

Exploring the Challenges and Perception of Nursing Practitioners in the Implementation of Disease Care in Interdisciplinary Team

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INTRODUCTION

The Institute of Medicine (IOM) has proposed that interdisciplinary teamwork is one of the five core competencies that healthcare professionals should possess. Interdisciplinary teamwork involves collaboration among healthcare professionals from different disciplines, with the shared goal of improving the quality and outcomes of patient care while reducing hospitalization, clinical errors, and mortality rates. Given that nurses are critical members of the healthcare team in the daily care of patients, it is essential to explore the characteristics that influence their participation in interdisciplinary teamwork, which is a key area of research and practice.

AIM

This study aims to investigate the differences in the level of collaborative competence among nurses in executing interdisciplinary team-based disease care based on important individual characteristics, using a quantitative research approach. Additionally, a qualitative research approach was employed to explore nurses' perceptions and challenges related to executing interdisciplinary team-based disease care.

METHOD

The study adopts a two-phase mixed-methods design, with the questionnaire as the primary data collection tool supplemented by interviews to obtain in-depth information. The Chiba Interprofessional Competency Scale (CICS29) was applied to measure the practical abilities of interprofessional collaboration. By answering 29 questions, the user can evaluate the professional abilities which are categorized into subscales. The participants include registered nurses aged 20 and above. A total of 444 valid questionnaires were collected and analyzed using Stata 14.0, including t-tests, one-way ANOVA, and multiple linear regression. Confirmatory Factor Analysis (CFA) was applied to examine the goodness of fit of the data. Qualitative data collected through in-depth interviews with four nurses were analyzed using thematic analysis to identify ten major themes and 31 sub-themes.

RESULTS

The study results reveal that nurses working in different departments, holding managerial positions, having senior nursing levels, and receiving interdisciplinary teamwork education and training demonstrate better interdisciplinary teamwork performance ($p < 0.05$). The in-depth interviews shed light on the participants' understanding of interdisciplinary teamwork, emphasizing the necessity of effective interdisciplinary teamwork to provide patient-centered care.

Multiple linear regression analysis of demographic characteristics on each aspect.

	Attitudes and beliefs as a professional	Team management skills	Actions for accomplishing team goals	Provide patient-centered care	Attitudes and behavior that improve team cohesion	Fulfilling one's role as a professional	Total scores
variable	Coef.						
Managerial Positions (ref : nurse)							
Supervising nurse	0.885 (-0.260-2.030)	0.770 (-0.145-1.685)	0.618 (-0.345-1.582)	0.949* (0.044-1.854)	0.521 (-0.333-1.375)	0.151 (-0.663-0.965)	3.895 (-0.998-8.788)
Nurse	1.219* (0.068-2.371)	0.531 (-0.389-1.450)	0.827 (-0.142-0.796)	0.944* (0.034-1.853)	0.403 (-0.456-1.261)	0.478 (-0.340-1.296)	4.401 (-0.518-9.320)
Practitioner							
Nursing Levels (ref :N5)							
N1	-0.883 (-1.992-0.226)	-0.328 (-1.214-0.557)	-0.117 (-1.050-0.816)	-0.344 (-1.220-0.532)	-0.089 (-0.916-0.738)	0.342 (-0.446-1.131)	-1.420 (-6.157-3.318)
N2	0.913 (-0.148-1.974)	0.569 (-0.278-1.416)	0.790 (-0.102-1.683)	0.789 (-0.049-1.627)	0.645 (-0.146-1.436)	0.838* (0.084-1.592)	4.544* (0.012-9.075)
N3	1.870** (0.570-3.171)	0.872 (-0.167-1.910)	1.000 (-0.094-2.094)	0.806 (-0.221-1.834)	0.757 (-0.213-1.726)	1.233** (0.309-2.157)	6.538* (0.983-12.093)
N4	2.229** (0.640-3.817)	1.208 (-0.060-2.476)	2.015** (0.679-3.351)	0.952 (-0.303-2.207)	1.466** (0.282-2.650)	1.559** (0.430-2.687)	9.428** (2.644-16.212)
Interdisciplinary teamwork education and training (ref : Yes)							
No	-0.403 (-1.160-0.354)	-0.531 (-1.136-0.073)	-0.680* (-1.317--0.044)	-0.220 (-0.818-0.378)	-0.265 (-0.830-0.299)	-0.299 (-0.837-0.239)	-2.399 (-5.632-0.834)
Uncertain	-1.180** (-2.000--0.359)	-1.080** (-1.735--0.425)	-1.116** (-1.806--0.426)	-0.524 (-1.172-0.125)	-0.831** (-1.443--0.220)	-0.624* (-1.207--0.041)	-5.354** (-8.858--1.850)

CONCLUSIONS

Regular interdisciplinary team meetings and the development of strategies were identified as crucial for achieving successful interdisciplinary team care. However, the study also identified challenges in conducting interdisciplinary teamwork, such as ineffective communication and problems with continuity of care due to staffing shortages. Therefore, education and training, as well as the establishment of a robust training mechanism, are crucial to maintaining successful interdisciplinary care

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