## RAPID LITERATURE REVIEW

# On Patient Readiness for Hospital Discharge: an update on recent Evidence

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**Keywords**: Patient Readiness for Hospital Discharge, Hospital Discharge, patient preferences, nursing management, Quality of Discharge Teaching Scale (QDTS Score)

# **ABSTRACT**

**Background**: The development of the "person-centered" model of nursing care requires a better understanding of patient self-reported readiness for hospital discharge (RHD). The theme is being studied extensively by researchers and professionals around the world.

**Methods:** Using search terms such as "readiness for hospital discharge", (RHD) we systematically searched the PubMed database for relevant articles on patients with RHD from 2019 to the present. Screening was performed strictly according to the inclusion and exclusion criteria, and finally, the relevant literature was read and summarized.

**Results:** A total of 8 articles met the criteria published between 2019 and 2022. The probability of being unprepared for discharge varied by disease type. Factors influencing patient RHD included demographic characteristics, psychological status, disease-related information, and hospital setting factors.

**Conclusions**: Studies of RHD patients have been extensively developed in recent years. There is evidence to sustain that some patients leave the hospital unprepared, and in conditions that would require further attention of clinical staff. The issue may not be receiving the best required attention in what should be a priority of healthcare management and concern with impacts on the patients' quality of life.

Contribution to Evidence-Based Care: The article contributes to an update on how to identify patients with low RHD in the context of busy nursing workloads and make clear interventions, thus improving the efficiency of nursing care. In addition, according to the factors affecting patients' RHD, scientific discharge plans were constructed and are used clinically to promote the application of nursing research results in nursing practice. Finally, the article sustains that evidence-based nursing care and RHD can ensure better quality of care and contribute to the improvement of impacts on patients' quality of life.

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#### What do we already know about this topic?

Readiness for hospital discharge (RHD) is strongly associated with complication rates, readmission rates, and health status of patients after discharge. In 2017, Galvin et al. had included RHD as an important indicator to assess the safety of patients discharged from hospital.

### What is the main contribution to Evidence-Based Practice from this article?

Through updating the evidence related to this topic, we learned that patients should be evaluated for RHD before they were discharged from the hospital. In addition, it clarified who nurses should focus on in nursing care and what can be done to improve patients' RHD.

#### What are your research's implications towards theory, practice, or policy?

The results of the study can enrich the transitional conditions in the Meleis' transition theory. The implication for clinical work is that assessment of a patient's RHD should be included in the nursing to-do list. Nursing managers should also take steps to improve nurse discharge teaching quality and adopt scientific discharge like Quality of Discharge Teaching Scale (QDTS Score).

#### **Authors' Contributions Statement:**

Na LI and Hong JI were responsible for the conception and design of the study. Na LI, Manjie GUO and Simeng YOU worked on the article search and articles revision. Na LI wrote the paper and Hong JI reviewed it thoroughly.

 ${\it What}$  is the relevance of studying Patient

Readiness for Hospital Discharge? Developed by Fenwick in 1979, the concept of "readiness for hospital discharge" refers to the ability of physicians and nurses to determine a patient's ability to leave the hospital and return home by assessing their physical, psychological and social function (Fenwick, 1979). Through a rapid literature review, we confirm that patients' readiness for discharge and the factors influencing is receiving extensive attention from researchers. The literature search identified 8 articles which we summarized next. The main purpose of this rapid literature review was to identify recent evidence on readiness for hospital discharge and to determine the significance of recent contributions.

## Methods:

The PubMed database was used, and the search terms were "readiness for hospital discharge" [Title/Abstract] OR "hospital discharge" [Title/Abstract] OR "discharge ready" [Title/Abstract]. A filter was used to select articles from 2019 to the present. Studies were included if they were cross-sectional, and using a Readiness for Hospital Discharge Scale (RHDS); studies were excluded if the subjects were not the patients themselves, such as the child's mother or father or other primary caregivers.

## **Results:**

A total of 327 articles were retrieved and excluding those articles that did not identify influence factors, 8 articles were finally obtained.

The first article suggested that 47.06% of patients with myocardial infarction (MI) were not prepared at the time of discharge. Patients who were older, unrelated, lived alone, less educated, and unemployed were less prepared for discharge. And the acceptance of illness was positively associated with RHD (Hydzik et al., 2021). The effective implementation of discharge planning for MI patients should include an assessment of factors influencing RHD and acceptance of illness. Meanwhile, acceptance of illness could enhance patients' RHD. Thus, this study showed that the effective readiness of MI patients to be discharged depended on psychological and demographic factors.

The second article suggested that about 28.9% of depressed patients were not ready for discharge. The results revealed that RHD was associated with the length of stay, QDTS (Quality of Discharge Teaching Scale)-content received and QDTS-delivery (Wang, Wang, Meng, & Li, 2021). The findings suggested that patients with depression may overestimate their ability to prepare for discharge. Prolonging the hospital stay did not improve the patient's RHD. Instead, we needed to focus on patients with a length of stay of more than 20 days, who often had a low RHD.

The third article was about the results of adult with major depressive patients, 36.2% were not ready for discharge. Depression level, content received

dimension of QDTS, education level, work status, and length of hospital stay were factors associated with RHD (Xiong, Liu, Chen, Tian, & Yang, 2021). Adult patients with major depression had an intermediate level of RHD and it was very necessary to make RHD assessment a routine process.

The fourth article suggested that 27.6% of HIV patients were unprepared at the time of discharge. Age, medical insurance, self-rated health status, quality of teaching discharge, and level of depression were the main influencing factors (X. Zhang, Tang, Xiao, Sun, & Wang, 2021). Nurses should routinely assess patients for RHD, especially those in poor physical and psychological condition.

The fifth article suggested that 13.9% of laryngectomy patients had low RHD. Quality of discharge teaching and a designated caregiver after discharge were found to influence patients' RHD (Zhao, Feng, Yu, Gu, & Zhang, 2020). Clinical interventions such as nursing assessment on discharge readiness, patient education, assistance to coordinate post-discharge support and individualized follow-up planning should be integrated into future clinical processes in China.

The sixth article was a survey on hepatobiliary surgery patients, where about 36.65% of patients had a mean score of less than 6 on the RHDS entry. The total QDTS score, place of residence, and education level were independent influences on RHD (Qian et al., 2021). When providing health education and discharge teaching, attention should be paid to the actual situation of patients, especially those who were far from the hospital and had a low education level. Providing them with adequate information support, such as teaching booklets and follow-up phone numbers, to facilitate patients' learning after discharge.

The seventh article was about the RHD of 204 elderly postoperative patients. We found that RHD was higher among older adults who were satisfied with their nursing care, those with family support, men, and those who graduated from high school. Meanwhile, RHD scores were lower for those who lived alone, single, illiterate, underwent emergency surgery, and used the intensive care unit (Baksi, Arda Sürücü, Turhan Damar, & Sungur, 2021). This study highlighted the importance of elderly patients' satisfaction with their nursing care, which placed a higher demand on nursing care. Besides, it was necessary to include patients' families in the discharge planning, as well as

to establish and develop follow-up systems across the country, with nurses following patients after discharge. In addition, it would be best to send the discharged patient to a rehabilitation unit for post-discharge exercises.

The eighth article was an article specifically investigated the effect of structural individual characteristics (i.e., unit, nurse, and characteristics) and process-related factors (i.e., the teaching of self-care and symptom management) on patients' RHD. The larger unit or medical unit was a risk factor for patient readiness for discharge, whereas higher nurse experience, better patient self-reported health, higher self-care teaching scores, and symptom management teaching were protective factors (Mabire, Bachnick, Ausserhofer, & Simon, 2019). This study focused on the relationship between patients' RHD and hospital context, which suggested that contextual factors on both the individual and the hospital levelespecially nurse experience- are related to patient readiness for hospital discharge and must be considered when making human resource decisions.

With the above data, we found that recent evidence shows that the probability of being underprepared for discharge ranged from 13.9% to 47.06% and varied by type of disease. The above 8 articles, 1 in 2019, 1 in 2020, and 6 in 2021 and mainly from China, indicating the increasing awareness of Chinese researchers on RHD. Statistical methods were different, with four studies using logistic regression, three studies using multiple linear regression, and one article using between-group comparisons. About the factors that influence patients' RHD, four main factors are demographic characteristics, psychological status, disease condition and hospital environment. Findings are summarized in Table 1.

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## **Discussion:**

Assessing RHD is widely used in international inpatient settings, reflecting the importance and feasibility of using it as one of the indicators of patient discharge safety. The results of the literature review suggest that some patients were still not ready for discharge, which has been identified as factor to increase the risk of complications and readmission rates for patients in the future (Rotvig et al., 2021; A. Zhang, Feng, & Qiu, 2021). At the same time, this review clarifies that the recent evidence demonstrates

that the factors influencing RHD are not consistent across different disease types. As a result, it is necessary to conduct specific investigations on patients with each specific disease.

After identifying the influencing factors, healthcare practitioners, especially nurses, should develop a more effective, patient-specific discharge plan that allows more patients to be prepared at the time of discharge. Improving patients' RHD places higher demands on nursing care, requiring nurses to constantly enrich themselves in scientific methods and

improve the quality of care. This rapid literature review is an update on recent evidence relevant for nursing knowledge to guide their work. At present, the number of registered nurses in many countries around the World may be inadequate, so there will be difficulties in implementing the best practice on patient discharge planning, which needs to be placed as a priority of continuing quality improvement program.

| Authors + years                                    | Participants                         | Percentage of low-RHD | Influencing Factors  |
|--|--------------------------------------|-----------------------|--|
| Hydzik et al., 2021                                | Myocardial infarction patients       | 47.06%                | Age, residence status, education level, work status, acceptance of illness   |
| Wang, Wang,<br>Meng, & Li, 2021                    | Depression patients                  | 28.9%                 | the length of stay, QDTS-content received, QDTS-delivery   |
| Xiong, Liu, Chen,<br>Tian, & Yang,<br>2021         | Adults with major depression         | 36.2%                 | Depression level, QDTS-<br>content received, education<br>level, work status, length of<br>hospital stay                                 |
| X. Zhang, Tang,<br>Xiao, Sun, &<br>Wang, 2021      | HIV patients                         | 27.6%                 | Age, medical insurance, self rated health status, quality o discharge teaching, depression level   |
| Zhao, Feng, Yu,<br>Gu, & Zhang,<br>2020            | Laryngectomy patients                | 13.9%                 | Quality of discharge<br>teaching, a designated<br>caregiver  |
| Qian et al., 2021                                  | Hepatobiliary<br>surgery<br>patients | 36.65%                | QDTS score, place of residence, education level  |
| Baksi et al., 2021                                 | Elderly<br>postoperative<br>patients | No data—              | Sex, education level,<br>residence status, type of<br>surgery, family support,<br>satisfaction with nursing care                         |
| Mabire, Bachnick,<br>Ausserhofer, &<br>Simon, 2019 | Patients  ne Patients' RHD           | No data—              | Medical unit, nurse<br>experience, patient self-<br>reported health, self-care<br>teaching scores, symptom<br>management teaching scores |

## **Conclusion:**

Research on factors influencing RHD in patients has been widely conducted, and an analysis of recent evidence revealed that the influencing factors are not identical for patients with different disease categories. Other main influencing factors were also demonstrated, including patient demographic characteristics, psychological status, disease factors and hospital environmental factors. Scientific instruments, namely Quality of Discharge Teaching Scale (QDTS Score), are being applied internationally and this is a practice that should be adopted widely as a key procedure of nursing management.

## Main Contributions to Practice:

Identifying the latest evidence and trends in patient discharge readiness provides direction for improving nursing care. First, nurses should enhance their knowledge about RHD and raise awareness of available assessment tools. Before a patient is discharged, the nurse should be clear about their self-reported RHD. Second, nurses should focus on the individual characteristics of patients, such as those who were older, had a longer hospital stay, had a lower level of education, and so on, as well as pay attention to their psychological status, which can affect the patient's RHD. Third, nurses or physicians should improve their own discharge teaching skills and expand their discharge teaching knowledge. Nursing managers should develop programs to improve teaching skills through digital solution and technologies, such as virtual patients and online discharge planning guides, as argued by recent literature (Jacennik, 2022). Fourth, nurses should develop a deatiled discharge plan for the patient and extend the teaching time, while the family is included in the discharge teaching (Antunes, 2022). In addition, when planning a discharge, the structural context of the unit, such as the number of patients and the experience of the nurses, should be considered. Last but not the least, the Readiness for Hospital Discharge Scale (RHDS) can be used to assess the level of readiness of inpatients before they are discharged from the hospital.

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