ISSN NO: 2249-3034

Prevalence of Self Medication practice among the population of Tiruppur District

Dr.BRAD BEST GFD

1. Professor, JKKMMRF's Annai JKK Sampoorani Ammal College of Pharmacy, Komarapalayam, Tamil Nadu, India
2. Pharm D Intern, JKKMMRF's Annai JKK Sampoorani Ammal College of Pharmacy, Komarapalayam, Tamil Nadu, India

[Affiliated to the Tamil Nadu Dr.M.G.R. Medical University, Chennai, Tamil Nadu- 600032]

*Address for Correspondence:
Dr. Arul Prakasam K C, M. Pharm, Ph. D
Professor and Head of the department,
JKKMMRF's Annai JKK Sampoorani Ammal College of Pharmacy, Komarapalayam,
Tamil Nadu- 638 183

ISSN NO: 2249-3034

Abstract:

Background and objectives: Self-medication is a widespread method of treating minor illnesses in India. The purpose of this study was to figure out how common self-medication was among the people living in the Tiruppur district. The perspective and attitude toward self-medication are also determined by this study. **Materials and methods:** A cross-sectional study design was conducted to describe the prevalence of self-medication practice among the population and the relationship between the self-medication-related variables and demographic variables. **Results:** Among 642 participants, 452 participants practiced self-medication, and 190 participants never practiced self-medication. study shows, that 42.7% of male and 57.3% of female participants practice self-medication. Shows that the majority of them were literate 95.14% and 4.86% were illiterate and 47.56% of participants were UG level, 22.59% were PG level and 1.99% were Ph.D. level. 27.43% reported knowing about the medicine by consulting a pharmacist. study shows there is a significant association between ailments and gender and there is a significant association between ailments and education status. **Conclusion**: The public has to be educated on the need for correct medication usage, as irrational medication use is caused by a lack of understanding about the dangers that can result from self-medication without a professional diagnosis.

Keywords : selfmedication, prevalence, ailments, Tiruppur district, Irrational use

ISSN NO: 2249-3034

Introduction:

Self-medication, according to the World Health Organization, is the use of pharmaceutical care items by the consumer to cure self-recognized illnesses without seeking medical advice.[1] Self-medication is viewed as a component of the larger self-care process, which encourages people to engage in activities for disease prevention, illness treatment, and health improvement after an accident or illness. Self-medication aids in easing the financial strain on patients. The risks of inappropriate and needless self-medication, however, cannot be overstated because it can result in polypharmacy, inaccurate diagnosis, unfavorable effects, drug interactions, antibiotic resistance, and higher drug costs. Healthcare authorities favor laws and regulations that support the use of prescription drugs, yet it is impossible to ignore the difficulties that come with self-medication among the general population. In order to address the difficulties of self-medication, increased public knowledge and education regarding the safe and responsible use of medications is required.[2]

It has become a worldwide trend for people to buy over-the-counter drugs only based on symptom mapping. It now poses a global public health risk due to its active and passive effects on health management. At least 21% of people in Europe used self-medication, according to research. Self-medication was found to be common in 38.8% and 75.7% of cases in Asia and Africa, respectively. In India, self-medication prevalence rates varied from 12.0% to 78.6%; in Nepal, 38.2% to 82.0%; in Sri Lanka, 35.3% to 78.0%; and in Iran, 83.0%.[3,12]

Doctor's clinic far from home and doctor's charge were the two main justifications for self-medication (22.39% and 22.34%, respectively). The most frequently reported symptoms were fever (16.77%) and headache (22.01%). Self-medication is practiced by 87% of people under the supervision of a drugstore. When taking self-medication, more than 90% of people viewed the material, but only 40% of them should have had some understanding of it. Antibiotics (42%), as well as analgesics (44%), were frequently utilized medications.[4]

Pharmaceutical advice is completed by package inserts. Patients should be incited to demand more pertinent advice from pharmacists. Drug advertisements should be handled more carefully. Compared to other countries, self-medication has reached a leading position in Switzerland. Pharmacists have accepted this challenge and are increasingly adjusting their education to the problems of self-medication.[5,6].

The Advantage of self medication is strategic policies of many pharmacy professional bodies is also driving increased deregulation and promoting self medication. The area of self medication, particularly within some European countries, is the unique domain of pharmacy. Research has shown that pharmacists are supportive of deregulation as it enables them to fulfil a more clinical role, increases therapeutic options, promotes greater involvement with patients and enhances their professional status.[7,8]. The present study was done to estimate the prevalence of self-medication for allopathic drugs among the population of Tiruppur district.

ISSN NO: 2249-3034

Material and Methods:

An observational cross-sectional study was conducted in the Tiruppur district, through google forms to evaluate the prevalence of self-medication practices among the population of the Tiruppur district. The sample size is calculated with a margin of error of 5%, and a confidence interval of 95%, the estimated sample size was 303. We conducted the study on 642 participants using a validated questionnaire. The inclusion criteria include people who are aged above 18 years and willing to participate in the study and have the ability to read an informed consent form. The exclusion criteria are Health care professionals. A self-designed questionnaire on the prevalence of self-medication was prepared and sent through Google platforms. This study was approved by Institutional Ethics Committee, JKKMMRF's Annai JKK Sampoorani Ammal College of Pharmacy, Komarapalayam. All responses were coded, entered, and analyzed using a statistical package for the social science program (SPSS) Version 26. Descriptive results were expressed as Numbers and Percentages.

Results and Discussion:

There were 642 participants among general population of tiruppur district submitted their response. Among 642 participants, 452 participants were practiced self-medication and 190 participants never practiced self-medication. Were the 452 of 642 is known as **prevalence of self medication is 70.4% and** a similar study has conducted in erode and the prevalence was 73% and the results are similar to that study (Sivasakthi et.al.,2020)

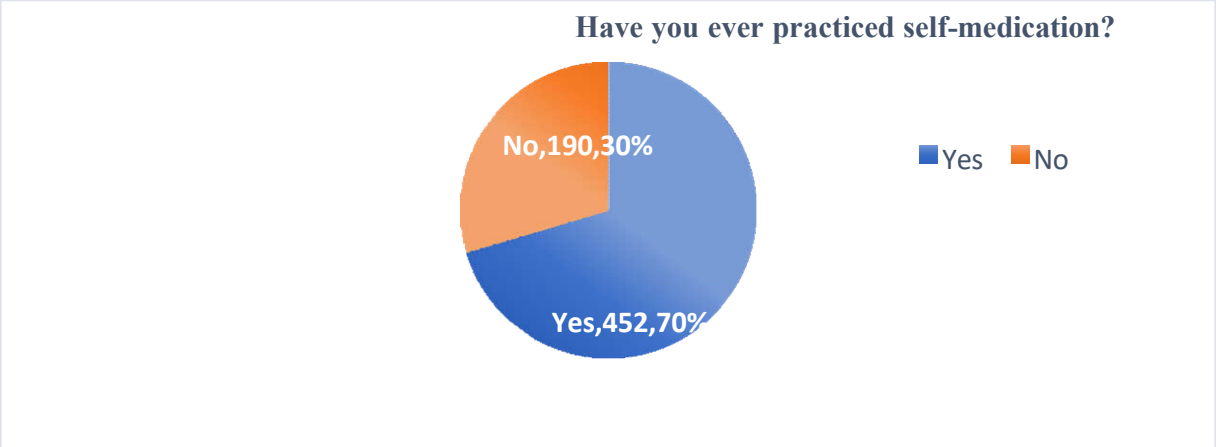

Figure-1 Prevalence of self-medication practice among the participants

Demographics of self-medication practitioners:

Our study shows, that 42.7% of male participants and 57.3% of female participants practice self-medication. Majority of the participants practicing self medication are known as females.

ISSN NO: 2249-3034

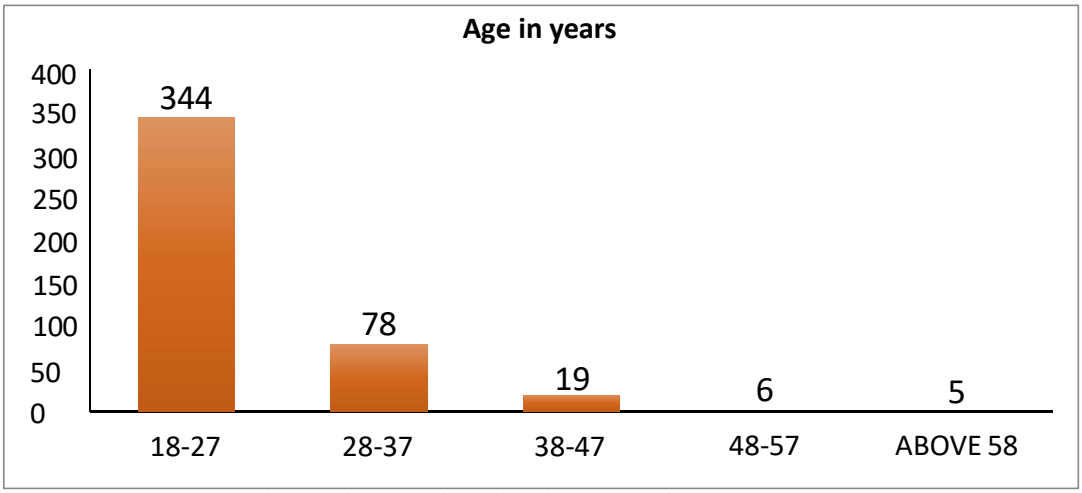

Figure-2 age wise distribution of participants

Figure-2 shows that **Majority of the participants 344 were aged between 18-27 years** and 78 respondents were aged between 28-37 years, 30 respondents reported they were aged above 37 years. Highest proportion of volunteers involved in practice of self medication were aged between 18- 27 years. This is similar to study done in erode where they aged between 18-27. (Sivasakthi et.al.,2020). Among the study population majority of the respondents 306 (67.7%) from rural region and 146 (32.3%) from urban region.

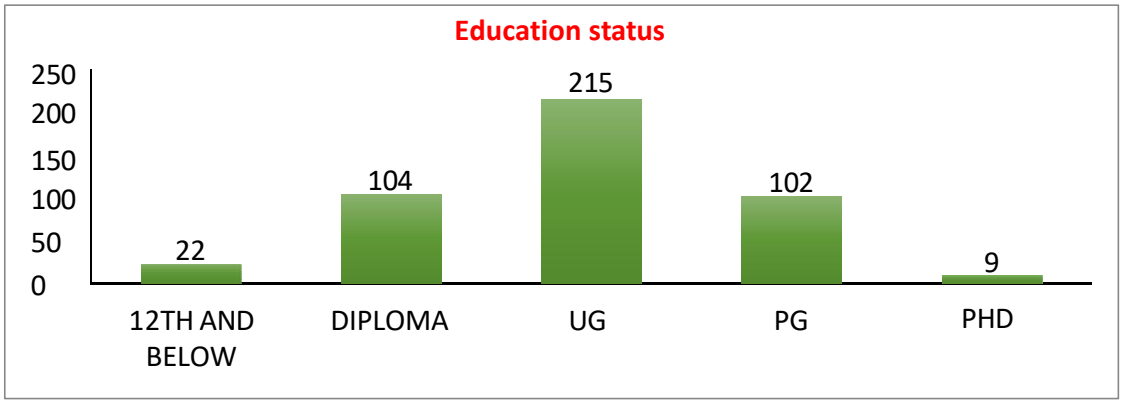

Figure-3 Education status wise distribution of participants

Figure-3 defined Education status of the respondents showed that 22 (4.86%) participants are 12th and below,104 (23%) participants are Diploma level and 215 (47.56%) participants are UG level,102 (22.59%) participants are PG level and 9 (1.99%) participants were PHD level.

Self-medication related data:

ISSN NO: 2249-3034

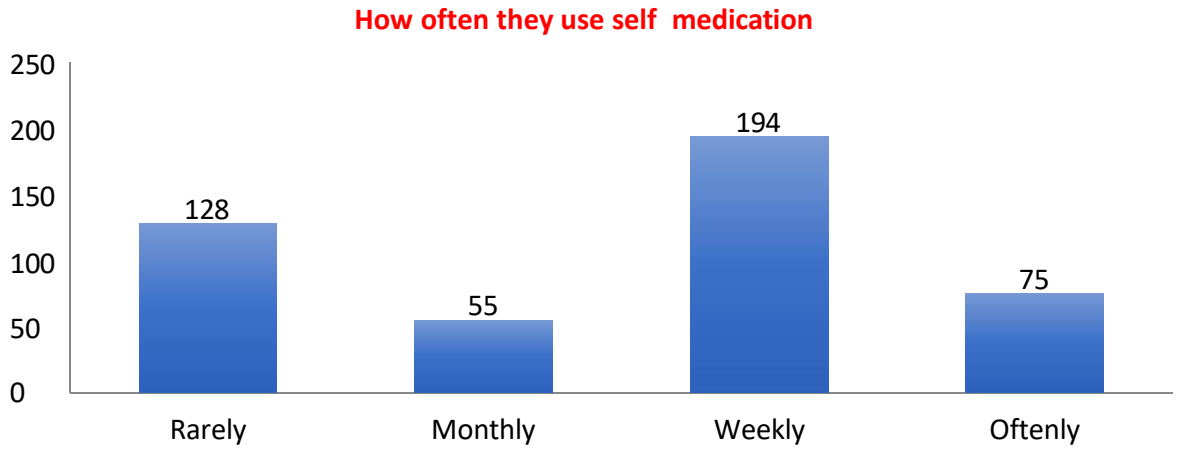

Figure-4 Frequency of usage of self medication

Figure-4 Describes about the self-medication related information from the respondents. Among the study population (642), 452 participants (70.3%) were practicing self-medication and 190 participants (29.7%) never practiced self-medication. Majority of the respondents 42.92% were taking self-medication 'Weekly', 28.32% were practicing self-medication rarely, 16.59% were Oftenly practicing self-medication and 12.17% of participants were practicing self medication monthly.

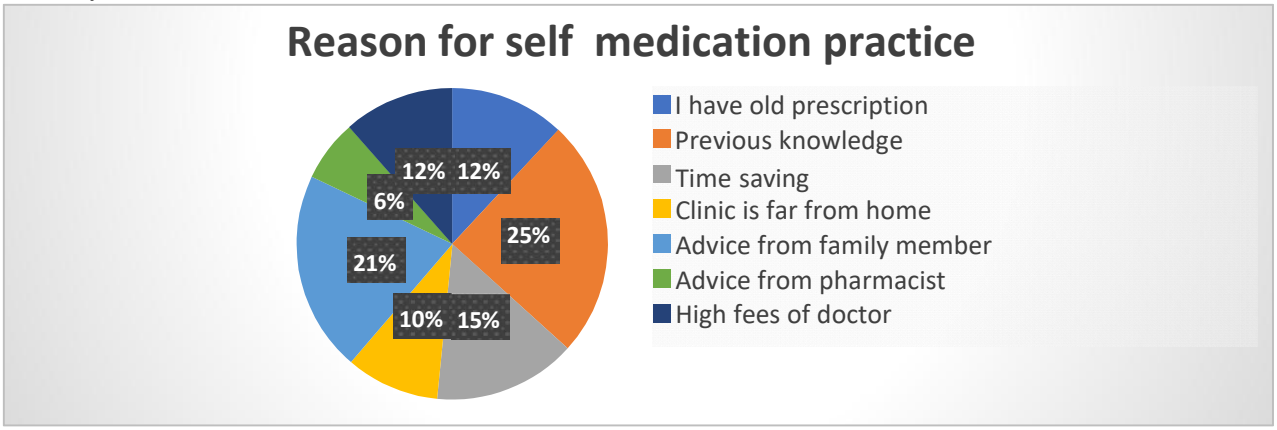

Figure-5 Reason for self-medication use

Figure-5 shows that, Previous knowledge on the medication 24.77% were the major reason for taking self-medication reported by majority of the respondents. 11.94% respondents were reported they have old prescription, 6.41% respondents were reported advice from pharmacist for taking self-medication, 20.79% respondents were reported advice from family for taking self-medication, 14.82% respondents were reported time saving for taking self-medication, 11.5% respondents practice self-medication because high fees of doctor, 9.73% participants practice self-medication because the clinic is far from home.

ISSN NO: 2249-3034

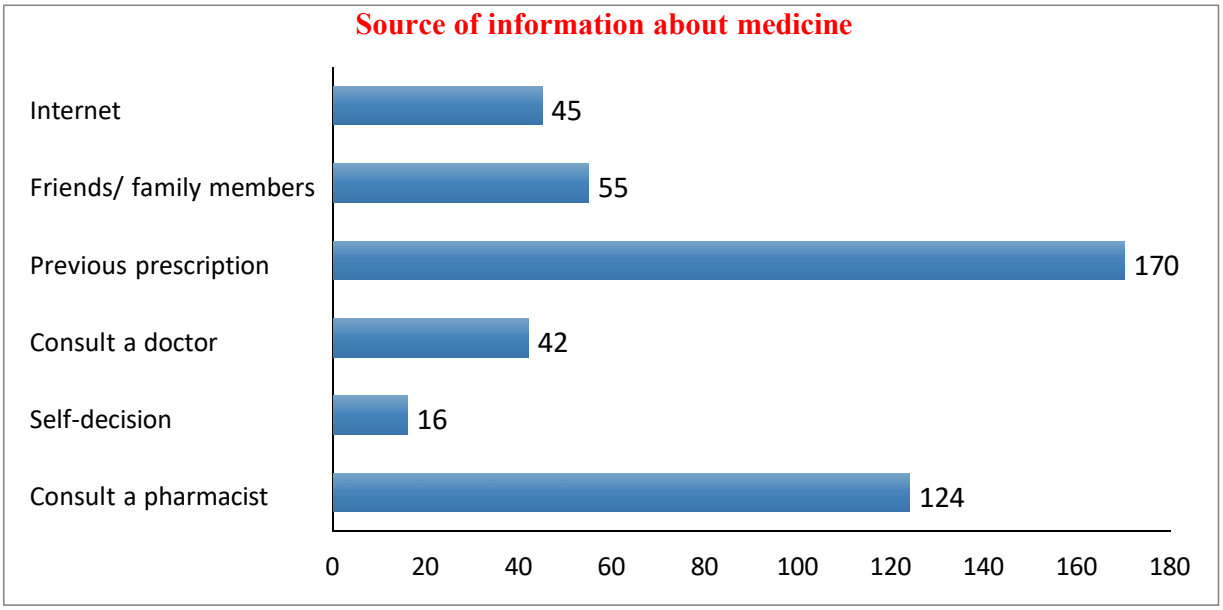

Figure-6 Source of information about medication

Figure-6 shows, 27.43% were reported know about the medicine by consult a pharmacist. 9.2% participants are mentioned they have previously considered a doctor, 37.61% were mentioned previous experience, 9.9% respondents selected internet, 12.16% participants were mentioned they family and friends, 3.5% respondents reported self-decision.

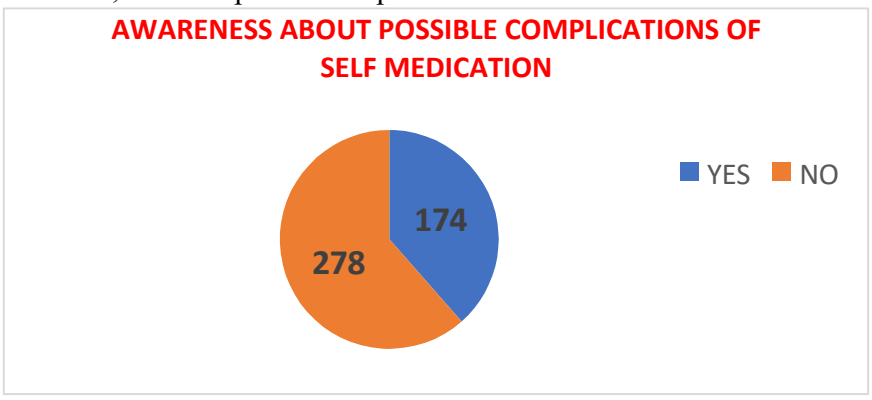

Figure-7 Awareness about possible complications of self medication

Figure-7 shows majority of the respondents 61.5% doesn't aware about possible complications of self-medication and 38.49% respondents were aware about the possible complications and Our study shows Majority of the respondents 78.53% were reported they had been never changed the dose while practicing self-medication, 1.54% were changed the dose because of their health is improved, 15.92% mentioned not effective, 2.47% changed the dose because of reduce the side effect risk, 0.88% mentioned drug insufficient, 0.66% reported a reason for changing the dose is disease condition worsened.

ISSN NO: 2249-3034

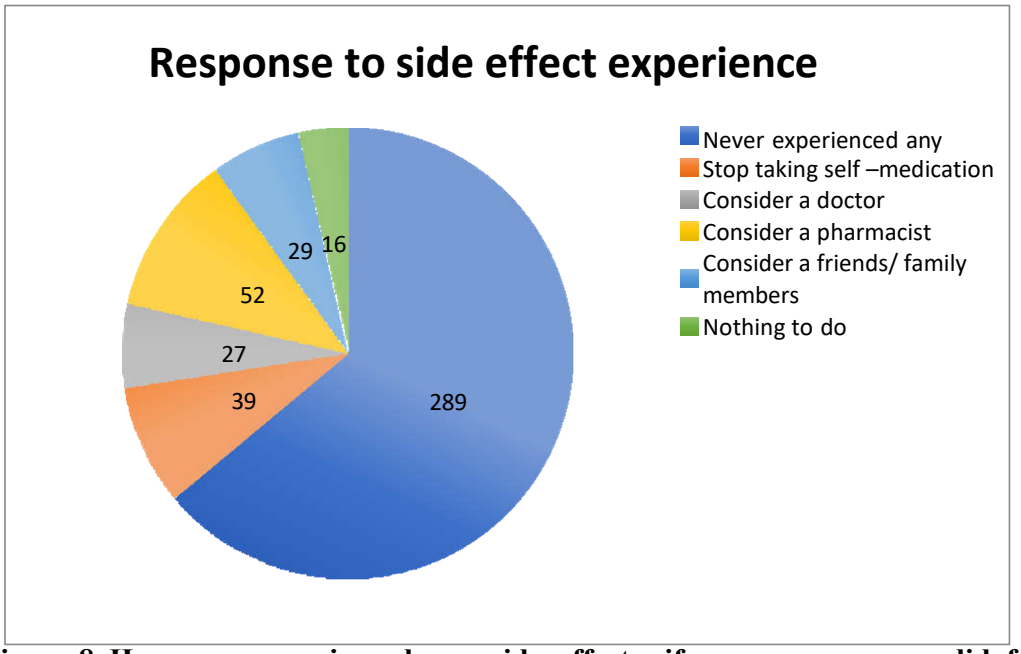

Figure-8 Have you experienced any side effects, if yes response you did for that

Figure-8 shows, Majority of the participants 63.95% never experienced any side effects while practicing self-medication, 5.98% consider a doctor when side effect occurs, 3.55 % mentioned nothing to do after side effects, 8.62% were stop taking self-medication after a side effect, 11.5% participants consider a pharmacist for side effects, 6.4% consider a friends or family members.

Table-1 Source of procurement of medication:

SOURCE	FREQUENCY	PERCENTAGE
Pharmacy shops	409	90.48%
E-pharmacy	21	4.65%
Friends/ family member	46	10.18%
Medical representatives	68	15.04%
Others	6	1.32%

Table-1 shows, 90.48% were mentioned pharmacy shops, 15.04% were mentioned medical representatives, 10.18% were mentioned friends/family members and 4.65% respondents selected e-pharmacy.

ISSN NO: 2249-3034

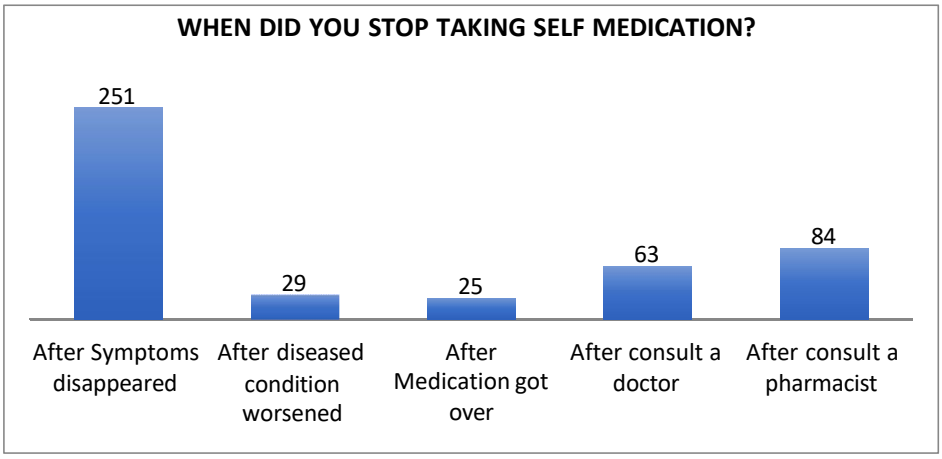

Figure-9 When did you stop taking self medication

Figure-9 shows, 55.53% participants stop taking self-medication after symptoms disappeared, 6.4% participants mentioned after disease condition worsened, 5.53% participants stop taking medication after medication got over, 13.95% mentioned after consult a doctor and 18.58% participants were stop taking self medication after consult a pharmacist.

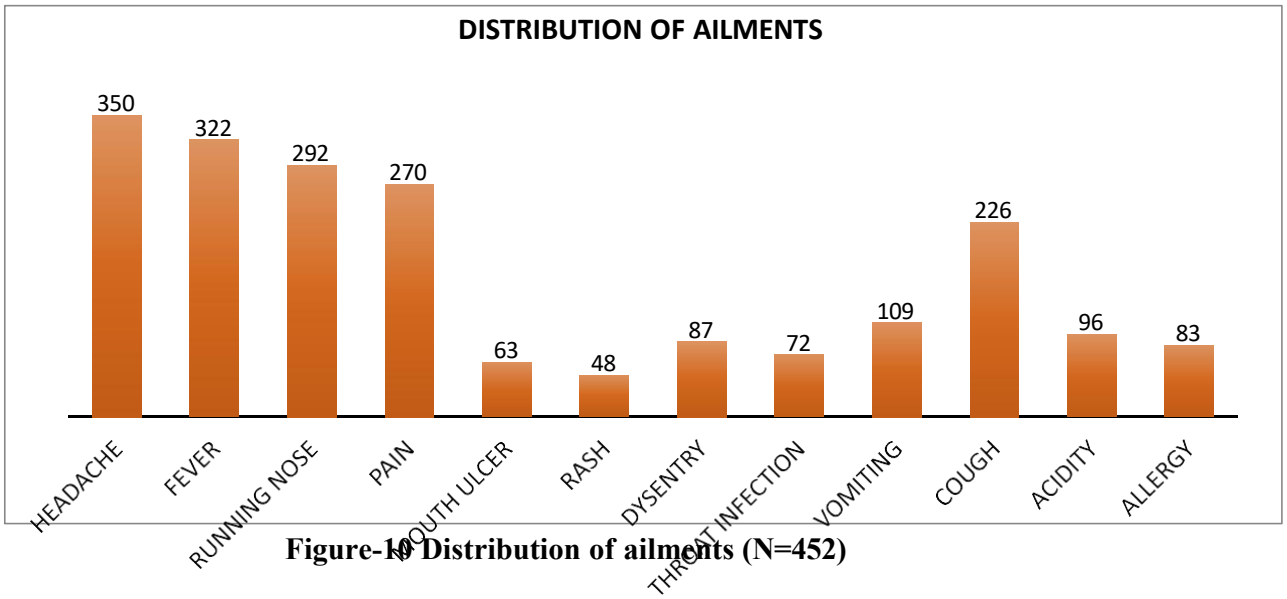

Figure-10 Distribution of ailments (N=452)

Figure-10 shows about the distribution of self-medicated diseases and drugs used for self-medication practice. Most frequent complaints expressed by the respondents were Headache 77.43%, Fever 71.23%, Running nose 64.60%, Cough 50%, Pain 59.73%, Acidity 21.23% Vomiting 24.11%, Dysentery 19.24%, Throat infection 15.92%, Allergy 8.36%, Mouth ulcer 13.98%, Rash 10.61%.

ISSN NO: 2249-3034

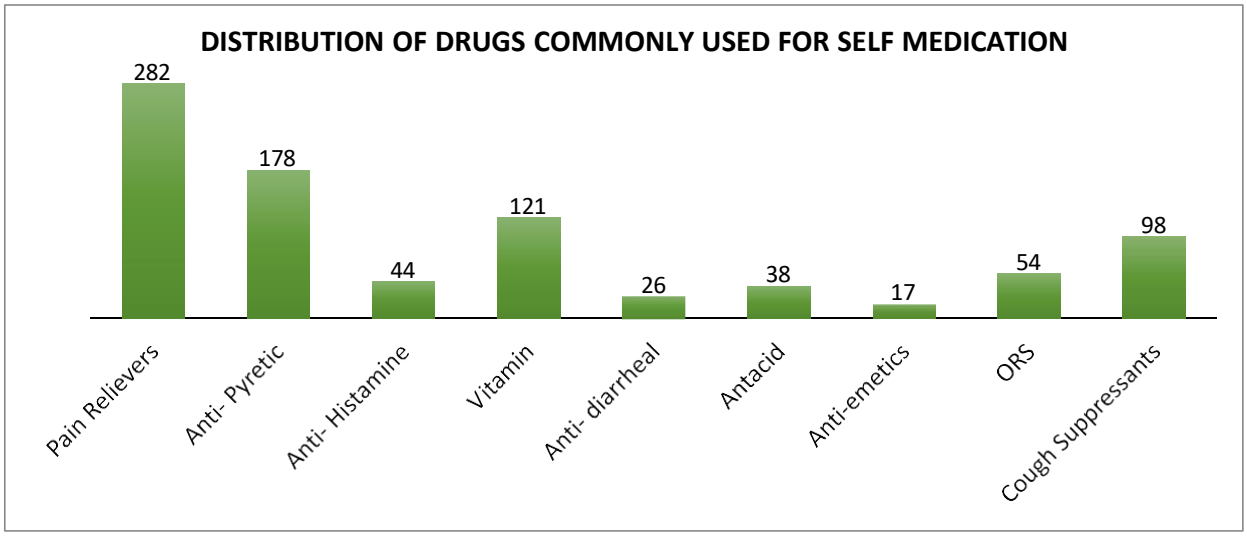

Figure-11 Distribution of drugs commonly used for self medication

Figure-11 shows The commonly used drugs were: pain relievers 62.39%, anti-pyretic 39.38%, vitamins 26.77%, cough suppressants 21.68%, Oral Rehydration Solution (ORS) 11.95%, anti-histamine 9.73%, antacid 8.41%, anti-diarrheal 5.75%, anti-emetics 3.76%.

Conclusion:

The study indicated that most of the patients (90.48% of participants) get medicines from nearby community pharmacies for treating minor ailments, thus people should be aware that the person dispensing medicines is qualified pharmacist, patients should ask question regarding the medicine to person who is dispensing and get complete knowledge regarding its usage, incase if person who is dispensing medicine in community pharmacy doesn't provide adequate information regarding drug avoid getting medicine from that pharmacy. Study shows high prevalence of self medication practice among participants (76.1 %), aged between 18 to 27 years, these aged people are highly exposed to internet compared to elders thus people should collect information regarding the medicine through internet as various medical websites such as, IBM Micromedex, Medscape, Drugs.com, 1mg.com, Webmd.com provide adequate information regarding drugs. 77.43 % of participants in this study mostly practice self medication for treatment of Headache, people should self diagnose the causes that lead to headache such as lack of sleep, high usage of mobile phones, food, stress, tension and try to avoid those triggers of headache, this leads to less usage of medications. 62.39% of participants take pain relievers in practice of self medication, people should avoid opioids medicines for mild and moderate pain and be aware of fact that non-steroidal anti inflammatory drugs (NSAIDS) may leads to exacerbation in asthma patients, incase theirs need for high dose of opioids usage then medicines for constipation have to be co administered as high dose of opioids leads to constipation. In this study prevalence of self medication was reported to be extensively 70.3% among studied

ISSN NO: 2249-3034

population and similar study done is erode, the prevalence was 73% and the results are similar to that study (Sivasakthi et.al.,2020).

Reference:

1. World Health Organization**.** Guidelines for the regulatory assessment of medicinal products for use in self-medication WHODEDM/QSM/001, 2000. Available: http://apps.who.int/medicinedocs/en/d/Js2218e/. Accessed November 17, 2014.
2. Sivasakthi K, Koshila KS, Sajeer Mohammed K, Viswa S, Assessment of knowledge attitude and practice about self medication among rural areas in erode district, Indian journal of pharmacy 2020 13(3):228-231 DOI: 10.5530/ijopp.13.3.x
3. Muna malik, Muhammad junaid tahir, Razia jabbar, Ali ahmed, Rabia hussain. Self medication during COVID 19 pandemic: challenges and opportunities. Drugs and their perspect. 2020; 36(12): 565-567 doi: 10.1007/s40267-020-00785-z
4. Saha A, Marma KKS, Rashid A, Tarannum N, Das S, Chowdhury T, et al. (2022) Risk factors associated with self-medication among the indigenous communities of Chittagong Hill Tracts, Bangladesh. PLoS ONE 17(6): e0269622. https:// doi.org/10.1371/journal.pone.0269622
5. Kalaiselvi Selvaraj, Ganesh Kumar S, Archana Ramalingam, Prevalence of selfmedication practices and its associated factors in Urban Puducherry, India, Perspectives in Clinical Research, 2014, 5 (1)78-79.
6. Mehta RK, Sharma S. Knowledge, Attitude and Practice of self-medication among medical students. IOSR Journal of Nursing and Health Science. 2015; 4(1), 89–96.
7. Subhashini, Bharath Kumar Garla, Muthu Karuppaiah and Taranath , Prevalence of Self-medication Practice Among People Attending Oral Health Outreach Program in Madurai East, Tamil Nadu, Journal of Advanced Oral Research, 2014 8(1&2):14-20. doi: 10.1177/2229411217729104
8. Varun Kumar, Abha Mangal, Geeta Yadav, Deepak Raut, Saudan Singh, Prevalence and pattern of self-medication practices in an urban area of Delhi, India, Medical Journal of Dr. D.Y. Patil University | 2015, 8 (1), 58: 1–10. Doi: 10.4103/9075-2870.148828
9. Afridi M, Rasool G, Rabia Tabassum, et al. Prevalence and pattern of self-medication in Karachi: A community survey. Pakistan Journal of Medical Sciences. 2015;31(5): 1241-1245.
10. Arumugam Shalini, Muthinarayanan Logaraj, (2021), Prevalence and determinants of self medication use among the adult population residing in a sub urban areas near Chennai, Journal of Family Medicine and Primary Care ,2021 10 (5):54-59.
11. Mahmoud Hashemzaei, Mahdi Afshari, Zahra Koohkan, Ali Bazi, Ramin Rezaee and Kaveh Tabrizian, Knowledge, attitude, and practice of pharmacy and medical students regarding self-medication, a study in Zabol University of Medical Sciences; Sistan and Baluchestan province in south-east of Iran, Hashemzaei et al. BMC Medical Education (2021) 21:49-51.
12. Nirma Subashini and Lahiru Udayanga, Demographic, socio-economic and other associated risk factors for self-medication behaviour among university students of Sri Lanka, Subashini and Udayanga BMC Public Health (2020) 20:613-619.

ISSN NO: 2249-3034

13. 16.Wael Zeid, Madeha Hamed, Nadia Mansour and Rokaya Diab, Prevalence and associated risk factors of self-medication among patients attending El-Mahsama family practice center, Ismailia, Egypt, Zeid et al. Bulletin of the National Research Centre (2020) 44:92.
14. Xiaosheng Lei , Heng Jiang , Chaojie Liu , Adamm Ferrier and Janette Mugavin, Self Medication Practice and Associated Factors among Residents in Wuhan, China, Int. J. Environ. Res. Public Health 2018, 15 (68)
15. Zemene Demelash Kifle, Abebe Basazn Mekuria, Demssie Ayalew Anteneh, and Engidaw Fentahun Enyew, Self-medication Practice and Associated Factors among Private Health Sciences Students in Gondar Town, North West Ethiopia. The Journal of Health Care Organization, Provision, and Financing 2021, 2:1-5.