

## Competency development of the transition era of nursing student's road to register Ners as agents of change

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### Abstract

The main challenge faced by lecturers and academic staff is to prepare a competitive nursing curriculum that is connected to employment to prepare final year students for the Register of Ners (RN) during the transition period. Study to analyze and evaluate the transition process of late-stage nursing students to gain competencies according to clinical needs through clinical preceptorship. Cross sectional study analysis was used in this study. Sample characteristics include academic staff, 3rd year nursing students and nurse practitioners. The questionnaire consisted of 2 groups, 22 questions for staff and students, 23 questions for nurse practitioners. Test the validity of the Cronbach Alpha coefficient with an acceptance limit of 0.72 vs 0.73, (theory vs clinical function). SPSS data analysis is used according to design using descriptive statistics. Academic research is very minimally applied in clinical (85%), lack of knowledge and skills of academic staff (70%), use of conventional methods of ward management (72%), irrelevance of total working hours to nurse workload (82%), advantages and disadvantages of using standard clinical protocols (79%), nursing learning outcomes are not applied in health practice after graduation. The gap between theory and practice will interfere with the development of nursing specificity competencies in the face of the transition period towards Register Ners (RN's) as part of the renewal modality. Various recommended efforts to reduce this gap include through preceptorship training.

**Keywords:** Clinical Competence; Nursing students; Registered nurse; Preceptorship

### 1. Introduction

Until now, there has been a trend of discussion on topics between new student nurses (RN's) in general whether they are comprehensively ready to provide nursing services in accordance with the code of ethics and competency standards that have been established between professional organizations and the government as regulators of health services in hospitals [1].

Transition roles in entering the real world of the nursing profession, final year nursing students must be able to solve problems well despite the complex challenges that will be faced to qualify as professional nurses. The toughest challenge in this role transition is that individual nurses experience high levels of stress, value conflicts, and role uncertainty, feelings of insecurity for new nurses, and if unable to adapt, individual nurses will experience reality shock [2–7].

Currently, the development of nursing is experiencing rapid progress both in the nursing education sector and in the health service setting (hospital / puskesmas). Unfortunately, the controversy continues towards research on how to prepare final year nursing students for role transition (conventional methods vs. digital system methods), which can

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trigger role conflicts where first-graduate students are more conflicted than post-graduate nurses who have a lot of experience [8]. Several researchers have previously explored their findings regarding role transitions in first-graduate nursing students not meeting the requirements needed to become competent practitioners [9,10]. Other findings also confirm that there is a negative public perception regarding the competence of nurses in hospitals, further reported that this condition occurs due to lack or not maximum support and intensive guidance from preceptorship, because this transition process must be maximized adaptation process through the process of transferring knowledge knowledge and skills adequately and continuously [11]. Retrospective research conducted by the Royal College of Nursing has strongly linked the lack of support for new nursing staff with the incompetence of nurses in the last 25 years [12].

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## 2. Material and methods

### 2.1. Participant characteristics and research design

Our study have received ethical clearance (EC) approval number 0232/O/KEPK-PTKMS/III/2023 from the Health Research Ethics Committee of Makassar Health Polytechnic. The research was conducted at the Department of Nursing, Makassar Health Polytechnic and Andi Makkasau Pare Pare General Hospital with census method through cross sectional study approach.

#### 2.1.1. Sampling procedures

The sample selection process uses simple random sampling from the population level randomly with inclusion criteria for Makassar health polytechnic nursing students, education staff and nursing alumni who work at Andi Makkasau Pare Pare General Hospital; exclusion criteria for nursing students in year I and II, nursing personnel who work in hospitals for less than 5 years.

#### 2.1.2. Sample size, power, and precision

The sample selection process of the sensus method with a cross sectional approach according to the research formula.<sup>12</sup> The results of the sample selection succeeded in capturing three characteristics, namely nursing students in the 3rd years (n = 70), education staff (n = 15), and Nurse alumni who work at General Hospital Andi Makkasau Pare Pare (n = 130).

#### 2.1.3. Measures and covariates

There are 22 questions to test problems related to the concepts of clinical nursing theory and practice and nursing clinical teaching, and 23 questions to test and assess nursing graduates working at General Hospital Andi Makkasau Pare Pare. The question scale consists of 4 levels ranging from strongly agree to strongly disagree

### 2.2. Data analysis

Data analysis is done by simplifying answers into 2 categories, namely agree vs disagree. To validate respondents' answers, 2 things are done, namely internal validity and external validity. Statistical analysis used Cronbach's Alpha coefficient, with a meaning level of 0.72 for student questionnaires and 0.73 for nursing alumni working at General Hospital Andi Makkasau Pare Pare. The presentation of data is carried out professionally with due regard to the rights and privacy of the subject. we use SPSS analysis version 22. To test the relationship between variables, the Chi-Square test is used with a significance degree of 0.05.

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## 3. Results and discussion

The age characteristics of the subjects were in the range of 19 - 45 years with the average age was 25.10±3.20 years. The clinical competence component of nursing and clinical teaching of nursing consists of 3 main elements of research findings, nursing process and Health practice shown in table 1.

**Table 1** Problems of nursing education institutions (theory vs. practice) on nursing competence from the perspective of Nursing Lecturers, Students and Nurses

Variable	Ac. Staff (n=15)	Nurs.student (n=70)	Nurses (n=130)	Total (n=215)	p-value
	Ag. (N=%)	Ag. (N=%)	Ag. (N=%)	Ag. (N=%)	
Research findings not used in hospitals	15(100)	56(80)	111(85)	182(85)	.20
The nursing process is not applied in health practice	15(100)	52(74)	110(85)	177(82)	.30
The nursing process is not applied in health practice the nursing process is not applied in Health practice	15(100)	51(73)	120(92)	186(87)	.02*
The clinical preceptor conducts the nursing care guidance process in the care ward oriented to routine aspects	12(80)	49(70)	94(72)	155(72)	.25
There is a gap between hospital care and the nursing education system	12(80)	44(63)	95(73)	151(70)	.30
Clinical preceptors use problem-solving methods to track student learning	6(40)	21(30)	49(38)	76(35)	.65
Weaknesses of Preceptor clinics apply nursing procedures based on theoretical courses in the field of practice	6(40)	32(46)	93(72)	131(61)	.01*
Nursing theory courses are taught based on the conceptual nursing model	9(60)	40(57)	87(67)	136(63)	.94
The amount of time used for internship practice in the hospital according to the semester credit system	6(40)	21(30)	52(40)	79(37)	.67
The amount of time spent guiding the specialty nursing competency	6(40)	17(24)	63(48)	86(40)	.01*
Compatibility between nursing theory learning outcomes with the needs of nursing practice	9(60)	30(43)	68(52)	107(50)	.40
Effective and fruitful scientific relationships between lecturers, educators, nurses and doctors	4(27)	13(19)	35(27)	52(24)	.53

Notes. Ac. Staff=academic staff. Nurs.student= Nursing student.; Ag= Agree \* p < .05

Clinical problems (theory vs. practice) from the perceptive perspective of Nursing Lecturers, Students and Nurses are shown in table 2. An important problem shown in this table is that they tell more about nursing theories and concepts than aspects of their application in clinical practice ( $p < 0.001$ ). The subject group is more likely to state that the construction of the nursing curriculum developed in the Study Program is not relevant to the needs of students after graduating nursing education. In addition, there are also no nursing kit facilities, nursing care guidelines and action protocols according to standards. Finally, it is not directly proportional between the total working hours of nurses with the workload of existing nurses.

The most important finding of this study is that the management of nursing academic education towards the transition of the Nurse register has not applied evidence-based research outcome studies in nursing clinical practice to prepare nursing competencies as a renewal modality. This research proves that nursing practitioners in carrying out the nursing care process still use a routine system based on traditional experience. Therefore, an important factor that needs to be developed is the application of evidence-based clinical competencies to support effectiveness and efficiency in the

provision of nursing care [13]. This will enhance the knowledge, skills and attitudes of high-quality professionals, which must be linked and matched with the construction of the nursing education curriculum [14].

**Table 2** Description of clinical problems (theory vs practice) from the perceptive of Nursing Lecturers, Students and Nurses

Variable	Ac. Staff (n=15)	Nurs.student (n=70)	Nurses (n=130)	Total (n=215)	P- value
	Ag.(N=%)	Ag.(N=%)	Ag.(N=%)	Ag.(N=%)	
Nursing learning outcomes are not applied in health practice after graduation	12(80)	48(69)	95(73)	155(72)	.28
The construction of the nursing curriculum does not support scientific performance in health practice	13(87)	43(61)	114(88)	170(79)	.001*
Lack of medical device facilities in the nursing ward according to standard operating procedures for nursing	11(73)	37(53)	80(61)	128(59)	.02*
Lack of nursing action protocols as per the needs of the care ward	7(47)	50(71)	90(69)	147(68)	.001*
Not enough time according to the total working hours according to the nurse's workload	12(80)	48(69)	116(89)	176(82)	.07
Compatibility between continuing nursing education programs and the needs of the nursing profession	5(33)	33(47)	52(40)	90(42)	.06
Disadvantages and advantages of standard practice protocols in the clinic	13(87)	43(61)	114(88)	170(79)	.001*

Notes. Ac. Staff=academic staff. Nurs.student= Nursing student; Ag= Agree \* p < .05.

Another finding is that the role of clinical preceptors in providing competency debriefing to nursing students affects their clinical competence in preparing to work in health practice. Similar studies were also put forward in his studies in different populations [15]. Active participation of clinical receptors in nursing education environments will further strengthen the status of evidence-based clinical teaching as has also been suggested by previous researchers [16]. In addition, competency development will run well if supported by a conducive environment, high confidence and motivation to change. Researchers have also previously revealed the fact that there are 2 important problems related to the work of clinical receptors, namely an uncomfortable environment and lack of confidence to mentor nursing students [17,18].

During the study, nursing students also always find complex challenges, namely the lack of Interprofessional Education (IPE) between theory and practice in an integrated manner, not using the nursing process as a scientific method of solving patients as previous research [19].

There are two things that affect the teaching of clinical skills, namely the pattern of student relations, education staff and teaching methods of lecturers, both theory and practice. In addition to the influential factors are practical experience for teaching lecturers (clinical preceptors) and a conducive clinical teaching environment [20]. These variables are the main pillars in the development of student competencies after graduating from education. Similar research on the role of clinical preceptors in clinical teaching has also been reported that the presence of preceptors in health practice is a source of motivation for students, preceptors as evaluators, good communicators, and supervisors in order to narrow the gap between theory and practice [21].

The development of specific competencies contained in the clinical teaching program has not been fully able to improve optimal learning and practical skills, therefore there is still a need for competency development strategies in the form of complementary skills that complement aspects of physiological nursing and psychological and spiritual nursing.

Consideration is reasonable and reasonable because the clinical competence gained from this study does not teach specific evidence-based nursing theories and concepts in health practice, as previous research has been consistent with this study [22–24].

Our study found that the construction of the nursing curriculum does not support scientific performance in health practice, Lack of medical device facilities in the nursing ward according to the operational standards of nursing procedures, Lack of nursing action protocols according to the needs of the care ward. The omena of the results of the study mentioned above is relevant to the research. That to support the competency development of nursing students after graduation, the support of educational staff, clinical preceptor lecturers and human resources and tools that meet the needs of practice is needed. Other studies with different populations also showed results similar to this study that more than half of nurses were dissatisfied with their performance, due to occupational safety and security factors, satisfaction with the environment and facilities and nursing practice tools [25].

Researchers Gheraghi (2009) argues that the paradoxical interrelationship between theoretical knowledge and nursing practice will create gaps that will directly affect the development of nurses' competencies towards RN's. This is due to differences in the vision and mission of Nursing Education and Hospitals as health service facilities. Other researchers also revealed that the gap between nursing theory and practice has an impact on the psychological condition of nurses, job satisfaction and the scientific foundation of nurses, and the nursing care process is no longer scientifically based [26,27].

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#### 4. Conclusion

The gap between theory and practice will interfere with the development of nursing specificity competencies in the face of the transition period towards Register Ners (RN's) as part of the renewal modality. Various efforts are recommended to reduce this gap in preceptorship training for nursing lecturers and clinical practitioners in finding patterns of interprofessional collaboration between the campus environment and nursing practice vehicles.

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#### Compliance with ethical standards

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##### *Disclosure of conflict of interest*

Authors should made a conflict of interests disclosure statement or a declaration that they do not have any conflicts of interest. Authors should disclose at the time of revision any financial arrangement they may have with a company whose product is pertinent to the submitted manuscript or with a company making a competing product. Such information will be held in confidence while the paper is under review and will not influence the editorial.

##### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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