

REVIEW ARTICLE

Comparison of the Career Development of Nursing and Rehabilitation Professionals: A Systematic Review

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Abstract

This study aimed to compare the career development of nursing and rehabilitation professionals using a systematic review approach and to provide suggestions for building support. The Minds Practice Guidelines Development Manual 2020 ver. 3.0 was used for this systematic review. The Medical Journal Web, PubMed, CINAHL/MEDLINE, and Cochrane Library databases were searched, and two eligible articles were selected. These articles showed no difference in career development between nursing and rehabilitation professionals by occupation but showed differences commonly related to the work environment and satisfaction, highlighting the need for an organizational career support system and individual career development support. However, few studies have compared the career development of nursing and rehabilitation professionals, and the survey contents were different; therefore, the results could not be fully verified. Additionally, the accumulation of randomized controlled trials is an issue. Further research on this topic and the development of shared intervention programs are required.

Keywords: Nursing Profession, Rehabilitation Professionals, Career Development, Systematic Review

1. Introduction

In the field of healthcare, career development is becoming increasingly important from the perspective of medical sophistication and multidisciplinary collaboration, and in recent years, the importance of career development for nursing and rehabilitation professionals has drawn attention¹⁻⁸. The global nursing workforce shortage was 5.9 million in 2018, highlighting the need to improve the ability to hire and retain graduates of basic nursing education programs⁹. Previous studies on job changes and turnover among nurses in the U.S. have reported that a large percentage of job turnover occurs at age 50 years or older, but turnover begins to rise at between the age of 30 and 40 years¹⁰. Higher education levels and enrollment in non-nursing degree programs are found to facilitate

job change, while advanced practice credentials are reported to decrease job change¹⁰. A study on continuing education for nurses in the U.K. reported that nurses consider leaving their jobs because of low staffing and salary, while simultaneously seeking management training, skills, and knowledge to care for critically ill patients¹¹. An Australian study on the retention of occupational therapists reported that the desire for a different profession, lack of time, and high workload were triggers for considering leaving, while the opportunity to use occupational therapy skills was reported as a factor for staying in the position¹². Nursing and rehabilitation professionals are involved in health care and often find it easy to not only develop their skills as professionals but also develop their professional careers with advancements in health care. However, nursing and rehabilitation

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professionals are expected to work in various settings, such as hospitals, institutions, and health centers, which may affect their ability to continue working. Career problems faced by nursing and rehabilitation professionals include “burnout,” or a state of fatigue caused by chronic stress, excessive workload, and mental pressure over a long period of time¹³⁻¹⁵ and “reality shock,” which is the phenomenon of studying to practice a particular role and then realizing that the professional reality is different from what is expected¹⁶⁻¹⁸). Although all professionals face this problem, healthcare professionals, such as nurses and rehabilitation specialists, need to develop their careers to keep up with advances in healthcare, pursue learning and expertise, and strengthen multidisciplinary cooperation. However, the methods of career development vary across professions, and it is difficult to determine whether career development has been established for each profession, making the establishment of a support system an urgent issue.

Against this backdrop, the International Council of Nurses (ICN) clarified the reality of nurses’ careers and the surrounding environment and positioned this as one of the issues in its position statement¹). The delivery of quality healthcare and the realization of universal health coverage depend on the health workforce of qualified, motivated, and well-supported nurses in sufficient numbers. In contrast, career mobility is important for nurses to further develop their professional competencies, achieve their personal career goals, and maximize the use of their skills and qualifications to contribute to safe and effective care. The ICN respects and supports nurses’ rights to seek professional success and better living and working conditions through career mobility¹). In addition, the Japan Nurses Association promotes initiatives to support lifelong learning so that nursing professionals can learn independently, provide quality care for patients, and realize their way of life through learning and career development¹⁹). It is important for nursing professionals to continue to develop, maintain, and improve their abilities by proactively engaging in continuous learning and re-learning new knowledge and skills to meet society’s changing needs. In addition, for nursing professionals to remain active in the nursing profession, they must learn autonomously while maintaining harmony between work and life according to their own life events and values¹⁹). In the rehabilitation profession, the World Federation of Occupational Therapists has issued a statement on professional autonomy and the need to engage in lifelong professional learning²⁰).

Additionally, the Japan Physical Therapists Association and Japan Occupational Therapists Association present models for career development and lifelong learning²¹⁻²²). Thus, career development is important and common to both nursing and rehabilitation professionals and there is a need for further research and the establishment of a support system. However, few studies have been conducted on this topic according to profession. In other words, career development comparisons between nursing and rehabilitation professionals have not been adequately examined. Therefore, we conducted a systematic review of studies focusing on the career development of nursing and rehabilitation professionals to obtain suggestions for building career support in both the nursing and rehabilitation professions.

2. Materials and Methods

This systematic review was conducted using the Minds Clinical Practice Guideline Development Manual 2020 ver. 3.0²³).

2.1 Clinical Question Setting and Literature Selection Criteria

The clinical question was “Are there similarities or differences in the career development of nursing and rehabilitation professionals?” The study was conducted in the following steps. A comprehensive literature search was conducted using the Central Journal of Medicine Web, PubMed, CINAHL/MEDLINE, and the Cochrane Library databases. The search terms used were “career,” “nurse,” and “therapist.” The search terms were limited to studies describing careers in the nursing or rehabilitation professions. No other search terms were used to ensure a comprehensive search (last viewed on June 15, 2024). The following documents were excluded: (1) Those whose target population was not nursing or rehabilitation professionals, (2) those without career-related descriptions, and (3) review documents.

Two investigators independently conducted the primary screening. Those that did not match the clinical question of the study in the title and abstract and those that had similar themes and researcher names were extracted. In secondary screening, two researchers independently read the full text, selected articles that met the inclusion criteria, collated the results, and reviewed the eligible literature. When the results were collated, and the two researchers’ opinions differed, a decision was made regarding the accepted articles, considering the opinions of a third party.

2.2 Ethical Considerations

Efforts was made to protect the copyright of the literature covered in this study. The results were extracted by two researchers to ensure that the content of each document was not compromised. The authors have no conflicts of interest to declare.

3. Results

3.1 Literature Search Results

Figure 1 shows the results of the literature search. One article was found on Medical Journal Web, 78 on PubMed, 123 on CINAHL/MEDLINE, and 31 on

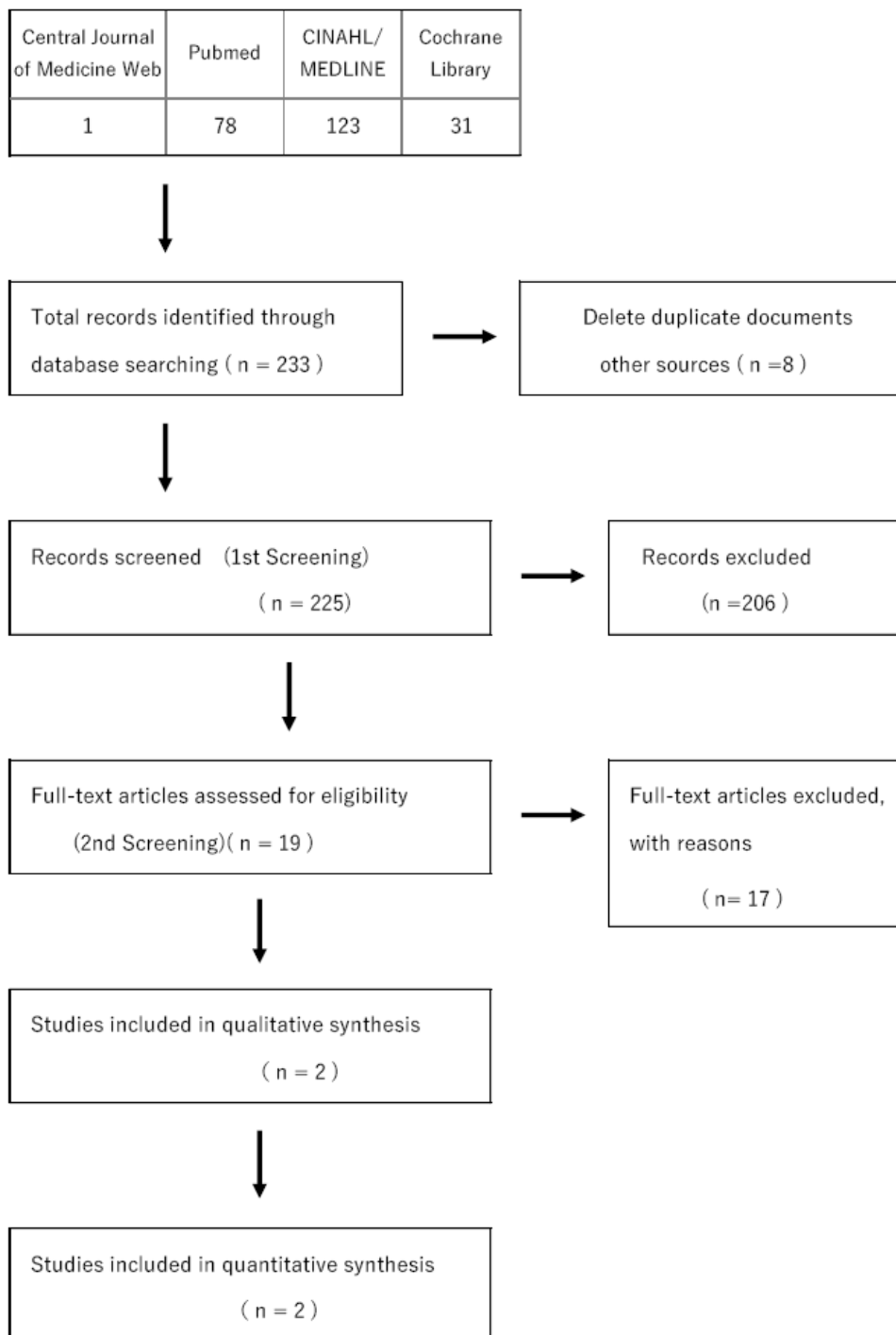


Figure 1. Literature Search Floechart Central

the Cochrane Library. Duplicate references and those meeting the exclusion criteria were excluded. Finally, two articles identified by the investigators as meeting the eligibility criteria were included in the analysis.

3.2 Career Development of Nursing and Rehabilitation Professionals

3.2.1 Participant Selection, Assignment, and Dropout Rates

Table 1 presents the participant selection method, allocation, and dropout rates for each study.

All the papers in each study clearly described the participant recruitment process. The two articles

included in this study were PAMs (professionals allied to medicine) that included nurses, physical therapists, and occupational therapists, and studies that included nurses, physical therapists, occupational therapists, and speech-language pathologists. The eligibility criteria for selecting participants were clearly stated in all papers but were not standardized; two studies (Study 1 and Study 2) were not assigned because both included only the intervention group. Dropout rates were not clearly stated for either Study 1 or Study 2.

3.2.2 Career Development Survey Content and Results

Table 2 shows the survey content and results of career development among the nurses and rehabilitation professionals.

Both Studies 1 and 2 were surveys. Study 1 compared the career development of nurses and PAMs, whereas Study 2 investigated the career development of nurses, physical therapists, occupational therapists, and speech-language pathologists as rehabilitation professionals. The survey content differed across the studies. Study 1 surveyed 38 items, including participant demographics, satisfaction, career prospects, effective activities to fulfill roles, and intention to retire. The results showed no significant

differences between the nurses and PAMs for any of the items. Important factors for being effective in the job were support, one's own qualities, effective communication, the autonomous nature of the post, adequate resources, and access to appropriate education and training. Important factors that prevented them from being effective in their jobs were inadequate resources, time constraints, staff relation problems, poor management, inadequate communication, and excessive workload. This study found no differences in career development between nurses and rehabilitation professionals. In contrast, Study 2 investigated the participants using a questionnaire related to their attributes, resilience, lifelong learning orientation, innovation support, satisfaction with basic psychological needs in the workplace, professional involvement, organizational involvement, career satisfaction, and intention to stay. Results showed that career satisfaction showed a significant positive overall effect from both resilience at work and satisfaction of basic psychological needs, while organizational engagement showed a moderate direct effect. Regarding the impact on intention to stay, satisfaction with basic psychological needs at work and innovation support showed significant positive total effects, lifelong learning orientation showed a direct effect.

Table 1. Subject selection, allocation, and dropout rate

No	author, year of publication, country	recruit	subjects	allocation method, allocated subjects, blinding	inclusion criteria, exclusion criteria	number of subjects, number of dropouts, dropout rate
1	K. COLLINS..etal...2000.UK	40 acute NHS Trusts	nurse(452), PAMs(162) ※Occupations included in PAMs (physiotherapists, occupational therapists, speech and language therapists, etc)	not random not blinding	<p>【inclusion criteria】</p> <p>①They belong to one of a total of 40 acute NHS Trusts, five in each of the eight NHS regions of England②Those who have assumed roles considered innovative or non-traditional or have assumed aspects of care previously considered the work of another group of health professionals③Role must be established for at least 6 months</p> <p>【exclusion criteria】</p> <p>NA</p>	614/NA/NA
2	Raine Osborne..etal...2023.U.S.A	4 health care organizations located in the Southeastern (n =2), Northeastern (n =1), and Midwestern (n =1) U.S.A.	registered nurse(136), occupational therapist(84), physical therapist(182), speech therapist(34)	not random not blinding	<p>【inclusion criteria】</p> <p>①Practicing in a specialized rehabilitation environment②Rehabilitation professionals practicing in inpatient and outpatient rehabilitation facilities③Individuals working in both clinical and administrative positions</p> <p>【exclusion criteria】</p> <p>NA</p>	436/NA/NA

Table 1. Survey on career development

No	author,year of publication,country	subjects (number)	survey method, survey period	survey contents	results
1	K.COLLINS..etal...2000.UK	nurse(452), PAMs(162)	questionnaire survey,1 month	total of 38 items consisting of closed questions and open-ended statements to explain answers, including participant demographics, satisfaction from innovative roles, career prospects, effective activities that fulfill innovative roles, and intention to leave	<p>【Job satisfaction from the innovative role】</p> <ul style="list-style-type: none"> ●no significant differences were found between nurses and PAMs <p>【Do you think working in this role has enhanced your career prospects?】</p> <ul style="list-style-type: none"> ●no significant differences were found between nurses and PAMs <p>【Important factors which help effective working in the innovative role】</p> <ul style="list-style-type: none"> ●support,own qualities,effective communication,the autonomous nature of the posts,adequate resources and access to appropriate education/training <p>【Important factors which hinder effective working in the innovative role】</p> <ul style="list-style-type: none"> ●inadequate resources,time constraints,problems with relationships with staff,poor management,poor communication and excessive workload <p>【I would leave my profession if I could】</p> <ul style="list-style-type: none"> ●no significant differences were found between nurses and PAMs <p>【Where do you see yourself in 5 year time?】</p> <ul style="list-style-type: none"> ●no significant differences were found between nurses and PAMs
2	Raine Osborne..etal...2023.USA	registered nurse(136), occupational therapist(84), physical therapist(182), speech therapist(34)	questionnaire survey,4 months	participant demographics, questionnaires related to each component of the proposed model (resilience, lifelong learning orientation, innovation support, basic psychological need satisfaction in the workplace, professional involvement, organizational involvement, career satisfaction, intent to stay)	<p>【effets on career satisfaction】</p> <ul style="list-style-type: none"> ●career satisfaction demonstrated significant positive total effects from both resilience and basic psychological need satisfaction at work ●organizational engagement had a moderate direct effect ●innovation support and orientation toward lifelong learning both had small and nonsignificant total effects on career satisfaction <p>【effects on intention to stay】</p> <ul style="list-style-type: none"> ●intention to stay demonstrated significant positive total effects from basic psychological need satisfaction at work and innovation support, and a negative total effect from orientation toward lifelong learning ●organizational engagement had a direct effect ●orientation toward lifelong learning had a negatively oriented direct effect on intention to stay which was somewhat reduced by the positively oriented indirect effects through organizational engagement

4. Discussion

4.1 Usefulness of Career Development in Nursing and Rehabilitation Professionals

There was no clear description of the dropout rate in the two target studies. Both studies used questionnaires, and the participants and number of questionnaires collected were the same. Considering the number of dropouts in previous studies covered in this study, the survey on career development was considered an easy method for nurses and rehabilitation professionals. Study 1 included 614 nurses and PAMs working in 40 acute NHS Trusts, and Study 2 included 436 nurses, physical therapists, occupational therapists, and speech and language therapists working in 4 medical institutions. No dropouts were found in either study. This suggests that career development is an interesting topic for nursing and rehabilitation professionals, and that they seek opportunities to learn about their own careers, which may have led to their active participation and to a low number of dropouts. Nursing and rehabilitation professionals need to strive

for continuous professional development²⁴⁻²⁵), and the abundant and diverse career opportunities available to them from the early stages of their careers have been emphasized²⁶), suggesting the need to support career development. However, individual participants cannot implement career development unilaterally. Rather than considering career development as an individual nurse or rehabilitation professional, it is important to consider how to support individuals' career development as an organization. It is thought that nursing and rehabilitation professionals participated in the survey because they were interested in knowing the trends in their individual and occupational careers. However, the underlying mechanism remains unclear. Therefore, the low number of dropouts identified in this review must be verified through a series of randomized controlled trials.

4.2 Comparison of Career Development Between Nursing and Rehabilitation Professionals

There were differences in the survey methodology, duration, and content. However, it is possible that

no differences in job categories were found in the comparison of career development between nursing and rehabilitation professionals. The reasons for the lack of differences in the career development of nurses and rehabilitation professionals may include the fact that the work environment was the same and that they received organizational support from their workplaces, which were also similar. Nurses' career turnover has been reported to be motivated by difficult work environments, lack of career development opportunities, and lack of support from managers²⁷⁾, and the work environment may have influenced their career development. In addition, it has been reported that the initial career development of occupational therapists requires support from related medical directors, medical clinical educators, and others²⁸⁾, which may be because organizational involvement, including the work environment, affects career development.

The articles reviewed in this study were written by nurses and other healthcare professionals such as physical therapists, occupational therapists, and speech-language pathologists, who inevitably require support from their workplaces and profession-specific associations. However, the importance of career development satisfaction has also been reported²⁹⁻³³⁾. This suggests that individual satisfaction of nursing and rehabilitation professionals affects career development and needs to be recognized by responsible managers and administrators. Study 1, which included nurses and PAMs, compared their career development and found no differences in career development by job title. Support, qualifications, and access to appropriate education and training were considered important factors for being effective in one's job, whereas problems with staff relations, inadequate communication, and excessive workload were considered important inhibiting factors. While various factors may influence career development, it is important for individuals to consider career development and improve as professionals. Furthermore, to promote individuals' career development, it is necessary for managers and supervisors to be aware of the impact of organizational interventions on career development and to provide career support.

Limitations and Prospects of the Study

This study included only studies pertaining to the career development of nursing and rehabilitation professionals, and there were differences in the eligibility criteria, exclusion criteria, and research methods among the included studies. Given the

differences in the experiences of the participants, it remains unclear whether the surveys conducted in the articles included in this study are effective for nursing and rehabilitation professionals. A randomized controlled trial should be conducted to compare the career development of nursing and rehabilitation professionals and develop a methodology that can be used to support their careers. The importance of career development has been validated in recent years, and programs related to individual and organizational efforts to support career development must be developed.

5. Conclusion

There were no differences in the career development of nurses and rehabilitation professionals by job type, and the results were commonly related to work environment and satisfaction, suggesting the need to establish an organizational career support system and individual career development strategies. However, owing to the paucity of previous studies, it is difficult to confirm whether this methodology is useful for the career development of nurses and rehabilitation professionals, and the accumulation of randomized controlled trials remains an issue.

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