Motivation and Nurses' Fulfillment of Critical Patients' Family Needs in the Intensive Care Unit

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ABSTRACT

Background: Family members may experience physical and psychological side effects, such as poor hygiene, sleep disturbances, appetite loss, anxiety, sadness, and post-traumatic stress disorder (PTSD), if they are around critically ill patients who were treated in intensive care units. Ensuring family needs are met during patients' stays in the intensive care unit can help to lessen the negative impacts.

Objective: The aim of this study is to determine whether nurse motivation and meeting the needs of their critically sick patients' families are related.

Methods: The type of research is quantitative, descriptive correlational to determine the relationship between nurse motivation and meeting the needs of families of critical patients. The population in this study were all ICU nurses at One of Public Hospital in Salatiga, totaling 32 people using total sampling technique.

Results: The results of this study indicate that the intensive care nurses in the ICU is in the good category in nurse motivation (53.3%), also family needs fulfillment in good category (50%). Meeting the needs of the families of critically ill patients in the intensive care unit is correlated with nurse motivation (p value < 0.000).

Conclusion: As a support system for the patient's recovery and to mitigate any negative effects on the family, nurses must attend to the needs of the critical patient's family.

INTRODUCTION

The presence of critical patients being treated in intensive care can cause physical and psychological problems for families. Physical problems include lack of attention to personal hygiene, difficulty sleeping and decreased appetite (Wong et al., 2020; Chivukula, 2022). Previous studies have reported a high prevalence of psychological problems, include anxiety (70%-80%), depression (35%-70%) and post-traumatic syndrome disorder (PTSD) (54%), that correlated with the duration of a patient being in the ICU (Saeid et al., 2020; Halain et al., 2022). In addition, higher PTSD symptoms scores were significantly associated with COVID-19 in the ICU, because many family members are unable to visit their loved ones during
an ICU stay because of other common barriers (Amass et al., 2022).

Up to 43.8% of family of critically ill patients in the intensive care unit (ICU) at Izza Cikampek Hospital, West Java, Indonesia reporting mild anxiety (Prima et al., 2022). Patients’ unstable condition involved more family attention, so they spent more time in the hospital in the ICU of the Dr. Hasan Sadikin Central General Hospital, Indonesia. This anxiety because of being wary of patient death threats, caused them to feel physically drained (Safitri, Kurnia and Jihad, 2021).

Untreated anxiety in the family can influence decision making to determine the medical action to be taken on the patient. Improper family decision making can hinder the medical action that will be carried out, so this can affect the patient's health recovery process (Ludmir and Netzer, 2019). In addition, stress on the patient's family members can disrupt the harmony of family members and can ultimately cause disruption in supporting the patient's recovery in the intensive care room (Sole, Klein and Moseley, 2020)

The negative impact experienced by the families of critical patients can be minimized by meeting the family's needs while their family members are being treated in the intensive care room (Scott, Thomson and Shepherd, 2019; Fernandez-Martinez et al., 2022). PTSD symptoms, anxiety, and sadness in family ICU members be decreased by employing proactive communication tactics, using pamphlets to satisfy information demands, and spending more time talking with the family of critically ill patients (mental support needs) (Zante, Camenisch and Schefold, 2020; Rhoads et al., 2022; Reifarth, Garcia Borrega and Kochanek, 2023). Based on the Critical Care Family Needs Inventory (CCFNI) developed by Molter and Leske in 1991, families of critical patients have 5 needs, including the need for comfort, service guarantees, information, closeness to the patient and mental support (Wantiyah et al., 2018).

The needs of families of patients treated in intensive care have been studied in Indonesia (Lukmanulhakim and Winda, 2018; Oktari, Deli and Lita, 2021). The research results showed that 45% of the needs of patient families in the ICU at RSUD dr. Dradjat Prawiranegara Serang has not been fulfilled. Information needs are the most frequently met family needs (65.0%), while mental support needs are the least met family needs (57.5%) (Lukmanulhakim and Winda, 2018). Other research results in RSUD Arifin Achmad Provinsi Riau showed that regarding the need for guaranteed services, 85.7% of respondents stated that it was very important to know the purpose of treatment and the treatment measures provided, for information needs, 66.7% of respondents stated that it was very important to know
the patient's actual condition, and for the need for family mental support, it was 71.4% (Oktari, Deli and Lita, 2021). Research was not only carried out on patient families, Anggelina in 2014 also conducted research on nurses' perceptions of the needs of families of critical patients. The majority of nurses in the ICU and ICVCU at Dr. Moewardi perceives that the five needs of critical patient families based on the CCFNI are important and very important, with the need for service guarantees being the priority (Anggelina and Utami, 2014) Nurses' perceptions regarding the importance of the needs of families of critical patients need to be supported by nurses' actions as a form of implementation in meeting the needs of families of critical patients. One way to find out the extent to which actions have been taken is by recalling the actions that have been carried out by the nurse (Notoatmodjo, 2016).

The primary duty of the critical care nurse is to recognize, address, and oversee clinical issues in order to enhance patient and family care. In addition to analyzing, diagnosing, planning, and prescribing medication and nonpharmacological treatments for health issues, they also offer direct patient care (Vance et al., 2010). Nurses as health workers must have a primary role in meeting the needs of critical patients and their families. The needs of families of critical patients as part of overall human needs can only be met if nurses are equipped with good skills and knowledge which will help improve their performance (Notoatmodjo, 2016; Zuliani et al., 2023).

The research results show that there are several factors that influence the performance of nurses in implementing nursing care standards, namely motivation, incentives/salaries, and work facilities (Layli, Suryawati and Kusumastuti, 2023). It has been discovered by additional research that nurses' job motivation has a good and considerable impact on their performance in hospitals (Karmadi, 2019). The essential impulse that propels someone to action is known as motivation. An individual who is moved to act on this inner impulse is possessed by this impulse (Uno, 2023). According to the results of the studies, a number of organizational and personal factors influence how motivated nurses are at work. Personal factors of nurses, such as age, years of experience, autonomy, educational attainment, and administrative roles, have been proven to impact their degree of work motivation (Baljoon, Banjar and Banakhar, 2018).

The results of a preliminary study conducted at One of Public Hospital in Salatiga in February 2023, based on the results of researchers' interviews with 6 nurses consisting of the Head of the ICU, and nurse representatives, the results showed that the motivation of nurses is not...
yet known for certain because there has never been research on nurses' work motivation in providing nursing care, especially regarding meeting the needs of families of critical patients.

The nurse also explained that generally meeting client needs is carried out in the ICU focusing on the patient. The nurse said that there were several facilities provided to meet the family's needs, including a waiting room and toilet. The nurse also revealed that meeting the needs of the patient's family was critical through providing information to the family regarding the patient's condition, and involving the family in patient care. There has been no special intervention provided to meet the needs of families of critical patients. The obstacle in serving the comfort needs of families of critical patients is the waiting room, it is difficult to limit the number of families waiting for patients so that the waiting room feels full. Based on existing phenomena, researchers are interested in conducting research on the relationship between nurse motivation and meeting the needs of families of critical patients treated in the intensive care ward.

METHODS AND MATERIALS

This study used a cross-sectional methodology to conduct a correlative descriptive investigation, to determine the relationship between nurse motivation and meeting the needs of families of critical patients. The independent variable studied is Nurse Motivation, and the dependent variable is the fulfillment of the needs of families of critical patients by nurses. The population in this study were all ICU nurses at One of Public Hospital in Salatiga, Central Java, Indonesia with totaling 32 people using total sampling technique. Data collection in this research was carried out in April-May 2023.

The inclusion criteria in this study were nurses in the ICU with work experience of > 6 months. The exclusion criteria for this study were the head of the room, ICU nurses who were on leave, training and study assignments during the time of the research.

The first questionnaire used nurse motivation, which was adapted from the Two Factor Theory by Herzberg (Rosa, 2017). The second questionnaire used the Modified Critical Care Family Need Inventory (CCFNI), developed by Molter and Leske in 1991 (Husain and Setyawan, 2015, 2020; Wantiyah et al., 2018). The nurse work motivation questionnaire consists of 17 questions divided into 5 domains, including Responsibility, Achievement, Recognition, Salary and Work Culture. Meanwhile, the questionnaire to fulfill the needs of families of critical patients consists of 38 questions divided into 5 domains, including Comfort Needs, Service Guarantee Needs, Information Needs, Closeness to Patients Needs, and Mental
Support Needs. The validity test results for each item have a value between 0.438-0.755 and a reliability value of 0.938.

Nurse motivation was categorized into good (more than equal to 57.67) and not good (less than 57.67) based on the mean value. Meanwhile, the fulfillment of family needs by nurses was categorized into good (more than equal to 124.2) and not good (less than 124.2) based on the mean. To analyze the data, the chi-square test was used. The research that has been conducted takes into consideration research ethics, the principles of justice, confidentiality, and anonymity.

RESULTS AND DISCUSSION

Treatment in the intensive care room does not only focus on the patient, but also needs to pay attention to the condition of the family waiting for the patient. The results of this study indicate that the intensive care nurses in the ICU at One of Public Hospital in Salatiga is in the good category with 50%. Frequency distribution results based on the characteristics of intensive care nurses at One of Public Hospital in Salatiga is shown in table 1.

### Table 1. Frequency Distribution of Respondents Based on Intensive Care Nurse Characteristics at One of Public Hospital in Salatiga May 2023 (n= 30)

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristics</th>
<th>f</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Man</td>
<td>14</td>
<td>46.7%</td>
</tr>
<tr>
<td></td>
<td>b. Woman</td>
<td>16</td>
<td>53.3%</td>
</tr>
<tr>
<td>2.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. 18-40 years old (early adulthood)</td>
<td>17</td>
<td>56.7%</td>
</tr>
<tr>
<td></td>
<td>b. 41-60 years old (middle adulthood)</td>
<td>13</td>
<td>43.3%</td>
</tr>
<tr>
<td>3.</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Diploma 3 in Nursing</td>
<td>22</td>
<td>73.3%</td>
</tr>
<tr>
<td></td>
<td>b. Bachelor of Nursing - Profesional Nursing</td>
<td>7</td>
<td>23.3%</td>
</tr>
<tr>
<td></td>
<td>c. Master of Nursing</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td>4.</td>
<td>Duration of employment as a nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. ≤ 5 years</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td></td>
<td>b. 6-10 years</td>
<td>5</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>c. &gt; 10 years</td>
<td>24</td>
<td>80%</td>
</tr>
<tr>
<td>5.</td>
<td>Duration of Intensive Care Nurse Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. ≤ 5 years</td>
<td>14</td>
<td>46.7%</td>
</tr>
<tr>
<td></td>
<td>b. 6-10 years</td>
<td>13</td>
<td>43.3%</td>
</tr>
<tr>
<td></td>
<td>c. &gt; 10 years</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>6.</td>
<td>Nurse Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Not good</td>
<td>14</td>
<td>46.7%</td>
</tr>
<tr>
<td></td>
<td>b. Good</td>
<td>16</td>
<td>53.3%</td>
</tr>
<tr>
<td>7.</td>
<td>Family Needs Fulfillment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Not good</td>
<td>15</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>b. Good</td>
<td>15</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on table 1, it is found that the gender of intensive care nurses is dominated by women (53.3%), aged 18-40 years (56.7%), with the latest education
being D3 Nursing (73.3%), having worked as a nurse for > 10 years (80 %), has worked as an intensive care nurse for ≤ 5 years (46.7%), has good motivation (53.3%), and half of the family needs are in the good category (50%).

Actions to fulfill the needs of families of critical patients by nurses can be influenced by several things, including gender, age, level of education and experience (Notoatmodjo, 2016; Bakar and Qomariah, 2023). According to studies, there are commonalities between men and women when it comes to intelligence, creativity, memory, learning, and reasoning skills. Either men or women make good workers, according to the evidence (Gunawan, Hariyati and Gayatri, 2019). The results highlighted that there were unclear associations between nurses’ gender and motivation as usually the group of male respondents being too small comparing with the group of female respondents in nursing studies (Baljoon, Banjar and Banakhar, 2018).

Based on the age distribution of the respondents, there is nearly no variation in the early adulthood age group. Age and maturity are closely correlated; the older a person is, the more technically and psychologically mature they are, and the more capable they are of performing their duties—in this case, those of an intensive nurse, which involve giving nursing care to critically ill patients—competently. In addition to his family (Wieck, Kunzmann and Scheibe, 2021).

Based on the educational background, D3 Nursing is more likely to fall into the poor group when it comes to attending to the requirements of relatives of critically ill patients. The quality of an individual's behaviors can be influenced by his educational background. While people from lower educational backgrounds typically stick to traditions, those with higher education levels will want to better themselves in order to do better (Notoatmodjo, 2016).

Experience is an event that a person has experienced when interacting with their environment. The experience that has been gained can expand knowledge and serve as a basis for someone to take action (Notoatmodjo, 2016). Based on the length of time working as an intensive care nurse, work experience ≤ 5 years is the most common. Number of years in the current profession was associated with motivation. Nurses’ work motivation sharply increased with high years of experience or self-rated expertise. Similarly, nurses with longer duration of service, better experience, and knowledge about their work increased their work motivation level (Baljoon, Banjar and Banakhar, 2018).

<table>
<thead>
<tr>
<th>Nurse Motivation</th>
<th>Family Needs Fulfillment</th>
<th>p value</th>
</tr>
</thead>
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</table>

Table 2. Relationship between nurse motivation and meeting the needs of families of critical patients

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Based on table 2, it is found that the p value is 0.000, so there is a relationship between nurse motivation and meeting the needs of families of critical patients in the ICU.

The results of this research show that in the implementation of meeting the needs of families of critical patients, there are still 50% of nurses' actions in the poor category. This can be influenced by resources which include facilities, time and energy. Facilities are part of a person's enabling factors in carrying out actions (Notoatmodjo, 2016). Based on the results of interviews with the head of the ICU, he said that meeting the needs of families of critical patients based on the CCFNI was important. However, not all nurses understand how to implement it, because there is no training/seminar or written guide regarding the implementation of meeting the needs of families of critical patients based on the CCFNI. Apart from that, the number of intensive care nurses is also limited to be able to meet all the needs of the families of critical patients in the intensive care room.

Based on the research results, it shows that 53.3% of intensive care nurses have good motivation and 46.7% have poor motivation. Motivation is the fundamental urge that spurs someone to action. This inner impulse possesses the person who is moved to act upon it (Uno, 2023). This is in line with Septiani's research that more than half of the nurses at RSUD dr. La Palalo Maros has high work motivation (50.8%). There is an influence of work motivation on the performance of nurses at RSUD dr. La Palalo Maros (p>0.05) (Septiani, Ahri and Surahman Batara, 2023). Studies show a good and significant relationship between nurses’ job performance and intrinsic motivation. The discovery has forced hospital administration to use intrinsic rather than extrinsic incentives to inspire their staff of nurses (Hee, Kamaludin and Ping, 2016).

The results of interviews with the head of the ICU stated that meeting the needs of families of critical patients based on the CCFNI is important. However, not all nurses understand how to implement it, because there is no training/seminar or written guide regarding the implementation of meeting the needs of families of critical patients based on the CCFNI. Apart from that, the number of intensive care nurses is also limited to be able to meet all the needs of the families of critical patients in the intensive care room.

Fulfillment of family needs carried out by nurses from the most frequent to the rarest includes the need for comfort, guaranteed service, information, closeness to the patient and mental support. The need for comfort is related to the comfort of families of critical patients when they are around the ICU. The need for service

<table>
<thead>
<tr>
<th></th>
<th>Not good</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not good</td>
<td>7 (23.3%)</td>
<td>7 (23.3%)</td>
</tr>
<tr>
<td>Good</td>
<td>8 (26.7%)</td>
<td>8 (26.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (50%)</td>
<td>15 (50%)</td>
</tr>
</tbody>
</table>

*Chi-square
guarantees is that the family feels confident that the patient gets the best service. The need for information is that the family gets clear information about the critical patient's condition. The need to be close to patients, namely families who want to be close to family members who are sick. The need for mental support means that the family feels they can express their feelings and receive attention from health workers in the intensive care room (Husain and Setyawan, 2015, 2020; Wantiyah et al., 2018).

Limitations to our study include our use a total sampling of ICU nurses from the One of Public Hospital in Salatiga was small relative to size. Also, our study sample lacked racial, ethnic, and gender diversity.

CONCLUSIONS AND SUGGESTIONS
Fulfilling the needs of families of critical patients by intensive care nurses in the ICU at One of Public Hospital in Salatiga is in the good category with 50%. There is a relationship between nurse motivation and meeting the needs of families of critical patients in the ICU. Nurses need to pay more attention to meeting the needs of families of critical patients. It is hoped that meeting the needs of the families of critical patients can provide support and increase the role of the family as a supporting system for the patient's recovery.

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REFERENCES


Septiani, R., Ahri, R. A. and Surahman

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Batara, A. (2023) “Pengaruh Beban Kerja dan Motivasi Terhadap Kinerja Perawat UGD dan ICU RSUD dr. La Palalo Maros,” *Journal of Muslim Community Health (JMCH)* 2023, 4(4), pp. 44–50. Available at: https://doi.org/10.52103/jmch.v4i4.1


