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Determinants of Interprofessional Collaboration Practices at Pidie Regency Regional Hospital, Indonesia

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Abstract
Health services in the current global period require health care workers to provide quality services. Collaboration between professionals in a health service system is very essential to provide quality services. However, interprofessional collaboration (IPC) remains uncommon, posing a challenge for hospitals in both middle- and low-income nations, as well as high-income ones. The purpose of this study was to identify the factors related with IPC practices at the Regional General Hospital in Pidie Regency, Indonesia. This quantitative research used a cross-sectional study design, and the sample approach was proportional stratified random sampling, with a total of 187 nurses. The data collecting tool includes two questionnaires: One on the determinants of interprofessional cooperation practices and one on the components of interprofessional collaboration. Data was analyzed using descriptive statistical tests, chi-square, and binary logistic regression utilizing the stepwise technique. The study's findings indicate that professional role factors (p-value = 0.037), patient factors (p-value = 0.001), interpersonal factors (p-value = 0.000), and organizational factors (p-value = 0.002) are all associated with IPC practices at Pidie District General Hospital in Indonesia. Interpersonal variables had the highest correlation with IPC practices (p-value = 0.000, Odds Ratio = 2.424). Quality health care emphasizes the importance of best IPC practices. According to the findings of this study, these four aspects are the most important priorities that the hospital must address right away, and they necessitate a collaborative effort from professional care providers and management to establish successful IPC procedures.

Keywords: Interprofesional Collaboration, Professionals Role, Patient, Interpersonal, Organization, Nursing Roles

1. Introduction

Quality health services are critical in the global period, yet fragmentation in health care delivery remains a major issue in health development in practically every country. As health problems become more complicated, healthcare providers must provide comprehensive and patient-centered care. IPC procedures are required to ensure efficient collaboration among health professionals [1]. IPC is a collaboration of health workers from various professional backgrounds who work together to solve issues, deliver health services, and accomplish common goals. IPC is utilized to achieve goals and benefit all health professionals engaged [2]. As a result, IPC is vital for providing patient-centered treatment. According to research, patient-centered treatment focuses on the patient's background, history, family, and strengths and limitations. Furthermore, this requires a change away from considering patients as passive participants in the health-care system [3]. Because of the huge number of nurses in the service, nurses play an essential role in implementing IPC; thus, nurses must be able to take the lead in establishing IPC activities [4].

There are several aspects that impact IPC practice; these characteristics can be both motivators and impediments to collaborative practice. According to the findings of the literature study, four elements impact IPC practice: Professional role factors, patient factors, interpersonal factors, and organizational factors. Identity in one's own professional practice is one of the variables that contribute to professional role. Patient aspects include language use, decision-making processes, and collaboration. Interpersonal variables refer to what happens among team members. Meanwhile, structural or organizational factors are factors that each member of the collaborative team cannot control, such as government policies and regulations requiring each health profession to collaborate in teams that promote IPC, IPC culture in the organization, work environment,

and human resource management [5]. Research from throughout the world suggests that IPC practices can enhance access and coordination of health services, the proper use of expert clinical resources, health outcomes for persons with chronic conditions, patient care, and overall safety.

IPC techniques can also help to minimize illness complications, hospital stays, nursing disputes, staff turnover, clinical mistake rates, and death rates [6]. In Indonesia, IPC in general has not gone well, indicating that interprofessional cooperation has not been adopted and that conventional collaboration continues to be carried out with the idea that physicians are leaders and pharmacists, nurses, and midwives are implementers [7]. The findings of a study on the professional knowledge and perceptions of care providers in terms of clinical authority at the Regional General Hospital in Aceh Province show that IPC implementation is not optimal due to a failure in care providers' professional understanding of carrying out their authority and responsibilities in accordance with their clinical authority. However, respondents typically had a good attitude about IPC and clinical authority [8].

Observations and interviews at one of Aceh Province's Regional General Hospitals reveal that IPC practices, such as sharing roles, knowledge, and authority among certain professions to make decisions about patient care together, have not been implemented optimally. One profession continues to dominate decision making, while other professional care providers involved in patient care are more likely to carry out and follow the instructions of one profession, and they do not see the implementation of the roles and contributions expected in the implementation of IPC practices, such as involving patients and families as the center of service. Based on the issue phenomena that have been discussed, the purpose of this research is to establish the determinants of IPC practice at the Regional General Hospital of Pidie Regency, Indonesia.

2. Methods

This is a quantitative study with a cross-sectional study design. The research population is all nurses who work in the inpatient ward of the Regional General Hospital of Pidie Regency, Indonesia, totaling 354 nurses. The sample size was determined using the Slovin formula, totaling 187 nurses, and the sampling technique is proportionate stratified random sampling. The data collection tool used a questionnaire on the determinants of IPC practices and IPC components. Data analysis uses descriptive statistical tests, chi-square and binary logistic regression with the stepwise method, the results are presented in the form of frequency distribution tables and cross tables.

3. Results

The study of this research data yielded the following results:

Table 1: Characteristics of Respondents According to Age, Length of Work and Length of Time Involved in IPC Practices

Characteristics	Mean	Min - Max	SD
Age	35	24 - 55	6.413
Length of work	9	2 - 30	6.694
Length of IPC practice	4	2 - 5	1.007

Table 1 shows that the average age of respondents is 35 years, they have worked in hospitals for 9 years, and they have been active in IPC practice for 4 years.

Table 2: Frequency Distribution of Respondent Characteristics

Characteristics	f	%
Gender:		
Male	43	23
Female	144	77
Education		
Nurse profession	52	27,8
D-IV Nursing	2	1,1
D-III Nursing	133	71,1
Employement status:		
Civil servant	56	29,9
Government employess with a work agreement	17	9,1
Honorary employee	114	61
Level of clinical authority:		
Clinical nurse IV	4	2,1
Clinical nurse III	66	35,3
Clinical nurse II	88	47,1
Clinical nurse I	29	15,5
Position		
Head of ward	9	4,8
Deputy head of ward	8	4,3
Team leader	40	21,4
Associate nurse	130	31
Had IPC training		
Yes	27	14,4
Never	160	85,6

Table-2 explains that of the 187 respondents, 144 (77%) respondents were female, 133 (71.1%) respondents had a Diploma III in nursing, 114 (61%) respondents were community service employees, 88 (47.1%) respondents were nurses' clinic II, 130 (69.5%) respondents were executive nurses and 160 (85.6%) respondents had never attended IPC training.

Table 3: Determinants Related to IPC Practices

Predictors	*p-value*	α
Interpersonal factors	0,000	0,05
Organizational factors	0,002	
Professional role factors	0,037	
Patient factors	0,001	

Related to IPC practices (p-value < 0.05) and deserve to be included as predictors of the phase I binary logistic regression test because they all have a p-value < 0 .25.

Table 4: Phase I Analysis of Determinants of IPC Practice Predictors

Prediktor	B	Odds Rasio	p-value	95% CI	
				Lower	Upper
Professional role factors	0,272	1,312	0,273	0,807	2,135
Patient factors	-0,046	0,955	0,859	0,572	1,593
Interpersonal factors	0,885	2,424	0,001	1,407	4,177
Organizational factors	0,574	1,775	0,008	1,166	2,703
Constant	0,554	0,575	0,149		

Table 4 shows that interpersonal and organizational components have p-values <0.05, making them appropriate for stage II analysis.

Table 5: Phase II Analysis of Determinants of IPC Practice Predictors

Predictors	B	Odds Ratio	p-value	95% CI	
				Lower	Upper
Interpersonal factors	0,883	2,417	0,001	1,482	3,942
Organizational factors	0,595	1,813	0,003	1,224	2,686
Constant	0,312	0,732	0,317		

Table 5 shows that interpersonal characteristics are the most important predictors of IPC behaviors (p-value = 0.000 <0.05, Odds Ratio = 2.417).

4. Discussion

The findings of this study reveal that all factors have an impact on IPC practices. Interpersonal variables are the most important characteristics associated with IPC behaviors, with a p-value of 0.000 and an Odds Ratio of 2.417. Interpersonal aspects are vital in motivating people to perform their roles and functions in IPC practice, and they must be backed up with enough competence. The amount to which the hospital organization is able to encourage and assist nurses so that they are able to carry out intercollaboration well determines whether or not the organization is successful in attaining its goals. Interactional elements are the primary interpersonal relationships amongst IPC team members. Every member of the profession in IPC practice must be able to engage in interprofessional contacts since this interaction is critical to the formation of a collaborative team with the goal of assuring the quality of treatment while also contributing to seamless team cooperation [9]. Interpersonal variables have a significant impact on IPC implementation; interprofessional collaboration is twice as likely to be effective when compared to health professionals who get poor interpersonal support [10]. However, the results of this research show that IPC practices from interpersonal factors can also be influenced by other factors, such as the educational level of the respondents, most of whom were Diploma-III in Nursing (71.1%) and nurses' knowledge of IPC practices. It was still found that many nurses had not received IPC training (85, 6%).

The patient factor is the second factor associated with IPC practice (p-value = 0.001). Quality health services are defined as those that fulfill patient expectations, meet the amount of need, and adhere to health care standards while also enhancing worker performance [16]. Patient satisfaction is a metric that may be used to assess the performance of a health care program [17]. Patient satisfaction can signal a hospital's progress in enhancing service quality [18]. Patients are considered to be satisfied when their expectations are met by health treatments provided at the hospital [19]. Other research complements the findings of this study, which show that patient characteristics have a significant influence on the application of IPC procedures. To accomplish shared goals, effective IPC implementation requires the involvement of all stakeholders, including patients, informal nurses, and health professionals [5]. Other research has indicated that patients, families, clinicians and non-clinical personnel, and staff support for health services are all components of an effective interprofessional team [20]. Collaboration among health-care professionals is critical for achieving synergy and providing efficient, safe, and high-quality services to patients [21].

The third element is the organization, which is the third factor associated with IPC practice (p-value=0.002). Good organizational support can increase nurses' and doctors' job satisfaction, particularly in the practice of IPC [11, 9, 5]. Organizational support also has several benefits in terms of enhancing clinical results and patient satisfaction, as well as lowering institutional expenses, improving treatment quality, and increasing engagement among fellow professionals in health care [11, 9, 5]. Organizational support for strengthening IPC practices includes a supportive work environment, competitive compensation, long-term professional growth, and the presence of conflict resolution processes required to guarantee IPC practices function smoothly among health care workers [12]. According to other study, strengthening IPC practice among professional health care professionals needs ongoing organizational support in order to enhance health service quality. Ineffective teamwork has been shown to have a negative impact on patient and organizational results, as well as causing job stress for nurses [13].

Professional role elements are the fourth factor connected to IPC practice, with a p-value of 0.037. The majority of respondents in this research had a nursing diploma (71.1%), indicating that IPC practice was dominated by nurses with vocational education backgrounds who were members of the IPC team. Employee performance is positively correlated with amount of education and job experience, according to research [14]. Other studies suggest that nurses' competency, experience, and level of education provide a difficulty in the service system while working as part of a collaborative team. The inequality of the level of education and the low competence of nurses can cause nurses to be dissatisfied with work, fatigue and risk of experiencing turnover in work in health services [15]. Professional role factors in IPC practice will also run well if supported by effective, responsive and responsible way of communicating between professional health care giving [10].

5. Conclusions

The results of this study explained that interpersonal factors, patient factors, organizational factors and professional role factors related to IPC practice. Interpersonal factors are the most significant factors related to IPC practices. The results of this research indicated that these four factors are the main priorities that must be immediately improved by the hospital and require a joint commitment from professional care providers and managerial parties to achieve effective IPC practices.

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