Professional Performance Among Nurses at Accredited Hospitals in the Bangkok Metropolis*

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Abstract : **The objectives of this study were to determine the level of professional performance among nurses, to examine factors affecting their performance, and to formulate a model for their performance at accredited hospitals in the Bangkok metropolis. A set of questionnaires was filled out by a random sampling method, 518 samples were drawn. The data were analyzed by multiple regression and confirmatory factor analysis.**

The findings revealed that about 70% of the nurses were found to have a professional performance score at the moderate level. The mean scores for adherence to the nurses' code, quality of care, and self-development aspect fell within the high and the fairly high levels. The mean score on the resource utilization and management aspect was at the moderate level. Mean scores falling at the rather low levels were community service, theory, research, and professional organization participation aspects; the dissemination aspect's mean score was at the low level. Factors used for predicting professional performance at predictive power of 39% were the following: goal-setting, self-efficacy, social support, and professional socialization (only this last factor, being not statistically significant). The professional performance among nurses at accredited hospitals in the Bangkok metropolis included ten aspects comprising 45 items by confirmatory factor analysis method. The theory, research, dissemination, and community service aspects along with professional organization participation aspect should be promoted by the hospital accreditation policy and nursing professional organization. Cooperation among professional nurses and the various hospital professionals should be encouraged.

Key words : Professional performance / nurses / accredited hospitals

เรื่องย่อ : การปฏิบัติเชิงวิชาชีพของพยาบาลในโรงพยาบาลที่ได้รับการรับรองคุณภาพโรงพยาบาลแล้ว ในเขตกรุงเทพมหานคร*

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การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อกำหนดระดับการปฏิบัติเชิงวิชาชีพของพยาบาล ศึกษาปัจจัยที่มีอิทธิพลต่อการปฏิบัติเชิงวิชาชีพของพยาบาล และเสนอตัวแบบการปฏิบัติเชิงวิชาชีพของพยาบาล ในโรงพยาบาลที่ได้รับการรับรองคุณภาพโรงพยาบาลแล้ว ในเขตกรุงเทพมหานคร โดยการสุ่มตัวอย่าง และเก็บรวบรวมข้อมูลโดยใช้แบบสอบถาม ได้แบบสอบถามที่สมบูรณ์จากตัวอย่าง 518 คน สถิติที่ใช้ในการวิเคราะห์ข้อมูลได้แก่ สถิติพรรณนา การวิเคราะห์ถดถอยพหุคูณ และการวิเคราะห์องค์ประกอบเพื่อยืนยัน

ผลการวิจัยพบว่าการปฏิบัติเชิงวิชาชีพของพยาบาลอยู่ในระดับปานกลาง โดยประกอบด้วย การยึดมั่นต่อจรรยาบรรณอยู่ในระดับสูง ด้านคุณภาพการพยาบาลและด้านการพัฒนาตนเองอยู่ในระดับค่อนข้างสูง ด้านการใช้แหล่งประโยชน์และการบริหารจัดการอยู่ระดับปานกลาง ส่วนระดับค่อนข้างต่ำ คือ ด้านการวิจัย ทฤษฎี การมีส่วนร่วมกับองค์กรวิชาชีพ และการบริการชุมชน และมีเพียงด้านการเผยแพร่ผลงานที่อยู่ในระดับต่ำ

ปัจจัยทำนาย 4 ปัจจัยร่วมกันทำนายการปฏิบัติเชิงวิชาชีพได้ 39.0% ประกอบด้วย 3 ปัจจัยที่มีอิทธิพลอย่างมีนัยสำคัญทางสถิติ ได้แก่ การตั้งเป้าหมาย การรับรู้ความสามารถแห่งตน และการสนับสนุนทางสังคม ส่วนการขัดเกลาเชิงวิชาชีพมีอิทธิพลน้อยและไม่มีนัยสำคัญทางสถิติ, การวิเคราะห์องค์ประกอบเพื่อยืนยัน พบค่าน้ำหนักองค์ประกอบในแต่ละข้อ มีค่ามากกว่า 0.30 ทุกข้อ

ข้อเสนอแนะจากการวิจัยครั้งนี้ คือ องค์กรควรส่งเสริมการปฏิบัติเชิงวิชาชีพทุกด้าน โดยเฉพาะด้านที่อยู่ในระดับต่ำและค่อนข้างต่ำ ควรให้ความรู้เกี่ยวกับมาตรฐานการปฏิบัติเชิงวิชาชีพให้ครบทุกด้าน เพิ่มการสร้างแรงจูงใจในการตั้งเป้าหมายสู่ระดับสูงของการปฏิบัติเชิงวิชาชีพ พยาบาลควรร่วมมือกันในการเผยแพร่ความรู้การปฏิบัติเชิงวิชาชีพทุกด้าน แม้ว่าโครงการรับรองคุณภาพโรงพยาบาลหรือองค์กรวิชาชีพจะเน้นไม่ครบทุกด้านก็ตาม การทำวิจัยครั้งต่อไปควรนำตัวแบบการปฏิบัติเชิงวิชาชีพของพยาบาลไปประเมินการปฏิบัติเชิงวิชาชีพของพยาบาลที่มีตำแหน่งการทำงานแตกต่างกัน และควรทำวิจัยเปรียบเทียบระหว่างโรงพยาบาลที่ได้รับการรับรองคุณภาพกับโรงพยาบาลที่ยังไม่ได้รับการรับรองคุณภาพ

คำสำคัญ : การปฏิบัติเชิงวิชาชีพ พยาบาลวิชาชีพ การรับรองคุณภาพโรงพยาบาล

INTRODUCTION

Many changes occurring throughout healthcare systems make every healthcare organization aware of quality concerns. Quality control related to personnel, services and hospital accreditation (HA). These can elicit professional standards which are put into use. Nurses, one of healthcare professionals, are expected to demonstrate contributions to nursing outcome achievement as a basis for evaluating professional performance. It is worth reflecting on changes in nursing performance and how to gain recognition by making maximum use of professional performance.

The implementation of professional standards will maintain honor and dignity of the nursing profession and bring quality service to all customers.[1] After receiving hospital accreditation, however, no one has explored the self-assessment of practitioners regarding their professional performance. Such self-assessment is especially lacking among professional nurses. The nurse is a change agent and thus must develop skill and knowledge in management of change in everyday practice.[2]

The result of greater focus on professional performance in nursing can reflect professional quality, which will help improve the quality of life in society.[3,4] If nurses cannot focus on professional performance, they will lack a professional identity, guidelines, intellectual functions, establishment of a professional climate, and demonstration of the value

of the nursing profession. Professional quality is the professionalism.[5] This can elicit by professional performance. Performance can be demonstrated by any group or individual in any situation.[6]

In Thailand, there are standards of nursing practice developed in 1995 that have 2 main categories: 1) standard of nursing care and 2) standard of professional performance which has 9 subparts.[7] These are the same as the standards of professional performance of the American Nurses Association (ANA) in detail.

Currently, many scholars have studied specific aspects of the professional performance standard and have found many problems as follows.

Full professional status for nursing is claimed by few today. Some nurses are unwilling to demonstrate commitment to their professional development.[8] The Prabaromrachanok Institute's data found that some health personnels' intellectual competency were high but narrow. They had good knowledge but not enough width, leading to ethical problems and crisis leadership.[9] The nurses' image has to be corrected. Nurses lacked human relationship and good communication.[10] There are still inappropriate behaviors among nurses although they work at accredited hospital. There are increasings in following codes for nurses, as recorded by litigation at Thailand Nursing Council.[11] Nurses performed nursing diagnosis and used nursing process at a moderate level, but knowledge of nursing diagnosis was at a low level.[12] Some nurses protested the new regulations of Thailand Nursing Council and sent litigation to the administrative courts due to Thailand Nursing Council's requirement.[13]

In research aspect, some nurses produced and disseminated researches at a minimum level[14,15] and adopted the research results for nursing care at a low level.[16]

Related to self and work development aspects, most nurses didn't improve themselves or their work.[17] If nurses lack a professional identity, they will not be successful in reaching a high level of professionalism or professional performance.

Those problems have encouraged the researcher to understand professional quality standards by studying professional performance. Therefor, this research is interested in the level of professional performance among nurses at accredited hospitals. In addition, the researcher believes that nurses not only are trained about hospital's vision but also have had goal setting about the professional performance. Nurse's self-efficacy can contribute to a successful work performance, and during the accreditation process, nurses are unable to avoid interactions with others that associate with professional socialization and social support. Professional socialization in nursing is believed to occur largely and social support is interpersonal transaction. Therefore the researcher believes that goal-setting theory, self-efficacy theory, professional socialization concept and social support theory are appropriate predictor variables and affect professional performance among nurses

The research objectives

1. To determine the level of professional performance among nurses at accredited hospitals in the Bangkok metropolis.
2. To examine predictor variables (factors) affecting professional performance among nurses at accredited hospitals in the Bangkok metropolis.
3. To formulate a model of professional performance among nurses at accredited hospitals in the Bangkok metropolis.

Scope of the research

The population consisted of each professional nurse who had worked for at least one year at each hospital that has received hospital accreditation (HA) in the Bangkok metropolis between November 1999 - November 2002.

The outcome to be obtained

1. To understand professional performance among nurses at accredited hospitals in the Bangkok metropolis.
2. To stimulate, guide, and give benefits to all nurses for promoting a higher level of nursing professional performance.
3. To offer a new policy about professional performance for the benefit of nurses, nursing organization, nursing profession, and especially society.

Conceptual framework

The conceptual framework was based on developing professionalism in the practice setting, behavioral sciences from the various conceptual and theoretical studies such as motivation, sociological as well as psychological theory and relevant

research. The researcher set up a conceptual framework to explain the factors derived from Lock's goal setting theory, Bandura's self-efficacy, professional socialization concept and Cobb's social support theory.

The research questions

1. What is the level of professional performance among nurses at accredited hospitals in the Bangkok metropolis?
2. What are factors that significantly affect professional performance among nurses at accredited hospitals in the Bangkok metropolis?

The research hypothesis

Goal setting, self-efficacy, professional socialization and social support as 4 predictors (factors) significantly affect professional performance among nurses at accredited hospitals.

Population and sample

Population was professional nurses who had worked for at least one year at accredited hospitals in various jurisdictions in the Bangkok metropolis. These hospitals started receiving accreditation between November 1999 - November 2002 .

The researcher formulated the sample size using the proportional stratified method, using simple random sampling and taking allowances from 4 jurisdictions using Taroyamane's formula that yielded the minimum sample size at confidential level of 95%, 20% for additional estimate of total sample size equaled 442 cases and 30% more were sent for cases with no response. The researcher obtained total complete response from 518 cases (95.65%), excluding the 32 missing cases (5.82%).

Inventory and procedure

The inventory comprised 3 parts. Each part was called a self-report questionnaire and was used for assessment related to performance and perceptions of goal setting, self-efficacy, professional socialization and social support. Part 1 was concerned with individual information taken for adding clarity to nurses' data. Part 2 was concerned with professional performance and had 45 items (10 aspects). The rest, part 3 (21 items) was concerned with perception, concept, performance and /or decision making. Part 2 and 3 were based on the Likert's scale measurement that were divided into 5 degrees.

All questionnaires were approved by 15 specialists (the thesis-committee and experts) and used "Index of Congruence (IOC)". All items, which had an IOC of more than 0.5 per each item, were used. Cronbach's alpha coefficient was used. The total professional performance inventory's alpha coefficient was 0.82 comprising 10 aspects including quality of care, self-development, adherence to the code for nurses, dissemination, research, theory, resource utilization and management, professional organization participation, autonomy, and community services. Each aspect's alpha coefficient was 0.75, 0.83, 0.86, 0.76, 0.90, 0.90, 0.79, 0.66, 0.80, and 0.75, respectively.

The results of reliability testing of predictors were as follows:

Cronbach's alpha coefficient of goal setting, self-efficacy, professional socialization and social support were 0.81, 0.66, 0.78, and 0.78, respectively.

The criteria were based on the tenet of Best[18] and Wichian Kaitsing.[19] There were high level, fairly high level, moderate level, rather low level, and low level.

Data analysis

The data were analyzed by Statistical Package for Social and Sciences (SPSS/PC) and by Joreskorg and Sorbom's LISREL 8.10.

Multiple regression analysis (Enter method) and confirmatory factor analysis method (CFA) were used.

RESULTS AND DISCUSSION

The level of professional performance among nurses at accredited hospitals

The study found that 68.5% of participants had professional performance at the moderate level, 23.6% were at a fairly high level and 7.9% were at a rather low level. The level of adherence to the code for nurses aspect was high. Three aspects, the quality of care, self-development and autonomy aspect, were at the fairly high level. The resource utilization and management aspect was at the moderate level. Research, theory, organization participation aspect and community service were at the rather low levels. The rest, dissemination aspect was at a low level.

These scores made the total professional performance at a moderate level.

These nurses had not been successful in reaching a high level (only one aspect was at a high level and 3 aspects were at a fairly high level). Perhaps one of the many reasons might be nurses' inability to reach agreement on a definition of professionalism and the responsibility required of professionals. From the qualitative data, the majority of nurses were not able to state the details, or subparts of professional performance. Most respondents could not explain the definition or characteristics of the Code for Nurses or Thailand Nursing Council's professional performance standards. They concluded that the HA program not only improved but also reduced some aspects of their performance. Although nursing had claimed a recognizable body of knowledge and had provided nursing services for society for over a century, some nurses not only were unwilling to assume responsibility for their practice but also were unwilling to demonstrate commitment to their professional development or to work toward control over their practice. They had assumed the title of professional, but they had been often unaware of the meaning of professionalism or of the problems involved in achieving professionalism. Some lacked a professional identity, many nurses did not envision themselves as practicing in professional manner.[8] If the nurses obtained a greater level of professionalism, it would help them continue their self-development and realize their potential more.[20] If nurses obtained a higher level of professional performance more than was found in this research, it would help them continue their self-development as well as realize their potential or self-efficacy more. The results might be due to most nurses believing that all things did not exist for eternity, but were parts of the circle of life which included emergence, existence, evolution, and end (4e), called "A-Nij-Jung" in Thai. This is one of "Tri-Luk" of Buddhist discipline as known in Thai perception as the middle way, "Thang-Sai-Klang".

The majority of respondents were women whose major responsibilities were to take care of their families. From qualitative data, some nurses said that they had no time to perform well in some aspects of professional performance. Most respondents were married (336 cases, 64.86 %), and if they performed in full manner of professional behaviors, they might lose some family-roles due to work-family conflict.

Many of them might be unable to reach agreement on the definition of profession and the responsibility required for professionals. Some wrote in the questionnaire that their work load, poor salary and benefits also were deterrents to their performance and motivation. The modeling of nurses in education and practice could not address the needs and motives of individual nurse by first satisfying their needs for adequate compensation. To create renewed motivation implied the ability to understand the individuals' motive base and then to work toward mobilizing new sources of motivational behavior. These might be from nurse leaders who were not successful in arousing and elevating. What motivation is there for individuals to join an organization and remain with it and be motivated to exert energy and effort to meet expectations if they are relatively poor?

Factors affecting professional performance among nurses

The factors that significantly predicted professional performance among nurses at accredited hospitals were goal-setting, self-efficacy, professional socialization and social support. The predictive power of these factors was 39.0% ($R^2 = 0.39$). But there were only 3 statistically significant predictors that positively related to the professional performance among nurses at accredited hospitals in the Bangkok metropolis. They were goal setting, self-efficacy and social support determined by considering the coefficient of regression value with the measurement into unstandardized coefficients (B), (goal setting has beta value = 2.61, self-efficacy has beta value = 1.90, professional socialization has beta value = 0.16, and social support has beta value = 0.53).

These 4 predictors could approximately account together for the professional performance among nurses. These factors explained that nurses' performance were at the moderate level of professional performance when they had a fairly high level of goal setting, self-efficacy, professional socialization and social support. The relationships were positive and in accordance with theoretical concepts. The importance and relevance of the factors

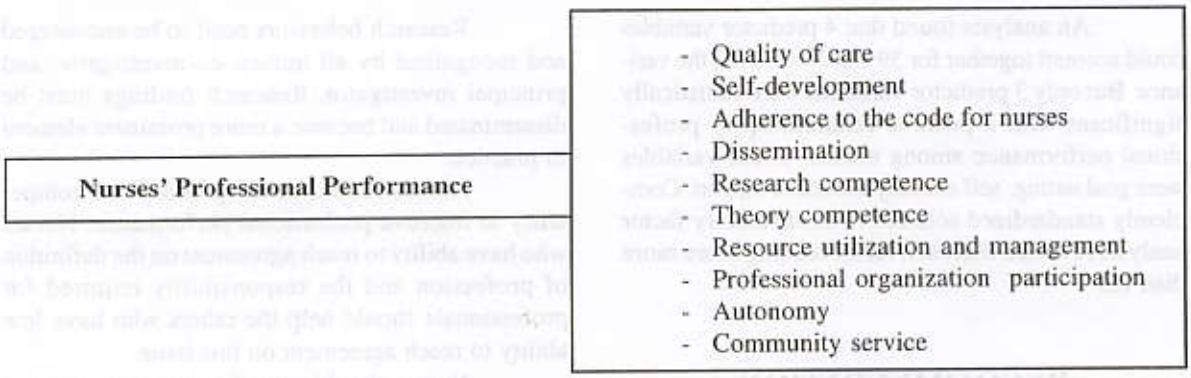


Figure 1. Chanakarn's professional performance model

affecting the professional performance among nurses could be ranked and put into a predictive regression equation as follows:

Y' = Predictive equation of the professional performance among nurses at accredited hospitals in the Bangkok metropolis.

= 55.50 + 2.61(goal setting) + 1.90 (self-efficacy) + 0.16 (professional socialization) + 0.53 (social support)

The professional socialization factor demonstrated the low effects on professional performance when using the enter method in multiple regression analysis. This professional socialization factor had a significant relationship with criterion variable when using the Pearson correlation value ($r = 0.38$ sig 1-tail at P-value < .001) and when using multiple regression analysis had a significant effect ($F = 83.45$ sig 1-tail at P-value < .001). Because the professional socialization factor was related to other predictors, it's predictive power was low. Professional socialization factor didn't independently contribute to professional performance among nurses at accredited hospitals in the Bangkok metropolis when the other factors were controlled. Professional socialization factor could explain professional performance when they were new nurses in the first 1-5 years, later they were not.

To formulate model of professional performance among nurses

Much of the controversy surrounding the nursing profession's status was due to an adequate interpretation of details and definition of the profession,[2] so validity and reliability as well as confirmatory factor analysis were used. The factor loading score in each item (total 45 items) had score more than 0.30 per each item. This study can elicit a model in figure 1.

This model is composed of 10 aspects. It can help nurses to determine what performance actually demonstrates his or her professionalism. This nursing inventory is based on the conduct portrayed along conceptual framework. It can be used in order to improve professional behaviors and evaluate nurse' performance as well as help nurses (every position) in self-assessment of professional behaviors.

CONCLUSION

The majority of the samples were in the moderate level. Four aspects including research, theory, community service and professional organization participation aspect were in the rather low level. The three aspects of quality of care, self-development and autonomy aspect were in the fairly high level. The rest, the resource utilization and management aspect was in the moderate level, adherence to the code for nurses aspect was in the high level and dissemination aspect was in the low level.

The goal-setting, self-efficacy, professional socialization and social support were proposed as predicting variables. Each predictor variable was significantly related to the professional performance among nurses at P-value <.001. These values supported the hypothesis.

An analysis found that 4 predictor variables could account together for 39% ($R^2 = 0.39$) of the variance. But only 3 predictor variables were statistically significant with a positive relationship to professional performance among nurses. Those variables were goal setting, self-efficacy and social support. Completely standardized solution of confirmatory factor analysis revealed that each factor loading score more than 0.3

RECOMMENDATION

The Thailand Nursing Council announced 9 aspects for professional performance standard but it did not include dissemination, professional organization participation, community service and a theory aspect. These 4 aspects were found in the low and rather low levels. Hence, The Thailand Nursing Council should pay attention to these aspects. The organization could better motivate nurses to exhibit professional performance. HA program and executive manager should provide continued education by designing various programs for achievement of the higher level. They should do in every position in order to maintain the right direction and to understand their identities.

Seminars could be held to discuss issues of the low and rather low levels of some aspects, and resources allocated for improvement of those issues. Healthcare organization should designed on the dissemination of nurses' work to be worthwhile and meaningful to the social because self-efficacy were generated from a sense of personal worth and recognized by others.

Every nurse should make a commitment to support and to advance the profession by sharing knowledge and expertise. Nurses should assist colleagues in building and maintaining competency by providing research activity support, advice on theory application and development, encourage professional organization participation, promote community services and uphold dissemination of information via publications. This assistance may be fulfilled informally through role modeling, acting as a resource, and mentoring, or formally by serving as a preceptor or instructor.

Research behaviors need to be encouraged and recognized by all nurses, co-investigator, and principal investigator. Research findings must be disseminated and become a more prominent element in practice.

Nurses should develop skills and competency to improve professional performance. Nurses who have ability to reach agreement on the definition of profession and the responsibility required for professionals should help the others who have low ability to reach agreement on this issue.

Nurses should actively participate in ward meetings, inform of needs, and discuss as well as identify documents that were recorded and reported about needs and opportunities to meet the higher professional standards in nursing.

The nurses' role was shaped primarily by environmental factors and therefore it is an important that nurses should focus on the management of increasingly community-based practice. In addition, every nurse should cooperate to share the professional performance model with other nurses. Understanding professional performance can help each nurse to design more effective evaluation tools and foster professionalism that will be strongest when all segments of the nursing profession share the same goals and aspirations. It is vital that all nurses have a copy of the professional performance tenet and become aware of its meaning.

Further research should compare the level of professional performance between accredited hospitals and non-accredited hospitals in all jurisdictions, using Chanakarn's model to investigate professional performance among the other professionals in health team. The unit of analysis for further research should be completely collected from the different positions among nurses. Further research is essential to provide knowledge for competent nursing performance. Continuing research may encourage research participation or explain strategies and behaviors to create professional performance.

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REFERENCES

1. The Institute of Hospital Quality Improvement and Accreditation in Thailand hospital accreditation. [Online]. Available: http: // www.ha.or.th, 2002.
2. Rocchiccioli JT, Tilbury MS. Clinical leadership in nursing. Philadelphia : W.B. Saunders Company, 1998.
3. Adams D, Miller BK, Beck L. Professionalism behaviors of hospital nurse executives and managers in 10 western states. Western J Nurs Res 1996; **5:** 77.
4. Miller BK. Just what is a professional? J Nurs Success Today 1985; **4:** 21- 27.
5. Oxford Dictionary. Oxford: Carendon, 1970.
6. Schechner R. Performance theory. New York: Routledge, 1994.
7. Monaiyapong SP. The opinion of nursing executive on nursing standards of The Thailand Nursing Council. Thai J Nurs Res 1998; **2:** 62-69.
8. Moloney MM. Professionalization of nursing: Current issues and trends. Philadelphia: J.B. Lippincott Company, 1992.
9. Viboolpolprasert S. The report of research for health personnel development of Public Health Ministry. Bangkok: Ministry of Public Health, 1999.
10. National Research Committee Institute. Jut-Praguy-Klamru-Susungkom. Bangkok: Dissemination and Technology Teaching Department, 2001.
11. Boonyanurak P. New trend into new role on nursing management. Bangkok: Wangmai Blue Print, 2001.
12. Chunhapran P, Raksasataya S, Chaipibansarit P. Status analysis on using nursing diagnosis at government hospitals. J Nurs Educ 1994; **5:** 52.
13. Thailand Nursing Council. Administration courts give up the delay of continuing license. Thailand Nursing Council New Letter 2002; **5:** 1.
14. Phancharaenworakul K. A survey of nursing researches in Thailand 1969-1987. Thai J Nurs 1993; **42:** 32-40.
15. Totarong K. Professionalism among professional nurses at Maharaj Chiang Mai Hospital. Nurs J 1998; **26:** 65-76.
16. Waluwanaluk. S. Nursing research utilization by professional nurses in regional centre hospitals. Master's thesis, Master of nursing science in nursing administration. Graduate school. Chiang Mai University, 1996.
17. Boonyanurak P. Past, present and future of nursing autonomy in coverage of nursing quality. Bangkok: Wangmai Blue Print, 1995.
18. Best J. Research in education. New Jersy: Prentice Hall, 1970.
19. Kaitsing W. Principles of instrument construction and analysis for research instrument. 3rd ed. Bangkok: Reunaugsorn Press, 1981.
20. Adams D, Miller BK. Developing professionalism in the practice setting. J Aspen's Adviser for Nurs Executive 1994; **1:** 1.