



# Asian Journal of Hospital Pharmacy

Available at [www.ajhp.online](http://www.ajhp.online)

ISSN: 2583-0724



## Clinical pharmacist in outpatient counselling for better therapeutic outcome

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### Abstract

Tertiary care hospital is a large health care set up which is always engaged in emergency and non-emergency cases. Present study is an observational study done on the patients who visited Jayabharath hospital. This mainly depicts the present patient understanding levels regarding his health status. The study is carried out for the period of four months in the out-patient department. Many of the people visiting the hospital are low at understanding levels. In the present scenario hypertension, diabetes, alcoholism, depression etc. are the most prevailing diseases which require regular follow-ups to check for the disease progress. These are the condition which requires regular medications alas! Patients are non-adherent. The reason behind decreases adherence is lack of patient counselling and lack of time which is mandatory in the health care system earlier patients used to get diagnosed and receive medications and return to their homes without proper counselling. And now after the establishment of counselling set up each and every patient is counselled. In the total of 5154 patients 3499 female patients and 1655 male patients approached for patient counselling and benefited with the counselling provided. In these patients 4126 patients are non-adherent and 1028 are adherent. After counselling many of the people themselves came forward to check their progress and got counselled on each of their next visits. Patients are given space to discuss their health problem and got counselled accordingly. Each patient is counselled on various grounds about disease, drugs, life style modifications, diet for their condition. After counselling the status of patient's adherence improved that total 3074 patients showed adherence to the given medications. Patient counselling is a major requirement for the public to for better understanding and good therapeutic outcome.

**Keywords:** Adherence, Hypertension, Diabetes, Depression, Alcoholism, Lifestyle modifications, Patient Counselling.

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DOI: <https://doi.org/10.38022/ajhp.v2i2.48>

### Introduction

Patient counselling is at most important in the health care system. Counseling helps to improve the medication adherence thereby results in good therapeutic outcome. Majority of the patients have come with errors like dispensing or administration errors.<sup>[1,2]</sup> Most of the patients are unaware of proper administration of drugs which leads to low efficacy of the drugs.<sup>[3]</sup> Counseling helps the patient to make sure that he is taking right drug at right time. Patient counseling provides a good platform for the patient to clarify his queries regarding his diseases and treatment [4, 5]. Effective counselling always results in good

Results. Low adherence of patients to prescribed, self-administered medical interventions is ubiquitous [6-10]. Low adherence limits the benefits of current medical care. Efforts to assist patients to follow treatments might improve the efficiency of care and substantially enhance benefits [11-14]. The main objective is to bring awareness and to improve medication adherence and to review their prescriptions in the patients visiting general hospital. People visiting government general hospital belong to low socio economic and uneducated background which leads to improper administration, low adherence which finally results in the poor therapeutic outcome [15, 16]. Clinical pharmacist plays a vital role in educating the patient regarding the disease, treatment, benefits of completing the course, providing information about the ill effects of drugs, patient specific information regarding the diet [17-19].

## Materials and Methods

A prospective observational study is done in Jayabharath Hospital, Nellore in the study period of four months for the out patients visited. We established an outpatient counseling set up, which contains a 6-8 clinical pharmacist providing services from 9am-1pm on working days. The set up was made in the outpatient department. Patient details are collected including name, sex, age, diagnosis, department visited, and phone number. Then the prescription is taken and Counseling was done, providing the basic information about their disease, drugs, food and social habits. Follow up is done on their next visit and counseled as per the prognosis, dietary counseling id provided.

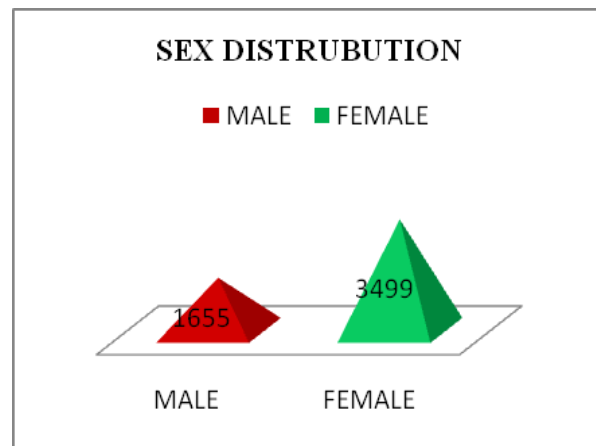
## Interviewing and counselling patient, patient care taker by clinical pharmacist

Patient visits the physician for complaints and gets prescription to the pharmacy for drugs; in the outpatient set up pharmacist the doctors don't have ample time to counsel the patient. Initially patient and patient care taker are interviewed for their past and present illness. Clinical pharmacist receives the prescription and the drugs and counsels the patient regarding the disease, name of the drugs ,purpose, dose frequency, duration of therapy and usage medication and there side effects for each patient. Along with this non pharmacological solutions are explained which includes diet, yoga and exercise which plays an important role. The whole counseling session is done in the patient's local language. Later consultation was made with physician.

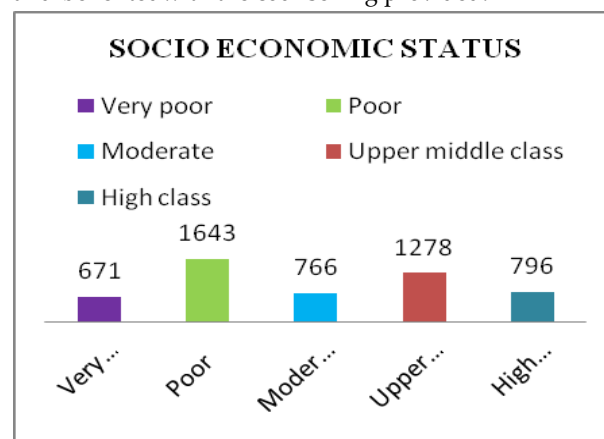
## Key elements in counselling

- Name of the drug
- Formulation of the drugs
- Dose ,frequency and time of administration
- Suspected side effects, what to do if any side effect is observed
- Risk factors of the disease condition
- Proper storage of the drugs
- Benefits of completing the treatment course
- Life style modification for the disease and drug

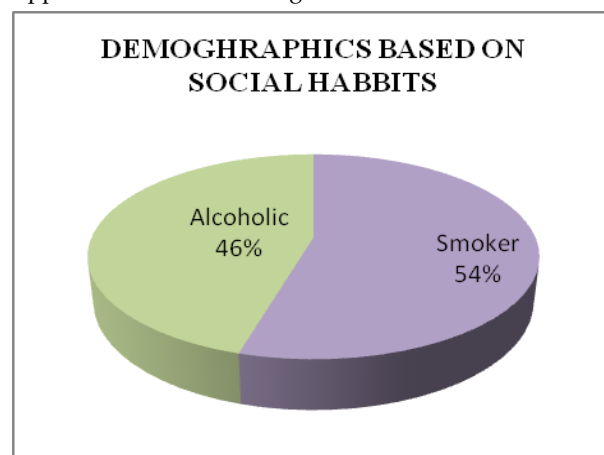
## Results & Discussion



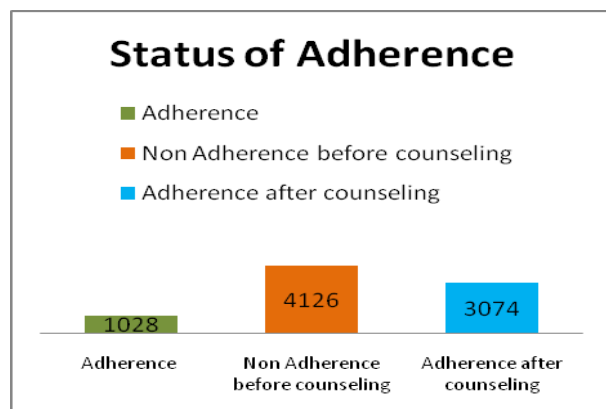
In the total of 5154 patients 3499 female patients and 1655 male patients approached for patient counseling and benefited with the counselling provided.



Socio economic status plays an important role in common man's life. It is an important criteria which decides his health and nutritional status. The people visited Jayabharath Hospital mostly belong to the low socio economic background. The people visited for counseling are categorized as very poor, poor, moderate, upper middle class and high class.



The patients are asked for their social habits and the results are that in the total of 1655 male patients 1436 are either smokers or alcoholics. This is the major area of concern as this decreases the efficacy of the drugs.



Initially 1028 patients showed adherence, 4126 patients are non-adherent before counselling. Status 3074 patients' adherence increased with patient counseling; due to one or the other reason most of the patients are non-adherent so they are counseled. The result of counseling was surprising that most of the people showed good compliance to the treatment in the follow up and even after counseling some patients are non-adherent due economic status and long term therapy. The following questionnaire is asked.

#### Questionnaires Age/Sex

##### Marital Status: Married /Unmarried Occupation

Level of Education: Educated /Uneducated

1. Are aware of your health status yes/no
2. Are you on regular health checkups? Yes/no
3. Do you know about the risk factors of your disease? Yes/no
4. Do you have any co morbidity? Yes/no
5. Are you aware of the foods that need to be avoided? Yes/no
6. Do you know names of your medications? Yes/no
7. Do you know about the frequency and dose of your medication? Yes/no
8. Do you adhere to your medications ?Yes/no
9. Do you miss the doses ?Yes/no
10. Do you know the side effects of the medications given to you? Yes/no
11. Do you take any precautions for your disease ?Yes/no
12. Do you follow any life style modifications? Yes/no
13. Did anyone counsel you regarding your disease/medications? Yes/no

14. Do you take any OTC medications? Yes/no

15. Is the information provided by clinical pharmacist beneficial to you? Yes/no

#### Conclusion

In the counselling process there came some patient barriers and which can be managed in counselling. The major problem encountered is lack of education and interest, initially the actual aim of the study was not fulfilled but later on the purpose of the counselling was made know to people which made them to approach the team by themselves in their next visit also. Once the awareness is bought in the public it made easy for counselling the patients and they could use the services provided. Patient counseling plays a key role for better therapeutic outcome. The counselling provided to the patients is well accepted which improves the patient quality of life. Patients adhered well with their medications given. The result of outpatient based counselling was fruitful that patient participated and showed interest to know regarding all the information of their health and treatments provided.

These services can be further established in specialized wards for better inpatient clinical outcome, which helps to decrease the economic burden and increases patient's quality of life.

#### Acknowledgements

It is our immense pleasure to dedicate this work to our beloved parents for their wonderful love and affection. We would be nothing without their support

#### Author's Statements

The authors declare no conflicts of interests.

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