Nurse Experience in Making Inter-Island Referrals for Emergency Patients: A Phenomenological Study

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A B S T R A C T
Making referrals for emergency patients is an activity that a nurse must do in remote areas. Referrals with trips that must pass by land and sea that take a long time will definitely encounter many obstacles and hindrances. Unpredictable obstacles experienced by a nurse in making referrals include accidents, port closures, and tidal waves. This study aimed to explore the experiences of nurses in making inter-island emergency referrals. This study is an interpretive qualitative research of phenomenology. The sampling technique used purposive sampling with criteria for nurses who had made inter-island emergency referrals. The participants were 25 nurses, with saturated data on the 14th participant. The process of collecting data was in-depth interviews until no new or saturated answers were found. From the results of the study, there were 3 themes, namely nurses’ feelings (sad, happy, dejected, anxious, irritated, angry), obstacles (preparation, process, handover), and expectations (means, honorarium, energy, ease of transfer). Therefore, in the referral process, competent nurses, adequate facilities and infrastructure during trips, and the ability to communicate with various parties to ensure a smooth referral process must be prepared.

Kata kunci:
emergency patient
inter-island referral
nurse

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INTRODUCTION

Not all health services can be reached by the community, especially in remote areas. There are many obstacles, ranging from long-distance trips, weather that can change at any time, availability of facilities and infrastructure, limited nurses who can refer—both in terms of the number and ability, to difficult trips that must even cross rivers and seas to get adequate health services or further treatment for any case related to head injury (neurosurgery, SH, dialysis, and so on). One region in Indonesia which consists of several islands is West Nusa Tenggara (NTB) Province. NTB Province consists of 10 Municipalities/Regencies, 5 of which are on Lombok Island and 5 others are on Sumbawa Island. Mataram as the center of government is the center of community services such as for the economy and health as well as other public facilities. The health center is the main referral center in NTB Province, namely the Regional General Hospital of West Nusa Tenggara Province (RSUD of West Nusa Tenggara Province) (Mudayana & Juniarti, 2018).

Of all the hospitals and health centers in NTB Province, each has different or uneven facilities. This inequality of health services has made the Regional General Hospital of West Nusa Tenggara Province the only referral hospital in NTB, especially referrals from Lombok Island and Sumbawa Island hospitals. Based on data from the Medical Record Installation at the Regional General Hospital of West Nusa Tenggara Province, it was found that patient referrals during 2020 from Sumbawa Island were 271, while in 2021 there was a decrease in the number of referrals due to the Covid-19 pandemic, namely only 192 referrals. Even though the referral rate has decreased, the percentage of patients admitted to the Regional General Hospital of West Nusa Tenggara Province has increased.

According to several studies, it was found there were several obstacles in the referral process—including patient preparation, natural conditions, facilities and infrastructure, and the referring nurse conditions. The first obstacle that must be faced is patient preparation. This includes all matters related to the patient, starting from physical and supporting examination carried out up to the doctor’s decision to refer the patient (Ningsih et al., 2021). Then contacting the referral hospital as information that there will be a patient who will be referred to get the certainty of the expected services and space. In fact, this process takes a long time so sometimes while this process is taking place, the patient has already been dispatched from the referring hospital (Amalia et al., 2022). The second obstacle that cannot be predicted is the natural conditions that must be passed during the referral process. This condition is due to long-distance trips, between 6 to 12 hours of trips, whereas sea trips or crossings are very dependent on natural conditions such as tidal waves or conditions that are not suitable for shipping. If the weather conditions are unfriendly, it is very possible for floods and landslides to occur due to rains. Even road closure incidents can occur which will hamper the trip process. The third obstacle experienced during the referral process is the lack of facilities and infrastructure that have to be prepared including the ambulance and its equipment. The ambulance that is used to refer patients in an emergency condition is an ambulance that has medical equipment that meets the minimum standards of Basic Life Support (BLS) and even better if it meets the standards of Advanced Life Support (ALS). Needs during the trips are greatly influenced by the equipment in the ambulance so that if the patient needs assistance they can be given immediate assistance (Veldhuis et al., 2021; Pomalango, 2021). And the last obstacle is related to the readiness of the referring nurses. With the emergency patient conditions, long-distance trips, sea crossings, administrative preparations, and handover with the referral doctor will be very burdensome for the referring nurses. From the start, the appointment of a nurse who has to refer has become a burden for the nurse. A nurse must prepare herself to be separated from her family for at least 2 days. On the way, the nurse must always observe the patient’s condition starting by checking the monitor, carrying out suction, stabilizing the patient’s condition, administering medicine, and many other things to do, such as being in the emergency room for approximately 6 hours or more. Lack of ability to carry out emergency actions that are very likely to occur in the ambulance if the patient experiences a condition that requires basic emergency assistance is also an obstacle (Wallin et al., 2021; Basuni, 2014).

Various problems or gaps that occur between health services on Lombok Island and Sumbawa Island have begun to be considered by local governments, especially the Government of NTB Province. Several policies have been implemented to address these gaps, including the construction of a Provincial Hospital on Sumbawa Island in the hope of being able to accommodate patient referrals from Regional Hospitals on Sumbawa Island and the improvement of other facilities such as ambulances that have the standards of BLS and even ALS. Because this process requires quite a long time and also requires appropriate human resources, the lack and facilities and infrastructure that have existed have not all been met with the standards. The hope to be achieved is that this process will continue and be met to reduce the existing gaps.

Based on the results of interviews with nurses who make inter-island referrals, it was obtained several important points experienced by nurses during the referral process. First, there are nurses who stated that the limited resources in the ambulance make them feel uncomfortable making referrals, but they must continue to do so—so that patients can get more comprehensive services. Second, there are also nurses who stated that they did not get the latest updates on patient emergency management during the long referral process. Third, due to natural factors and the long referral process, there are nurses who complained about fatigue so they cannot be optimal in serving patients during the referral process.

From the description above, it can be seen that there are several conditions that greatly influence the referral process between Sumbawa Island and Lombok Island. For example, the long patient preparation can delay the emergency assistance needed by the patient which may result in fatal or even deadly conditions. Long-distance trips can also cause damage to facilities or infrastructure, for example, the ambulance and its equipment can be damaged caused of road conditions that may not be predicted. The factor of fatigue by the nurse and ambulance driver is very important to ensure the referral process runs smoothly. If the driver is drowsy, it is definitely very risky for an accident to occur. Meanwhile, fatigue experienced by the nurse can cause errors or omissions in providing therapy (treatment) to the patient on the way. In the handover process which is carried out when arriving at the destination, the nurse feels burdened. So, not all nurses want to make referrals, in the end, it is the same nurse who will still get the task of making referrals. This will cause the fatigue factor to increase. Natural factors are the most unpredictable factors because there are many possibilities for trips to be hampered due to...
problems related to natural or weather conditions such as heavy rains, floods, and tidal waves at sea, which will hinder the smooth referral process. This greatly influences the patient's needs on trips, which should have been sufficient but become reduced so that it will cause problems for the patient and can result in death. However, there has never been a study examining nurses' experiences in making inter-island emergency referrals. In addition, published research studies related to this matter are also very limited.

METHODS

Participant Characteristics and Research Design

This study is qualitative research using the interpretive phenomenology method. The choice of qualitative method was to explore and identify participants' subjective experiences. Through this study, researchers wanted to explore more deeply the nurses' experience in making referrals for emergency patients from Sumbawa Island to Lombok Island. The participants of this study were: 1). Emergency room nurses at the hospital on Sumbawa Island, 2). Nurses who had referred emergency patients to (Lombok Island, 3). Nurses with experience making referrals more than 10 times, 4). Nurses who are willing to be interviewed and recorded during the research process, and 5). Nurses who had more than 5 years of working period

Sampling Technique

Participants in the qualitative research were selected by purposive sampling technique. Selecting and determining the number of participants were carried out until the data collected experienced saturation or was considered saturated.

Number of Samples

The total sample used in this study was 25 participants consisting of 7 participants from Manambai Hospital, 10 from Sumbawa Hospital, and 8 from Asy Siyfa Hospital. The data collection process used in-depth interviews with each participant, resulting in 3 participants from Manambai Hospital, 4 from Sumbawa Hospital and 7 from Asy Siyfa Hospital. And obtained data that has been saturated.

Data collection

Data was collected by in-depth interviews with semi-structured question guides and field notes.

Data analysis

The data analysis process in qualitative research is carried out sequentially, continuously, and interactively until it is complete and reaches data saturation, meaning that no new answers or themes are found from new participants. This qualitative research used the data analysis that Smith, et al. have proposed, (2009) namely Interpretative Phenomenological Analysis (IPA) (Smith et al., 2009).

RESULTS AND DISCUSSION

From the results of this study, demographic data were obtained as follows:

Table 1
Demographic data

<table>
<thead>
<tr>
<th>No</th>
<th>Gender</th>
<th>Age</th>
<th>Ethnic group</th>
<th>Marital status</th>
<th>Education</th>
<th>Religion</th>
<th>Referring Frequency (x)</th>
<th>Working period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>31</td>
<td>Samawa</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>6 years</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>31</td>
<td>Bugis</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>6 years</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>31</td>
<td>Samawa</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>8 years</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>33</td>
<td>Samawa</td>
<td>Married</td>
<td>D3</td>
<td>Islam</td>
<td>More 10</td>
<td>9 years</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>33</td>
<td>Samawa</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>9 years</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>27</td>
<td>Samawa</td>
<td>Single</td>
<td>D3</td>
<td>Islam</td>
<td>More 10</td>
<td>5 years</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>36</td>
<td>Samawa</td>
<td>Married</td>
<td>D3</td>
<td>Islam</td>
<td>More 10</td>
<td>11 years old</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>31</td>
<td>Samawa</td>
<td>Married</td>
<td>D3</td>
<td>Islam</td>
<td>More 10</td>
<td>7 years</td>
</tr>
<tr>
<td>9</td>
<td>Male</td>
<td>30</td>
<td>Samawa</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>6 years</td>
</tr>
<tr>
<td>10</td>
<td>Female</td>
<td>30</td>
<td>Samawa</td>
<td>Single</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>5 years</td>
</tr>
<tr>
<td>11</td>
<td>Female</td>
<td>30</td>
<td>Samawa</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>5 years</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>38</td>
<td>Samawa</td>
<td>Single</td>
<td>D3</td>
<td>Islam</td>
<td>More 10</td>
<td>10 years</td>
</tr>
<tr>
<td>13</td>
<td>Male</td>
<td>35</td>
<td>Samawa</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>6 years</td>
</tr>
<tr>
<td>14</td>
<td>Male</td>
<td>30</td>
<td>Java</td>
<td>Married</td>
<td>S1</td>
<td>Islam</td>
<td>More 10</td>
<td>6 years</td>
</tr>
</tbody>
</table>

The results of this qualitative study obtained 3 themes, namely nurses' feelings, obstacles in the referral process, and expectations in making referrals.

The first theme is how the nurse feels in the referral process, which includes joy, sadness, anxiety, worry, fear, nervousness, difficulty, dejection, irritation, happiness, anger, relief, and solace.

... transferred to the referral team, I was also nervous because I am usually not that good with car trips and tend to experience car sickness, but after that, I drink ... what is that? Also on that trip, the tidal waves were rough and the trips were long so I became anxious too... shocked, and scared. I examined myself and then I examined the patient ... (P1)

... We feel sorry to the referral team there... We promised that the trips would take, mm ... 6 hours. But then we told them that there were obstacles on the way and the patient couldn't arrive on time ... (P2)
... at first it was a bit confusing because first—it was our first experience, we didn't know what we were doing but we dared ourselves to do it like normal treatment with just a different place, the facilities there were a bit lacking...

... When it comes to dispatching a patient, it's different, it's a mixed feeling—for example, if the patient is in critical condition we should in a stand by position in the ambulance...

... Yes, I have also felt irritated, anxious, scared of what the patient might experience during the trips... (P9)

The second theme related to obstacles in the referral process which include patient preparation, namely patient files, family decisions, police reports in case of traffic accidents, and delays in responses from the referral hospital. In the referral process, there are traffic jams, queues to be on the ship, uneven roads, uncertain weather, worsening patient conditions, and incomplete ambulance facilities. Then obstacles at the destination, namely the handover process that take a long time, being asked many questions, being asked to explain the patient's chronology, and files that were left behind.

... once I had a pile-up cases of traffic accidents, I dispatched 4 patients...

... once I had also had to queue to enter the ship because the tidal waves were rough. I leaned to the wall to queue then went to the deck to report to the Captain. The weather makes the trips become long, in the afternoon the traffic is bad. (P1)

... the elders are discussing to make a decision—even if 3 people agree but if the eldest sibling doesn't agree, the patient will not be dispatched (referred), sir. It is usually like that...(P3)

... the problem is usually the documents requested by the police. (P5)

...Suddenly the patient cannot stand (to pee/ poop) but the patient is male and still single, the patient refused to being attached (with tool) on the street, then I said to the ambulance driver to stop by the nearest health center to find a male nurse... (P6)

... What takes a long time is going from Kayangan to Mataram, especially on Sundays. I got stuck in a traffic jam...(P12)

The third theme is the expectations that nurses want during the referral process which include main road repairs, the equipment of ambulances that must be improved, the process of reporting to the referral hospital that is immediately responded to, ambulances that are always prioritized when carrying emergency patients, increasing the number and competence of nurses, and rewards according to referring nurse risks.

... the ambulance should have an inverter so it's complete, it doesn't use a manual system. Until now it's still manual— but when compared to the past, it is better now...(P1)

... ideally, it should not just the nurse who carry out the referral process, if possible, the should also accompany the nurse to carry out the referral process because the doctor will also assess the patient's clinical condition during the trips... (P2)

... the hope is that the number of nurses will be increased because there are many nurses who are already old, so their energy is not as strong...(P5)

... those who had night shift had a day off, so those who had two days off were subject to the schedule for that day, which is making referrals...(P9)

... (my) only wish is that the pay, I think it's okay to add a little more pay...(P12)

Based on the data obtained in theme 1, the feelings experienced by nurses when making referrals vary widely according to the patient’s condition, length of trip time, and the preparation of the nurse. Feelings of joy, sadness, anxiousness, worry, fear, nervousness, difficulty, dejection, irritation, happiness, anger, relief, and solace can appear in different conditions. Moreover when they have to do everything themselves in observing critical patients. In a cramped ambulance, nurses have to provide actions such as checking the airway, breathing, circulation, and even the movement of the patient, so that the patient does not experience unwanted things. Based on a study conducted by Basuni (2014) on the experience of emergency room nurses at the Kotaraja Health Center in East Lombok Regency in making referrals for patients with emergency cases to the hospital, it was found that nurses felt less confident in determining the emergency status of the patient, felt confused in sorting critical patients, did not understand the clinical condition of the patient, and feared of being wrong in providing assistance which showed their lack of confidence. The feeling of anxiety experienced by ambulance nurses is an individual response due to the lack of facilities in the ambulance which makes them unable to take emergency actions while on the trips which can end in the patient's death. The condition of the referred patient also contributes to the anxiety experienced by nurses while making referrals for the patient in the ambulance. At the time of the handover of the patient at the referral hospital, they could not answer the officer’s questions so a feeling of embarrassment arose regarding the ability of the referring nurses. So that if there is a plan to make referrals again, the feeling of going to carry out the referral process will become increasingly difficult (Basuni, 2014).

The second theme that shows obstacles during the referral process is strongly influenced by many obstacles in the referral process including patient preparation, namely patient files, family decisions, police reports in case of traffic accidents, and delays in responses from the referral hospital. In the referral process, there are traffic jams, queues to be on the ship, uneven roads, uncertain weather, worsening patient conditions, and incomplete ambulance facilities. Then obstacles at the destination, namely the handover process that take a long time, being asked many questions, being asked to explain the patient’s chronology, and files that were left behind. According to Basuni 2014 and Pomalango, 2021, there are obstacles for nurses in making referral decisions due to limited authority in making decisions independently even though nurses are very concerned about patients who need assistance (treatment). However, due to limited facilities and infrastructure, nurses are powerless in providing first aid in emergency cases (Basuni, 2014; Pomalango, 2021).

The third theme is the expectations that nurses want during the referral process which include main road repairs, the equipment of ambulances that must be improved, the process of reporting to the referral hospital that is
immediately responded to, ambulances that are always prioritized when carrying emergency patients, increasing the number and competence of nurses, and rewards according to referring nurse risks. As stated by Pomalongo 2021, it is important to develop the quality of human resources and service facilities at health centers. The bottom line is that emergency referral services in the Ponelo Islands region are not optimal due to limited nursing staff, lack of development through training in emergency services, and inadequate health center service facilities (Pomalongo, 2021).

Based on the experience of researchers there are many obstacles in making referrals from Sumbawa Island to Mataran. Obstacles faced by referring nurses include the preparation phase (i.e. preparation of referral administration, phone calls or patient reports before being referred, and preparation of accompanying families who will participate in the referral process). The second phase is the trips when making referrals (i.e. bad weather, problems with facilities and infrastructure in ambulances, long-distance trips, fatigue, and also the risk of accidents). The third phase is the handover carried out at the referral hospital (i.e. communication problems). In addition to the above obstacles, other obstacles that are no less important are the condition and readiness of the referring nurses who must be physically and mentally prepared.

LIMITATIONS

This study was conducted on Sumbawa Island, which is approximately 200 kilometers away and 2 hour crossings. So it took more time and costs. Due to the limitations of researchers, this study was only conducted in the Regencies of Sumbawa Besar and Sumbawa Barat.

CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this study is that there are several themes, namely nurses’ feelings and the actions taken during the trips in the ambulance, obstacles experienced during the trips of making referrals for emergency patients, and expectations of nurses who make referrals for patients. It suggested for researchers examine the experiences of nurses in the Municipality/Regency of Bima as well as the Regency of Dompu which are farther away than the Regencies of Sumbawa Besar and Sumbawa Barat.

RESEARCH ETHICS

This study has received ethical permission issued by the ethics committee of the Regional General Hospital of West Nusa Tenggara Province with number 070.1/55/KEP/2022 on September 21, 2022.

REFERENCES


