



Knowledge, Attitude and Practice of Community Pharmacist towards various Medication Adherence Programs.

U R Rakshith¹ Srikanth M.S² *. Mr. Atiqulla Shariff³

1. UR Rakshith, Lecturer, Department of Pharmacy Practice, JSS College of Pharmacy
JSS Academy of Higher Education and Research, Mysuru- 570015, Karnataka, India

Phone: +91 9739818218 Email: Urrakshith@jssuni.edu.in

2. Srikanth MS, Lecturer, Department of Pharmacy Practice, JSS College of Pharmacy,
JSS Academy of Higher Education and Research, Mysuru- 570015, Karnataka, India

Phone: + 91 948047818 Email: mssrikanth@jssuni.edu.in

3. Mr. Atiqulla Shariff, Research Scholar, Department of Pharmacy, Practice, JSS College of
Pharmacy, JSS Academy of Higher Education and Research, Mysuru- 570015, Karnataka,

India. Phone: +91 9164840404 Email: atiqccp@gmail.com

Corresponding Author*

Srikanth M.S, Lecturer, Department of Pharmacy Practice, JSS College of Pharmacy,
JSS Academy of Higher Education and Research, Mysuru- 570015, Karnataka, India

Phone: + 91 9480478187 Email: mssrikanth@jssuni.edu.in

Abstract:

Adherence to the prescribed medications plays an important role in treatment of chronic diseases. Non-Adherence to the prescribed medications occurs in 50% of patients in chronic diseases leading to increase in emergency visits, hospital stay and medical cost. Medication adherence program has shown better impact on health-related quality of life. However, there are no studies in Indian settings on medication adherence programs. To assess the knowledge, attitude and practice of community pharmacist towards various medication adherence program. A Cross sectional survey-based study was carried among Practicing community Pharmacist in Mysuru city for a period of 6 months. The community Pharmacist was recruited after obtaining inform consent form. The data was collected using validated questionnaire. The obtained data were analysed using descriptive statistics to describe the demographics and to assess the items related to knowledge, attitude and Practices towards various medication adherence services. A total of 95 practicing pharmacists were participated in the study. Among them majority were male (80%) and belong to age group 26-35 years (32.6%) with highest qualification D-pharm (50.5%). Majority of them have experience of 1-10 years (44.2%). All the community Pharmacist were aware of medication adherence programs. Our study shows that Community Pharmacist were having limited knowledge, Positive attitude & Practice on medication adherence programs. The community pharmacists were aware about Medication Adherence Programs. Pharmacist were having limited knowledge, positive attitude, and barriers to implement medication adherence programs in their pharmacies.

Key words: Community pharmacists, Medication adherence, non-adherence, Chronic diseases.

Introduction:

Non adherence to the prescribed medications is one of the major health threat worldwide. ^[1-2] In India non adherence is commonly observed in 60% of patients on chronic disease which leads to increase in emergency visits, hospitalization stay, and medical cost^[3-4] As per World Health Organisation (WHO) globally every year chronic diseases kills 38 million peoples ^[4-5]. Around 50% of Indian population suffers from chronic diseases which are estimated to cost \$6.2 trillion during the period of 2012-2030.^[4] Patients with chronic disease are often prescribed with multiple medications to treat their condition, prevent complications, and to improve overall health-related patients in quality of life^[6-7]. advanced age group are at higher risk for medication non -adherence as they are prescribed with multiple medications, which

they find difficulty in following. Non-adherence comprises of multiple factors such as social, economic, therapy- related, patient- related, condition- related, and health system factors and polypharmacy^[7-8] Community Pharmacist are in better position to improve adherence by providing medication adherence program that has positive impact on patients' health related quality of life^[9-10] Studies have shows that medication adherence has improved 2-6 times through this process. ^[11-12] How ever community pharmacist who are mostly a diploma in pharmacy certificate holder must be aware of various medication adherence enhancing programs ^[13-14]. This will scope our community pharmacist to better deliver the program in achieving therapeutic outcomes among patients. Therefore, we aimed to assess the knowledge, attitude and practice of community pharmacist towards various medication adherence programs.^[15]

Methodology:

A cross sectional survey-based study was conducted among community pharmacist in Mysuru city for a period of six months. Practicing community pharmacist are enrolled in the study after obtaining informed consent. The data was collected through community pharmacist interview and knowledge, attitude and practice questionnaire. This study was approved by Institutional Ethics Committee with reference number JSSMC/IEC/ 141020 /37 NCT /2020-21 Date: 16.10.2020. The sample size was calculated using Raosoft sample size calculator based on population of community pharmacist in Mysuru. The margin of error for the study was kept as 5% with 95% confidence interval and sample size was found to be 200. The study involves developed and validated knowledge, attitude, practice questionnaire. The questionnaires was designed after extensive literature review from the previous studies on similar topic. The questionnaire consists of two parts. The first part consists of the demographic details such as age, gender, professional qualifications, years of experiences of the community pharmacist and other part consist of study specific questions. The study specific questions is on community pharmacist knowledge, attitude and practice on various medication adherence programs. Study specific questions like knowledge and practice was assessed using Yes (1) No (0) whereas attitude was assed using 5-point Likert scale. This study utilized descriptive statistics to describe the particular demographics and their views towards various medication adherence programs.

Results:

Demographic details of study participants:

A total of 95 community pharmacist participated for the study. Among them a majority were males (71, 80%) belonging to the age group of the 26-35 years (31, 32.6%) with highest qualification of diploma in pharmacy (75, 78.94%). The majority of community pharmacist was having experience of <10 years (42, 44.21%). The majority of the study participants were owners of the pharmacy (64, 67.36%). The demographic details of the study participants are presented in Table 1.

Table 1: Demographic details of study participants

Category	Features	Number (n=95)	Percentage (%)
Gender	Male	71	80
	Female	24	20
Age in years	18-25	11	11.57
	26-35	31	32.63
	36-45	22	23.15
	46-60	26	27.36
	61 and above	5	5.26
Highest Professional Qualification	D Pharm	75	78.94
	B Pharm	20	21.06
Position in the pharmacy	Owner	64	67.36
	Employee	31	32.63
Number of years of practice	< 5 years	1	1.05
	< 10 years	42	44.21
	< 20 years	30	31.57
	<30 years	15	15.78
	< 40 years	3	3.15
	>40 years and above	4	4.21

Item	Yes	No
Are you aware of the medication adherence programs offered by community pharmacies?	80(84.22%)	15(15.78%)
Do you think Medication adherence program is a systemic cyclic process that improves quality use of medication?	93(97.90%)	2(2.1%)
In medication adherence program, a pharmacist coordinates the refill of patient's medications.	90(94.74%)	5(5.26%)
Do you think in medication adherence programs patients receive all their medications at once either on a bi-monthly or monthly basis?	64(67.36%)	31(32.64%)
Do you think medication adherence programs are the one suited for patients who are all taking multiple drugs?	68(71.58%)	27(28.42%)
Do you think by providing medication adherence programs to their patients where community pharmacist will get any benefits or not?	71(74.73%)	24(25.27%)

Table 2: Pharmacist's Knowledge on medication adherence program (n=95)

Table 3: Pharmacist's Attitude on medication adherence program (n=95)

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Medication adherence programs are the one which reduces the patient's burden in terms of avoiding multiple visits to pharmacy to get their prescriptions filled.	40(42.10%)	45(47.36%)	10(10.5%)	0	0
Medication adherence programs will improve patient's adherence to their medications.	25(26.31%)	57(60%)	9(9.47%)	3(3.15%)	0
Medication adherence programs provides opportunities for pharmacists for comprehensive review of patient's medications.	22(23.15%)	50(52.63%)	20(21.0%)	2(2.10%)	0
Medication adherence program, helps pharmacists to keep a track of all medications taken by patients.	24(25.26%)	42(44.21%)	29(30.5%)	0	0
Through medication adherence program, pharmacists can identify and resolve medication related problems.	30(31.57%)	41(43.15%)	18(18.9%)	6(6.31%)	0
With medication adherence, pharmacists are able to fill more prescriptions and increasing their dispensing output.	20(21.05%)	51(53.68%)	19(20%)	5(5.26%)	0
Medication adherence program can improve patient's overall health related quality of life.	41(43.15%)	35(36.84%)	19(20%)	0	0

Table 4: Pharmacist's Perceptions on Medication Adherence Programs. (n=95)

Items	Yes	No
Do you consider provision of medication adherence programs as one of the professional responsibility of pharmacists?	93	2
Are you interested in learning more about medication adherence programs through workshop?	67	28
Are you interested in providing medication adherence services at your pharmacy?	91	4
Do you have any barriers to provide medication adherence services at your pharmacy?	87	8

Discussion:

Pharmacist knowledge on medication adherence programs.

This study shows community pharmacist are having limited knowledge on medication adherence programs. Though community pharmacist are aware of these programs (n=84.22%) but they could not able to provide for their patients^[16] The barriers for these programs are in our country most of the community pharmacist are diploma in pharmacy & bachelor in pharmacy holders where they lack medication adherence programs in their course curriculum^[17]. The knowledge can be achieved by adding these newer services in their course curriculum. Apart from course curriculum the pharmacist should undergo continuous professional programs, skill development programs, adequate training in order to implement these programs in their community pharmacies^[18]

Pharmacist attitude on medication adherence programs.

Our study reveals that community pharmacist having positive attitude on medication adherence programs. The results of our study similar to the study conducted by Matthew. J.W et al^[19] community pharmacist attitude on medication adherence programs. He describes medication adherence programs was offered by 45% of community pharmacies & 46.6 % were offering medication therapy management. The enrolled community pharmacist was strongly agreed medication adherence programs will benefit the pharmacy financially (5.25± 1.41) that would increase the opportunities to interact with the patients. (4.71 ±1.45) (p<0.001). All the question relating to the community pharmacist attitude was found to be

agree (45%) and strongly agree (42%) this shows they were having positive attitude in implementing these newer services in their community pharmacies for the chronic diseases.

Pharmacist practice on medication adherence programs.

The community pharmacist asked to answer three questions relating to their practice on medication adherence programs. Almost all of the community pharmacist answered yes for the three questions which shows community pharmacist may implement medication adherence programs in their pharmacies^[20] Our study shows that 91.5 (n=87) of community pharmacist are having barriers to implement the medication adherence programs. The barriers are social, economic, therapy- related, patient- related, condition- related, and health system factors. Minimizing these barriers during their practice can help in achieving optimum medication adherence.

Conclusion:

Results suggest that community pharmacists are aware of medication adherence programs to minimize non adherence. This study shows practicing community pharmacist were having limited knowledge, positive attitude and barriers for implementing these programs in their practice setting.

Limitations:

Lack of interest among practicing community pharmacist to provide response. The adequate sample size was not able achieve due to non-willingness among practicing community pharmacists.

Future directions:

More research needs to carried out for the community pharmacist to improve their practicing skills, techniques and implementation process.

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