

Assessment of Knowledge Attitude and Perception of Transition of Care among Pharmacy Students in South India

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Abstract: transition of care is defined as the set of instructions designed to ensure co-ordination and continuity of the health care to the patient. It should be based on the comprehensive care plan and availability of well-trained practitioners who have a complete knowledge of patients' preferences and treatment goals, care plan and clinical status. It was initiated with an aim to justify the medical investments of the patients and also make the health care affordable by all sectors of the public. Though the practice of transition of care is carried out in various countries and the results are vividly better in certain diseases like diabetes and nephrology, still in India, we do not come across any hospital or community settings that apply transition of care concept. It is mainly due to the lack of awareness and certain barriers like non standardized care planning and poor inter professional relationships. Co-ordination being the heart of the transition of care concept, cannot be implemented unless the health care professionals collaborate with each other to contribute to the benefit of the patients. So, in this study we have aimed to assess the knowledge, attitude and perception about transitional care concept first and later educating the pharmacy graduates about the concept of transition of care and also the importance of coordination, collaboration and thereby integration of all the fields of health care for better outcomes of patient. Apart from this project was carried out with an intention to promote the effectiveness of the transitional care in various departments of the health care which could help the students to show case their skills and could avail clinical pharmacists opportunities in the future. Project was carried out with 300 students of different pharmacy colleges and calculated the knowledge, attitude and perception assessment using a questionnaire with 15 questions, 5 each for knowledge, attitude and perception. First the students were asked to answer the questionnaire, later an intervention in the form a power point presentation, which discusses all the aspects of transitional care and the students were educated. Later again the same students were asked to answer the questions which were used to assess the extent of understanding the concept. Results of the assessment were highly significant with the p- value of 0.001 (< 0.05) which means there is an emergency need to educate the students of pharmacy graduate courses, other allied health care courses who are involved in the provision of health care to the patients. This project derives the conclusion that, if the concept of transitional care is taught to the students of pharmacy graduates and other allied health care sciences, there could be a drastic improvement in the quality of care provision and also the quality of life of the patients.

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I. Introduction

“Transition of care” is defined as the set of designed activities to ensure co-ordination and continuity of health care. It should be based on comprehensive care plan and availability of well-trained practitioners who have a complete knowledge of patients' preferences and treatment goals, care plan and clinical status¹.

Transition of Care defined by the Joint Commission: “Transitions of care” refer to the movement of patients between health care practitioners, settings, and home as their condition and care needs change.²

Transition of Care defined by Department of Health, Australian Government: Transition of Care provides short-term support and active management for older people at the interface of the acute/subacute and residential aged care sectors. It is goal-oriented, time-limited and targets older people at the conclusion of a hospital episode who require more time and support in a non-hospital environment to complete their restorative process, optimize their functional capacity and finalize and access their longer term care arrangements. The potential for further recovery will vary according to the individual. Therefore, the services provided will vary from individual to individual, ranging from those that further improve physical, cognitive and psychosocial functioning thereby improving the person's capacity for independent living, to those that actively maintain the

individual's functioning while assisting them and their family and care givers to make appropriate long-term care arrangements.³

Causes for ineffective transition of care²: though there are many barriers for the implementation of transition of care, the root causes have been assessed by the joint national commission which are as follows.

- Communication breakdowns : this is because of the following reasons
 1. Expectations differ between senders and receivers of patients in transition
 2. Lack of teamwork and respect
 3. Inadequate amount of time provided for successful handoff
 4. Lack of standardized procedures in conducting successful handoff like sbar (situation, background, assessment, recommendation)
- Patient education breakdowns : this is due to
 1. Lack of sufficient understanding of the medical condition or the plan or care
 2. Exclusion of the patients from planning the regimen
 3. Financial burden on the patients
- Accountability breakdowns : this is because of
 1. Lack of standardized procedures for discharge and risk assessment
 2. Lack of co-ordination especially when many professionals are involved.

How to improve the quality of transition of care⁶: many organizations that promote effective practice of transition of care have suggested few considerations to achieve the goal. Among them here are the recommendations suggested by the national transition of care coalition (ntocc).

- Improve communication among providers, patients and caregivers between the transitions.
- Implement electronic health records which include standardized medication reconciliation elements.
- Expand the role of pharmacists in transitions of care in respect to medication reconciliation.
- Increase the use of case management and professional care coordination.
- Implement payment systems that align incentives
- Develop performance measures to encourage better transitions.

Components of transition of care⁴: the major components of the transition care concept include the following

- Medication reconciliation
- Follow-up tests and services
- Changes in plan of care
- Involvement of team during hospitalization, discharge, follow-up.
- Communication
- Transfer of all information when site of care changes
- Education of the patient and family.

Role of pharmacists in transition of care: pharmacists are the connecting link between the patient and the physician. Pharmacists can also help by maintaining the communication between the patient and the physician because pharmacists can actually provide the appropriate information of a patient's complete case profile to the physician and at the same time pharmacists can also act as effective counsellors whereby they can educate the patients about the disease and also the drugs. Apart from counselling, pharmacists can also convey the economic status, social history and the allergy profile correctly to the physicians which helps in the clinical decision making. For the pharmacists to effectively discharge their duties, workload has been categorized into 3 major tasks.

1. **Medication reconciliation (mr)** : medication reconciliation is the formal process in which health care professionals partner with the patients to ensure and complete medication information transfer at interfaces (at each transition) of care⁷
2. **Medication therapy management (mtm):** service or group of services that optimize therapeutic outcomes for individual patients.⁸
3. **Patient counselling (pc)** :: individualized systematic structured process to assess and impart knowledge or develop a skill in order to effect a change in behavior⁹.

Transition care models :to improve the patient outcomes, many transition care models are being practiced which aim at the individualized care provision. For example, care transition intervention (cti), guided care transition (gct), better outcomes for older adults through safer transitions (boost), geriatric resources for assessment of care of elders (grace) and project red (re engineered discharge). These may include all or few elements like

1. Multidisciplinary communication, collaboration, coordination
2. Clinician involvement and shared accountability at all transition points
3. Comprehensive planning and risk management throughout hospital stay
4. Standardized transition plans
5. Standardized training to the staff
6. Standardized discharge procedure design for each individual patient.

II. Material and methods

Study sample size: around 300 students

Study site: various colleges of pharmacy in and around anantapur district, andrapradesh, india

Study duration : 6 months

Study design : quasi experimental with control

Inclusion criteria: students of 3rd to 6th year pharm. D

students of 4th b. Pharmacy

those who are willing to participate in the study.

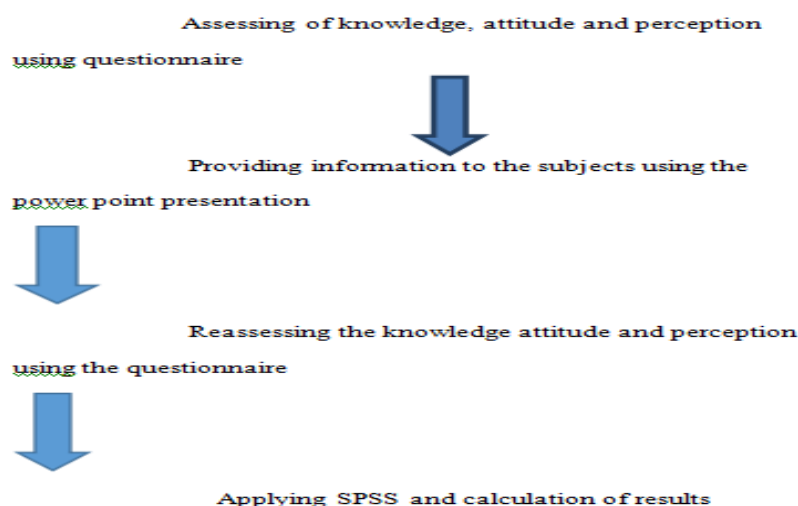
Exclusion criteria: students of 1st year and 2nd year pharm. D

those who are not willing to participate in the study.

Procedure:

The study was conducted with the students because students are going to be the future pharmacists and they would play a major role in the decision making process while dealing with the patients and contribute much to the continuation of care post-discharge. In the study, there were majorly 3 steps where in the first step, the knowledge, attitude and perception about the “transition of care” concept was first assessed using the questionnaire. The questionnaire was designed so as to assess the knowledge, attitude and perception individually. The questionnaire included 15 questions with 5 questions each knowledge, attitude and perception. The subjects were asked to answer the questionnaire prior to our presentation. After collecting the forms, we have provided information on “transition of care” in the form of a power point presentation. The power point presentation was designed in such a way that the subjects understand the concept in a clear and comprehensive manner. After the presentation, the subjects were handed over the questionnaires again to answer. The knowledge, attitude and perception were reassessed using the questionnaires. This questionnaire based survey method was followed due to the ease of assessing, convenience of data collection before and after the presentation. After completion of the data collection, statistical tool spss was applied to calculate the standard deviation, p-value and t-value. Using these values, the results were obtained which are tabulated under the results section.

Depiction of procedure :



Statistical analysis:

Data was analyzed using SPSS version 0.2.the level $p < 0.05$ was considered as the cutoff value or significance.

III. Result

Table .1 :Percentage of the students from different streams.

Year	No. Of students	% of the students
III- Pharm. D	80	26.66
IV – Pharm. D	80	26.66
V – Pharm. D	30	10
VI- Pharm. D	30	10
IV – B. Pharm	80	26.667
Total	300	100

Table. 2 :Percentage of the students of each stream that answered before and after the intervention.

No. Of students	Before		After	
	Answered	Unanswered	Answered	Unanswered
III year Pharm. D (80)	25 (31.25%)	55 (68.75%)	65 (81.25%)	15 (18.75 %)
IV year Pharm. D (80)	32 (40%)	48 (60%)	68 (85%)	12 (15%)
V year Pharm. D (30)	12 (40%)	18 (60%)	24 (80%)	06 (20%)
VI year pharm. D (30)	16 (53.33 %)	14 (46.66%)	28 (93.3%)	02 (6.6%)
IV B. Pharm (80)	30 (37.5%)	50 (62.5 %)	55 (68.75%)	25 (31.25%)

Table. 3:Averages of the scores answered before and after the intervention.

TOTAL NO. OF STUDENTS	BEFORE NO OF STUDENTS		AFTER NO OF STUDENTS	
	ANSWERED	UNANSWERED	ANSWERED	UNANSWERED
300	115	185	240	60

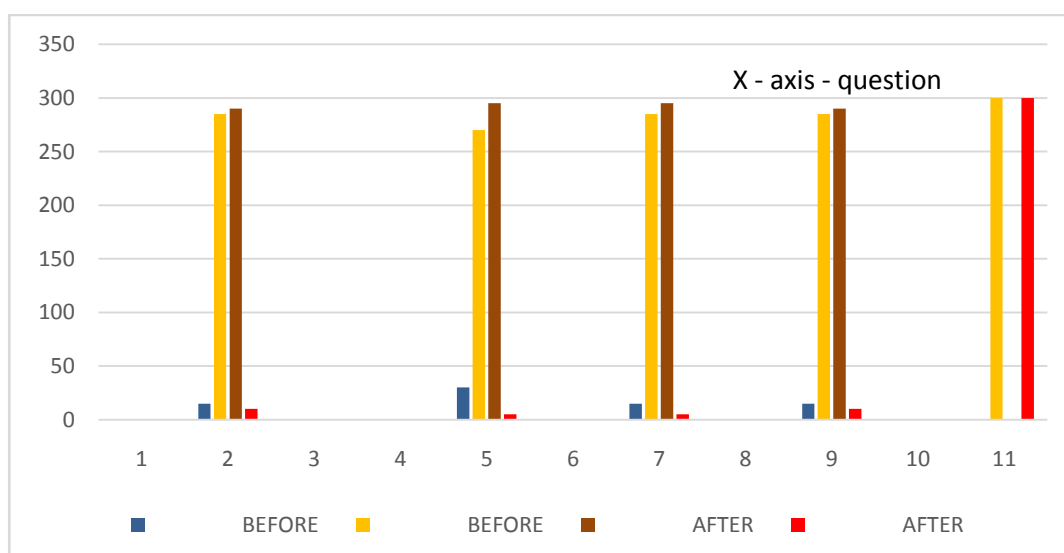


Fig : 01 Answering pattern of knowledge related questions by the students before and after interventions Intervention

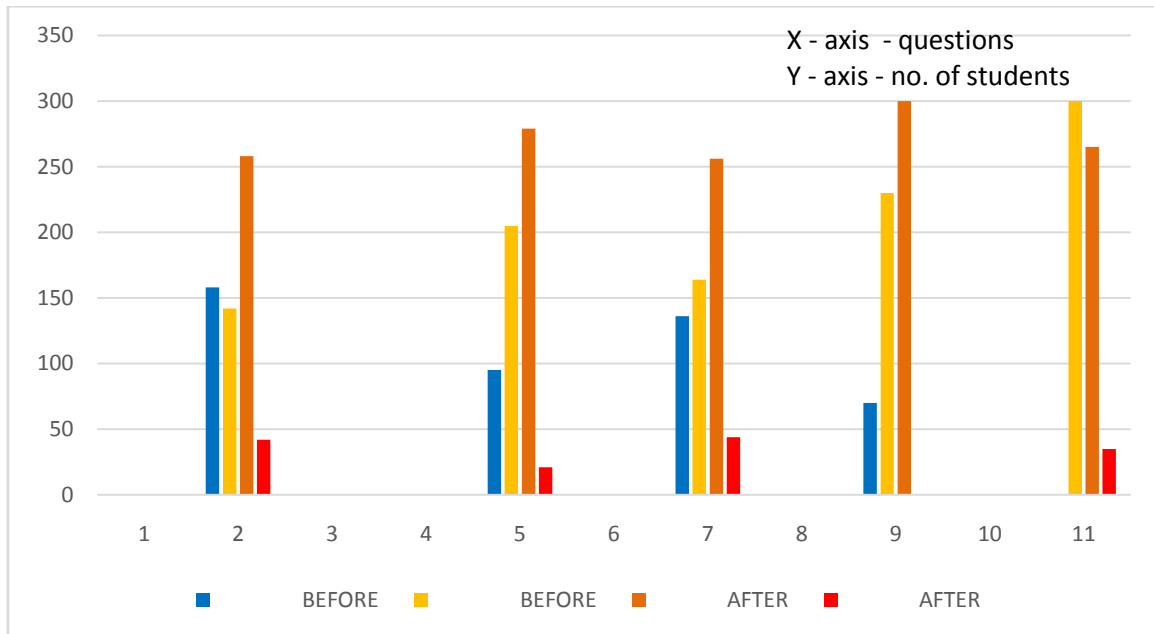


Fig 02: Answering pattern of attitude-related questions by the students before and after intervention.

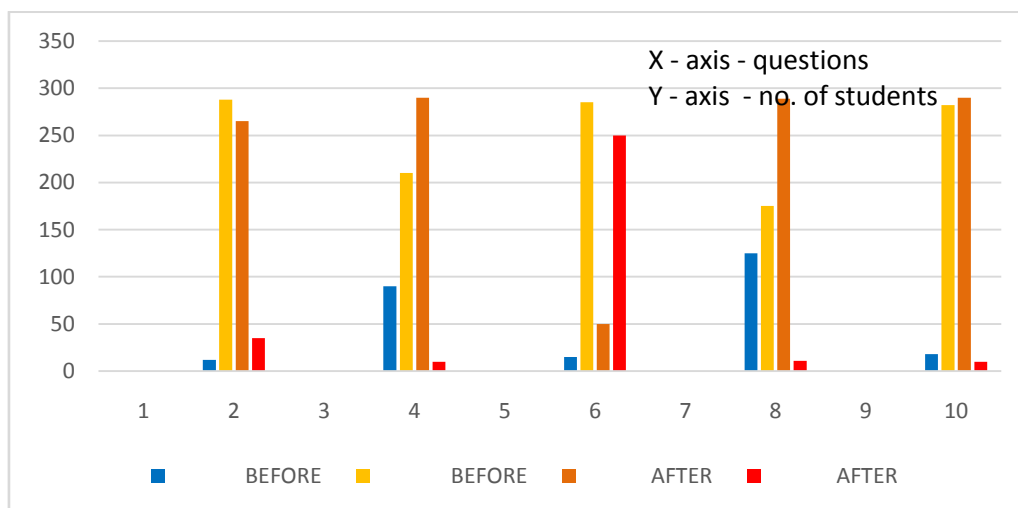
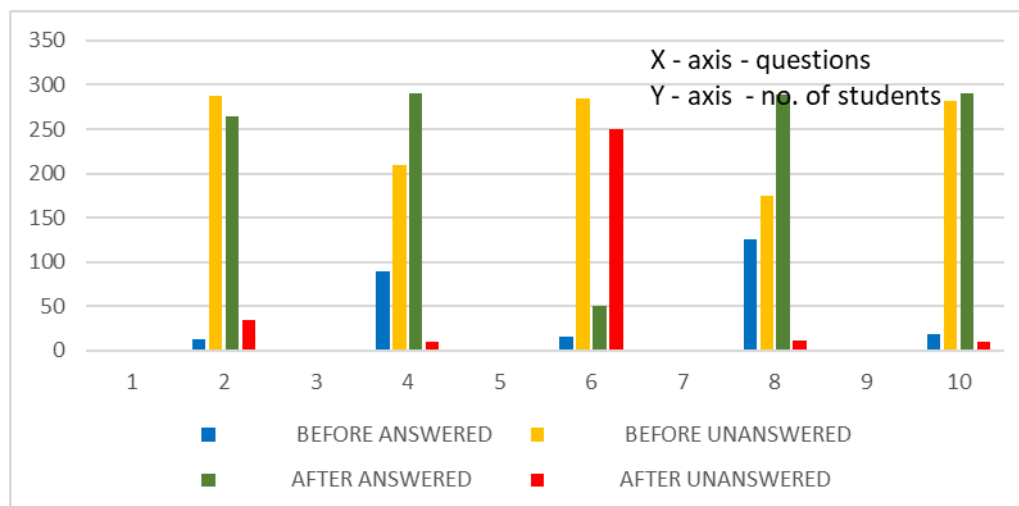


Fig 03: answering pattern of perception related questions by the students before and after intervention

Total no. of samples	Paired differences					t-value	Difference	p-value
	Mean	Standard deviation	Standard mean error	95% confidence interval of difference				
				lower	upper			
300	-12.29	3.46	0.200	-12.69	-11.90	-61.39	299	0.001

Table. 4 : Mean Deviation & P – Value



IV. Discussion

Transition of care is one of the most advanced concept among enhancement of patient quality of life. Whereas the awareness about transition of care among south Indian pharmacists was very poor. Intermediary factor like attitude take part in participation of transition of care. The distrustful attitude about transition of care has to be overcome by this study. By the current study results it has been clearly shown a significant difference among the participants of before and after transition intervention. The present study shows that only 38.33% have answered during the first visit (before) and after intervention 80% have answered. Currently according to present study only a very few are aware of transition of care. This overall study defines about transition of care concept. By which most of the medical conditions can be pharmacoeconomically and therapeutically justified. Based on the baseline survey first visit (before) it is clear that very few pharmacy students are aware about transition of care in their concern areas. Comparing baseline survey first visit (before) with second visit (after) survey showed a significant difference by implementation of transition of care awareness tool, which resulted a $p < 0.001$ considered very significant. By this it is clear that present study had a justified impact of its awareness about transition of care, which has no comparison with previous studies

V. Conclusion

By the current study it is clear that there is no formal training for pharmacy undergraduates and pharmacy professionals, no proper updating information centers about transition of care. It is prerequisite in order to educate every working pharmacist and pharmacy students and hospital clinical pharmacists about transition of care in order to overcome all patient complications.

However, as the awareness about transition of care among south Indian pharmacists is very poor. In order to enhance regular update about conceptual technologies should periodize and benefits of transition of care should be phenomenalised in patient favour. So it could be concluded that the transition of care has significant role both statistically and practically in upgrading patient quality of life.

As the pharmacist and hospital clinical pharmacists have significant impact in both clinical and community settings associated to society and public health, the current practice of pharmacy surely needs an improvement considering transition of care as a way to implement and improve pharmaceutical care with the main focus of improving patient quality of life.

References

- [1]. Coleman, e.a. 2003. Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs. *Journal of the American Geriatrics Society*, 2003; 51(4): 549-555.
- [2]. Hot topics in health care – transitions of care : theneed for more effective approach to continuing patient care, issued by the Joint Commission. June-2012.
- [3]. Transition care guidelines – Department of Health, Government of Australia, 2015.
- [4]. Transitions of care: policy, regulation, opportunities, &challenges for pharmacy, Aimon c. Miranda, pharm d, BCPS; Radha V. Patel, pharm. D, Mph, Bcacr, Cph ; Griniserag-bolos, pharm. D
- [5]. Transition of care, atrial fibrillation (powerpoint) American college of cardiology, heart rhythm society.
- [6]. Improving transitions of care – findings and considerations of the “vision of the national transition of care coalition” published by the National Transition of Care Coalition (NTOCC), September – 2010.