



Interprofessional Collaboration in Patients Diabetes Mellitus: A Case Study

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ABSTRACT

Interprofessional collaboration (IPC) is cooperation between health professionals who work together to solve health problems, provide medical services, and achieve common goals. In the health sector, 70-80% of errors are due to poor communication and understanding within the team. In Indonesia, one result of the lack of coordination between medical personnel is the high error rate in prescribing drugs, which is up to 98.69%. Communication in the application of IPC is a very important factor that contributes to patient safety and the quality of health services so that it will form a good hospital image. Barriers to professional cooperation can be a major cause of medical errors, treatment errors, or other unforeseen events. The purpose of this study was to analyze interprofessional collaboration in the care of patients with Diabetes Mellitus. The results of the case study show that the role of the health team in collaboration in nursing care has been implemented but has not been optimal. The implementation of IPC has not been optimally implemented because there are several obstacles such as the lack of communication between professions, none of the team members have participated in the application of IPC in health services, and stereotypes from one profession to another. So it is necessary to increase teamwork between health professionals, so that collaboration can be established optimally

Keywords: diabetes mellitus, interprofessional collaboration, nursing care

I. BACKGROUND

Interprofessional collaboration (IPC) is a cooperative partnership between health professionals from various professional backgrounds who work together to solve health problems, provide

medical services and achieve common goals (Morgan et al, 2015). Professional collaboration occurs when various health professionals work together with families, patients, and communities to provide comprehensive, quality care. This

collaboration is used to achieve goals and provide mutual benefits for service users (Green & Johnson, 2015). Healthcare providers must adopt collaborative best practices and not provide medical services independently to improve patient safety in hospitals (Fatalina, 2015). Improving patient safety can keep health workers from making mistakes that cause ethical dilemmas (Khoiroh et al, 2020). This action will indirectly increase the knowledge and attitude of the health team toward rules that can result in ethical violations (Rifai et al, 2021).

In the health sector, 70-80% of errors are due to poor communication and understanding within the team. In Indonesia, one result of the lack of coordination between medical personnel is the high error rate in prescribing drugs, which is up to 98.69%, due to prescription errors by doctors and pharmacists who are wrong in dispensing and preparing drugs and providing incomplete information about drug consumption. . Communication is included in aspects of the non-physical work environment that can affect team performance (Afandi & Ardiana, 2021). In addition, according to the Australian National Prescription Service, 6% of hospital cases are the result of medication errors. This incident occurred because of a disagreement between the nursing staff.

According to data published by the World Health Organization (WHO), there are 421 million hospitalizations per year and ± 42.7 million medical treatment errors worldwide (Babaei et al, 2018). Nurses' knowledge that is not optimal can also affect decision-making (Putri et al, 2022).

The results of Fatalina's research (2015) show that interprofessional collaboration has not been established, meaning that in health services some still use the traditional collaboration model by making doctors leaders, while nurses, midwives, and pharmacists as practitioners. The obstacles that occur in coordinating or communicating with other professionals are the lack of communication that is applied between health service providers so that unwanted things occur, such as mistakes in dispensing and preparing medicines for patients. Setiadi (2017) also added to the results of his research that communication is an important thing that needs attention in implementing collaboration between health professionals. Not establishing good communication will have an impact on patient care which will get worse. Apart from that, it can also cause patient satisfaction in terms of service to also decrease (Putri et al, 2021). Communicating in the application of IPC is a very important factor that contributes to

patient safety and the quality of health services so that it will form a good image of the hospital.

Collaboration in the care of patients with diabetes mellitus is very important because diabetes is a disease that requires continuous therapy. Increasing the knowledge of diabetes mellitus patients can increase the success of therapy. The success of the therapy will have a positive impact on improving the quality of life of patients and can reduce the occurrence of complications in patients with diabetes mellitus. Management of diabetes mellitus requires the role of doctors, nurses, nutritionists, and pharmacists (Wijayatri et al, 2021). Collaboration in the treatment of patients with chronic disease diagnoses is very important to do so that it can improve the patient's quality of life indirectly (Afandi et al, 2021). Barriers to professional cooperation can be a major cause of medical errors, treatment errors, or other unforeseen events. Therefore, interprofessional doctor-nurse collaboration is very important and must be a priority for healthcare providers. Preliminary studies obtained from observations in the Hospital Treatment Room found that direct communication between health workers seemed ineffective, not all professions communicate directly with patients and

families and the food consumed by patients is equated between one patient and another. Therefore, the purpose of this study is to analyze interprofessional collaboration in the treatment of diabetes mellitus in the Hospital Treatment Room.

2. METHODS

The research method used is a case study with a descriptive observational approach with the aim of analyzing interprofessional collaboration in the care of patients with Diabetes Mellitus in Hospital Inpatient Rooms. The data collection technique was carried out by means of observation through a checklist sheet which was assessed at the time of treatment in managed patients. Observations were made while the patient was undergoing treatment in the inpatient room. Data analysis was carried out by presenting the facts and then comparing the facts with the theory which will then be outlined in the opinion/opinion discussion.

3. RESULTS & DISCUSSION

The Role of Each Health Worker

The results of observing the implementation of collaborative professional nursing care for diabetes mellitus patients in inpatient rooms at

hospitals in Jember, based on the checklist sheet, are as follows:

1) Nurse in charge of upbringing (PPJA)

One of the nursing interventions for patients is counseling and education. The provision of information by way of counseling can improve the obedient behavior of clients with Diabetes Mellitus. The education provided consists of an introduction to Diabetes Mellitus, risk factors, symptoms that appear in people with Diabetes Mellitus, complications, and management of Diabetes Mellitus. Then regarding counseling, namely regarding how to control blood sugar and how to administer insulin injections. Preparation for giving nursing actions is usually done during the pre-conference and evaluation is carried out during the post-conference (Alfid et al, 2023). In addition, patients after admission are immediately given education until discharge planning must also be informed (Pitaloka et al, 2022).

Providing education will be better if it is not only given orally but media can be added so that patients and their families can learn and know more deeply about the care of people with Diabetes Mellitus (Oktorina et al., 2019). The media in question can be in the form of leaflets, booklets, posters, or videos. Learning to use media can involve more human senses so

that recipients of information will be able to more easily understand information. The more the five senses are used, the more and clearer the knowledge obtained (Pranata et al, 2020). In the inpatient room of the Hospital, leaflets are available regarding several diseases that often arise, one of which is Diabetes Mellitus. According to Muchiri (2016), health education using leaflets has proven to have an effect on increasing respondents' knowledge using lectures and face-to-face methods (Afriyani, 2020).

In accordance with the theory of Lawrence Green (1980) in Adriyani (2020) which states that one of the things that can influence a person's behavior regarding health is determined knowledge. The more often a person gets an education, the better his behavior will be. So that it can increase the care of nurses in their service (Anisah et al, 2022). Health education for people with Diabetes Mellitus is an important component in self-management to obtain information related to Diabetes Mellitus. This also requires support from the health team and also through support from people around them (Afriyani, 2020).

2) Nutritionist

One way to lower blood sugar is to follow a diet. Implementing this intervention requires collaboration with a

nutritionist to enable the patient to adjust his or her dietary needs. The nutritionist at the Jember Inpatient Room calculates daily calorie needs, monitors nausea and vomiting after the patient arrives, and feeds the patient three times a day at 6 am, 12 am, and 5 pm.

The principle of the diabetic diet is more or less the same as that recommended for the general public, namely a balanced diet adapted to the calorie and nutritional needs of each person. Diabetic patients must prioritize regular nutrition in terms of time, type, and amount of food, including those taking hypoglycemic drugs or insulin. The recommended reference is food with a balanced composition between 60-70% carbohydrates, 20-25% fat, and 10-15% protein (Fatimah, 2018). Nutrition can be understood as a person's behavior to meet their nutritional needs, including beliefs, attitudes, and food choices (Bataha, 2017). Unhealthy eating habits are factors that can increase the incidence of diabetes. With a daily diet that fulfills the appeal of a balanced diet, one can maintain an ideal body weight and prevent various diseases, one of which is avoiding type 2 diabetes (Nuraini & Surpiatna, 2016). Eating small portions at certain times can help prevent blood sugar from rising, whereas eating large portions can cause glucose levels to increase dramatically. So if this happens

continuously for a long time, it can cause heart failure and diabetes mellitus. Therefore, sufferers must adjust their eating patterns by eating before they are hungry and eating on schedule, because eating when hungry causes overeating and unplanned eating (Nuraini and Surpiatna, 2016). Diabetics are advised to avoid or follow a diet with a high glycemic index and high-fat foods.

3) Doctor

Interventions performed by doctors in the Melati Room at Balung Jember Hospital include injections and fluid therapy. The pharmacological treatment consisted of 0.9% NaCl, 50 units of insulin in 50 PZ at 1.5 cc/hour, dexketoprofen, lansoprazole, ondansetron, probiotics, levofloxacin, hyoscine, sodium and zinc tablets. Doctors visit patients every day to monitor the progress of the patient's condition and decide whether to continue or change treatment, even if the patient has improved, part of the treatment is stopped.

The doctor visits the patient for about 3-5 minutes, asks about the last complaints, and performs a physical examination. The minimum time for patient visits resulted in less than optimal IPC performance, as evidenced by the absence of PCC. Martiningsih (2011) argues that doctors often have little time to

interact with patients for several reasons, for example. As a result, nurses also rarely provide recommendations and information about the development of DPJP patients (Martaningsih, 2011).

4) Pharmacist

The role of the pharmacist in the Melati ward is to provide services to patients, carry out scheduled pharmacological treatment of patients, calculate the doses of drugs prescribed by doctors, and check whether there are problems related to drugs or not. Pharmacists will frequently go to the nurse's office to record CPPT in patient records and care for patients during office hours and rarely visit patients. Pharmacists usually only ask the nurse about the patient's progress, the nurse reports any problems related to the patient's treatment, especially if the treatment has side effects as well as the medication prescribed by the doctor. Pharmacists do not make direct visits to clients due to a lack of staff and a heavy workload so IPC is not running optimally. Pharmacies participate in preparation, distribution, and patient education about substance abuse and problems. Pharmacists also play a role in educating patients about the importance of taking medication. Education is needed to increase

knowledge, which can affect patient motivation and treatment (Putera, 2015).

Analysis of the Application of IPC in Patients with Diabetes Mellitus

Patients with diabetes need collaborative care from various disciplines to improve their quality of life. However, the implementation is not optimal, as shown by the results of the IPC Application Checklist in the IPC application questionnaire for patients with diabetes in the inpatient ward of a hospital in Jember, which is still not optimal. These things are due to several factors, namely the lack of communication between professions involved in the IPC process, and the lack of medical staff who attend training related to IPC.

Nurses and doctors are considered important factors in the delivery of good quality nursing care. In this case, the inpatient nurse collaborates with various medical staff such as doctors, nutritionists, and even pharmacists to treat patients with a diagnosis of blood sugar instability, diarrhea, and acute pain. Ohman et al. (2017) found that implementing interprofessional collaboration (IPC) among hospital healthcare professionals could provide a more holistic approach to disease prevention and treatment. Collaborative interprofessional include

communication, cooperation, understanding of roles and responsibilities, as well as the ethical values of each profession (Utami et al, 2020). There are several characteristics of nurses that influence behavior toward cooperation, including age, education, functional position, and seniority. While doctors are age, education, and years of service. Many interventions have been developed to increase interprofessional collaboration in providing services to PCC patients, which have been shown to increase adherence, client outcomes, and individual or combined outcomes over the course of treatment (Marais et al., 2019). Diabetics require a number of approaches and actions to minimize the length of stay in the hospital. The implementation of PPJA together with other health workers in hospital inpatient rooms in Jember has not been fully implemented. This is due to several obstacles such as ineffective inter-professional communication, lack of interaction between professions and professions, misunderstandings about the authority and responsibilities of nurses, and feelings of inferiority between professions and professions. another profession.

Reeves (2017) argues that IPC implementation is also influenced by competency imbalances, limited

understanding of the roles and responsibilities of each profession, and conflicts between professions when providing patient care. Hardins et al. (2017) suggest that collaborative practice between nurses and doctors can run smoothly if the two disciplines support each other and respect each other's roles and responsibilities. A lack of understanding of the roles and responsibilities of doctors and nurses can affect the continuous provision of services to diabetes patients (Marais et al., 2019). There is also an opinion that the doctor is the leader, who at the same time decides all actions for the patient, while other medical personnel is only executors in carrying out the doctor's orders (Kusuma et al., 2021). Doctors doubt the authority of other medical staff to delegate care to patients (Nguyen, 2017). This opinion limits communication between professions and hinders the practice of implementing IPC in health services. So it is hoped that this can reduce the saturation of health workers and increase patient satisfaction (Purwandari et al, 2022).

Opportunities to increase the efficiency and effectiveness of services for diabetes patients can be maximized by optimizing the implementation of IPC in health services so that an increase in the quality of patient services can be achieved.

This can be done by changing the focus of the doctor-centered medical service model, to a patient-centered service. and families with an approach to planning, delivering, and evaluating health services based on partnerships and mutual benefits between service providers, including health workers, patients, and families. The essence of the health profession partnership is a sense of interdependence for cooperation and collaboration. Successful collaboration between nurses and other health workers can increase client compliance, reduce the length of stay in the hospital, and reduce medical costs (Moncatar et al., 2021).

4. CONCLUSION

Based on the results and related discussion of interprofessional collaboration in the care of clients with diabetes mellitus, it can be concluded that the application of collaboration to health workers in inpatient rooms at Hospitals in Jember has not optimally implemented IPC due to constraints such as lack of interprofessional communication and uneven application of IPC among health workers attending health training courses and the interprofessional paradigm.

Limitations or limitations in this study are found in the research method. Researchers realize that in a study of

course there are weaknesses. One of them from this research is located at the time of filling out the observation sheet. Filling in the observation sheet is taken from the point of view of a researcher who is practicing in a hospital inpatient room as an observer so that the data obtained may be less than optimal.

The results of this study can be used as an evaluation material and included in maintaining and improving more optimal nursing care services in accordance with existing standard procedures, it is hoped that this will create a level of satisfaction for service users and health workers.

AUTHOR CONTRIBUTIONS

Substantial contributions to conception, data collection, and analysis: Alfid Tri Afandi, Melis Candrayani, Anisah Ardiana, Cucik Fariasih. Writing: Melis Candrayani. Manuscript revisions: Alfid Tri Afandi and Melis Candrayani.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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