

Investigation and Analysis of the Transitional Care Needs of Patients Following Hospital Discharge

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Abstract

Background: The transitional care model ensures the continuity of care and has significant impact on patients' health outcomes. Transitional care services need to be developed based on patients' needs. **Purpose:** This study aimed to investigate the care needs of patients following hospital discharge. **Methods:** This quantitative cross-sectional survey was conducted among 484 patients using a questionnaire to investigate patients' transitional care needs, covering the types of the services and patient preferred services providers. **Results:** The investigation revealed that only 17.98% (n=87) of participants were aware that the tertiary hospital provided transitional care following hospital discharge, even though more than half of participants (n=265) expressed a preference for doctors and nurses from tertiary hospitals to provide this. Regarding types of transitional care service, 46.9% participants (n=227) considered health education to be their priority, followed by medication guidance (35.33%), and rehabilitation needs (34.71%). **Conclusion:** The most preferred service model perceived by patients is transitional care services provided by health professionals from tertiary hospitals. Transitional care must encompass a broad range of health services including health education, medication management, and rehabilitation in order to meet patients' needs. This is to promote the care continuity across various care settings.

Keywords: Transitional care; Hospital discharge; Tertiary care

Introduction

The American Geriatrics Society defines transitional care as the design of a series of care activities received by patients when they are transferred among various care settings at different levels [1]. A growing body of evidence suggests that transitional care has become the focus of health care reform in many countries, due to the greatest need for transitional care following hospital discharge [1, 2]. As part of holistic nursing care, transitional care can ensure the continuity of nursing work in the hospital by providing patients with multi-channel out-of-hospital nursing and health guidance [2, 3]. Transitional care has been linked to a reduction of inpatient length of stay, reduced hospital stay length, improved patient satisfaction, and substantial social and economic benefits including reduced health services cost [4-6].

In 2016, the National Nursing Career Development Plan Outline (2016–2020) indicated that transitional care was a major task during the “13th Five-Year period”. The “Healthy China 2030” plan, issued by the Communist Party of China Central Committee and the State Council, also proposed that medical institutions should provide various forms of transitional care services for discharged patients [7]. The needs of patients are the primary basis of transitional care design; however, research has shown that the specific needs of patients following discharge, are not always met by the transitional care services provided [8-10]. Unmet needs may lead to a number of adverse consequences, including psychological distress, increased risk of re-admission, and poor well-being [11,12]. The misunderstandings of transitional providers, failure to place sufficient importance on patient needs, lack of time, and inaccurate and inconsistent assessments, are thought to cause the failure to meet patients' needs.

This study investigated the demand for continuous care of inpatients after discharge from the tertiary hospital and identified patients' needs for transitional care. Discharged patients are a substantial target group that merit special attention, and hopefully, this study will inform future supportive interventions for this population by proving transitional care services based patients' needs.

Methods

This study employed a cross-sectional survey. Fang pointed out that sample size should be at least 15–20 times the greatest number of variable dimensions [13]. A transitional care needs questionnaire, which surveys 20 items including demographic data [Table 1] and transitional care needs scales [Table 2], was used to measure the perceived transitional care needs of patients ($N=(\text{the greatest number of dimensions}) \times 20=10 \times 20=200$). An additional 10% for non-response was added for a minimum sample requirement of 220.

Ethical approvals were obtained before the survey. The population in this study was patients hospitalized in the 18 departments of a tertiary hospital in February 2019. Patients hospitalized in the 18 wards were all invited to participate into the study. The researchers provided clear information to participants in the form of an information sheet and consent form

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including the purpose of the study and the right to withdraw from the research. It took approximately 10–15 min to complete the questionnaires. A total of 492 questionnaires were distributed in this survey and 484 questionnaires were completed, with a valid rate of 98.37%. Analyses were performed using IBM SPSS (version 23.0, Chicago, IL, USA) statistical software. A significance level of 0.05 (2-sided test, power=0.9) was used. Mean, standard deviation, and constituent ratio were used to describe patient needs.

Results

Of the 484 participants, 51.86% (n=251) were male and 48.14% (n=233) were female. Most patients (76.45%) could take care of themselves independently without assistance. Almost three quarters (n=380, 78.15%) of patients were hospitalized in the department of medicine and surgery. Detailed information is displayed in Table 1.

This survey revealed that only 17.98% (n=87) of patients were aware that their admission hospital provided transitional care following discharge. There were 54.75% patients (n=265) who would like doctors and nurses in their admission hospital to provide transitional care services, while only 5.17% of patients choose community doctors and nurses as their preferred providers. Concerning transitional care service content, approximately half (n=227, 46.90%) considered health education as their primary

Table 1: Profile of participants.

Hospitalized individuals	N (%)
Sex	
Male	251 (51.86)
Female	233 (48.14)
Age (years)	
<45	173 (35.74)
45–59	122 (25.21)
60–74	123 (25.41)
75–89	61 (12.60)
≥ 90	5 (1.03)
Education	
Elementary school or below	116 (23.96)
Junior middle school	105 (21.69)
High /Secondary vocational school	98 (20.25)
College/ University or above	165 (34.09)
Department	
Internal medicine	204 (42.15)
Surgery	176 (36.36)
Obstetrics	59 (12.19)
Pediatric	22 (4)
Oncology	23 (4.75)
Self-care ability	
Completely independent	370 (76.45)
Partly dependent on others	77 (15.91)
Completely dependent on others	37 (7.64)

Table 2: Patient needs for transitional care service models and providers.

Service Model	N (%)	Providers	N (%)
Outpatient service	181 (37.40)	Doctors and nurses in the hospital where the patient is admitted	265 (54.75)
Home visit	123 (25.41)	Doctors and nurses in nearby hospitals	60 (12.40)
Telephone guidance	105 (21.69)	Community doctors and nurses	25 (5.17)
Community service	56 (11.57)	Any health professionals	98 (20.25)
Rehabilitation	4 (0.83)	Other providers	37 (7.64)
Self-care	54 (11.16)		
Other means	54 (4.55)		

Table 3: Patient needs for transitional care service content.

Service content	N (%)
Health education	227 (46.90)
Medication guide	171 (35.33)
Rehabilitation care	168 (34.71)
Remove stitches and change wound dressing	51 (10.54)
Maternal and infant care	41 (8.47)
Maintenance of postoperative drainage tube	18 (3.72)
Maintenance of stomach tube	11 (2.27)
Other chronic wound care	10 (2.07)
Maintenance of peritoneal dialysis lines	9 (1.86)
Care of pressure ulcers	7 (1.45)
Diabetic foot care	6 (1.24)
Catheter maintenance	4 (0.83)
Care of trachea cannula	4 (0.83)

need, followed by medication guidance (n=171, 35.33%), and rehabilitation care (n=168, 34.71%). Detailed information is displayed in Tables 2 and 3.

Discussion

This study showed that only 17.98% of inpatients were aware that the doctors and nurses from the tertiary hospital could provide transitional care after their discharge. This finding indicates insufficient health education about transitional care services by health providers to their patients before discharge. Transitional care encompasses a broad range of health services and intends to meet the needs of patients who might be discharged from hospital with varying degrees of health problems. It intends to promote the continuity care of patients across care settings [14,15]. In the context of worldwide efforts to improve the quality of life of patients after discharge [16-19], it is very important to ensure that patients can access transitional care services after discharge. There is a need to provide patients with health related information about transitional care prior to hospital discharge. As transitional care can be helpful in improving patients' satisfaction with care, reducing re-hospitalization rates and lowering the cost of health services [3].

This study also revealed that the top three demands for health services after patient discharge were health education (46.90%), medication guidance (35.33%), and rehabilitation services (34.71%). Patients may lack care-related knowledge due to their age, health literacy, capacity to receive information, and absence of professional guidance^[20]. Therefore, health education including medication management and disease-specific health information throughout hospitalization and during the transitional care process after discharge must be provided to patients by health professionals for the improvement of health services^[21,22]. Hence, it is prudent to examine the competency of health professionals in providing health education for expanding healthcare access and improving healthcare provision.

Patient demand for transitional care covers a wide range of services, including pharmacy, rehabilitation, psychology, nutrition, wound care, maintenance of catheters/cannulas, maternal and child health care, etc. Therefore, transitional care requires the cooperation of a multidisciplinary team, to participate in and implement services to meet the multi-dimensional needs of patients and families^[23]. For the purpose of meeting the increasing needs of patients, advanced nursing practice including wound management and rehabilitation services need to be encouraged to ensure competent care.

In terms of forms of care, this study shows that outpatient services accounted for 37.40%, home visits 25.41%, and telephone guidance 21.69%. The results indicate that most patients consider receiving outpatient services provided by a tertiary hospital staff as more appropriate. Home visiting services by transitional care team, which was the second preferred option, can provide patients with convenient professional care services and face-to-face guidance. Further, home visits provide more opportunities for unobstructed direct communication between health professionals and patients, targeted individualized care, and are the basis for transitional care implementation^[24].

More than two-thirds of participants expected doctors and nurses in their admission hospitals to provide transitional home visits after discharge, while only 5.17% chose community nurses. Compared with community nurses, patients were more likely to accept post-discharge transitional care from clinical staff in tertiary hospitals. A possible reason is that patients believe that clinical staff in tertiary hospitals has rich clinical experience and strong technical skills, which can better meet the complexity of patients' care needs^[25,26], even though community-based care contributes to an increased health services access and reduced health related costs. A hospital-community integrated transitional care model is a time-saving and feasible service model, which takes advantage of specialized technology and facilitates the transition of quality care resources to the community. This finding is congruent with previous studies indicating that hospital-community integrated transitional care models can improve patient quality of life^[27-29].

Conclusion

This study investigated the demands for transitional care services by patients following hospital discharge. The most preferred service perceived by patients is transitional care by health professionals from their admission hospitals. Transitional

care must encompass a broad range of health services including health education, medication management, and rehabilitation in order to meet patients' needs and promote the safe passage of patients across various care settings.

This study has several limitations. First, participants were chosen from one tertiary hospital which may restrict the generality of the findings of this study. Second, this study examined patients' perceived needs for transitional care after discharge while they were in hospital. This might not completely reflect their actual needs after discharge, as their demands will change with personal experience and disease. Further investigation using a well-designed longitudinal study could be used to evaluate changes in patients' care needs for transitional care at different stages.

References

- Marcotte LM, Reddy A, Zhou L, Miller SC, Hudelson C, Liao JM. Trends in utilization of transitional care management in the United States. *JAMA Netw Open* 2020;3: e1919571.
- Naylor MD, Aiken LH, Kurtzman ET, Olds DM, Hirschman KB. The care span: The importance of transitional care in achieving health reform. *Health Aff (Millwood)* 2011; 30: 746-54.
- Ang YH, Ginting ML, Wong CH, Tew CW, Liu C, Sivapragasam NR, et al. From hospital to home: impact of transitional care on cost, hospitalisation and mortality. *Ann Acad Med Singapore*. 2019;48: 333-337.
- Chan DKY, Zhang S, Liu Y, Upton C, Kurien PE, Li R, et al. Effectiveness and analysis of factors predictive of discharge to home in a 4-year cohort in a residential transitional care unit. *Aging Med (Milton)* 2019; 2: 162-167.
- Deng A, Yang S, Xiong R. Effects of an integrated transitional care program for stroke survivors living in a rural community: a randomized controlled trial. *Clin Rehabil* 2020; 269215520905041.
- Wong FK, Yeung SM. Effects of a 4-week transitional care programme for discharged stroke survivors in Hong Kong: a randomised controlled trial. *Health Soc Care Community* 2015; 23: 619-31.
- National nursing development plan (2016—2020). *Nursing Management*. 2017;1: 1-5.
- Graham CL, Ivey SL, Neuhauser L. From hospital to home: assessing the transitional care needs of vulnerable seniors. *Gerontologist* 2009;49: 23-33.
- Robison J, Shugrue N, Porter M, Fortinsky RH, Curry LA. Transition from home care to nursing home: unmet needs in a home- and community-based program for older adults. *J Aging Soc Policy* 2012; 24: 251-70.
- Hughes AK, Woodward AT, Fritz MC, Swierenga SJ, Freddolino PP, Reeves MJ. Unmet needs of us acute stroke survivors enrolled in a transitional care intervention trial. *J Stroke Cerebrovasc Dis* 2020;29: 104462.
- Xie X, Song Y, Yang H, Nie A, Chen H, Li JP. Effects of transitional care on self-care, readmission rates, and quality of life in adult patients with systemic lupus erythematosus: a randomized controlled trial. *Arthritis Res Ther* 2018;20: 184.
- Chan WX, Wong L, Wong R. Transitional care to reduce heart failure readmission rates in South East Asia. *Card Fail Rev* 2016;2: 85-89.

13. Fang JQ, Wan CH, Hao YT, Shi ML, Zhou FQ, Liu FB. Design and implementation of a study on quality of life. *China Cancer* 2001;10.
14. Chow SKY, Wang FKY, Chan T. Community nursing services for post discharge chronically ill patients. *J Clin Nurs* 2008;7B: 260-271.
15. Holland DE, Mistiaen P, Bowles KH. Problems and unmet needs of patients discharged “home to self-care”. *Prof Case Manag* 2011;16: 240-50.
16. Aase K, Laugaland KA, Dyrstad DN, Storm M. Quality and safety in transitional care of the elderly: the study protocol of a case study research design (phase 1). *BMJ Open* 2013; 8.
17. Mazloun SR, Heidari-Gorji MA, Bidgoli-Gholkhatmi M, Agayei N. Effectiveness of discharge-planning on physical quality of life of patients with ischemic heart disease. *Int J Appl Basic Med Res* 2016; 6: 129-33.
18. Manges K, Groves PS, Farag A, Peterson R, Harton J, Greysen SR. A mixed methods study examining teamwork shared mental models of interprofessional teams during hospital discharge. *BMJ Qual Saf*. 2019; 10.
19. Hesselink G, Schoonhoven L, Plas M, Wollersheim H, Vernooij-Dassen M. Quality and safety of hospital discharge: a study on experiences and perceptions of patients, relatives and care providers. *Int J Qual Health Care* 2013;25: 66-74.
20. Yan Z. Investigation and analysis on transitional care needs of hospitalized elderly patients. *J anhui preventive med* 2017;1: 64-71.
21. Mansukhani RP, Bridgeman MB, Candelario D, Eckert LJ. Exploring transitional care: Evidence-based strategies for improving provider communication and reducing readmissions. *P T* 2015; 40: 690-4.
22. Thelian J. Transitional care management services: everything you need to know. *J Med Pract Manage* 2013;28: 382-4.
23. Tuggey EM, Lewin WH. A multidisciplinary approach in providing transitional care for patients with advanced cancer. *Ann Palliat Med* 2014;3: 139-43.
24. Sauers-Ford HS, Tubbs-Cooley H, Statile AM, Pickler RH, White CM, Wade-Murphy S, et al. Optimizing a Nurse-led transitional home visit program in preparation for a randomized control trial. *Pediatr Qual Saf* 2017;2: e012.
25. Naylor MD, Aiken LH, Kurtzman ET, Olds DM, Hirschman KB. The Importance of transitional care in achieving health reform. *Health Affairs*. 2011; 30(4): p. 746-754.
26. Robison J, Shugrue N, Porter M, Fortinsky RH, Curry LA. Transition from home care to nursing home: unmet needs in a home- and community-based program for older adults. *J Aging Soc Policy* 2012;24: 251-70.
27. Liu M, Li GH, Liu YH. Effects of hospital–community integrated transitional care on quality of life in patients with chronic obstructive pulmonary disease. *Front Nurs*. 2019;6: 97-105.
28. Markle-Reid M, Valaitis R, Bartholomew A, Fisher K, Fleck R, Ploeg J, et al. Feasibility and preliminary effects of an integrated hospital-to-home transitional care intervention for older adults with stroke and multimorbidity: A study protocol. *J Comor*. 2019;9: 2235042X1982824.
29. Low LL, Tay WY, Tan SY, Chia EHS, Towle RM, Lee KH. Transitional home care program utilizing the integrated practice unit concept (thc-ipu): effectiveness in improving acute hospital utilization. *Int J Integr Care* 2017;17: 5.