Self Quit Smoking Initiative – Knowledge Level And Barriers

Anandhasayanam[*]A, Naveenkumar[1] I, Prasanth[2] S, Radhisri[3] A J,
Ramakrishnan[4] P, Sangameswaran[5] B, Kannan[6] S

[*] *A Professor, Department of Pharmacy Practice, SSM College of Pharmacy,*
[1,2,3,4] *P, Final B. Pharm, Practice School Scholars SSM College of Pharmacy,*
[5] *B – Principal, SSM College of Pharmacy,*
[6] *– Professor & HOD Department of Pharmacy Practice, SSM College of Pharmacy,*
Affiliated to The Tamil Nadu Dr. M. G. R. Medical University,

ABSTRACT
Background: Adverse drug reactions (ADR) are the known dangers of any medicinal therapy. They are not only responsible for increasing the mortality and morbidity but also for multiplying the health care expenditure. The **aim** of this study was Identify the utilization pattern of different drugs, monitoring, reporting and management of ADRs in Pulmonary Medicine Department of a Tertiary Care Hospital **Methods:** The study was prospective observational study which was carried out for a period of Three Month (April – June 2025) study in Tertiary Care Hospital. Patients included in the Pulmonary Medicine Department in respiratory disease Proportion of ADRs and patient characteristics were investigated. Causality was evaluated by the Naranjo algorithm, severity was determined using the Hartwig classification and preventability was assessed using the Schumock and Thornton scale. **Results**: One hundred and Five numbers (105) of ADRs were seen out of 150 patients of the study population. The occurrence of ADR was found slightly higher in males i.e., 55% as compared to females i.e., 45%. Most of the patients are affected with tuberculosis about 42 patients, asthma are 31 patients and acute pulmonary edema 19 patients. Causality assessment of ADR is identified According to naranjo scale. ADR were classified as is (0%) doubtful, (28%) probable (54%) possible and (18%) definite. ADRs observed yellow eyes (17%), nausea & allergy (15%), Palpitation which occurred in 14 cases i.e., 20.29%. Among 28 ADRs i.e., 43% belonged to the mild category,46% moderate category and Severe 11% was found in the study. **Conclusion:** A routine patient follow-up is needed for the early detection and prevention of ADRs in order to improve patient adherence to drug therapy and provide improved drug therapy by avoiding associated morbidity and mortality.

Keywords: Naranjo algorithm, Hartwig scale, Lower respiratory tract diseases.
A prospective survey was conducted among 412 smokers in Erode district to assess smoking prevalence, reasons for initiation, awareness of hazards, and barriers to cessation. The majority were aged 26–30 years, with higher prevalence in urban areas; 69% were graduates and 29% self-employed. Cigarettes with filters were most commonly used (65%). Peer influence (42%) and stress (27%) were the main reasons for starting smoking. While 74.5% knew the hazards, only 33% specifically identified cancer as the most serious risk. Of the participants, 272 desired to quit and 219 had attempted, but stress (44%) and addiction (35%) were the main barriers. Awareness of cessation aids was seen in 192 smokers, with 53% knowing about nicotine gum. The study concludes that although most smokers want to quit, barriers such as stress, addiction, and work pressure hinder success, highlighting the need for greater awareness and better access to cessation resources.
KEY WORDS: Smokers, Hazards of smoking, Smoking Cessation, Prevalence of Smoking, Barriers of Quit Smoking.

I. INTRODUCTION

Cigarette smoking is the largest preventable risk factor for morbidity and mortality in developed countries. Current smoking is positively associated with younger age, lower income, reduced educational achievement, and disadvantaged neighbourhood environment. Daily smokers smoke cigarettes to maintain nicotine levels in the brain, primarily to avoid the negative effects of nicotine withdrawal, but also to modulate mood. Nicotine dependence is the single most common psychiatric diagnosis in the United States, and substance abuse, major depression, and anxiety disorders are the most prevalent psychiatric

comorbid conditions associated with nicotine dependence[1].

Tobacco smoke contains harmful chemicals such as acetone, ammonia, arsenic, benzene, cadmium, carbon monoxide, lead, formaldehyde, and nicotine, which travel through the bloodstream and damage various organs. Smoking reduces calcium absorption and weakens bones, decreases oxygen supply to the eyes leading to vision loss, weakens the immune system, alters hormones affecting fertility, and damages DNA, increasing cancer risk. In India, Studies show thepatternofsmokingtobaccoincreasedinurbanIndiafrom101.8million in the year 2015–106.2 million in the year 2025, whereas in rural India were declining throughout the period 2015–2025[2].

Smoking cessation management involves both non-pharmacologic and pharmacologic approaches. Non-pharmacologic methods include asking about tobacco use at every visit, providing strong personalized advice, assessing readiness to quit, scheduling follow-ups, stressing risks, highlighting benefits, and addressing barriers. Pharmacologic management involves FDA-approved medications, which should be offered to all motivated patients without contraindications to support long-term abstinence[3].

Smoking is associated with significant alterations in sleep architecture. Previous studies have revealed changes in the subjective sleep of young smokers, but research on objective sleep assessment using polysomnography (PSG) is limited. Sleep EEG power and spindle activity may assess sleep quality in young smokers, which may provide new insights into the relationship between smoking and sleep[4].

The decline in ASMR (Age-Standardized Mortality Rate) can primarily be attributed to the global reduction in smoking prevalence and advancements in medical care. In 2020, an estimated 1.18 billion people worldwide were smokers, with Eastern Europe, Southeast Asia, East Asia, and Oceania identified as regions with persistently high male smoking prevalence. Between 1990 and 2020, global smoking prevalence decreased by 27.2% among men and 37.9% among women[5].Most smokers believed that smoking increased COVID-19 risk. Smokers' responses to the pandemic varied, with increased smoking related to stress and increased quitting associated with perceived COVID-19 vulnerability[6].

II. METHODOLOGY

Study Type: A Prospective Observational Study.
Study Period: Study was conducted from May (2025) to July (2025).
Study Site: In TAMILNADU(ST) on ERODE(DT) like urban areas are Erode, Bhavani, Anthiyur, Gobichettipalayam, Komarapalayam, Jambai and rural areas are Paruvachi, Ennamangalam, Pachampalayan, Brammadesam, Ammapettai, Thavittupalayam, Vempathy, Poonachi, Pudhupalayam, Athani.
Study Population: 412 Smokers Data were collected from Various Places.

Study Criteria:
Inclusion Criteria:
  People above the age group of 19 years to 65 years
  Ability to understand the language of the survey.
  Willingness to share personal experience and options regarding self-initiative quit smoking
  Ability to provide accurate and complete demographic information

Exclusion Criteria:
  Non-smokers were excluded from this study.
  Failure to provide complete or accurate demographic information

STUDY PROCEDURE:
- A questionnaire was designed to determine the variation and the current amount of smokers and to examine the intensity of the self initiative quit smoking and their barriers regarding it.
- Various journals, articleswererereferredbeforeconductingthissurveywhichprovidebasicsofthepreparationof the questions. Our target population was the smokers.
- Random circulation of the form was done and response wrere collected through manual and online survey.
- Collected Details included: Demographics, smoking period, smoking products used, reason of started smoking, No. of times of smoking, interest on smoking cessation, attempts had been taken to stop smoking, barriers of quit smoking and prevalence of products available for quit smoking.
- Collecteddatawereanalyzedusingthedescriptiveanalysisandthefindingsfromthe analyzed data were reported.

III. STATISTICAL ANALYSIS:

The data obtained was entered in the MS Excel. Descriptive Statistics can be used to describe the data. Categorical variables and percentages were used for the research.

IV. RESULTS

In Erode district over 412smokers were questioned during the study period, of which 128 smokers (31%) belong to the age of 26-30 years and urban areas contain highest prevalence of smoking than the rural areas. 285 smokers (69%) were graduated and 119 smokers (29 %) were self-employed. 269 smokers (65%) were used cigarette with filter. 172 smokers (42%) were started to smoke by friends and 112 smokers (27%) were started to smoke by stress. Among 412 smokers, 307 smokers (74.5%) were known about the hazards of smoking. 135 smokers (33%) were thought that cancer is the most dangerous hazard caused by smoking. Among 412 smokers, 272 smokers were desired to quit smoking and 219 were tried to quit smoking. 96 smokers (44%) were implying stress is the major barrier of quit smoking and 76 smokers (35%) were implying addiction as barrier of smoking cessation. Among 412 smokers, 192 smokers were aware of the products available for quit smoking and 101 smokers (53%) were known about Nico gum.
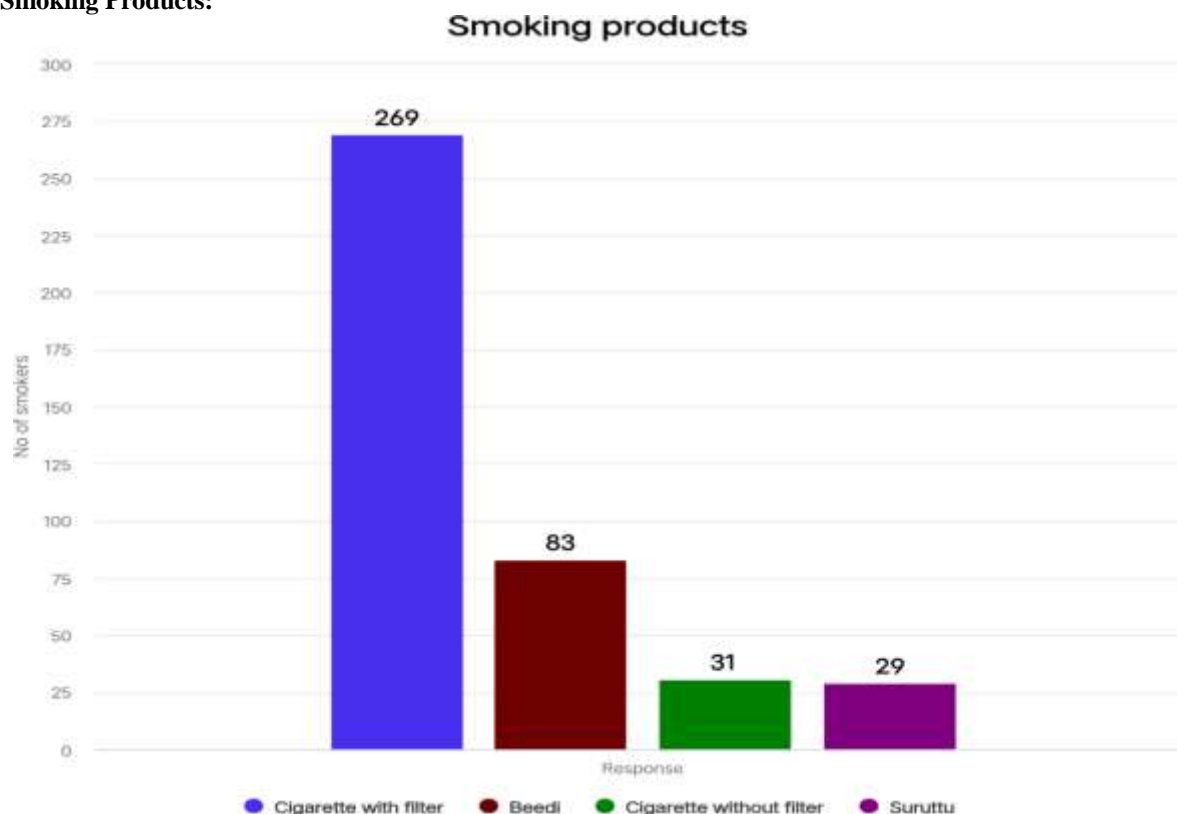
Smoking Products:

Figure:1Smoking products

Cigarette with filter remains the most widely used smoking product about 269 smokers (65%) had been used out of 412 smokers. Beedi use was most popular among those smokers who aged above 40 years. Cigarette without filter had been used by 31 smokers and suruttu had been used by 29 smokers which is least in numbers.

Reason of Started Smoking:

The most common reason for initiating smoking is friends (172) with smoking habit or with interest in smoking. They influence their friends to smoking, this increasing the smoking rates. The next reason is stress (112) due to work pressure, financial problems, unemployment, loss in business and relationship breakdown.
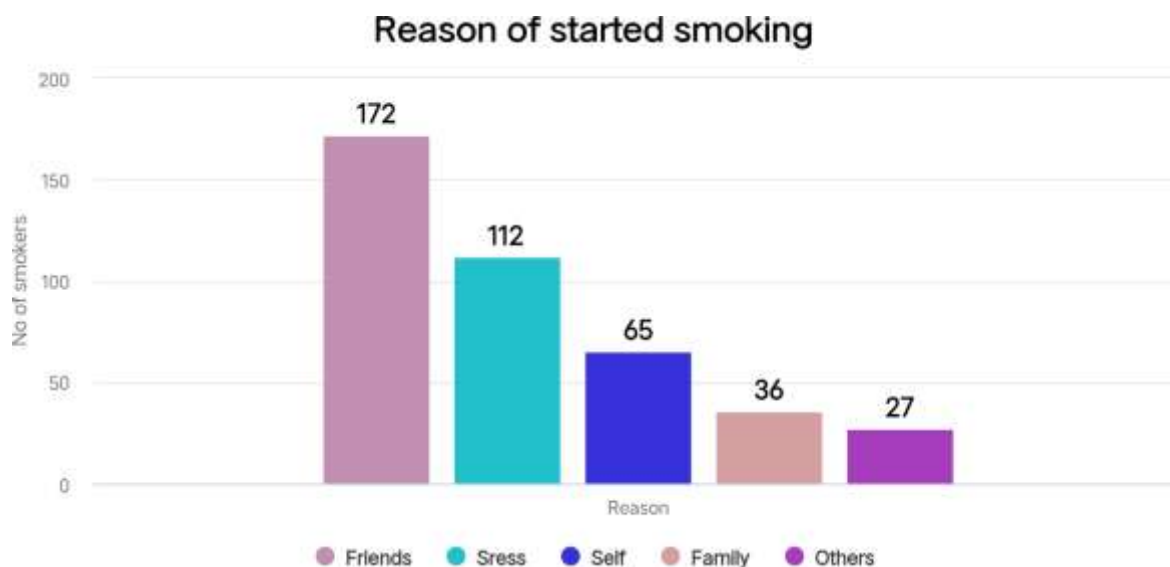
Figure: 2 Reason of started smoking

Some smokers initiate smoking themselves includes 65 smokers. Few of smokers started to smoke by smoking habits of their family members includes 36 smokers. Even some smokers started to smoking by the influence of online sources and movies include 27 smokers.

Knowledge Level of Smokers about Hazards of Smoking:
Most of the smokers have been knowing the hazards of smoking (307smokers) but even still they get smoked. Few of them are not awared about hazards of smoking (105 smokers).

Table: 1 Knowledge Level of Smokers about Hazards of Smoking

Response	No. of Smokers n = 412	Percentage(%)
Knowing about the hazards of smoking	307	74.5
Not knowing about the hazards of smoking	105	25.5

Hazards of smoking:
Most of the smokers Thought that consistent smoking leads to high risk of cancer (135 smokers). Some smokers said that consistent smoking causes cardiovascular disease (86 smokers) especially heart attack and hypertension and some smokers said that smoking causes pulmonary disease (51) especially asthma and lung failure.
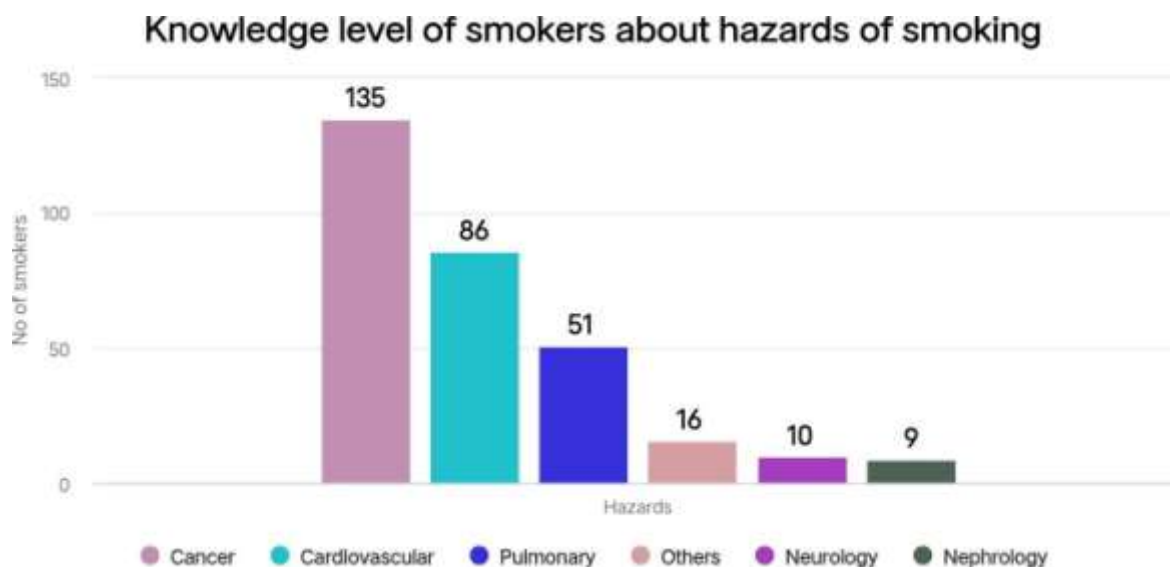
Knowledge level of smokers about hazards of smoking

Figure:3Hazards of smoking

Few of them told consistent smoking leads to neurological problems (10) like stroke and nephrological problems (9)like kidney failure and around16 smokers told early aging and joint pain are caused by consistent smoking.

No. of Smokers Want to Quit Smoking:
From this study, it is observed that 272 smokers (66%) desires to quit smoking while140 smokers (34%) desires to continue smoking.

Table: 2 No. of Smokers Want to Quit Smoking

Smokers Want to Quit Smoking	No. of Smokers n = 412	Percentage (%)
Smokers want to quit smoking	272	66
Smokers don't want to quit smoking	140	34

No. of Smokers Tried to Quit Smoking:
Fromthisstudy,itisobservedthat219 smokers(53%)had been tried to quit smoking while 193 smokers (47%) not tried to quit smoking.

Table: 3 No. of Smokers Tried to Quit Smoking

Smokers Tried to Quit Smoking	No. of Smokers n = 412	Percentage(%)
Yes	219	53
No	193	47

No. of Times Smokers Tried to Quit Smoking:

From this study, it is observed that around 120 smokers tried to quit smoking for 1 time and around 62 smokers tried to quit smoking for 2 times. 18 smokers tried to quit smoking for 3 times and 9 smokers tried for 4 times. Around 10 smokers tried to quit smoking for 5 times.
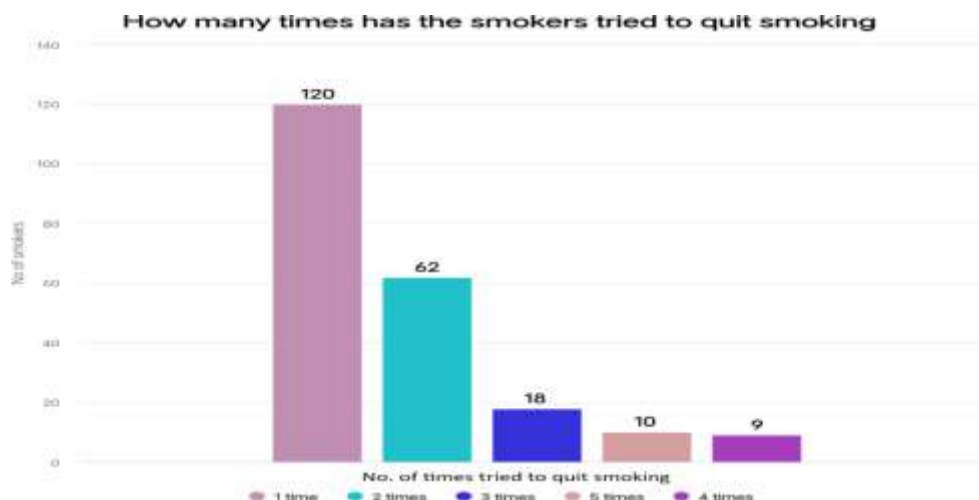

Figure: 4No.of times smokers tried to quit smoking

Barriers of Quit Smoking:

Most of the smokers (96) said that stress is the major barrier for them to quit smoking. They said that smoking causes relaxation and relief from stressful condition. Around 76 smokers said that nicotine addiction is the barrier for them to quit smoking.
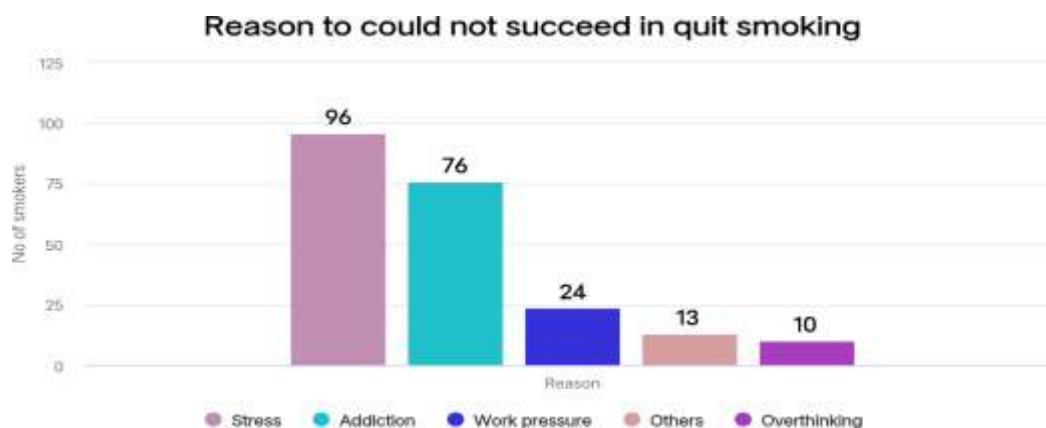

Figure: 5Barriers of quit smoking

They also desire to get counselling for quit smoking. Around 24 smokers told work pressure is being the barrier for quit smoking and 10 smokers told smoking can make them relax and stop them to over think about something else.Around13 smokers said that they feel other smokers in the surrounding is the barrier for quit smoking. When they see and talk to other smokers, they get stimulated to smoke.

Response of Prevalence of Products Available for Quit Smoking:

From this study, it is observed that 192 smokers (46.6%) know about the products available for quit smoking while 220 smokers (53.4%) unknown of any products available for quit smoking.

Table: 4Response of Prevalence of Products Available for Quit Smoking

Response	No. Of Smokers n = 412	Percentage(%)
Smokers know about products available for quit smoking	192	46.6
Smokers not know about products available for quit smoking	220	53.4

Prevalence of Products Available for Quit Smoking:

From this study, it is observed that Nico gum was the most known smoking cessation product by 101 smokers (53%). Nicotine patch was known for 56 smokers (29%) and Nicotine lozenges were known for 42 smokers (22%). Around 4 smokers had been known about drugs (varenicline) for quit smoking.
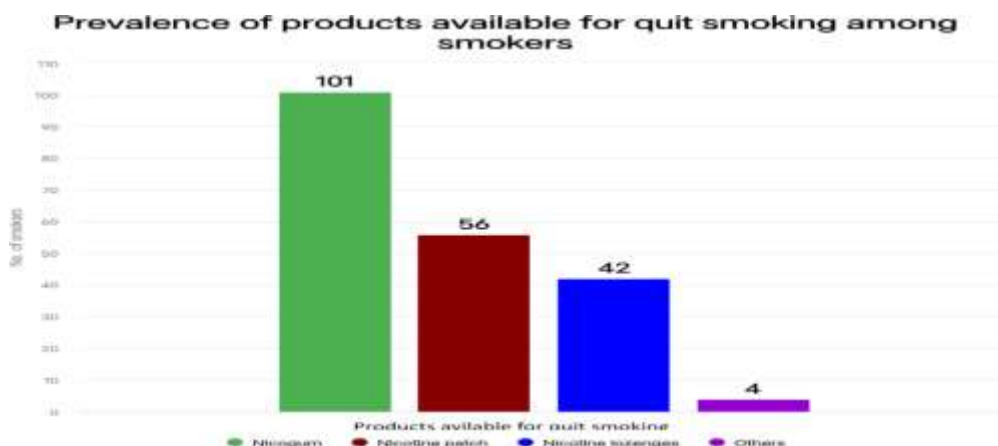

Figure: 6 Products available for quit smoking

V.   DISCUSSION

Our study determines the incidence of ADR s in Pulmonology department and establishes the strategies to reduce and prevent the occurrence of ADRs. Such approaches will not only improve the quality of life of patients,' but also minimize the cost associated with ADRs' contingency. This study was carried out in a tertiary care hospital (Bhavani medical Centre and Suham hospital) in accordance to the designed protocol.

In our study, we enrolled 150 patients of diagnosed by Pulmonologist of our tertiary care Hospital. This study was conducted after taking approval from the institutional ethics committee. In our study mainly the patients of COPD, Asthma, Bronchiectasis and ILD were enrolled after fulfilling the selection criteria.

The main aim of the study was to monitor different ADRs in this population of patients who are treated by different classes of drugs. At the same, we tried to find out the burden of ADRs in these patients, the association of ADRs with different drugs and overall picture of drug-ADR profile.

Demographic profile of the study population

In our study, gender distribution reveals that 55 % males and 45 % females were enrolled in our study which was in contrast to studies conducted by Oltmanns et a[1[8] where they enrolled 63 patients in which 47 males (75%) and 16 females (25%) were present. Tyagi et al carried out a study where 60 patients were enrolled in which 56 males (93.33%) and 4 females (6.67%) were present.

The data collection was done for a period of 3 months. The study was conducted in 150 patient's data in pulmonologist department.From that collected data, Male are 82 patients occupying about 55% of overall cases, where as female are 68

occupying about 45%. Most of the patients are affected with tuberculosis disease about 42 patients, occupying 28%. The second highest disease is asthma are about 31 patients, occupying about 21%.

Disease wise incidence of ADR

Disease wise incidence of ADR in the study population the patients who were on treatment for tuberculosis disease about 42 patients, occupying 28%. showed highest percentage of ADRs i.e., Asthma are 31 patients, occupying about 21%. Lower RTI (8 %) and lastly

Distribution of Mostly affected ADRs

Mostly affected ADRs Headache, cough is the ADR which is affected in most of the patients are 18 patients occurring about 17% Mohammed Zabeer et.al also supported the same finding that the majority of the ADRs are Headache and cough[6].Drowsiness is the ADR that is occurred moderately which contributes about 13% of total number of patients affected with the ADR. Depression and palpitation are least ADRs affected among all the patients which occupying about 8%.

This study was carried out in various places at Erode (dt) i.e., Erode, Anthiyur, Bhavani, Komarapalayam, Gobichettipalayam and other surrounding areas. This study focusses on consistent smokers about to know their smoking duration and frequency, reason of smoking, rate of smokers who want to quit smoking and barriers in quit smoking. The survey was carried out for 1 month. The total number of smokers who performed in survey are 412. Among those 412smokers, Adults who aged 26-30years are the highest in smoking rate. Among 412 smokers, males occupying 95% while females occupying only 5%. Here, the order of widely used smoking products are, Cigarette with filter>Beedi>cigarette without filter>Suruttu.

From this study, it is observed that smokers usually used to smoke to make them relax, to relieve them from stressful state of mind and over thinking and also to get relief from body pain due to work like mechanics, building workers. Most of the smokers said that stress is the major barrier for them to quit smoking. Stress was because of family problems, financial problems, unemployment and work pressure.

In 412 smokers, around 66% of smokers want to quit smoking. But barriers like stress(44%), addiction(35%), work pressure(11%), over thinking (5%), and other smokers in surrounding (6%),

makes a disturbance to succeed in quit smoking. In a study, they said more than half of current smokers identified "loss of a way to handle stress" (59%) and "cravings or withdrawal" (52%) as barriers to quitting [7].30.6% of smokers consulted a doctor or paramedical professional for quit smoking. They are also aware about products available for quit smoking like Nico gum (53%), nicotine patch (29%), nicotine lozenges (22%) and other drugs.

VI. CONCLUSION

Smoking isa major risk factor for cardiovascular disease, pulmonary disease and other pathological conditions. Most of the smokers want to quit smoking but some barriers like stress, addiction and work pressure, are causes lack of success in smoking cessation. Hence, a proper access to cessation program, counselling and nicotine replacement therapies greatly increases the accomplishment of smoking cessation. Therefore, the survey emphasizes the necessity of continued awareness about quit smoking and accessible resources to help individuals achieve and maintain a smoke-free lifestyle.

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