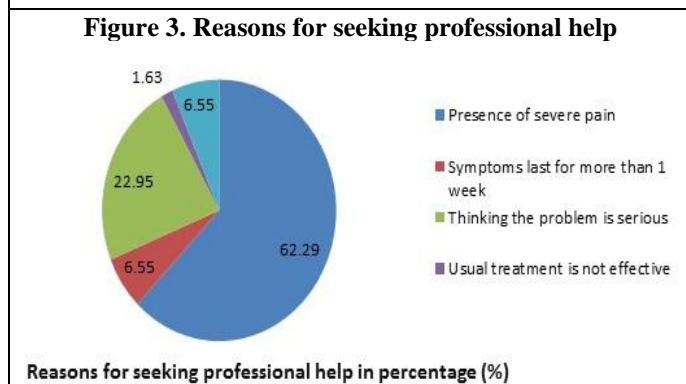
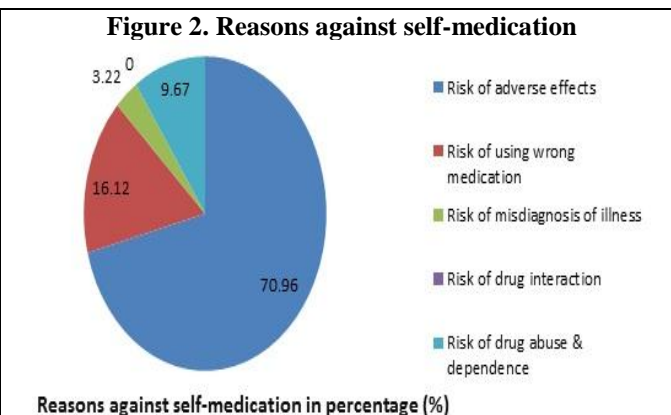
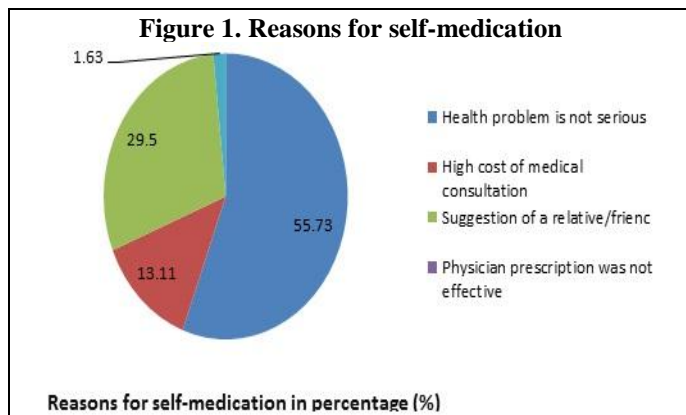
	Frequency	Percentage (%)
Pharmacy	42	68.85
Street market	3	4.91
Herbal store	4	6.55
Relative/friend	12	19.67
Total	61	100

**Table 4. Antibiotics obtained as self-medication**

	Frequency	Percentage (%)
Yes	39	63.93
No	22	36.06
Total	61	100

**Table 5. Duration of use of antibiotics**

	Frequency	Percentage (%)
1 week	30	76.92
2weeks	9	23.07
Total	39	100



## DISCUSSION

Self-care, including self-medication, has been a feature of healthcare for many years and people have always been keen to accept more personal responsibility for their health status [9]. Self-medication by itself has both pros and cons that depend on who and what one chooses to self-medicate [10]. The present study was conducted to evaluate the practices, attitude and perception of self-medication among engineers. The prevalence of self-medication in our study was found to be 66.3%. In studies conducted within India, the prevalence of self-medication among the medical students was shown to be ranging between 57.1% & 92% [11-13]. Other studies on Indian students from non-medical background showed a prevalence of 80.1% in Tamil Nadu [14] and 87% in Uttar Pradesh [15]. The self-medications were maximally obtained from the Pharmacy (68.85%). Antibiotics were used as self-medication by 63.93%. Our results are higher than that reported in other studies from India [11,12]. 55.73% people gave the reason for self-medication as health problem is not serious, 70.96% gave the reason against self-medication as due to risk of adverse effects, 62.29% persons seek professional help because of severe pain. 78.3% disagreed that all medications have adverse effects, 96.7% agreed that concomitant use of drugs can be

dangerous, 63% agreed that no drug can be used during pregnancy, 83.7% disagreed that mild medical problems do not require drug treatment and 77.2% agreed that self-medication can mask signs & symptoms of disease so the Physician can overlook them easily.

## CONCLUSION

Our study shows that self-medication is widely practiced among engineers of the institute. In this situation, awareness regarding self-medication practices to help patients decide on the appropriateness of self-medication is required. The present study perceives that to prevent the growing trend of self-medication, strong policies should be applied prohibiting the supply of medicines without a valid prescription. The youth, should be educated and made aware about the implications of self-medication. The study findings are based on a single centre study in rural place of South India and hence, the study observations cannot be generalized per se. More multicentric studies need to be carried out among medical students and general population at large to understand the various factors influencing the practice of self-medication in India. The role of socio-economic status and its influence on practice of self-medication needs to be explored in further studies.

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