



Impact of Healthcare Advertisements and Self Medication on Peoples' Attitude – A Survey

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ABSTRACT

Advertisement is an information to the consumers and often displayed in television, newspapers/magazines, wall posters, the internet, and social media. Furthermore, advertising fulfils the reasonable need of individuals to get health-related information about medications that are lawfully accessible without a prescription, or what is often known as "over the counter" (OTC) and helps people make sensible choices about their usage. Patients often turn to self-medication as a method of treatment. In addition, patients who self-medicate run the risk of creating drug interactions that might have been avoided if they sought treatment from a qualified medical professional. To prevent people from self-medication, numerous laws and regulations were analysed and put into effect. These laws ensure that advertisement is consistent with the authorized prescription information, restrict some forms of advertising, and impose fines for violating the statutory standards. The present survey was an attempt to know about the "Impact of Healthcare Advertisements and Self-medication on Peoples' Attitude". This survey had been done through various related questions to common peoples (500 peoples in different age group and it includes illiteracy, non-graduation and graduation) in rural and urban area. These results were reported which depend on the people's mentality and their attitude. As a result of this survey, it is advised that a comprehensive strategy be used to address this issue, which includes adequate knowledge, education and mainly cause of awareness on self-medication and pharmaceutical advertisement.

Keywords: Healthcare advertisement, self-medication, act and rules, survey.

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INTRODUCTION

Direct-to-consumer (DTC) advertising raises people's awareness of illnesses and treatment options. In many cases, people's need for knowledge regarding their medical care is higher than physicians expect. We also recognize that prescription drug advertising might elicit strong feelings among certain individuals. For the benefit of the public health, DTC advertising of prescription drugs raises public awareness, informs the general public of treatment options, encourages patients to speak with their doctors about their health concerns, and increases the likelihood that patients with conditions that are frequently misdiagnosed or untreated will receive the proper care they need. DTC advertising has the added advantage of promoting open dialogue between the general public and the professionals who care for their health. Millions of people can be reached and educated using DTC communication methods, particularly DTC television advertising, and we are committed to ensuring that DTC communication methods provide accurate, readily available, and useful health information for the general public and consumers. Advertisement for prescription pharmaceuticals should be carefully constructed to accomplish this purpose and to urge the proper use of these products since they are so potent. Food and Drug Administration (FDA) rules are adhered to by DTC communications (FDA). According to FDA guidelines, all DTC information must as follow,

- Be truthful and not mislead.
- To only make assertions that are backed up by solid evidence.
- As a reflection of the FDA-approved labelling's balance between risks and benefits.

The pharmaceutical sector, which is always innovating, takes its responsibility to the FDA very seriously. To ensure that DTC Communications are accurate, reasonably balanced, and comply with all relevant regulatory requirements, companies dedicate considerable time and effort and often seek the advice of the FDA. As a result of these principles, Pharmaceutical Research and Manufacturers of America (PhRMA) members will participate in a conversation with the FDA to ensure that DTC advertising before release is thoroughly reviewed by the agency, commensurate with its objectives and resources. In addition to

fulfilling their legal responsibilities, businesses aim to communicate messages that help educate the general public and urge them to seek the advice of a health care expert [1].

Patients often turn to self-medication as a method of treatment. Self-medication has been linked to a counterintuitive economic loss owing to delayed detection and treatment of underlying diseases, according to several studies. In addition, patients who self-medicate run the risk of creating drug interactions that might have been avoided if they sought treatment from a qualified medical professional. There has to be a check on the habit of self-medicating with antibiotics since this might lead to drug resistance. One can't say that self-medicating is always bad. "Over the counter" drugs may be acquired without a prescription, which can save patients both time and money in the long run. Patients in the hill, tribal, and other hard-to-reach communities are still relying on self-medication methods for mild ailments in the absence of human health workers. Since self-medication can be regulated by the government, it should do so. This may be accomplished by having safe medications available, as well as providing clear instructions on how to use them, and referring patients to a doctor when necessary. Self-medication is a popular practice in India, and it is a growing problem for health care practitioners [2].

Advertising Regulations in India

Medications serve a critical part in the treatment of human sickness and malady. Medical practitioners are entrusted with prescribing different medications to patients based on their specific needs. Despite this, several pharmaceutical corporations engage in advertising concerning medical products, which raises questions about their legality. As a result of their advertisements in newspapers and television, the general population is misled and begins to spend money on things they don't need, resulting in their damage. As a result, the federal government is worried about the unscrupulous marketing of pharmaceuticals and medical equipment. Thus, the government has enacted a variety of laws to prevent individuals from being exploited. Despite the ban on advertising for healthcare professionals, there are certain basic rules that marketers must follow or else they will be held liable for the advertisements. According to the Drug Price Control Order, 2013, the National Pharmaceutical Pricing Right has the authority to set a ceiling price, after which importers cannot raise the price more than the Maximum Retail Price (MRP) [3]. Health and family welfare officials are also attempting to set up online marketplaces for the purchase and distribution of medications. Drug advertisement in India is regulated by a slew of Acts & Rules and recommendations issued by non-governmental organizations [4-5]. Advertising of medicines in India is covered by the following, Rules and regulations issued under the Food, Drugs and Cosmetics Act of 1940 (DCA) and the Drugs & Cosmetics Rules of 1945 (DCR).

- The Drugs & Magic Remedies (Objectionable Advertisements) Act 1954 (DMRA) and the Drugs & Magic Remedies Rules 1955 (DMRR).
- The Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002 (IMCR).
- The Pharmacy Practice Regulations 2015 (PPR).
- The Sales Promotion Employees (Conditions of Service) Act 1976 (SPEA).
- The UCPMP (Uniform Code of Pharmaceutical Marketing Practices) is self-regulatory.
- The Advertising Standards Council of India's (ASCI) Code for Self-Regulation of Advertising Content (CSRA).
- Published by the Organization for Pharmaceutical Producers of India, the OPPI Code for Pharmaceutical Practices 2019 (OCPPI). To be clear, the OCPPI is only applicable to OPPI members, who are primarily international pharmaceutical corporations operating in India.

Reason for Self-Medication

The usage of Histamine H₂ receptor blockers, topically applied corticosteroids, antifungals, and oral contraceptives are just some of the medications that many patients may self-manage when a correct medical diagnosis has been made. To avoid going to the doctor, they are naturally apprehensive because they believe they can diagnose and treat themselves if they are provided all the knowledge in advance. It's not uncommon for people to self-medicate for a variety of reasons. It's becoming more common for people to take their own medicine owing to a lack of time and health services, as well as a lack of money and incorrect beliefs [6].

- Too much time spent using it
- Dependency and abuse potential
- An interplay between food and drugs

Role of Pharmacist in Self-Medication

Prescription self-medication is one area where pharmacists may play a critical role in educating their patients. He/she must follow the correct procedures throughout his/her training and practice. Pharmacists are dedicated to their patient's health and well-being by identifying, resolving, and preventing drug-related issues. Ambulatory pharmacists must guarantee that all drugs, including those

that patients choose for themselves, are used safely and effectively. Before taking any drug, a pharmacist must notify their customers that they should consult with a physician. Among the duties of a pharmacist include communicating, providing quality medication, training and supervising others, as well as becoming health advocates [7-10]. The responsibilities of pharmacists are much greater than those of the aforementioned professionals.

Promotion of Responsible Self-Medication

Organization of Pharmaceutical Producers of India (OPPI) has formed a committee to promote safe self-medication by expanding the OTC market. Access to over-the-counter (OTC) pharmaceuticals and a better knowledge of the need for responsible self-medication need public and government help if they are to be successfully handled. Healthcare organizations have made big comments on self-care and self-medication, both on their own and in collaboration with World Self-Medication Industry (WSMI) [11]. There are just a few instances in this area. According to the World Health Organization, self-medication is an essential aspect of the healthcare system. By acknowledging people's responsibility for their health and realizing professional treatment is frequently unneeded for minor ailments, these ideas have evolved. Self-medication is becoming more common due to rising levels of education, literacy, and socioeconomic standing. Regulation of self-medication pharmaceuticals: Evaluation Guidelines (Guidelines for the regulatory assessment of medicinal products for use in self-medication, 2000) [12]. According to the International Pharmaceutical Federation (FIP), "to maintain great health," individuals are becoming more self-reliant when it comes to making decisions about their health care. It is the purpose of both pharmacists and non-prescription pharmaceutical producers to provide high-quality service to the public and to encourage safe medication use. Self-medication is an important aspect of self-care for patients with chronic illnesses or those who are well-informed, as the FIP and WSMI emphasized in a joint statement in 1999 [13]. The International Council of Nurses (ICN), self-medication is a critical health resource that is both underutilized and underestimated. Consumers and healthcare providers may work together to enhance it [14]. The ICN and the WSMI said this in a joint statement in 2003.

MATERIAL AND METHODS

Healthcare Advertisement

Over a period of two months (December 2021 to January 2022), 500 people from Annamalai Nagar (Cuddalore District), Kurinjipadi (Cuddalore District), and Kadaladi (Ramanathapuram District). The participants were advised regarding the study ahead of time, and their formal consent was obtained after further discussion. Participation was completely voluntary, and all information was kept strictly confidential. Twelve closed-ended survey questionnaires (Annexure) were given to them as part of a cross-sectional survey. There were two versions of the survey, one in Tamil and one in English. The survey responses were statistically analysed and evaluated. (All questionnaires reported in respective figures).

Self-Medication

Between December 2021 and January 2022, a cross-sectional study was conducted in three service areas of the urban and rural health centre attached to a medical institution, including Annamalai Nagar (Cuddalore District), Kurinjipadi (Cuddalore District), and Kadaladi (Ramanathapuram District), which each serve about 7000 people.

A standardized pretested questionnaire (Annexure) was used to interview the household members who were present at the time of the visit. The study participants signed a written consent form before to their participation. Self-medication use and reasons for self-medication were studied in relation to participants' sociodemographic characteristics (age, gender, and level of education). There were two versions of the survey, one in Tamil and one in English.

A second round of questions was administered to those who admitted to self-medicating. Questions about self-negative medication's effects, as well as whether or not the respondent plans to use the same strategy in the future, were included in this domain. The self-medications data reported in respective figures and tables.

RESULT AND DISCUSSION

SURVEY ON HEALTHCARE ADVERTISEMENT

In all, there are 500 people who have signed up to participate (Male-250 & Female-250). Only 433 of the 500 people who responded finished the survey. People's ages, genders, and levels of education and training were all noted down in the survey. There were approximately 403 participants in the study who were at least 19 years of age or older (n = 219 men and 214 females). In addition, the majority of those polled (n = 368) had either completed high school or obtained some form of postsecondary education.

The vast majority of participants (n = 393) were from the middle-class or upper-class. Only 10 of the participants were low-income or lower-middle class, while 30 were middle-class or upper-middle class.

Figure 1. How many people are watching the healthcare advertisements?

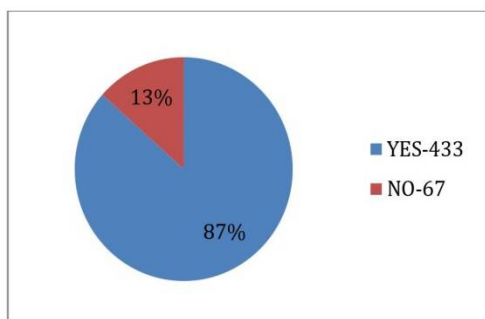


Figure 2. Source of advertisements

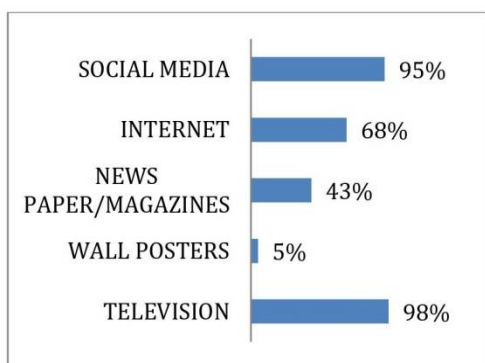


Figure 3. After seeing these advertisements have you purchased drug & cosmetics?

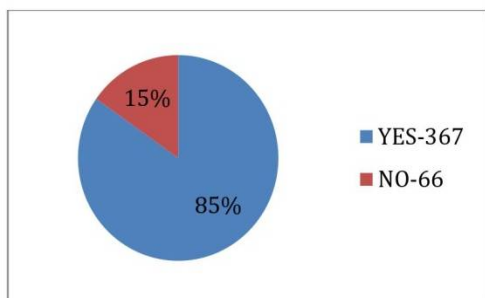


Figure 4. Types of products purchased

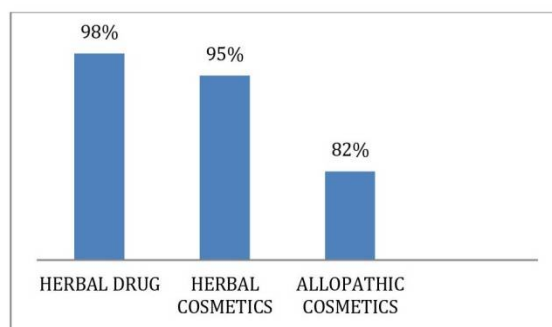
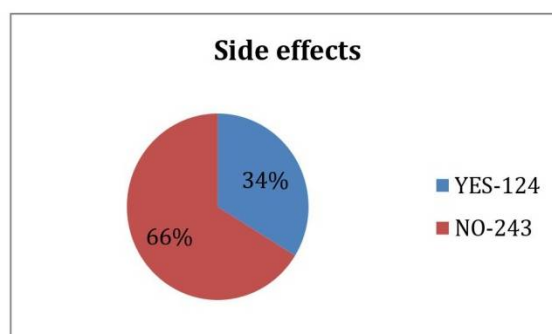


Figure 5. Reason for purchase



Figure 6. Have you had any side effects by these drug & cosmetics?



A whopping 95% of people have seen commercials on social media, 68.6% of people have seen advertisements on the internet, 43.3% of people have seen advertisements in news/magazines and 5.2% of people have seen advertisements on wall posters. 98.9% of people have seen advertisements on television. Of the 433 respondents surveyed, 367 (84.75%) purchased medications or cosmetics as a result of seeing an advertising. 90% of people have bought herbal drugs, 95% of people have bought natural products and 82% have bought allopathic products. Brand name (96 percent), offers/discounts (92 percent), and specifications (90 percent) are the main reasons people buy medications and cosmetics (84 percent). 33.78 percent (n=124) of those who use this product report side effects, which is based on 367 users. After experiencing side effects, 112 people (90 percent) quit using the product. Of the 367 respondents surveyed, 201 (54.76 percent) bought these items from neighborhood pharmacies, 97 (26.43 percent) bought them online, and 69 (18.8 percent) bought them from both neighborhood pharmacies

and online pharmacies. The majority of respondents (78 percent) felt that the DTCAs failed to emphasize the price or side effects of the marketed product when asked about the DTCAs' negative effects on them. A total of 35% of respondents were concerned about the lack of knowledge about the disease and possible treatment choices. Some people were worried that if they were advertised, the drug's price would go up.

Figure 7. Which product caused you side effects?

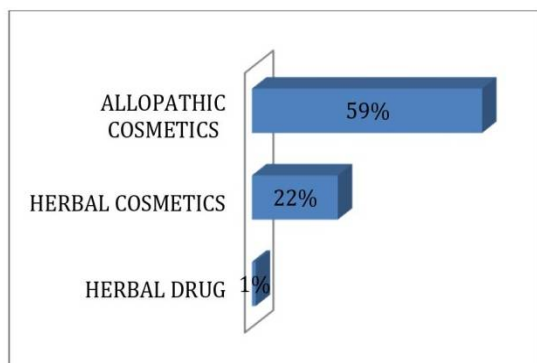


Figure 8. Have you stopped using that product after having side effects?

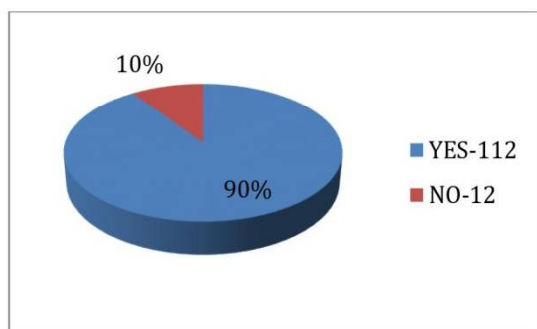


Figure 9. Did you consult a Physician after you had side effects?

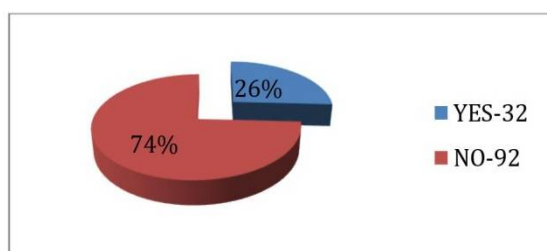


Figure 10. Did you consider it necessary to seek medical advice before purchasing and using the products?

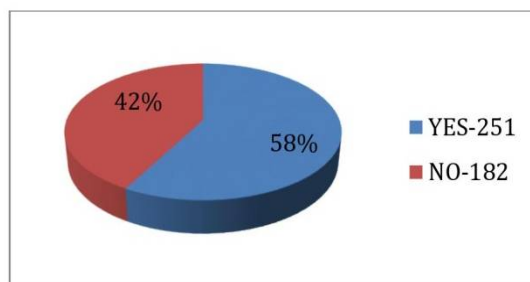


Figure 11. Credibility on these advertisements

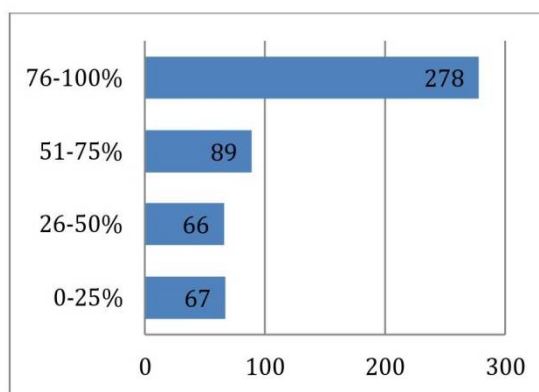
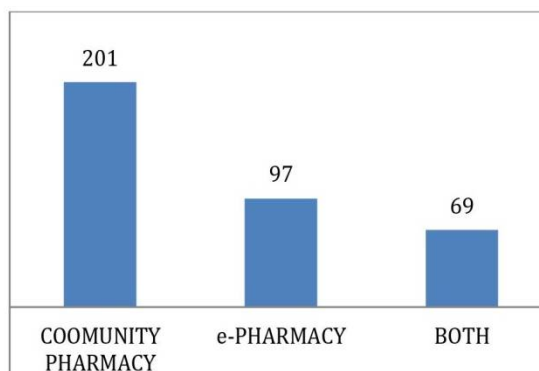


Figure 12. Where will you buy these products?



SURVEY ON SELF-MEDICATION

Figure 13. Without consulting Physician have you taken Self-medication?

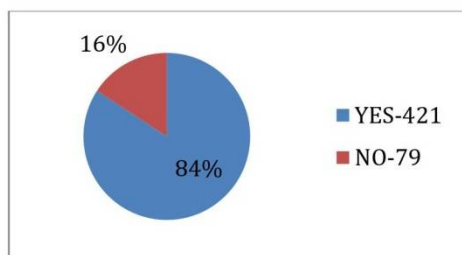


Table 1. Number of peoples - without consulting Physician have you taken Self-medication?

Gender	Male	Female	
Yes	212	209	421
No	38	41	79
Total	250	250	500

Table 2. Number of peoples in different age group - without consulting Physician have you taken Self-medication?

Age	14-18		19-25		26-45		46-60		60 & above		
Gender	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Yes	08	19	132	135	22	17	20	06	30	32	421
No	15	13	11	17	05	05	06	04	01	02	79
Total	23	32	143	152	27	22	26	10	31	34	500

Table 3. Number of peoples in different age group of education - without consulting Physician have you taken Self-medication?

Age	14-18		19-25		26-45		46-60		60 & above		
Gender	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Illiterate	0	0	0	0	01	02	03	0	07	29	42
Non-Graduate	08	19	06	0	07	03	09	02	02	03	59
Graduate	0	0	126	135	14	12	08	04	21	0	320
Total	08	19	132	135	22	17	20	06	30	32	421

Figure 14. Self-medication by peoples with education

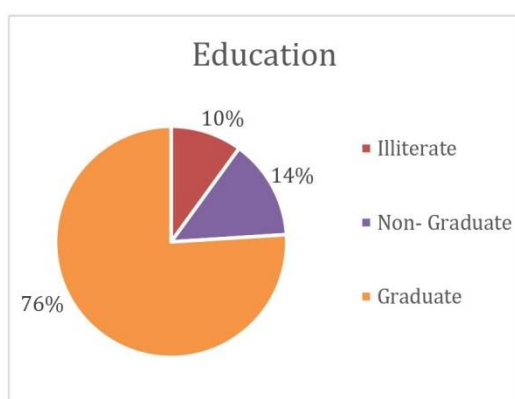
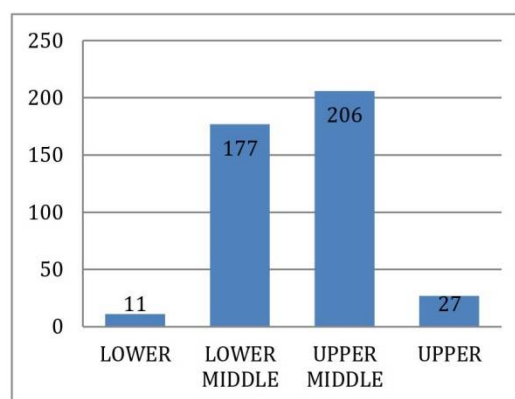


Figure 15. Socio-economic category



Socio demographic characteristics

In all, there are 500 people participating in this event (Male-250 & Female-250). Allopathic self-medication was used by 421 out of 500 participants, or 84%. Self-medication was found to be linked to a person's gender, occupation, and age. Self-medication for fever, headache, and spasmodic stomach symptoms was the most common use of self-medication by participants. There were 43 people (10.21 percent) who obtained drugs through studying about the drug, 163 people (38.71 percent) who used previous prescriptions, 179 people (42.51 percent) who obtained medication through the pharmacist, and 12 people (2.8 percent) who obtained medication through the internet/social media. The reasons for

self-medication include the mild nature of the illness and time constraints (n=108, 25.65 percent), for emergencies (n=92, 21.85 percent), no time for going to the clinic/hospital (n=97, 23.04 percent), previous good experience (n=58, 13.77 percent), know about the disease and their medicine (n=42, 9.97 percent), and lack of proximity to medical facility (n=24, 5.7 percent).

Figure 16. Method of procurement for self-medication

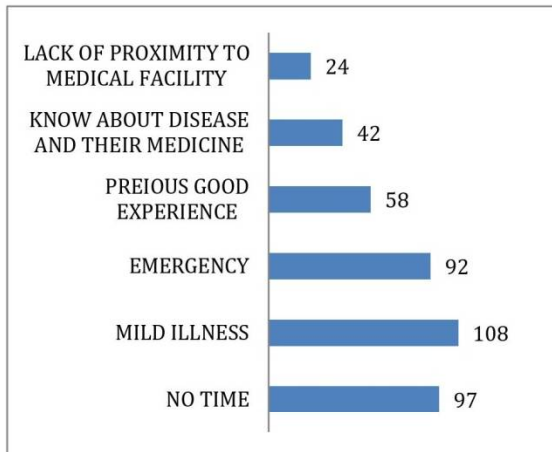


Figure 19. Have you had any side effects by the self-medication?

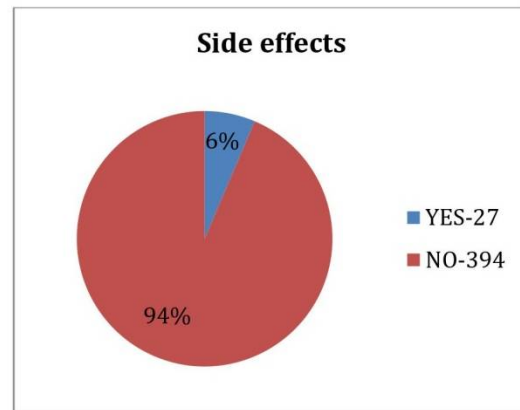


Figure 17. Reasons for using self-medication

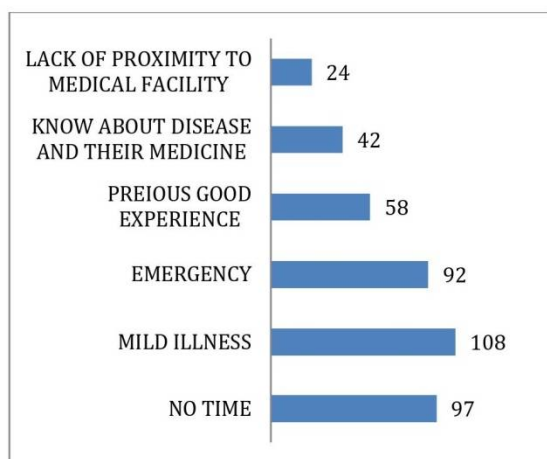


Figure 20. The nature of side effect

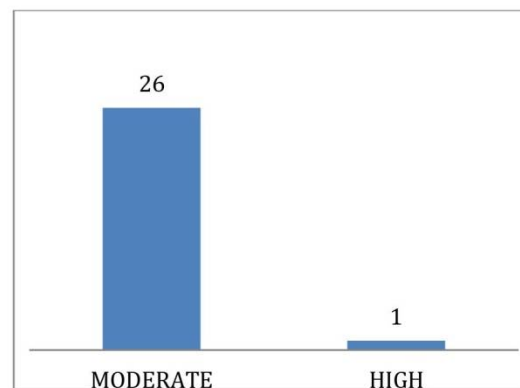


Figure 18. Do you feel that the self medication is harmless?

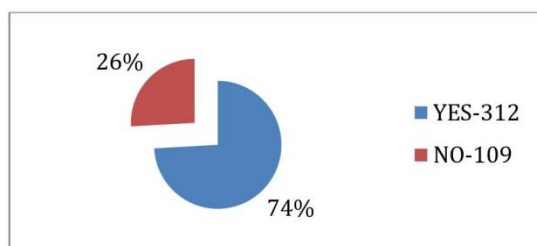
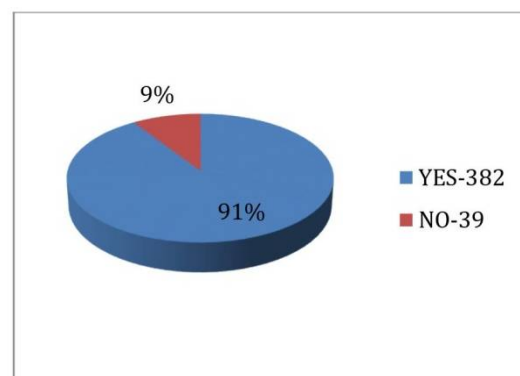


Figure 21. Will you continue to take self-medication in the future?



Attitude toward self-medication

An overwhelming majority of the 421 people who took the survey (73 percent) agreed that self-medication is safe. More than 91% of those polled (382/421) said they plan to utilise self-medication in the future for their own benefit. Instead, 306 (73 percent) said they would recommend self-medication to their friends and family members. 84% of people in the study's selected areas of Tamil Nadu self-

medicated with allopathic medication for at least three months prior to the study's completion, according to the findings. Economic position was not taken into account in the majority of Indian studies.

Figure 22. Reliability on the self-medication

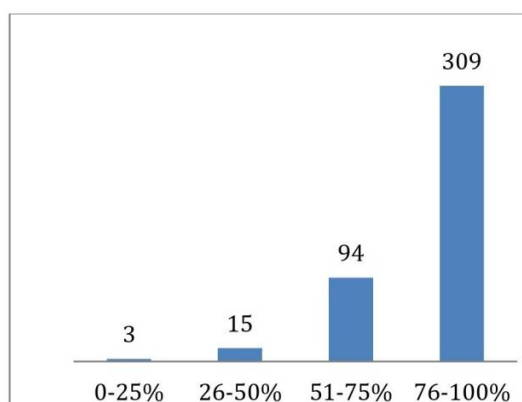


Figure 23. Do you recommend self-medication to others?

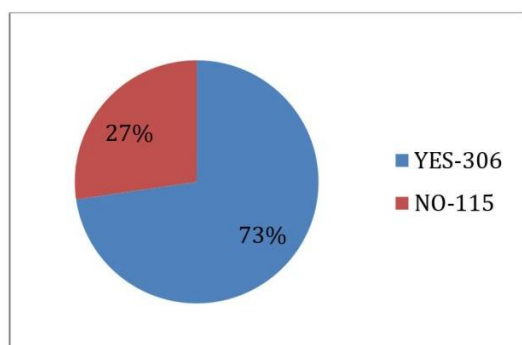


Table 4. List of symptoms treated by self-medication practices

Symptoms	Numbers (%)
Fever	98%
Headache	99%
Body pain	87%
Abdominal pain	89%
Cough and cold	93%
Joint pain	23%
Constipation	92%
Allergy	2%
Itching	27%
Others	3%

Table 5. Categories of drugs

Category	Numbers (%)
Antibiotics	37%
Analgesics	99%
Antipyretics	97%
Antiulcerics	56%
Cough suppressants	89%
Multivitamins	42%
Anthelmintics	7%
Antipruritic	24%

Self-medication discussion report

Low-income residents tended to be housewives, illiterates, and those with small families. Furthermore, they have access to high-quality health care at no cost within a short distance of their homes. People with lower socioeconomic position may be less likely to self-medicate due to these variables. Self-medication is more common among those who earn a higher income because they are more afraid of losing out on the opportunity to earn more money.

Self-medication for fever, headache, and stomach discomfort is the most common usage of self-medication by people. Some chronic illnesses, such as diabetes and arthritis, were also treated with self-medication in this study. After two days of use, 349 (82.89 percent) of the participants in this study had used self-medication and had not been relieved. The most common method of obtaining medications was from a pharmacist by displaying a previous prescription or by recalling the name of the medication from previous prescriptions. Drugs were given to those with low literacy levels by a pharmacist, whereas those with higher literacy levels relied on a previous prescription. People opted for self-medication due to the nature of their moderate disease and the lack of time they had available. The vast majority of respondents planned to use the product in the future and to suggest it to friends and family.

CONCLUSION

To promote their business, facilities, and research capabilities, the pharmaceutical firms in India often put-up billboards. For controlling the advertising of pharmaceuticals and prevent self-medication, the Drugs and Magical Remedies Act was enacted. According to the different statutes and laws, it may be determined that advertising of all medications is forbidden unless the Union Government Licensing body is granted permission, either by law or notice. This survey had been done through some related questions regarding healthcare advertisement and self-medication to common peoples in rural and urban areas. In most cases, the people who watch healthcare advertisement and who took self-medication; which depends on their education and knowledge; and mainly those have lack of awareness on them. If people

have no education, they are promoted by some educated people to utilize the advertisement and self-medication. Even though some people have no idea about self-medication and what is advertisements. However, they may utilize this issue. As a result of this survey, it is advised that a comprehensive strategy be used to address this issue, which includes adequate knowledge, education, and mainly cause of awareness on self-medication and pharmaceutical advertisement.

ANNXURE

Questionnaires for Healthcare Advertisement

1. How many people are watching the healthcare advertisements?
2. Source of advertisements
3. After seeing these advertisements have you purchased drug & cosmetics?
4. Types of products purchased
5. Reason for purchase
6. Have you had any side effects by these drug & cosmetics?
7. Which product caused you side effects?
8. Have you stopped using that product after having side effects?
9. Did you consult a Physician after you had side effects?
10. Did you consider it necessary to seek medical advice before purchasing and using the products?
11. Credibility on these advertisements
12. Where will you buy these products?

Questionnaires for Self-medication

1. Without consulting Physician have you taken Self-medication?
2. Number of peoples - without consulting Physician have you taken Self-medication?
3. Number of peoples in different age group - without consulting Physician have you taken Self-medication?
4. Number of peoples in different age group of education - without consulting Physician have you taken Self-medication?
5. Self-medication by peoples with education
6. Socio-economic category
7. Method of procurement for self-medication
8. Reasons for using self-medication
9. Do you feel that the self-medication is harmless?
10. Have you had any side effects by the self-medication?
11. The nature of side effect
12. Will you continue to take self-medication in the future?
13. Reliability on the self-medication
14. Do you recommend self-medication to others?
15. List of symptoms treated by self-medication practices
16. Categories of drugs

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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