DEVELOPMENT OF PRE-GRADUATION PROGRAM FOR ENTRY INTO PROFESSIONAL NURSING PRACTICE.

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Abstract

Pre-graduation preparation was very important for new bachelors in increasing their self-confidence and readiness for entry into professional practice in the midst of rapid change of technologies and knowledge-based society. This study aimed to develop and evaluate pre-graduation program effectiveness for entry into professional nursing practice. It involved three steps: program development, program trial and evaluation of developed program.

Firstly, integrated reviews and Rungnoei's model (2010) were used as a guideline for developing 46-hour pregraduation program.

Secondly, a one group pre-test post-test design was used in program trial with a group of 60 senior nursing students. It had 10 sessions of preparation activities (30 hours).

Lastly, an 8-month follow-up has been made (2 hours each month or total of 16 hours) for implementing and evaluating the developed program. The evaluation was made at the end of the program (total of 46 hours) with 2 phases: 1 and 8 month (s) after the implementation. This study also reported the program effectiveness after one-month implementation.

It was revealed that total post-program mean of nursing students' perception of self-development and professional life planning competencies was at a "good" level (\overline{x} =4.14) and higher than pre-program one at statistically significant level of .01 (p=.000).

Such findings could be a guideline for pre-graduation preparation. The researcher would examine the program effectiveness in longer periods (8 months) in light of increased self-development and professional life planning competencies and program satisfaction at the end of trial.

Key words: Pre-graduation program; Professional nursing practice; Nursing students.

Introduction

There has always been a need for continuing education in any health occupation by enhancing the knowledge and technologies. Continuing education is the guarantee of continuing competence and the ultimate protection of the quality of care for patients (Henderson & Nite, 1997). According to Thailand Nursing and Midwifery Council (TNMC, 2009), nursing competencies were the essential knowledge, skills and attitude of nurses to practice nursing care safely, responsibly, and effectively, while selfdevelopment is a major contributor to the competency of registered nurses (RNs). Thus, RNs need to improve themselves, and participate in continuing education or inservice education because they faced the challenges associated with transitioning from the role of nursing student to newly licensed nurse. Many new RNs feel unprepared for the demand of practice, and struggle with mastery of clinical competence. They have no plan for self-development and professional life planning as well as fail to understand about professional improvement opportunity, resulting in the increased stress level, feeling of incompetence, and, importantly, the potential of turnover. This may eventually worsen nursing shortage (Bratt, 2009).

The current shortage of RNs is an important issue in many countries (World health organization, 2006). Sawangdee (2008) studied the supply of RNs in Thailand, and found that the shortage of RNs is increasing. There were approximately 97,942 nurses in the age under 60 years registered in Thailand by December 2005, with approximately 88,440 or 90.3 percent working in health system. The numbers of RNs remain woefully insufficient, with total shortage being in the order of 31,260 full time equivalents. Presently, the workforce is aging, the average age of Thai RNs has increased to 37.8 years and working life expectancy declined to 22.55 years that effect loss rate raised to 4.43 % per year. The increased loss rate in 2005 was the result of a reduction of new RN production from 1999 to 2005 due to economic problem of the country.

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To meet demand in the near future we must produce 8,000 new RNs per year and must implement the nurses' retention policies both financial and non - financial. The study suggested that retaining nurses in the health care system is the most effective method of reducing the costs of producing more nurses. Keeping experienced nurses employed in the Thai health care system is of considerable importance.

As a result of a convergence of factors including increased demand in health care service (e.g. increasing of aging population, changes of illness pattern, health care policies to be medical hub in ASIA), inadequate supply, and health care system reform, nursing shortages occurring in health systems is a critical issue both quality and quantity in terms of adverse impacts on the health, well-being of populations, and nurse-patient ratio. One way of preserving manpower levels in the public sector is by increasing the tenure of those nurses currently employed or by teaching the new RNs who join the public sector ways that will both increase their tenure and their satisfaction with their careers. Colleges of Nursing can help to prevent this loss by providing additional learning activities that are designed to increase tenure and satisfaction with nursing careers. Professional life planning is a technique that has been demonstrated to be associated with greater tenure and career satisfaction (Hall, et al., 2004; Price, 2009; Waddell & Bauer, 2005), and self-development is the strategy to improve one's own competencies to provide high quality of nursing care (TNMC, 2009, AACN, 2008). TNMC (2009) recognizes the need for professional self-development and requires nurses to meet specific self-development competencies. Nursing students should now learn how to be ready to work as professionals and provide quality services under the circumstances of the Thai health system in the current period. In a nursing career, professional life planning helps nurses to realize the value of their work and motivates them to improve themselves.

In Thailand, there have a few studies that measured selfdevelopment and professional life planning. Selfdevelopment requires understanding about what a person needs to study and opportunities for learning. Knowles (1984) believes that successful learners need to have their own motivation. Adult learners want to study when they have a need to study. Adults will develop self- responsibility and motivate themselves to study And this leads to the need for self-control and self-direction (Brocket and Hiemstra, 1991). Self-direction may come from external motivating factors such as compensation, job position, etc., or internal motivation factors such as satisfaction, self-esteem, quality of life, etc. Therefore, it was the purpose of this research to develop and evaluate a program that fostered nursing students' competencies toward self-development and professional life planning.

Methodology

Design: This three-step study, conducted between April 2011 and August 2011.

Step I: the primary investigator (PI) synthesized selfdevelopment and professional life planning process and studied Rungnoei's model of self-development and professional life planning (2010). The data from integrative review and Rungnoei's model were used as a guideline for developing 46-hour pre-graduation program for entry into professional nursing practice (PGPPNP).

Step II: it consisted of the PI administering and evaluating, via use of a pre-test /post-test one group design, the pregraduation program and assessment of the students' level of achievement, in regards to the program, with 60 senior nursing students. It had 10 sessions of preparation activities (30 hours).

Final step: for developed program implementation and evaluation, monthly follow-up was made for 8 months (2 hours each or total of 16 hours). The evaluation was made at the end of the program (total of 46 hours) with 2 phases: 1 and 8 month (s) after being implemented. This study also reported the program effectiveness after one-month implementation.

Ethical Considerations: The approval to conduct the study was obtained from the Committee for Research Involving Human Research Subjects, Prachomklao College of Nursing.

Sample: The sample consisted of sixty senior nursing students from a college of nursing (purposively selected from 29 colleges of nursing) under the administration of Praboromarajchanok Institute, the Ministry of Public Health (in fact, there were 70 students who willingly participate in this research; however, 10 of them fail to complete the entire program).

Instruments: 3 instruments have been devised by the PI based on Rungnoei's doctoral dissertation (2010). They were then validated by 5 experts. The PI has adjusted only the wordiness in some sentences to avoid repeated validation. They included:

1) Nursing Students' Self-Assessment of Self-Development and Professional Life Planning Competencies: It was 55-item instrument, which have been completed. Its IOC and alpha coefficient reliability were 0.94 and 0.95, respectively. 2) Nursing Students' Self-Development and Professional Life Planning Record: It was a 29-item record/diary in which the subjects have recorded their thoughts about their involvement in the activities. Its IOC was 0.85.

3) Assessment of Nursing Students' Self-Development and Professional Life Planning Competencies: It was a 20item instrument used by the PI after one-month implementation and at the end of program. This was to assess students' achievement in self-development, professional life planning and learning outcomes via the review and evaluation at the end of 8-week model. Its IOC was 0.95.

Data Analysis: Descriptive statistics was used in demographic data assessment and scoring of the instruments. Also, t-test was used to compare the mean

scores of pre- and post-test results of the program administered.

Results

1. A pre-graduation program for entry into professional nursing practice: It is based on the six stages of self-development and professional life planning process, namely:
1) scanning the environment; 2) self-assessment;
3) determining one's outlook on life; 4) planning for the future; 5) implementation; and, 6) evaluation (Figure 1).

The relevant details can be found in Rungnoei's doctoral dissertation (Rungnoei, 2010) or Rungnoei, et al (2010).

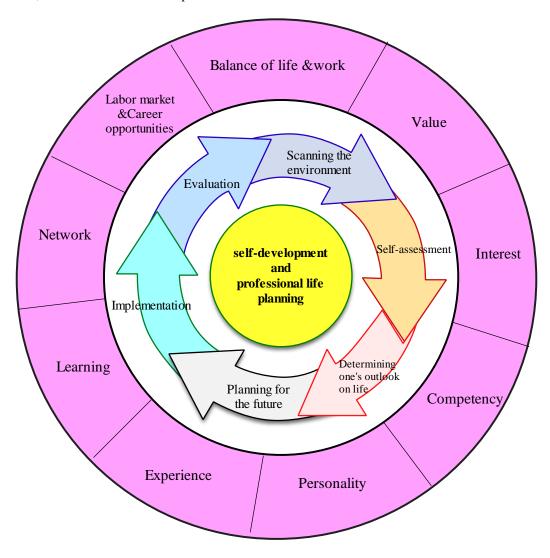


Figure 1: Self-development and professional life planning process (Rungnoei, 2010)

According to Rungnoei (2010) self development and professional life planning process consists of 6 stages as follow:

1) Scanning the environment

Scanning environment is assessment of external environment in the global, national, and local level such as future issue and trend, health, health care system, client demand, nursing, labor market needs, and career opportunities

2) Self- assessment and analysis

Nursing student should assessment and analysis themselves continually about their value, interest, competencies, personality, experience, learning needs, and network such as persons whom they can ask or consult about career decision, and develop themselves.

3) Determining one's outlook on life

Nursing students should write daydream for the future. It is an important motivator of success.

4) **Planning for the future**

Plan is a critical blueprint of life. Nursing students

should set their optimal goals, timelines, activities, resources and successful indicators appropriately. They should think about self development every day and make daily plan in their diary.

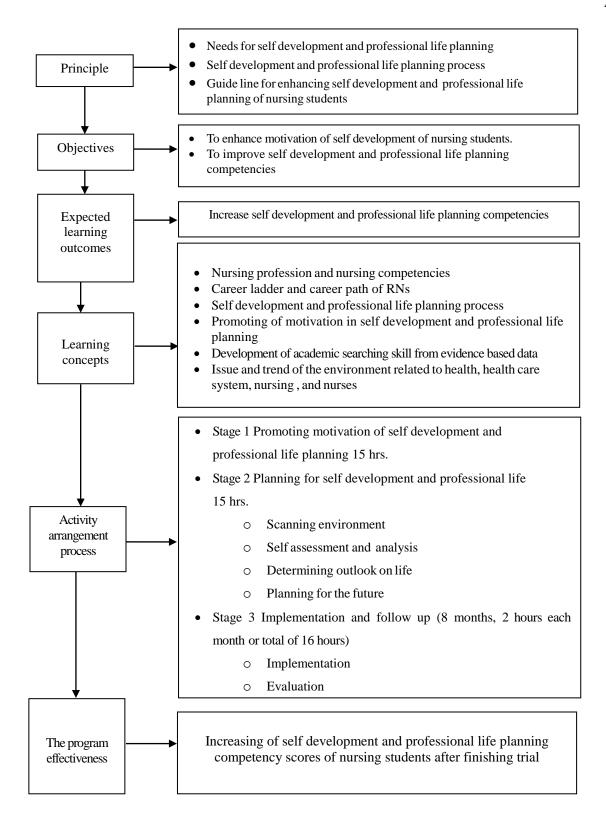
5) Implementation

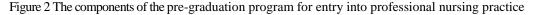
Nursing students have to take responsibility to do the best according to their plans, and they should be active, yearn to know, and intend to do everything to achieve goals. Systematic record keeping is needed to help them to reflect their implementation and self development.

6) Evaluation

Evaluation is to determine the quality of planning and implementation. Nursing students should evaluate themselves at least every six months and adjust plan to improve their achievements.

The program components consist of six parts as follows: 1) principle; 2) objectives; 3) expected learning outcomes; 4) learning concepts; 5) activity arrangement process, and, 6) the program effectiveness (Figure 2).





The objectives of PGPPNP were to enhance nursing students' motivation, self-development and professional life planning competencies. Learning concepts and the activities will help nursing students more understanding in self development and professional life planning process. The PI used games and the activities in the work shop to supplement the instruction of self development and professional life planning. Games and activity selection are based on learning objectives, the concepts including in each activity, what point during the activity that need to use a game, and the games or activities are suited to nursing students, time of delivery, and resources

Three-stage workshop (or preparation activities) has been developed by the PI for senior nursing students. The PI has presented the program in a workshop that lasted for 30 hours over the period of 8 weeks. It was divided into 10 sessions of preparation activities (3 hours each). Further, there were also 2-hour follow-up sessions on monthly basis in month 2-9. 11 different activities were carried out during PGPPNP. According to the assessment of program content and feasibility by three experts prior to the implementation, program content and activities were indeed feasible for the implementation. Prior to the start of the PGPPNP, seventy subjects were placed into 7 groups (10 each)

2. *The program effectiveness:* the study revealed that total post-program mean of nursing students' perception of self-development and professional life planning competencies were at a "good" level ($\overline{x} = 4.14$) and higher than pre-program one at statistically significant level of .01 (p=.000) (Table 1).

Table 1: Comparison, using paired *t*-test, of means and standard deviation of self-development and professional life planning competencies before and after program. (n = 60)

| Competencies | Pre-program | | Post-program | | | |
|--------------------------------------|---------------|-------|----------------|-------|-------|------|
| | $\frac{1}{x}$ | SD | \overline{x} | SD | t | р |
| Knowledge | 3.49 | .4132 | 4.12 | .3027 | 10.52 | .000 |
| Skills | 3.45 | .3313 | 4.10 | .3399 | 11.26 | .000 |
| 1. Scanning the environment | 3.33 | .4754 | 4.06 | .4327 | 9.37 | .000 |
| 2. Self-assessment | 3.59 | .3829 | 4.19 | .3574 | 6.68 | .000 |
| 3. Determining one's outlook on life | 3.49 | .4728 | 4.18 | .4807 | 7.57 | .000 |
| 4. Planning for the future | 3.27 | .4679 | 3.91 | .4379 | 8.29 | .000 |
| 5. Implementation | 3.34 | .4738 | 3.91 | .4343 | 7.73 | .000 |
| 6. Evaluation | 3.33 | .4398 | 4.12 | .5156 | 10.12 | .000 |
| Attributes | 3.61 | .3381 | 4.20 | .3757 | 11.42 | .000 |
| 1. Motivation | 3.74 | .3666 | 4.30 | .3999 | 9.22 | .000 |
| 2. Yearn to know | 3.33 | .4843 | 3.97 | .4577 | 9.42 | .000 |
| 3. Responsibility | 3.59 | .4670 | 4.23 | .3381 | 9.49 | .000 |
| Total | 3.51 | .2980 | 4.14 | .2981 | 13.24 | .000 |

p < .01

The researcher would examine the program effectiveness in longer periods (8 months) in light of increased self-development and professional life planning competencies and program satisfaction at the end of trial.

According to the qualitative analysis, 100% of the sample group could analyze the social issues and health service needs affecting their profession and nursing at domestic and international level. They could also analyze their professional progress opportunity. Most of them indicated that they had more chances due to continual self-development and easy access to knowledge sources (75.00%). The next one was their chance for furthering in the specialized field (55.00%).

With respect to self assessment, most-required self development with the highest frequency was the nursing

knowledge (76.66%); while the personalities: self confidence, human relations and Emotional Quotient (EQ) was the second highest (55.00%). The thinking and decision making skills accounted for the lowest frequency (10.00 %). For the increase of self-motivation, the highest frequency was parents (55.00%) with the family as the second highest (53.33 %). For the proudest thing or experience, pursuing nursing field accounted for the highest frequency (75.00%). Besides, the mother was the role model in life with the highest frequency (70.00%); while, the father was the second highest (58.33%). In light of role model in the profession, the instructing teachers accounted for the highest frequency (86.66%) and the second highest one was the professional nurses conducting the practicum (13.33%). The sample could improve their routine activities during twomonth period, such as learning, taking rest, doing personal routines, doing exercises, performing the roles in family and other activities. In this regard, the time for personal routines and entertaining activities was reduced; while the time for reading and for family roles was increased.

For reflecting future pictures, the assessment of environment and self assessment have been taken into account based on the awareness of personal and working life balance. It was found that 100% of the sample group has reflected future pictures in light of personal and working life. They desire for life happiness as well as good and warm family along with professional success (being the good, skillful and knowledgeable nurse). Moreover, the sample group has also analyzed self concepts or surrounding factors that could obstruct the achievement of such future picture and found that the laziness accounted for the highest frequency (50.00%), while lack of knowledge s (41.67%) and unstable financial status (21.67%) came second and third, respectively. The following examples reflected some future pictures:

"Being a successful professional nurse in personal and working life refers to the one who is beloved and trusted in nursing service provision. The knowledge is broadened by furthering high education or training program in specialized fields and conduct reliable researches. With respect to the family life, she gets married and has kids in a happy family. The parents are happy and healthy.."

The researchers have urged the sample group to determine the goals of professional life, which included personal and working life. These goals were divided into three phases: 2 months, 1 year and 5 years, respectively. For the two-month goal, learning diligently and being a good child account the highest frequency (75.00%) Meanwhile, for one-year and five-year goals, maintaining parents and family was at the highest frequency (61.67% and 80.00%, respectively). For two-month professional goal, desiring for sitting in Mahidol University's comprehensive examination for the registration of Thailand Nursing Council's License for Professional Practice and passing all 8 subjects at once accounted for the highest frequency (100%). Meanwhile, for one-year goal, higher professional competency and happy working environment were at the highest frequency (91.67%). Lastly, for five-year goal, furthering Master Degree accounted for the highest frequency (25.00%).

With regard to the implementation and assessment, self development and professional life planning has been implemented by the sample group within 1 month. The researchers have followed up such implementation in week 8. According the data analysis, 100% of the sample group has indeed implemented two-month plan. The obstacles to the implementation could be found from time to time;

therefore, recommendations on possible solutions have been given.

For the obstacles found during the follow-up, the unsuitable time management accounted for the highest frequency (60.00%). Then, occasional laziness was also found (41.67%). In this regard, the solution provided in the first follow-up was the increase of determination (60.00%) and the second highest one was the awareness of expected goals (41.67%)

Additionally, during this follow-up, it was also found that the sample group has also attempted to find several solutions, such as reviewing one own practice according to the plan, learning from successful friends, taking advices from parents and friends, self motivating and praying to relax the mind and to increase the concentration.

It was found that the sample group had expressed the effort to pursue more activities under the plan as well as the determination for self-development.

"From the beginning until today, I would say that I have understood "what I need to do in my life." The participation in the activities allowed me to gradually broaden that idea (to understand the way of life). I have more enthusiasm and effort. I now had greater motivation to continue reading and to learn what I have never known before. I will keep striving for the success..."

"In the past, I have no idea what to do in one given period of time, what I should do. Things are disorganized. After my participation in the activities, we have our own goals and targets as well as look into future. Well, I have thought many things before but I have never taken any action. Engaging in the activities allowed me to do routine activities in more organized manner. I was proud in myself. I expressed my gratitude to you for organizing these activities..."

100% of the sample group has summarized the things have been learnt as follows: 1) having more positive attitudes toward professional nursing 2) being aware of the importance of life planning and profession, 3) having motivation for self development toward success, 4) having a conclusion on the direction for self development toward success and happiness, 6) being aware of the importance of peer review for greater coverage of the plan., 7) being aware of the important of the determination in plan implementation, and 8) being aware of the importance of systematic academic retrieval. Some examples were: "The activities can be comparable to the compass giving the direction in life, assisting the identification of life goals based on the preparedness for goal accomplishment and providing advices for the success both in personal and working life..."

"The activities taught us how to think as well as to have plans, objectives, and clarity. Observing the role model has increased our motivation. We need clear goals and plans along with good thinking, good action and good discourse. Besides, we also have to listen to the criticisms for the improvement of ourselves. The success depends on clear goals and determination. It is normal to have certain obstacles in life. One should reckon that those obstacles strengthen human beings..."

With reference to the sample group's planning in implementing what they have learnt for self development, it was found that adoption of good examples of role models and of the way of life of senior students or teachers accounted for the highest frequency (100%); taking the weaknesses into account for self-development and for increase of one own strength (93.33%)

Discussion

Professional devotion should be promoted among nursing students who should have self-development awareness and understand their career path. This belief corresponded with the suggestion of Marsland (1994) who argued that colleges of nursing should be the primary source providing career guidance and planning. Meanwhile, the researcher-developed program could also enhance self-development and professional life planning competencies. This finding was consistent with those of Hay, Mitchell and Allen (1989), Waddell and Bauer (2005), and Rungnoei (2010). Having the outlook on life in mind could be an important motivator for self-development towards desired goals (Donner and Wheeler, 2001, 2009; Montana, 1989). The integration of pre-graduation program into extracurricular activities or academic curriculum may be a mean to ensure that nursing students were trained to be active, yearn to know, and take responsibility of their individual study and professional life planning. All these skills could eventually increase their self-confidence to work as a RN after graduation.

Nursing students should thus be promoted to devote in profession, and to have the awareness in self-development, and understanding about career path corresponding with the suggestion of Marsland (1994) that primary source providing career guidance and planning should be colleges/school of nursing. The researcher-developed program could enhance self-development and professional life planning competencies. This finding was consistent with the research finding of Hay, Mitchell and Allen (1989),Waddell and Bauer (2005) and Rungnoei (2010).

After the eight-week trial of the program, encouraging the students to plan for self-development and professional life should thus recognize the importance of those elements for achieving the balance of life and work. Parents and family are the things increasing the motivation for specifying one's outlook on life and professional life goals as well as for moving forward to the success in spite of problems or obstacles in life. This resulted in their ability to overcome those difficulties. With regard to the proudest experience during the past 3-5 years, pursuing nursing field accounted for the highest. This finding may reflect the fact that the sample group had indeed the determination to pursue nursing profession. One could claim that the pride in the profession could strengthen the love in that particular career and the dedication for professional development.

For the role model in personal and profession, this finding may reflect the fact that individuals tend to learn from role model who is close to them. Observing the good examples from parents and family members could enhance learning process and shape the value in life. It could be argued that the value was a personal belief determining what is important to one individual and the foundation in life. The value tends to interrelate to the belief on personal behaviors and interaction with others (Hood and Leddy, 2006; University of Western Sydney, 2009). For the role model in professional life, the nurse instructor and registered nurse could be the model for students. Therefore, it was central for the educational institutions to recognize the importance of the plan for the development of good model, particularly nurse instructors and nurse supervisors at the practicum site. The nurse instructors should thus be a model for personal and professional life because nursing students have their personal routine at the institutions and dormitories for 4 years. Therefore, they are close to the nurse lecturers more than to their respective families. This allowed the students to learn from good model in light of both personal and professional life, a contributory factor for being good registered nurse and achieving the success in their individual life.

The sample was capable to reflect one's outlook on life in conformance to the results of scanning environment and self-assessment. This focused on the balance of life and work or having good and happy family as well as achievement in work. This finding revealed the fact that the sample also desire for high accomplishment, which was the basic needs of each individual. Having the outlook on life in mind could be an important motivator for self-development toward desired goals (Donner and Wheeler, 2001, 2009; Montana, 1989). However, with regard to personal belief or surrounding factors that could obstruct the achievement of such future pictures, it was found that the laziness accounted for the highest frequency. Hence, the laziness was an important hindrance to high accomplishment. While arranging activities under researcher-developed program the focus was paid to the creation of motivation toward selfdevelopment and awareness of the importance of plan implementation. There was a persuasive discourse for enhancing the awareness of self-efficacy, self-discipline and determination to take more actions according to the plan. Those who were successful in personal and professional life according to the concept of Bandura (1997) were taken as the program. According to him, the persuasive discourse and learning from good model could create the motivation for self-development toward greater achievement.

With respect to future planning, nursing students had plans for their life and work according to their outlook on life and desired goals in each phase. For the implementation and evaluation, it is found that the sample has indeed implemented the plan. In this regard, certain problems and obstacles were also revealed during the first, second, and third follow-up, namely, unsuitable time management and occasional laziness, respectively. This coincided with the assessment in light of the obstacles to the accomplishment of desired outlook on life. As the PI has urged the sample to continuously keep the record of the results of implementation and self-evaluation, the sample could thus review its own behaviors for continual improvement and adjust plan in conformance to the relevant contexts. According to the evaluation, this finding reflected the fact that most problems derived from one self. Hence, in order to implement the plan, nursing students should have the determination be without the feeling of despair; while being aware of the importance of specified goals and outlook on life.

As a result, self-development relied upon the patience and determination; while, keeping the feeling of despair away. Meanwhile, the key for the development toward goal accomplishment also involved suitable time management and self-control (Megginson and Pedler, 1992). In this regard, Case (1997) argued that life sometimes faced certain problems or obstacles leading in the feeling of despair, boredom, and confusion. To reduce those problems or feelings, nursing students should thus explore their own needs, specify clear goals in life and outlook on life as well as plan self-development by taking into consideration the relevant situations. This conformed to professional life planning concept; in other words, professional life planning was dynamic so the plan should then be adjustable on the basis of suitability; while, the changes should be emerged from the assessment of oneself and of the environment (Donner and Wheeler, 2001, 2009).

Conclusion

The study on pre-graduation program for nursing students is an important issue in nursing profession. The findings suggest that colleges of nursing should arrange the activities that enable nursing students to do self-assessment, to consider their interests and competencies, to devote to nursing profession, to have self-motivation in assessing and planning their life and profession, and to yearn to know. This study provides a guideline for setting the activities for continuous development of nursing students who would become RNs so that they can improve high quality of care, and plan their professional life according to their career ladder and specific goals. They will then have individual development plan, and know their professional progress. These activities may eventually increase the tenure of nurses in health care system. Future research is recommended, especially in light of the longitudinal research for monitoring the outcomes of pre-graduation program after graduation.

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