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THE ROLE OF PHARMACIST IN THE MANAGEMENT OF ASTHMA IN TERTIARY CARE HOSPITAL

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ABSTRACT

Back ground: The study carried out to determine the effect of drug therapy in asthmatic patients. It is mainly explained the up to date information about how to take the medications in asthmatic condition & frequency of dose, route of administration, epidemiology, signs & symptoms, pathophysiology of asthmatic patients. This article describes strongly recommended regarding the management of asthma. **Objectives:** To assess medication knowledge of patients with help of questionnaire. To assess the effect of patient counseling on medication knowledge. To assess the Quality Of Life. To find out the needs of patients regarding medication consultation. **Methods:** This study was conducted as a randomized prospective study on 100 asthmatic patients through the period of august 2015 to march 2016. Counseling produced a significant improvement in the quality of life. Assessment of outcome of this study needs long term follow up of patients, so it was not best carried out within the study period. **Conclusion:** The impact of patient counseling medication knowledge on asthma and its complication and quality of life was carried out at KONASEMA INSTITUE OF MEDICAL SCIENCIES, AMALAPURAM, East Godavari dist., Andhra Pradesh. Compared was made among the study population between the before intervention and after intervention. It also helped in improved Quality of life of the patient. Moreover, a good professional rapport has been built between Pharmacist and patients.

KEYWORDS: Short acting beta 2 agonist, inhaled cortico steroids, meter dose inhalers, specific immunotherapy.

INTRODUCTION

Asthma is a chronic inflammatory disorder of the airways in which many cells and cellular elements play a role: in particular, mast cells, eosinophils, neutrophils (especially in sudden onset, fatal exacerbations, occupational asthma, and patients who smoke), T-lymphocytes, macrophages, and epithelial cells.[1,2,8] In susceptible individuals, this inflammation causes recurrent episodes of coughing (particularly at night or early in the morning), wheezing, breathlessness and chest tightness.[6,7,8] These episodes are usually associated with widespread but variable airflow obstruction that is often reversible either spontaneously or with treatment. Asthma is a common disease in any of the population throughout the world. In United Kingdom, it is a common disease affecting 20% of children aged 8-13 and 7% of adults. In India there are an estimated 15-20 million cases of asthma in which children are the major sufferers it affects 14 million to 15 million persons in the United States.[4,5] An estimated 4.8 million children have asthma, which makes it the common chronic disease of childhoodwith the increased understanding of the role inflammation plays in asthma and the addition of new pharmacological agents, the management of this disease has improved. Asthma should be considered in patients with a history of recurrent wheezing, cough (particularly if the cough is worse at night) recurrent shortness of breath or chest tightness.[9,10]

METHODOLOGY

Study Design: It is a Randomised prospective Study. The first step in the study is to design a documentation form, patient medication knowledge assessment form and compliance assessment form. Documentation form will used to collect patient details to known about their past and previous medication histories, lab results and other details of the patient.

STUDY SITE: The study will carried out at KONASEMA INSTITUE OF MEDICAL SCIENCIES, AMALAPURAM, East Godavari dist., Andhra Pradesh. In this study during the period of august 2015 to march 2016.

STUDY CRITERIA

INCLUSION CRITERIA

- Patients aged above 18 years and below 60 years of age.

- Patients who are diagnosed with Asthma.
- Patients who are willing to participate.
- Chronic smokers

EXCLUSION CRITERIA

- Patients aged below 18 years and above 60 years of age.
- Pregnant patients.
- Patients who are not willing to participate.

Methodology for Impact of Patient Counseling and patient education on QOL of asthma patients

INSTUMENTS

The QOL outcome of the asthmatic patients evaluated using a pre validate St. George Respiratory Questionnaire with 20 questions. The physical, social, envenornemental, psychological domains of using St. George Respiratory Questionnaire Quality Of Life.

RESULTS AND DISCUSSION

Every breath that we take is synonymous with life. Asthma has been growing in prevalence and has imposed an increasingly large burden on health services. Mortality related to asthma in old age has fallen steadily during the twentieth century. Mortality rate for asthma among young people is being noticed to have an increasing index due to prevailing epidemics and rising environmental pollution in day to day life. Counselling produced a significant improvement in the quality of life. Assessment of outcome of this study needs long term follow up of patients, so it was not best carried out within the study period.

Table -1: Demographic data based on age and sex:

S.NO	AGE IN YEARS	MALE	FEMALE	TOTAL	PERCENTAGE
1.	18-39	24	18	42	42%
2.	40-60	36	22	58	58%
3.	TOTAL	60	40	100	100%

Data: MEAN±SD (30±8.48)(20±2.82).

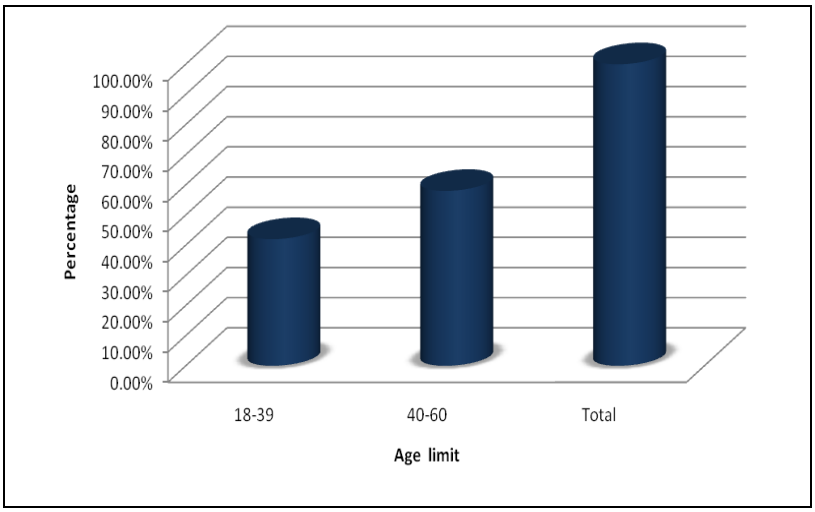

Fig: 1 Demographic data based on age and sex

The total number of the study population was 100 of which 60% found to be male and 40% female. Among the study population, the age was ranging from 18yrs to 60 yrs. The total number of patients 42(42%) patients were between the age 18-39 among them 24 were male and 18 were female, followed by 58(58%) patients were between the ages 40-60 among them 36 male 22 female. In this observed mean and standard deviation were (30±8.48) (20±2.82) (Table: 1).

Table -2: Demographic data of asthmatic patients based on social habits

S.NO	QUS.TYPE (Yes/No)	SMOKING	ALCOHOL	PERCENTAGE (Smoking)	PERCENTAGE (Alcoholic)
1.	Yes	65	34	65.0 %	34.0 %
2.	No	35	66	35.0 %	66.0 %

Data: MEAN±SD (50±21.2) (50±21.2.

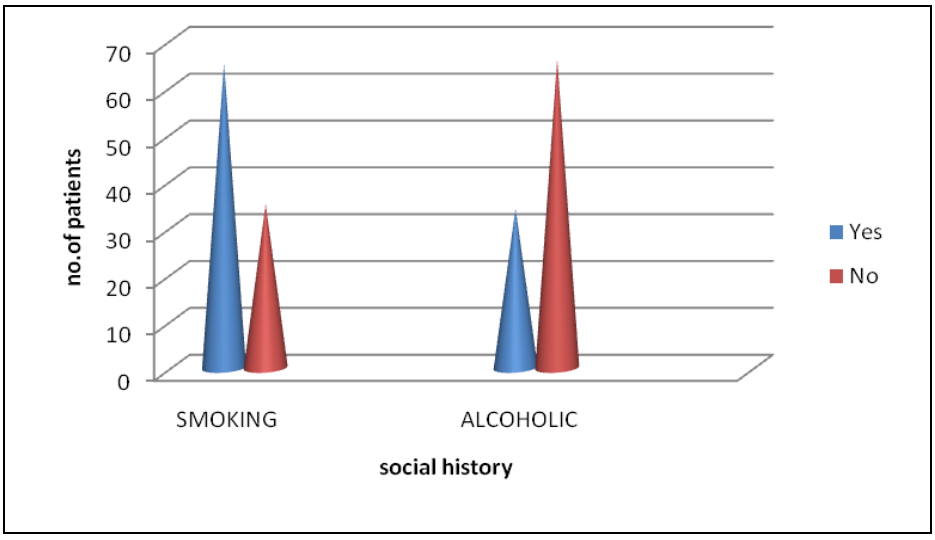

Fig: 2 Demographic data of asthmatic patients based on social habits

Among the study population, the (65%) of them were smokers and (35%) non-smokers, (34%) of them are alcoholics and (66%) of they were non- alcoholic. the observed mean and standard deviation were (50±21.2) (50±21.2) (Table: 2).

Table -3: Demographic data of asthmatic patients based on occupation:

S.NO	OCCUPATION	NO.OF PATIENTS	PERCENTAGE
1.	Students	18	18.0 %
2.	Business	25	25.0 %
3.	Housewife	28	28.0 %
4.	labour workers	29	29.0 %
5.	Total	100	100.0 %

Data: MEAN±SD (25±4.96).

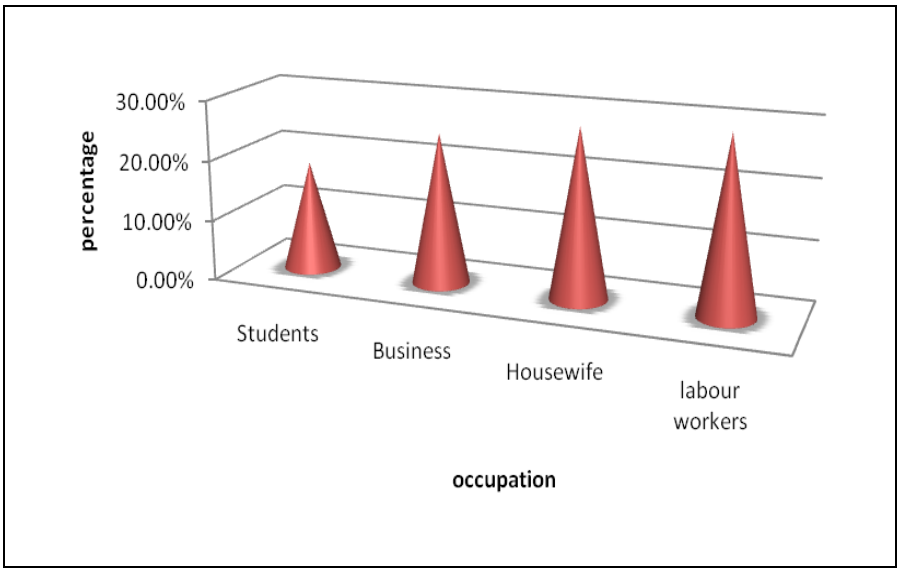

Fig: 3 Demographic data of asthmatic patients based on occupation

Among the study population (18%) of them were students, (25%) were business people, (28%) house wifes, (29%) labour workers. The observed mean and standard deviation was (25±4.96).

Table -4: Demographic data of asthmatic patients based on number of drugs used:

S.NO	NO.OF DRUGS USED	NO.OF PATIENTS	PERCENTAGE
1.	<3	28	28.0 %
2.	3-5	56	56.0 %
3.	>5	16	16.0 %
4.	Total	100	100.0 %

Data: MEAN±SD (33.3±20.52).

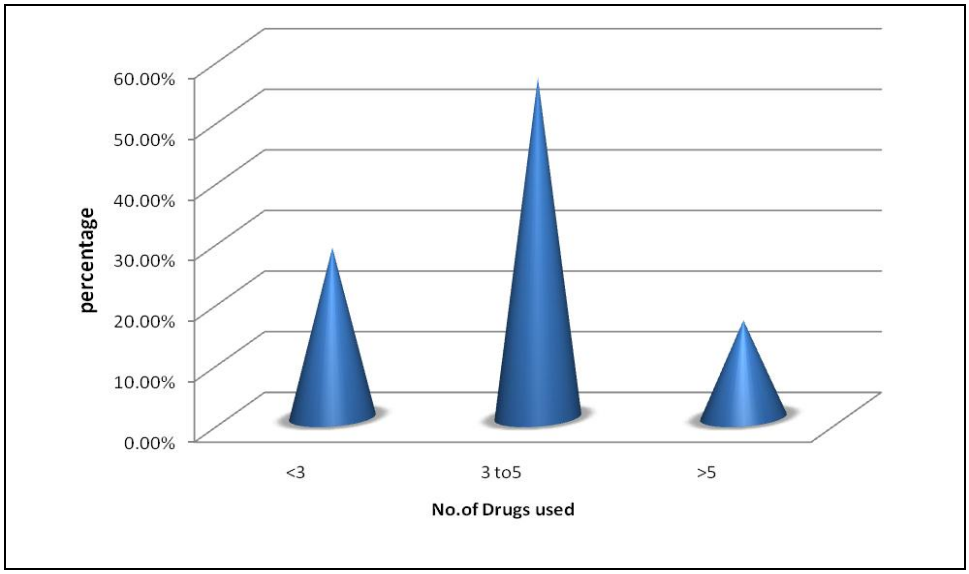

Fig: 4 Demographic data of asthmatic patients based on number of drugs used

Among the study population (28%) of patients were more than three drugs, (56%) were a combination using three to five drugs, (16%) used more than five drugs. The observed mean and standard deviation was found (33.3±20.52) (Table: 4).

Table-5:-Demographic data of asthmatic patients based on different of drugs used:

CATEGOERY	DRUGS	NO.OF PATIENTS	PERCENTAGE
INHALED DRUGS	BUDESONIDE	28	28.0%
	LEVOSALBUTAMOL & IPRATROPIUM BROMIDE	8	8.0%
	SALBUTAMOL & BECLOMETHASONE DIPROPIONATE	17	17.0%
	OTHERS	10	10.0%
ORAL DRUGS	DOXOFYLLINE	6	6.0%
	THEOPHYLLIN	10	10.0%
	SALBUTAMOL	10	10.0%
	OTHERS	11	14.0%

Data: MEAN±SD (12.5.5±7.01).

Among the study population (28%) patients were usingbudesonide,(8%) patients levo salbutamol & ipratropium bromide combination inhaler, (17%) salbutamol & beclomethasone di propionate combination inhalers and other inhalers were used (10%). The oral drugs were used (6%)doxofylline, (10%)theophylline,(10%)salbutamol and the other drugs were used (11%) in this observed mean and standard deviation were(12,5±7.01) (Table-5).

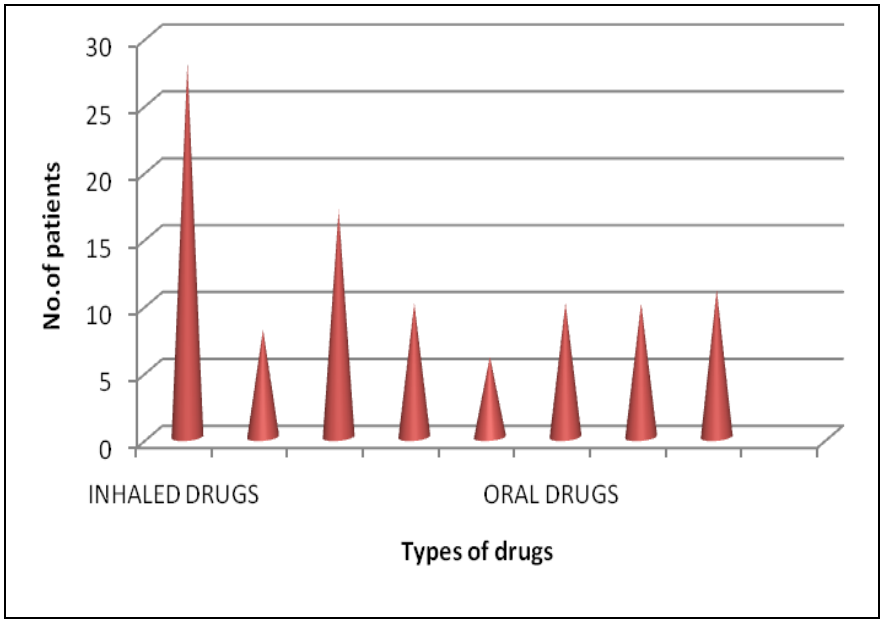

Fig: 5 Demographic data of asthmatic patients based on different type of drugs used

CONCULSION

The Counseling service provided by clinical pharmacist was found to be useful and beneficial to the patients of the hospital where the study was carried out finally. It is believed that pharmacist and other health care professionals would appreciate the role of pharmacist in counseling and educating the patients and an attempt to extent their services to include patient counseling as one of their service. The study aims at educating the patients in overcoming the common misconception prevalent among patients suffering from the diseases, to help maintain the social relationship with family and friends and in turn provide better psychological support treatment.

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