



## Designing implementing and evaluating the settlement of the senior undergraduate nursing students at the Educational and Treatment Center of Zanzan University of Medical Sciences

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### Abstract

**Background & Objective:** Nursing students' experiences in the field of internship require intelligent attention and management. The plan was designed and implemented in order to settle the senior undergraduate nursing students at the Educational and Treatment Center.

**Materials and Methods:** In order to implement this single-group interventional study, undergraduate nursing students were attending full-time work in medical and surgical wards of Educational and Treatment Center under the supervision of a teaching assistant (TA) and a senior instructor in their last year of the course. The program started from the first semester of the 2016-2017 academic year and continued until the second semester of the 2017-2018. The planning and implementation team of the program at the faculty and its corresponding team at the educational and treatment center was responsible for planning, implementing, monitoring, and evaluating the program. Students' satisfaction with the program and their feedback was reviewed by the planning and implementation team. In this study, the first level of a Kirkpatrick model was used to evaluate the program.

**Results:** Most of the participating students acknowledged that the program had a positive impact on professional preparation, accountability, self-esteem, and job independence in comparison to the conventional program. They also had criticisms of the program, that the most important of them was mentioned in the article. Also, the head nurses and TAs believed that the program, in addition to reaching the educational goals, was able to moderate the care burden of the nursing staff of the departments.

**Conclusion:** Appraisal of the program illustrates the success of the program in achieving educational goals. It seems that the implementation of similar programs at this stage of the student's curriculum will not only facilitate the transition of the student's professional role but if implemented effectively, it can also help to mitigate the shortage of nursing. It is recommended to study the possibility of implementing such programs in the final year of the midwifery and other paramedical courses.



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### Introduction

The mission of nursing education programs in Iran should be conducted to aim at educating the students who are not only don't align themselves, during the course of studying and after entering the real field of work, with the organization and with its demand but also seeking to provide a positive change in the professional environment and challenge the organization for the desired changes. The purpose of nursing education is to educate nurses who have the ability and knowledge of caring for patients in clinical settings. Clinical learning is an essential part of nursing education (1-4). Clinical learning occurs in a complex social context that aims to develop clinical

students' skills, apply the theory in practice, apply problem-solving skills, develop interpersonal skills, and learn formal and informal norms, protocols and expectations of the nursing profession and the health care system. The success of nursing programs greatly depends on the effectiveness of these clinical experiences (2, 5-7). Students get acquainted with nursing primary values at nursing faculties and apply them to internships (8). Considering that about half of the nursing programs are devoted to clinical practice, this part of education plays an important role in shaping the professional identity of nursing students (9, 10).

Currently, the nursing undergraduate curriculum in Iran consists of three years of theoretical education and one year of clinical practice in health care settings (11). The clinical practice, the internship, is the main part of the professional nursing course, which includes 40 weeks of clinical internship under the supervision of faculty instructors, in which students are set to carry out controlled care of patients (5). Revision of the philosophy, mission, and objectives of the internship program and modification it in practice can have positive and constructive effects and consequences in the student's socialization experience and their transitional role. Responsibilities of nursing educational planners, practitioners, professors, and instructors in educating, educating, supporting and guiding students have a determinative effect in educational and clinical settings. Close collaboration between nursing faculties and hospitals has many benefits to each other. The use of qualified hospital nurses as guides, role models, and clinical instructors in creating an acceptable and stress-free atmosphere is one of the other necessary measures. Modifying the curriculum and patterns should be in a direction that educates students, to be self-esteemed and aware nurses (12).

The experiences of senior nursing students that coincide with the internship program is a pleasant part of their professional experience and require intelligent care and consolidation. In this program, students gained the necessary conditions and competencies for a professional role after transiting through a rugged path. At this stage, students are actively involved in the process of learning and managing their educational and professional activities, due to the inevitable need to prepare for the real world of work. Their motivation at this stage is to learn, to become more independent and more responsible. Also, communication skills have also grown dramatically with patients and care teams, especially nurses. Acceptance and attention to students' abilities during this period reinforces their sense of self-esteem. Providing opportunities for learning, eliminating existing restrictions, admitting them to professional groups, giving full care to patients, providing timely and constructive feedback, and evaluating their fairness, can be effective to restore and maintain their individual and professional integrity (13).

Reviewing literature abroad and inside the country highlights the many challenges faced by undergraduate nursing students in the course of study and young nurses at the onset of professional work. Evidence suggests that the common methods of

nursing education (the presence of students with close supervision and control of relevant educators) has not been successful in acquiring the professional readiness necessary to transit the student role to a professional independent role. Designing and implementing diverse educational programs for this purpose in the world, including in the interior, also indicate the concern of managers and nursing education leaders in this regard (6-7, 9 and 12).

In several countries around the world, similar programs are being developed under different titles, such as internship, preceptorship, mentorship, and externship in faculties and sometimes in hospitals, in order to prepare nursing students or novice nurses to enter work settings. These programs have been designed and implemented for various purposes such as increasing self-esteem, consolidating critical thinking, developing knowledge, skills and clinical competencies, as well as reducing the stress and anxiety of these individuals. For professional organizations, the most important consequence of such programs is to improve the quality of patient care and maintain staff retention and reduce the cost of treatment and care (16-14).

Nursing students' experiences in the field of internship require intelligent care and management. The experience of the authors during his career in management, educational and research positions in the field of nursing education represents a great challenge in the management of clinical education of undergraduate nursing students. This worries more about the planning and implementation of the nursing senior students' educational program. It seems that the implementation of this program is aimed at achieving important goals such as: facilitating the transition of the professional role of students, improving their independencies and self-esteem, improving the quality of care, coherence and continuity of nursing care, improving interaction and communication skills of students with patients and care team, reducing the care burden, and helping students become social nurses (13). This program was designed and implemented with the aim of settling the senior nursing students in educational centers.

## Materials and Method

In order to implement this single-group interventional study, senior undergraduate nursing students were attending full-time work in an medical and surgical ward of Vali-e-Asr hospital under the supervision of teaching assistants (TAs) and a senior instructor in their last year of the course. In order to

settle senior nursing students in educational hospitals for four semesters, the program was implemented from the first semester of the 2016-2017 and continued until the second semester of the 2017-2018 academic year. In order to design a settlement program, the program's planning and implementation team at the faculty, consisting of an educational assistant and clinical education manager, heads of nursing educational groups, including medical and surgical nursing, critical care nursing and senior instructors of faculty at the hospital and the corresponding team at the hospital included nursing matron, educational supervisor, head nurses and TAs. The target students included senior undergraduate nursing students who completed all of their theoretical units and had almost completed clinical placements under the direct supervision of their faculty instructors. These students have acquired the minimum capabilities required for independent attendance and further training in order to prepare for entry into the real world of work.

The program was initially designed for the general ward internship (heart, respiratory, and general surgery wards) and, by the end of the semester, evaluated the ability to generalize to other wards, including intensive care units, pediatric intensive care units, neurology, etc. At the beginning of the program, a faculty planning and implementation team (consisting of an educational assistant, relevant educational head of nursing, and a clinical education manager) held a justification session to acquaint the target students on the purpose and manner of the program. The team also held another session with the respective team at the selected hospital, discussing the purpose of the program, how to hold and interact with each other. At the same session, head nurses selected TAs from practicing nurses working in a hospital with a clinical competence and work experience of at least 5 years. Then, target students were introduced to the educational centers according to the internship plan. It was also decided that a senior instructor at the hospital would evaluate the educational needs of target students and plan empowering programs in the form of a conference in the department, workshops, or seminars in each semester, supervised by faculty professors. The selection criteria for senior instructors are to have high educational and clinical backgrounds and qualified academic, professional and managerial competencies among faculty professors that were proposed by the heads of educational departments and the educational assistant.

Student satisfaction with the program, feedback from the planning and implementation team at the faculty and the hospital was examined through focus group discussions. In this study, the first level of a Kirkpatrick model was used to evaluate the program (17).

In this program, unlike traditional internships, students attend full-time work as nursing staff and, under the supervision of TAs, took care of the full care of patients (2-4 patients) in the form of case method care. Students worked with other members of the care team in the morning and in the evening, according to the head nurse's planning. The senior instructor of the faculty was located at the hospital on all days of the week and closely monitored and addressed the students' educational and non-educational issues. Also, the senior instructor of the faculty, with the participation of TAs, assessed the performance of students in terms of achieving learning purposes.

Regarding the implementation of this program, all the faculty actions with the selected hospital were carried out in the following order:

Assessing students' problems in the field of the internship by holding focused group discussions (FGD) and conducting interviews with students, clinical instructors as well as nurses working in the hospital.

Discussing the issue of settlement of senior undergraduate students at the session with the heads of educational departments in August of 2016 and approval of the plan.

Organizing a preliminary session with the director of nursing services and educational supervisors of Vali-e-Asr hospital in March of 2016.

Signing a Memorandum of Understanding between the faculty and the hospital in September of 2016 regarding the cooperation for the implementation of the settlement of senior undergraduate nursing students in the general ward. The memorandum refers to the parties' obligations in planning, implementing, monitoring, coordinating and evaluating the program.

Introducing educational collaborator of the hospital to work with the faculty to support and guide the target students' education.

designating hospital TAs to collaborate with the faculty to support and guide students' education by the educational assistant.

Preparation and compilation of internship regulations (such as entry and exit rules, student responsibilities, student dress code, care method, and the evaluation method of students) in a session with a

head of the department, a senior instructor and clinical education manager and sending to selected hospital and related departments along with internship program.

Sending the internship program to head nurses in the general ward to schedule student work shift in the monthly program of the ward.

Holding a briefing session for target students on how to implement the plan with the presence of the educational assistant, clinical education manager, head of the nursing departments and hospital senior instructor.

Sending a letter to the hospital that defines the students in the center's working system and sends their monthly attendance report to the faculty.

Introducing and issuing a notification for one of the experienced faculty members with as a senior instructor based at hospital, with the purpose of monitoring the good implementation of program and evaluating students' performance.

Coordination with the center for the presence of a senior instructor at the sessions of head nurses of different wards and the discussion of the students' probable problems and the ways to deal with them.

Regular visits by the planning and implementation team of faculty during the implementation of the program, examining the issues and problems of its implementation by attending clinical wards and observing the implementation of the program as well as interviewing students, TAs and head nurses of the relevant wards for appraisal of the program.

Holding joint sessions of the planning and implementation team of faculty with the target students at the end of each semester, discussing issues related to their educational and non-educational issues, assessing students' satisfaction and reviewing their responses and feedbacks, and obtaining comments and their suggestions for improving of the program based on the first level of Kirkpatrick's model.

Applying necessary modifications based on the feedback of the program implementing agents (TAs, head nurses and target students) in the plan and planning for the next semester.

## Results

The results of the feedback and assessment of the senior undergraduate students indicate that after completing theoretical and clinical courses based on their curriculum in the last six semesters, they often repeat their previous sections with the same clinical instructors and do not see significant changes in terms of content and structure. They often mentioned that

these two semesters are very monotonous and in some cases boring, and they do not have the incentive to attend repetitive sections. On the other hand, the findings of faculty instructors and nurses in clinical wards indicate that despite potential capabilities in nursing students at this stage, they are practically ineffective in the wards and, like other lower-level students, they are not self-dependent and have less self-esteem and less incentive to engage in providing nursing care to patients and collaborating with care team.

The program was monitored continuously by the faculty through a clinical education manager and head of departments and in the hospital through TAs and a senior instructor. In regular visits through observation, interviews with the program implementation team and target students, their reactions and feedback to the program were received. In addition, a session was held at the end of each semester with the presence of the planning and implementation team at the faculty, with the participation of all students. The whole process of the program and its strengths and weaknesses were analyzed and through FGD discussions and action was taken to modification and improvement.

A survey of TAs of hospital showed that the program, in addition to achieving the educational purposes set out in the student's clinical lesson plans, was able to moderate the workload of nursing staff in the wards, which has also been successful in improving nursing staff shortages.

Most participating students also expressed satisfaction with the implementation of the program and acknowledged that the program had a positive impact on professional readiness, accountability, and improvement of self-esteem and autonomy. They also had critics of the program, most notably are as follows:

Provide specific educational needs (independent nursing procedures, writing the report, attending the rounds of wards, and changing the work shift).

Provide students with welfare needs (transportation service, lounge, dressing room, and supplying food at different shifts).

Improving the communication and interaction of the faculty team with the implementation team and the students.

Definition and payment of fees for students in exchange for providing services and full-time attendance at work.

Generalization of the program to all of clinical placements of last year.

Accept and maintain their respect by nurses and other members of the care team as future colleagues.

## Discussion

Reviewing the philosophy, mission, and objectives of the internship program, modifying it in practice can have positive and constructive consequences for the transition of the professional role of students. In 2007 and 2008, efforts were made by the nursing faculties in the field of settlement of the senior undergraduate nursing students in hospitals, and correspondence with the universities and then the ministry was carried out. In recent years, Mashhad and Shahid Beheshti Universities of Medical Sciences have similar programs in this field. Although these programs have been successful, they have been challenged due to lack of reliance on the plan and the implementing code and approved by the relevant ministry (18).

Implementing the program over the course of four semesters and evaluating it, made the planning and implementation team to monitor the strengths and weaknesses of the program and take steps to resolve these weaknesses, and to maintain and improve the strengths of the program. Since students were scheduled to spend more time in the selected general ward and, like the nursing staff and the care team, attend a full-time part in their careers, their communication skills with the care team and acceptance of responsibility for caring of the patients and subsequently, the sense of self-esteem and work autonomy had recovered significantly. Verbal and written feedbacks from head nurses in selected wards and educational supervisors also indicated their satisfaction with students' performance. They believed that the presence of students in this program has been able to take careful attention from the care team.

Settlement of students in clinical settings and assigning full care responsibility of a limited number of patients are provided to them by the TAs and a senior instructor of faculty who acquaints students with the actual conditions of the workplace and gradually transit from the role of a student to the role of a professional nurse. Studies show that long attendance in clinical settings leads to the development of communication skills with patients and effective interaction with care team members (13, 19-22).

One of the main weaknesses of the program, reflected in the feedback of the students, was the quantitative and qualitative weakness in recognizing the educational needs of the students in this period and the holding of training courses in accordance with

their needs from the faculty and the hospital. It seemed that with the implementation of this program, the students' relationship with the faculty became weaker and the faculty's role was diminished.

Implementation of this program was accompanied by limitations. Since undergraduate nursing students, in accordance with the proposed curriculum of the Ministry of Health, were attending clinical placements under the supervision of instructors, the lack of clinical instructors at the onset of the program created problems for them that joint sessions by the ending of the semester were expressed in terms of protest and dissatisfaction from them. This problem was gradually overcome by passing the two semesters and improving the interaction between the senior instructor and the relevant TAs. The program was mainly implemented in general wards such as medical and surgical wards. Hence, the other limitations of this program were its lack of implementation in ICU, CCU, and dialysis, and other wards such as pediatric, psychiatric, and the emergency department, due to the specific nature of providing care in these wards, the implementation of the program faced with issues.

Based on the findings from the program's implementation and recognition of its capabilities, the planning and implementation team concluded that by modifying the structure and implementation of the program, similar and well-adjusted programs could be found in other wards of the hospital. It is also possible to implement such a program for senior students in other related majors, including midwifery, Operating room and anesthesiology technology.

## Conclusion

The program was designed and implemented to settle the senior undergraduate nursing students in the educational and treatment centers. Although similar plans have been designed and implemented in few universities of medical sciences in Iran, this program was first designed and implemented at the nursing and midwifery faculty of Zanjan University of Medical Sciences. The program was accompanied by student resistances at the beginning, and sometimes there have problems in the coordination and cooperation of the selected wards in its implementation, after one semester the monitoring of the program and making the necessary changes and effective interactions with those involved in the implementation, not only these issues were overcome, but also the program was accepted by students, authorities of hospital and members of the care team in the relevant wards.

Appraisal and positive feedback from students and the implementation team illustrate the success of the program in achieving predetermined purposes. It seems that the implementation of this program and similar programs at this stage of the student's curriculum will not only facilitate the role transition of students but if effectively implemented, they will be able to provide part of the workload of nurses in these wards. It also helps to mitigate the issue of a shortage of nursing staff.

It is suggested that nursing faculties, with appropriate modeling of this program, provide the possibility of generalizing the implementation of this program in other wards of the health care centers. It is also recommended that studies be carried out to examine such programs in the final year of the course in related fields such as midwifery and other paramedical sciences.

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