Predictive Factors of Advanced Practice Nurse–Physician Collaboration in Patient Care

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Abstract : Advanced practice nurse-physician collaboration in patient care results in positive outcomes for patients, nursing practice, and health organizations. However, limited data exists regarding this collaboration. The purpose of this predictive correlational study was to examine factors which can predict advanced practice nurse-physician collaboration in patient care. The hypothesized predictors were attitudes toward advanced practice nurse-physician collaboration in patient care, self-esteem, commitment to nursing practice, and working environment in patient care. Two hundred and twenty-four advanced practice nurses participated and were selected by convenience sampling. Data were collected using five instruments: 1) the Jefferson Scale of Attitudes toward Physician-Nurse Collaboration 2) the Collective Self-Esteem Scale 3) the Nursing Practice Commitment Scale 4) the Working Environment Scale and 5) the Collaborative Practice Scale. Pearson's product moment correlation and stepwise multiple regression were used to analyze data.

Results revealed that the commitment of advanced practice nurses to nursing practice and working environment in patient care together explained 21.10% of the variance in collaboration. The results are useful for senior nurses and advanced practice nurses in the development of effective interventions or strategies for promoting this collaboration in patient care.

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Introduction

Collaboration in patient care between Advanced Practice Nurses (APNs) and physicians results in positive outcomes for patients[1-2], APNs[3], and health organizations.[2] Patient outcomes include reduced length of stay.[1] APN outcomes include increased job satisfaction.[3] Health organization outcomes include improved healthcare providers' satisfaction and decreased costs of care.[2]

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APNs' success as clinicians and leaders depends on the collaboration with other healthcare professionals.[4] APN-physician collaboration (APN-PC) is essential for effectiveness and quality of patient care because collaboration can build working relationships to provide high quality patient care.[2] The current literature on APN-PC from abroad and Thailand suggests difficulties in collaboration in patient care between APNs and physicians.[5-7] These difficulties include physicians having a poor understanding of APNs role and scope of practice [5-6], and the lack of cooperation from physicians.[7] In Thailand, there are few reports in relation such collaboration. Two studies have identified APN-PC in patient care as problematic.[5,7] Previous studies have suggested that attitudes toward nurse−physician collaboration[8,9], nurses' self-esteem[8,10], commitments to nursing practice[10], and working environment[10-11] were associated with nurse−physician collaboration in patient care. However, these studies did not identify the predicting factors of APN-PC. Due to difficulties in the APN-PC in patient care that continue to exist, factors which influence the occurrence of collaboration need to be determined. Knowing the significant predictors of APN-PC may facilitate decision-making in development of strategies for enhancing such collaboration.

Review of the literature

In the context of health care, collaboration has been defined in various ways. In this study, it is the interaction between APNs and physicians which enable the knowledge and skills of APNs and physicians to have an effect on the patient care provided. The current literature suggests four factors which affect nurse−physician collaboration in patient care including attitudes of nurses toward nurse−physician collaboration[12], nurses' self-esteem[8], commitment of nurses to nursing practice[10], and working environment in patient care.[10] Attitudes toward this collaboration are characterized by attitudes toward physicians' dominance, nurse autonomy, shared education and teamwork, and

caring as opposed to curing.[12] Symbolic interaction theory has been used to describe the impact of attitudes on the collaboration between nurses and physicians.[8] Here nurses' behaviors are considered as learned from educational programs and work settings, that help to construct their attitudes and beliefs. The beliefs and attitudes of both nurses and physicians have an impact on their behaviors during interaction with each other.[8] When individual nurses and physicians enter into their own education, continued changes are made as they try to meet ideal roles in practice. Rigid hierarchies continue to exist in the educational programs as well as in the work settings.[8] Physicians focus on autonomy and practice often without needing help from others. In addition, the hierarchy places more emphasis on the discrimination of social class between the nursing and medical profession and gender role stereotypes.[13] As a consequence, the behaviors which were learned from the hierarchy of education and work settings construct the attitudes and beliefs of individual nurses and these influence the practice roles and social interaction between nurses and physicians; and these may impact on the interaction in collaboration between nurses and physicians.[8] Nurses who have more positive attitudes toward nurse−physician collaboration in patient care are more collaborative with physicians; and these attitudes explain 42.1% of the variance in the nurse−physician collaboration in patient care.[8]

Based on social identity theory, in this study, nurses' self-esteem refers to the evaluation of individual nurses toward their membership of the nursing profession. Social identity theory has been used to describe the association between self-esteem and nurse-physician collaboration.[8] The groups that people belong to, for example occupations and social class, are important sources of self-esteem and pride, and give a sense of social identity to the individual. Therefore, individuals divide the world into "them" and "us" based on a social categorization process.[14] Self-esteem functions as a motivating factor for specific forms of behavior of the members of our group and members

of other groups.[8] People will exhibit behaviors serving the interest of the in-group ('our' group) as a means to protect or enhance their self-esteem.[8] The way to achieve a positive self-esteem is to compare our group (in-group) with other groups (out-group). These notions help to explain that membership in lower status groups has led to low social self-esteem, and such members are motivated to exhibit greater intergroup discrimination than the members of high status groups.[15] This supports the notion that health care providers' beliefs or feelings about the group of which they are a member influences their behaviors, including collaboration, during inter-professional interactions in clinical setting. The self-esteem of health care providers related to the occupational or social group of which they are a member influence their behaviors during inter-professional interactions in the clinical setting and also collaborative behaviors.[8] Empirical research has reported a significant positive relationship between nurses' self-esteem and nurse-physician collaboration in patient care.[8]

Commitment to nursing is a practice behavior of nurses in relation to patient care; and is characterized as altruistic, devoted, dedicated, caring, trusting, loyal, and being there.[10] Based on the Conceptual Model of Collaborative Nurse-Physician Interaction, the individual communication/behavior tendencies are considered as the influencing factors on nurse-physician collaboration.[16] The behaviors of nurses who have a strong commitment to nursing practice can create a good atmosphere in the workplace and decrease conflicts between nurses and physicians. Thus, commitment to nursing practice can reduce the resistance from physicians and result in the acceptance of nurses by physicians.[10] However, to date only one study has reported a significant positive relationship between commitment to nursing practice and patient care collaboration between nurses and physicians.[10]

The working environment is made up of elements in the work situation that promote effective collaboration between nurses and physicians.[10] This is further categorized as physical work environment (the buildings, facilitators), societal work environment (the relationships among health professionals in hospital, the support regarding nursing education, social activities), and psychological work environment (nursing autonomy, self-development, democratic climate, or equality in participation). Seen within a framework that includes a model of collaborative practice and working environment, working environment factors are considered as influencing factors on interdisciplinary and nurse-physician collaboration in patient care.[11] Findings from descriptive research reveals a positive significant relationship between working environment and nurse-physician collaboration (r = 0.47, p< .05).[10]

Few studies have focused on APN-PC in patient care, which in Thailand is identified as problematic.[5,7] To promote collaboration in patient care among APNs and physicians, it is important to identify the predictors of such collaboration. However, previous studies regarding factors influencing collaboration have mainly used descriptive and qualitative descriptive exploratory design. We believe that the limitations in these studies are the identification of the ability of attitudes toward nurse-physician collaboration, nurses' self-esteem, working environment, and commitment to nursing practice in explaining the variability of APN-PC in patient care. Therefore, this study aimed to determine the predictive ability of these four factors on APN-PC in patient care.

Method

Design: A predictive correlational design was used.

Ethical Considerations: This study was approved by the Research Ethics Review Committee of the Faculty of Nursing, Chiang Mai University. All potential participants were informed regarding: the purpose of the study; confidentiality and anonymity issues; and the right to withdraw from the study at any time without repercussions. All those willing to participate were asked to sign a consent form prior to data collection.

Sample: The population was made up of 1,519 participants certified as APNs by Thailand Nursing and Midwifery Council (TNMC) in the period 2003–2011.University lecturers, and APNs who were not clinical nurse specialists were excluded.

The sample size was calculated based on the recommendation for the sample size of multiple regression analysis. The minimum sample needed to include 40 times each predictor for stepwise regression.[17] Given that there were 4 independent variables, the sample size was set at 160, and allowing for an attrition rate of 20% [18], the total sample of this study was set at 192 APNs. However, to ensure an adequate sample size, oversampling was conducted; therefore, 250 participants were recruited into this study by convenience sampling. Inclusion criteria were APNs who were: clinical nurse specialists; certified by TNMC; working in secondary and tertiary government/private hospitals or clinical settings experience at least 1 year; and willing to participate in this study.

Instruments: Six instruments were used to obtain data. Permission for use of all copyrighted instruments was obtained from the copyright holders.

1. The Demographic Data Collection Form was developed by the principal investigator (PI) to obtain participant's demographic information, including: gender, highest educational level, age, specialty areas, type of workplace, experiences in nursing practice, and duration of being an APN.

2. The Jefferson Scale of Attitudes Toward Physician–nurse Collaboration (JSA) was developed by Hojat and colleagues.[9] In this study, it was used to measure attitudes of APN toward APN–PC in patient care. The Scale consists of 15 items with answers recorded on a 4–point Likert–type scale (4=strongly to 1=strongly disagree). An example of the items is: "Nurses should be accountable to patients for the nursing care they provide". The total score is the sum of all item scores. Possible scores range from 15– 60, with 3 levels of interpretation of positive attitudes toward APN–physician collaboration in patient care

as high (47-60), moderate (31-46), and low level (15-30).

3. The Collective Self–esteem Scale (CSE) was developed by Luhtanen and Crocker[19] and used in this study to measure APN self–esteem. This scale has 16 items, divided into four subscales: 1) membership esteem (4 items), 2) public collective self–esteem (4 items), 3) private collective self–esteem (4 items), and 4) identity (4 items). It uses a 7–point Likert–type scale (1=strongly disagree to 7= strongly agree). An item example is: "I am a worthy member of the social groups I belong to". A total score is obtained by combining responses on all 16 items, and possible scores range from 16-112 with 3 levels of self–esteem interpretation: high (82-112), moderate (49-81), and low (16-48).

4. The Nursing Practice Commitment Scale was developed by Nakchai.[10] It is used to measure commitment of APNs to nursing practice and consists of 33 items with a 5–point Likert scale (5=very frequently to 1=very rarely). An item example is: "I always explain healthcare regimens to patients and their family members". The total score is the sum of all item scores. Possible scores range from 33-165 with 3 levels of interpretation of commitment to nursing practice: high (123-165), moderate (78-122), and low (33-77). The content validity of the questionnaire was approved by eight nursing administration expert panelists.

5. The Working Environment Scale (WES) was developed by Nakchai[10] to measure the working environment in patient care. Items are categorized into physical work environment (6 items), societal work environment (9 items), and psychological work environment (15 items). There are 30 items using a 5–point Likert scale (5=almost always true to 1= almost never true), and one example is: "In my workplace, we work together as a team." The total score is the sum of all items. Possible scores range from 30-50 with 3 levels of interpretation of appropriateness of working environment: very appropriate (111-150), moderately appropriate (71-110), and lightly appropriate (30-70). The content validity of the WES was approved by the same eight experts above.

6. **The Collaborative Practice Scale for Nurse** (**CPS-Nurse**) was developed by Weiss and Davis.[20] It measures the perception of collaboration between nurses and physicians. The CPS for nurses has 9 items, consisting of 2 factors. The first factor has 5 items measuring the degree to which a nurse directly asserts professional expertise and opinions when interacting with physicians about patient care. The second factor has 4 items measuring the degree to which a nurse clarifies with the physician mutual expectations regarding the nature of shared responsibilities in patient care. Each item is scored on a 6-point Likert type scale (1=never to 6=always). An example is: "I tell physicians when, in my judgment, their orders seem inappropriate". Possible scores range from 9-54, with 3 levels of interpretation of using collaborative behaviors: high (41-54), moderate (25-40), and low (9-24).

The three instruments (JSA, CSE, and CPS-Nurse) were originally in English and translated from English to Thai by the first researcher, and then back-translated from Thai to English by a bilingual expert. Comparisons of the back-translated version of these instruments to the original English version were made by the same bilingual expert used above. Finally, any inconsistency was corrected with the agreement of all researchers.

Prior to use, five questionnaires were pilot-tested with 20 APNs, similar to the samples in this study. The Cronbach's alpha coefficients of the JSA, the CSE, the Nursing Practice Commitment Scale, the Working Environment Scale, and the CPS-Nurse were .85, .78, .93, .93, and .93, respectively. In this study, the Cronbach's alpha coefficients of these five questionnaires were .54, .82, .89, .91, and .84, respectively.

Procedure: After study approval by the Faculty of Nursing Ethics Committee, Chiang Mai University and the directors of the hospitals, directors of nursing divisions were contacted and asked if coordinators could distribute the questionnaires to APNs in their organizations. Questionnaires were completed within 2 weeks and returned by mail.

Data analysis: Descriptive statistics were used to analyze demographic data, attitudes of APNs toward APN-PC in patient care, APNs' self-esteem, commitment of APNs to nursing practice, working environment in patient care and APN-PC in patient care. Pearson's product moment correlation was used to analyze the bivariate relationship between APN-PC and independent variables. Stepwise multiple regression analysis was used to identify the predictors of APN-PC

Results

Two hundred and fifty questionnaires were sent to APNs and 226 were returned. Two outlier cases were excluded from the data screening. Finally, 224 APNs were included in this study. The majority were female (96.9%) and all held a master degree. Ages ranged from 33-60 years ($\bar{x}$ =44.25, SD. = 5.53). Regarding the APNs' specialty area, about half specialized in medical-surgical nursing (53.1%), followed by pediatric nursing (12.9%), and geriatric nursing (12.5%). More than half of the APNs worked in tertiary care hospitals (59.8%), and 50.4% had 11-20 years experience in nursing practice, followed by 44.6% having 21-30 years of experience. About one third (36.6%) had practiced as an APN for 2-3 years and 33% for >5 years. The attitude of APNs toward APN-PC in patient care ($\bar{x}$ = 55.16, SD. = 2.70), APNs' self-esteem ($\bar{x}$ = 99.44, SD. = 9.27), commitment of APNs to nursing practice($\bar{x}$ = 136.80, SD. = 10.45), and working environment in patient care ($\bar{x}$ = 118.73, SD. = 12.16) were at a high level while APN-PC in patient care ($\bar{x}$ = 34.20, SD. = 7.55) was at a moderate level.

Correlational analyses among attitudes of APNs toward APN-PC in patient care, APNs' self-esteem, commitment of APNs to nursing practice, working environment in patient care and APN-PC in patient care are illustrated in **Table 1**. There was a significantly moderate positive relationship between APN-PC in patient care and commitment of APNs to nursing

practice (r = .41, p < .01) and working environment in patient care (r = .40, p < .01). There was a significantly low positive relationship between APN–PC in patient care and APNs' self–esteem (r = .27, p < .01) and attitude of APNs toward APN–PC in patient care (r = .19, p < .01).

Table 1 Correlation Matrix of APN–Physician Collaboration in Patient Care and the Independent Variables (n=224)

Variables	1	2	3	4	5
1. Attitudes of APNs toward APN–physician collaboration in patient care	–				
2. APNs' self–esteem	.12	–			
3. Commitment of APNs to nursing practice	.32**	.43**	–		
4. Working environment	.19**	.45**	.58**	–	
5. APN–physician collaboration in patient care	.19**	.27**	.41**	.40**	–

** p< .01

Stepwise multiple regression analysis was used to identify the predictors of APN–physician collaboration in patient care. The results revealed the commitment of APNs to nursing practice and working environment in patient care and together explained 21.10 % of variance in predicting APN–PC in patient care (**Table 2**).

Table 2 Predicting Factors of APN–Physician Collaboration in Patient Care (n=224)

Variables	B	SE	β	t value
Constant	–1.212	.672	–1.805	
Commitment of APN to nursing practice	.740	.195	.279	3.799**
Working environment in patient care	.492	.152	.238	3.234**
Attitudes of APNs toward APN–physician collaboration in patient care	–	–	–	–
APNs' self–esteem	–	–	–	–

– *Note*. R = .460, R^2 = .211, Adjusted R^2 = .204, F (2, 221) = 29.619. **p< .01.

Discussion

Commitment of APNs to nursing practice and working environment in patient care were found to be the predictors of APN–PC in patient care in this study. This finding can be supported by the Conceptual Model of Collaborative Nurse–Physician Interaction.[16] Based on this Model, commitment to nursing practice was implied as the individual behavior tendency which influences the occurrence of nurse–physician collaboration. In addition, the behavior of nurses who have a commitment to nursing practice can reduce the resistance from physicians and promote acceptance of the nurses' role by health care team members.[10] Therefore, acceptance of the APNs' role by health care team members may lead to cooperation and collaboration from members of the health care team. Moreover, a possible explanation for this finding could be that there has been evidence regarding the effectiveness of APNs' care in diverse groups of patients in different settings.[21-24] Because of APNs' commitment to nursing practice, they have conducted the projects to manage complex health problems of various groups of patients. This is evidenced by the effectiveness of APNs and

positive patient outcomes found within diverse clinical settings in Thailand and other countries .[21-24] The commitment behaviors (altruism, devotion, dedication, care, trust, loyalty, and being there) of APNs could be seen by multidisciplinary team members when APNs provide care services to their patients through APNs' projects. This implies that as a result of APNs' commitment to their work, they provided effective care and achieved positive outcomes, are accepted by the multidisciplinary team members including physicians, and also improve APN-PC in patient care.

The predicting effect of working environment in patient care on APN-PC can be supported by the Composite Collaborative Practice Model. This Model proposed that organizational factors facilitate the participation of health care providers to utilize their separate and shared knowledge and skills in corporation with one another.[11] The possible explanations of the effect of working environment on APN-PC in patient care are as follows:

Firstly, physicians believed in the benefits of collaboration with APNs. Specifically, about half the participants in this study worked in tertiary care settings. Tertiary care setting presents a complexity of tasks and needs in using specialized equipment resources and thus requires personnel with relevant skills. Physicians in tertiary care settings believe that collaboration with APNs benefits both patients and the health organization,[23] which in turn may a promote hospital environment that facilitates APN-PC.

Secondly, the complexity of patient care in tertiary care may foster APN-PC in patient care. The majority of participants in this study worked in tertiary care settings. The care services in tertiary hospitals are specialized consultative care. The health care is provided by specialists who are working in a center that has personnel and facilities for special investigation and treatment. Tertiary care hospitals admit patients with more severe types of illness and complex health problems than secondary hospitals do. Thus, health care services in tertiary care are complex; and patient care requires professional knowledge, skill, and experience.[25] Moreover, complexity of patient care is associated with interaction and sharing decision making[25]; and this may influence the APN-PC. The impact of complexity of care on APN-PC is supported by the Model of Nurse Practitioner Interaction and Participatory Decision Making with Physicians, which explains that the likelihood of interaction and sharing decision making between APNs and physicians is a direct result of the complexity of the patient's problem.[25]

Thirdly, the psychological work environment within hospitals may facilitate the occurrence of APN-PC. In this study, more than half of the APNs worked in tertiary hospitals. There is evidence that such hospitals have policies which support the self-development of APNs including inside/outside organizational short course training and sharing knowledge related to their patients.[26,27] Self-development may improve knowledge, skill and competence of APNs. Clinical competence is an important factor underlying successful APN-PC because it leads to trust and respect among clinicians,[4] which in turn enhances collaboration and shared responsibilities in patient care. APNs have expertise in educating patients in relation to illness and lifestyle modification. Physicians have expertise in diagnostics.[4] Therefore; clinical competence may enhance shared responsibilities in patient care and also APN-PC.

Finally, the societal work environment within hospitals may facilitate the occurrence of APN-PC. Tertiary hospitals have administrative support for APNs' practice. In this study, more than half of the APNs are working in tertiary hospitals. There is evidence that tertiary hospitals have administrative support for APNs' practice including the clearly delineated position of the APN within the organization and the freedom of working truly as APN.[26,27] This support was reflected in the form of an "APN blog" in the website of hospitals, which provides APNs' with personal and work information, discussion about successful projects, and research.[26,27] This helps multidisciplinary team members

to understand and accept APNs' role, and thus might contribute to better sharing of responsibilities in patient care between team members, and may lead to APN—PC in patient care.

Attitudes of APNs toward APN—PC and APNs' self—esteem were not significant predictors APN—PC. However, these two variables had a significant positive correlation with two predictors and mild significantly positive correlation with APN—PC (**Table 1**). A possible explanation could be that attitudes of APNs toward APN—PC and APNs' self—esteem alone may not strong enough to affect APN—PC. Collaboration is built on the respect, trust, and valuing each other's knowledge because these key elements enhance shared decision making in patient care.[4] It is therefore assumed that attitudes of APNs toward APN—PC in patient care and APNs' self—esteem alone also may not strong enough to influence the occurrence of APN—PC in patient care.

Conclusions, Limitations and Recommendations

The findings provide evidence regarding predictive factors of APN—PC in patient care and can help guide development of an intervention program to enhance this collaboration. Based on our findings we suggest that nursing administrators should develop a program that focuses on enhancing a collaborative working environment and the further commitment of APNs to nursing practice.

A limitation is that the samples in this study consisted of clinical nurse specialists who worked in secondary and tertiary hospitals in Thailand and was a convenience sampling. Generalization of the finding to all APNs should be done with caution.

Based on this study, it is recommended that the study should be replicated with APNs working in primary care settings, NPs, and Anesthetist APNs, in order to compare the findings, to identify different predicting variables, and to generalize the findings to all APNs in

Thailand. Other potential variables affecting APN—PC in patient care should be identified as the results found only 21.10% of variance in APN—PC in patient care was accounted for by commitment of APN to nursing practice and working environment.

Acknowledgement

References

1. Newhouse RP, Stanik—Hutt J, White KM, Johantgen M, Bass EB, Zangaro G, et al. Advanced practice nurse outcomes 1990—2008: A systematic review. Nurs Econ. 2011; 29(5): 230—250.

2. Maylone MM, Ranieri L, Quinn Griffin MT, McNulty R, Fitzpatrick JJ. Collaboration and autonomy: perceptions among nurse practitioners. J Am Acad Nurse Pract. 2011; 23: 51—57.

3. Donald F, Ann ME, DiCenso A, Brazil K, Stephenson M, Akhtar—Danesh N. Nurse practitioner and physician collaboration in long—term care homes: survey results. Can J Aging. 2009; 28(1): 77—87.

4. Hanson CM, Spross JA. Collaboration. In Hamric AB, Spross JA, Hanson CM. eds., Advanced nursing practice. An integrative approach. 4th ed. Philadelphia: W. B. Saunders; 2009. p. 283—314.

5. Hanucharurnkul S, Suwisit N. Case study: The path of success of nurse practitioner in Thailand, Bangkok: Goldenpoints Publishing Co; 2007 (in Thai)

6. Nardi DA, Diallo R. Global trends and issues in APN practice: engage in the change. J Prof Nurs. 2014; 30(3): 228—232.

7. Wongpratoom S, Srisuphan W, Senaratana W, Nantachaipan P, Sritanyarat W. Role development of advanced practice nurses in Thailand. Pacific Rim Int J Nurs Res. 2010; 14(2): 162—177.

8.   Bankston KD. Collective self-esteem and attitudes toward collaboration as predictors to collaborative practice behaviors used by registered nurses and physicians in acute care hospitals [doctoral dissertation]. [Ohio]: University of Cincinnati; 2005. 162 p.

9.   Hojat M, Gonnella J, Nasca TJ. Attitudes toward physician-nurse collaboration: a cross-cultural study of male and female physicians and nurses in the United States and Mexico. Nurs Res. 2001; 50(2): 123-128.

10. Nakchai J. Relationships between working environment, self-esteem, nursing practice commitment and collaboration with physician in patient care as perceived by professional nurses in government hospitals [master's thesis]. [Thailand]: Chulalongkorn University; 2001. 130 p. [in Thai]

11. Jones L, Way D. Literature Review Report: Delivering primary health care to Canadians: nurse practitioners and physicians in collaboration. 2004 [cited 2010 July 24]; Available from: http//www.cna-aiic.ca

12. Hojat M, Gonnella JS, Nasca TJ, Fields SK, Cicchetti A, Lo SA, et al. Comparisons of American, Tsraeli, Italian and Mexican physicians & nurses on the total and factor scores of the Jefferson scale of attitudes toward physician-nurse collaborative relationships. 2003 [cited 2010 July 24]; Available from: http://jdc.jefferson.edu/crmehc/3.

13. Hojat M, Fields SK, Rattner SL, Griffiths M, Cohen MJM, Plumb JD. Attitudes toward physician-nurse alliance: comparisons of medical and nursing students. Acad Med. 1997; 72(10 suppl 1): S1-S3.

14. McLeod SA. Social Identity Theory. 2008 [cited 2012 January 10]; Available from: http://www.simplypsychology.org/social-identity-theory.html

15. Rubin M, Hewstone M. Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. Pers Soc Psychol Rev. 1998; 2(1): 40-62.

16. Corser WD. A conceptual model of collaborative nurse-physician interactions: The management of traditional influences and personal tendencies. Sch Inq Nurs Pract. 1998; 12(4): 325-341.

17. Tabachnick BG, Fidell LS. Using multivariate statistics. 5th ed. United State of America, Boston: Pearson international, Inc.; 2007.

18. Polit DF, Beck CT. Nursing research: generating and assessing evidence for nursing practice. 8th ed. Lippincott Williams & Wilkins; 2008.

19. Luhtanen R, Crocker JA. Collective self-esteem scale: self-evaluation of one's social identity. Pers Soc Psychol Bull. 1992; 18(3): 302-318.

20. Weiss S, Davis H. Validity and reliability of the Collaborative Practice Scales. Nurs Res. 1985; 34(5): 299-305.

21. Brooten D, Youngblut JM, Hannan J, Guido-Sanz F, Neff DF, Deoisres W. Health problems and APN interventions in pregnant women with diabetes. Pacific Rim Int J Nurs Res. 2012; 16(2): 85-96.

22. Jeangsawang N, Malathum P, Panpakdee O, Brooten D, Nityasuddhi D. Comparison of outcomes of discharge planning and post-discharge follow-up care, provided by advanced practice, expert-by experience, and novice nurses, to hospitalized elders with chronic healthcare conditions. Pacific Rim Int J Nurs Res. 2012; 16(4): 343-360.

23. Partiprajak S, Hanucharurnkul S, Piaseu N, Brooten D, Nityasuddhi D. Outcomes of an advanced practice nurse-led type-2 diabetes support group. Pacific Rim Int J Nurs Res. 2011; 15(4): 288-304.

24. Piaseu N, Kasemsuk W, Maruo SJ, Hanucharurnkul S. Structure, process, and outcomes of healthcare service provision, at two primary care settings, by an advanced community nurse practitioner and a general nurse practitioner. Pacific Rim Int J Nurs Res. 2013; 17(2): 117-130.

25. Lamb GS. Two explanations of nurse practitioner interactions and participatory decision making with physicians. Res Nurs Health. 1991; 14(5): 379-386.

26. APN blog [homepage on the Internet]. Chiangmai. Maharaj Nakorn Chiangmai Hospital; no date[cited 2013 September 20]Availablefrom:http://www.med.cmu.ac.th/hospital/nis/blog/ [in Thai]

27. APN [homepage on the Internet]. Pathumthani. Thammasat University Hospital; no date [cited 2013 September 20] Available from: http://dn.hospital.tu.ac.th/tu_nursing/unit/Case%20Manager.html [in Thai]

ปัจจัยทำนายความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์

ปริญญา พรหมเดชะ ทิพาพร วงศ์หงษ์กุล ศิริรัตน์ ปานอุทัย ฐิติณัฏฐ์ อัคคะเดชอนันต์

บทคัดย่อ: ความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์ทำให้เกิดผลลัพธ์ที่ดีต่อผู้ป่วย การศึกษาถึงความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์ยังมีจำกัดดังนั้นการวิจัยแบบหาความสัมพันธ์เชิงทำนายครั้งนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยทำนายความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์ ได้แก่ปัจจัยด้านทัศนคติต่อความร่วมมือในการดูแลผู้ป่วย ความรู้สึกมีคุณค่าในตนเอง ความยึดมั่นผูกพันต่อการปฏิบัติการพยาบาลและสภาพแวดล้อมในการทำงาน กลุ่มตัวอย่างคือผู้ปฏิบัติการพยาบาลขั้นสูงจำนวน 224 คนที่ได้จากการเลือกกลุ่มตัวอย่างตามสะดวก เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูลประกอบด้วยแบบสอบถามทัศนคติที่มีต่อความร่วมมือระหว่างแพทย์และพยาบาลของเจฟเฟอร์สัน แบบสอบถามความรู้สึกมีคุณค่าในตนเอง แบบสอบถามความยึดมั่นผูกพันต่อการปฏิบัติการพยาบาล แบบสอบถามสภาพแวดล้อมในการทำงานและแบบสอบถามการปฏิบัติที่เกี่ยวกับความร่วมมือในการดูแลผู้ป่วยสำหรับพยาบาล วิเคราะห์ข้อมูลโดยใช้สถิติสหสัมพันธ์เพียร์สัน และสถิติการวิเคราะห์ถดถอยพหุคูณแบบขั้นตอน

ผลการศึกษาพบว่าความยึดมั่นผูกพันต่อการปฏิบัติการพยาบาลและสภาพแวดล้อมในการทำงานมีความสัมพันธ์ทางบวกในระดับปานกลางกับความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์ ทัศนคติต่อความร่วมมือในการดูแลผู้ป่วยและความรู้สึกมีคุณค่าในตนเองมีความสัมพันธ์ทางบวกในระดับต่ำกับความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์ ความยึดมั่นผูกพันต่อการปฏิบัติการพยาบาลและสภาพแวดล้อมในการทำงานร่วมกันทำนายความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์ได้ร้อยละ 21.10 ผลการศึกษาสามารถนำไปใช้เป็นข้อมูลสำหรับผู้ปฏิบัติการพยาบาลขั้นสูงและผู้บริหารทางการพยาบาลในการส่งเสริมความร่วมมือในการดูแลผู้ป่วยระหว่างผู้ปฏิบัติการพยาบาลขั้นสูงและแพทย์

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