

## Review Article

# The Needs of Patient's Families in Intensive care Units: A Literature Review

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### Abstract

The treatment of patients in the Intensive Care Unit (ICU) has an impact on the patients and their family both physically and psychologically. The psychological impact will be even higher if the family needs are not fulfilled. The objective of study was to determine the needs of patient's families in ICU and identify factors which associated the family needs of the ICU patient. This study was conducted with a literature review. Eleven literatures were identified from four data bases, specifically: Google Scholar, Proquest, Science Direct, and Portal Garuda in the period of 2015-2020. The research design of the article was a cross-sectional and descriptive study with a population of  $\geq 18$  years old of patient's families. All articles were analyzed using the JBI Critical Appraisal Tools-Checklist for Analytical Cross Sectional Studies and the JBI Critical Appraisal Tools-Checklist for Prevalence Studies and fulfill the criteria. Eleven articles fulfilled the inclusion criteria and to know the factors related to priority family needs are sociocultural and sociodemographic factors. There are five domains of family needs members of ICU patients, including: need for assurance, proximality, information, comfort, and support. The priority needs of ICU patients' family members are assurance. Meanwhile, two needs that are considered less important by family members are support and amenities. Factors related to priority family needs are sociocultural and sociodemographic factors including gender, age, level of education, relationship with patient, patient's length of stay, and patient's condition. It is important for nurses in ICU to know sociocultural and sociodemographic aspects to help fulfilling the priority needs of the patient's family in the ICU.

**Keywords:** family needs, ICU, Intensive Care Unit

### Introduction

The Intensive Care Unit (ICU) is a special room in a hospital operating in an integrated manner with other departments. The ICU is prepared to treat critically ill patients with potentially life-threatening diseases such as organ failure and vital functions that require adequate diagnostic testing and treatment or surgery to improve outcomes (Rehatta et al., 2022). The world mortality rate in critical care units (including ICU) is around 17% of the total deaths where the lowest rate is 9% in Australia and New Zealand and the highest 20% is in Saudi Arabia (Adamski et al.,

2015). When a patient is admitted to the ICU with a life-threatening illness, it is a crisis not only for the patient but also for his or her family members (Ozbayir et al., 2014). Intensive care can have a physical impact on the patient's family including sleep disturbances, fatigue, and health problems. Not only physical impacts, psychological impacts will appear such as anxiety, depression, and Post Traumatic Stress Disorder (PTSD) (Curtis, 2008). Family members of patients in the ICU often experience stress, helplessness, and confusion, mainly because most of them

cannot communicate their own needs (Al Barraji et al., 2018).

Families of patients in the ICU have special needs but their needs are not met, especially in the field of communication and emotional support. Family needs are not met due to a lack of compatibility between what is considered important by health workers and what is considered important by the family (Myhren et al., 2011). The unfulfilled needs of the families of the ICU patients will further increase the family's psychological problems (Hickman Jr & Douglas, 2010). Some of the results of previous studies, it is known that the family needs to be included in the discussion to understand the patient's condition. However, the family is not given the opportunity and information by the health team in the ICU (Lind, 2019). The results of another study, families explained that they needed information about the patient's prognosis (Gutierrez, 2012). Based on research conducted by Salameh, *et al* in 2020 it is known that the domain of assurance is the most important need for families of ICU patients, which is 64.10% (Salameh et al., 2020). This agrees with the research conducted by Liew SL, *et al* in 2018 that guarantee is the most important need (Liew et al., 2018). This is also supported by the results of research by Zahra Khoshnodi *et al* in 2017 where it is said that insurance is the most important and main domain for families of ICU patients. Higher education levels have a significant relationship with higher levels of security needs ( $p=0.001$ ) (Khoshnodi et al., 2017). In addition, the condition of the patient's awareness also affects the needs of the family, where the family with the patient is not aware / decreased consciousness sets the level of need for information higher (Alsharari, 2019a).

This is different from the results of research conducted by Fateme Hasandoost, *et al* conducted in 2018 where the highest need for families of ICU patients is support, and insurance is actually fourth. Family needs decrease as the patient stays in the ICU increases (Hasandoost et al., 2018). According to Turkan Ozbayir, *et al* In 2014, the most important need for family members of ICU patients is to be convinced that the best care is provided to patients and if ranked on

the average CCFNI subscale the highest is support (Ozbayir et al., 2014). Based on the phenomenon of the problem above, therefore researchers are interested in conducting a *literature review* on the family needs of ICU patients because it has seen from several previous research results there are differences related to priority needs for ICU patient families so that there is a need for a literature review to conclude related to the needs of the patient's family in the ICU room. .

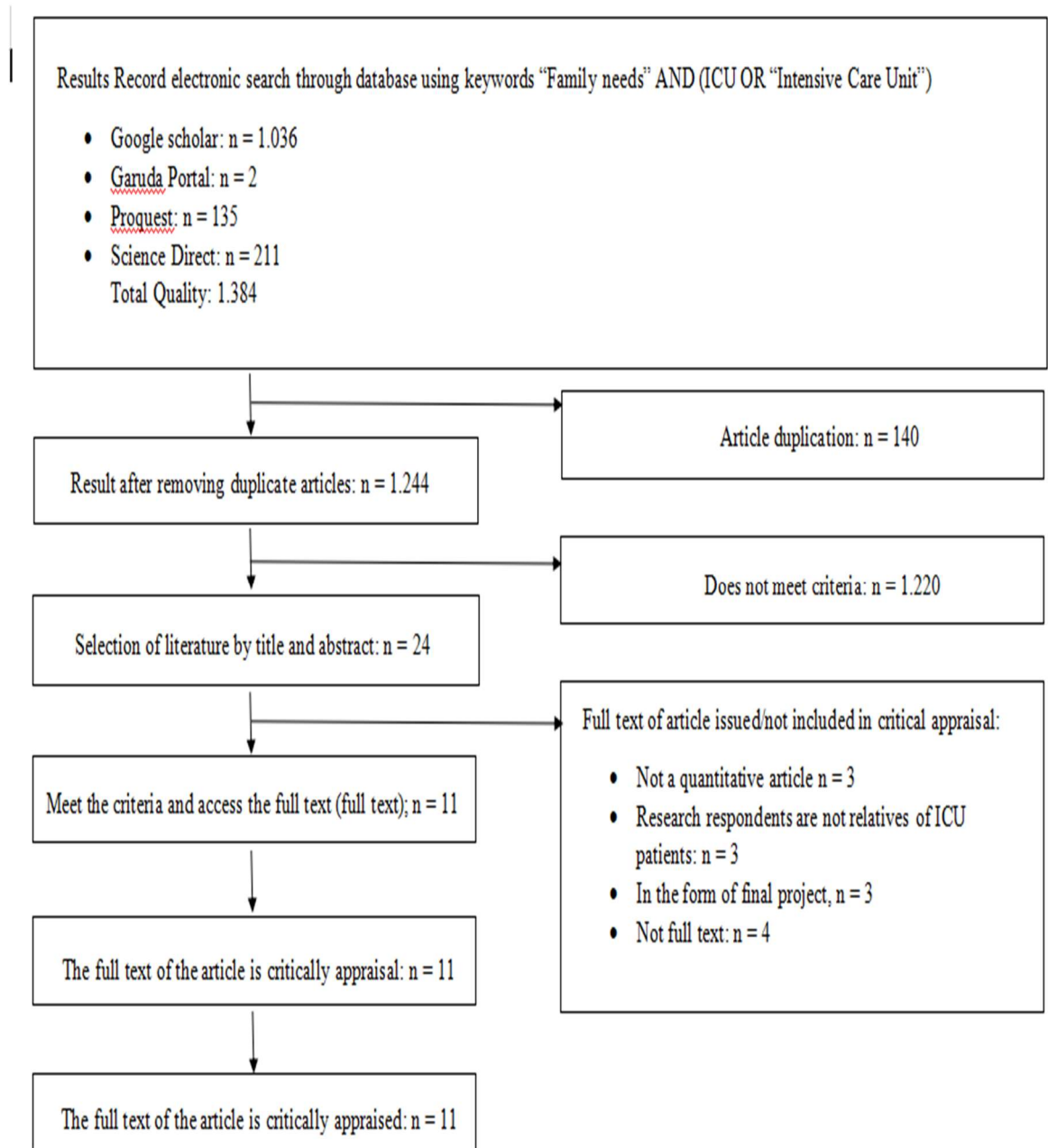
**Methods:** A literature review research with quantitative research is designed using a cross sectional and descriptive approach. The data used in the form of secondary data, namely the results of research journals that have been published in both national and international journals. The journal search databases used by researchers are *Google Scholar*, *Science Direct*, *Proquest*, and *Portal Garuda*. The keywords used in the journal search were "Family Needs" AND ICU OR "*Intensive Care Unit*". The inclusion criteria for the articles reviewed are articles that examine the needs of patients' families in the ICU, published in the 2015-2020, using English and Indonesian and can be accessed in full text. Journals that met the inclusion criteria were *critically appraised* by three reviewers using the *JBI Critical Appraisal Tools Checklist for Analytical Cross-Sectional Studies* and *JBI Critical Appraisal Tools Checklist for Prevalence Studies instruments* and 11 research journals were deemed to have the best methodological quality, which is meeting the 50% of the *critical appraisal* criteria for analysis in this *literature review*. The literature search framework in this literature review can be seen in Figure 1.

### **Equipment**

The equipment of this study is *JBI Critical Appraisal Tools-Checklist for Analytical Cross-Sectional Studies* and the *JBI Critical Appraisal Tools-Checklist for Prevalence Studies* and fulfill the criteria.

### **Results**

The results of this study are literature review to know priority needs of ICU patients' families (table 1), to determine factors associated with family needs of icu patients (table 2), and to know the differences in each article (table 3).



**Figure 1:** Flow chart and article selection

**Table 1.** List of Journal Literature Review to Know Priority Needs of ICU Patients' Families

No	Researcher's Name	Research Title	Year	Design Study	Instruments	Results
1	Basma Salim Saleh Salameh, Sami Salim Saleh Basha, Linda Lee Eddy, Hiba Salem Judeh, and Dalia Rahmi Toqaan	Essential Care Needs for Patients' Family Members at the Intensive Care Units in Palestine	20 20	Analytical, Cross sectional studies	CCFNI Arabic version with 45 question items and socio-demographic data collection sheet .	The level of importance of the patient's family needs based on the CCFNI score, are: 1. Guarantee (64.10%) 2. Proximity (58.27%) 3. Information (56.07%) 4. Comfort (54.37%) 5. Support (50.09%)
2	T. Kumaravadivel Dharmalingam, Mohammad Rahim Kamaluddin, Shamsul Kamalrujan Hassan, and Rhendra Hardy Mohammad Zaini	The Needs of Malaysian family Members of Critically Ill patients Treated In Intensive Care Unit, Hospital Universiti Sains Malaysia	2016	Cross sectional design	CCFNI-M with 42 question items	The needs of the patient's family based on the CCFNI-M score from the most important are: 1. Guarantee (Mean = 3.69) 2. Information (Mean = 3.59) 3. Proximity (Mean = 3.21) 4. Comfort (Mean = 3.16) 5. Support (Mean = 3.01)
3	Fateme Hasandoost, Maryam Momeni, Leila Daughankar, Nastaran Norouzi Parashkouh, Haydeh Rezaei Looyeh, and Fateme Emamgholian	Family Needs of Patients Admitted to The Intensive Care Units	2018	Cross sectional study	CCFNI with 45 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Support (Mean = 37.82) 2. Information (Mean = 30.90) 3. Proximity (Mean = 23.60) 4. Guarantee (Mean = 21.53) 5. Comfort (Mean = 17.86)
4	Abdalkarem F Alsharari	The Needs of Family Members of Patients Admitted to the Intensive Care Unit	201 9	Cross sectional study	CCFNI Questionnaire with 45 question items translated into Arabic	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 3.62) 2. Information (Mean = 4.47) 3. Proximity (Mean = 3.34)

						4. Comfort (Mean = 3.01) 5. Support (Mean = 2.91)
5	Thecla W. Kohi, Marwa W. Obogo, and Lilian T. Mselle	Perceived Needs and level of Satisfaction With Care by Family Members of Critically Ill Patients at Muhimbili National Hospital intensive Care Unit, Tanzania	2016	Cross sectional design	Questionnaire consisting of demographic profile, level of need on a Likert scale (English questionnaire translated into Kiswahili)	The most important needs of the patient's family include: 1. Information (Mean = 3.66) Having someone to contact at the hospital when family members are not around The least important needs of the patient's family include: 1. Support (Mean = 2.26) Talking about the patient's possible death
6	Al Faydhi A, Mohidin S., Nuzhat S, Shalaby, S, Al-Tabsh, L, and Aleidarous, S.	Perceptions of Critical Care Family Needs In the Kingdom of Saudi Arabia	2016	Non experimental comparative descriptive cross sectional study	CCFNI with 46 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 4.77) 2. Information (Mean = 4.54) 3. Proximity (Mean = 4.46) 4. Comfort (Mean = 4.35) 5. Support (Mean = 4.29)
7	Zahra Khoshnodi, Shademan Reza Masouleh, Sayedeh Fatemeh Sayed Fazelpour, and Ehsan Kazem Nezhad Leyli	The Importance of Fulfillment of Family Needs at Critical Care Units	2017	Cross sectional and descriptive -analytical design	CCFNI with 45 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 3.46) 2. Proximity (Mean = 3.23) 3. Support (Mean = 3.16) 4. Information (Mean = 3.14) 5. Comfort (Mean = 2.54)
8	Liew SI, Dharmalingam TK, Ganapathy GK, Muniandy RK, Johnny Ngu, and Lily Ng	Need Domains of Family Members of critically-ill patients: A Borneo Perspective	2018	Descriptive cross sectional study	CCFNI-M with 45 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 3.53)

						<ol style="list-style-type: none"> <li>2. Information (Mean = 3.51)</li> <li>3. Comfort (Mean = 3.14)</li> <li>4. Proximity (Mean = 3.12)</li> <li>5. SupportN (Mean = 2.92)</li> </ol>
9	Mohammad A. Al Barraj, Mirna Fawaz, and Lina Kurdahi Badr	Needs of Family Members of Critically Ill Patients: A Comparison of Nurses and Family Perceptions	2019	Descriptive prospective cross sectional design	CCFNI/ NMI with 30 question items	<p>Family needs based on 5 CCFNI / NMI domains from highest are:</p> <ol style="list-style-type: none"> <li>1. Guarantee (Mean = 3.80 / 3.39)</li> <li>2. Information (Mean = 3.72 / 3.26)</li> <li>3. Proximity (Mean = 3.58 / 3.21)</li> <li>4. Reality (Mean = 3.45 / 3.20)</li> <li>5. Support Mean = 3.22 / 2.90)</li> </ol>
10	Atika and Halimuddin	Family Needs of Patients in the Intensive Care Unit	2018	Descriptive exploratory cross sectional study	CCFNI in Indonesian with 43 question items	<p>The average needs of the patient's family from the most important are as follows:</p> <ol style="list-style-type: none"> <li>1. Guarantee (Mean = 3.72)</li> <li>2. Information (Mean = 3.28)</li> <li>3. Proximity (Mean = 3.10)</li> <li>4. Comfort (Mean = 3.06)</li> <li>5. Support (Mean = 2.78)</li> </ol>
11	Sofee Akhlak and Emad Shdaifat	Needs of Families With a Relative in a Critical Care Unit	2016	Comparative exploratory descriptive studies	CCFNI-M with 35 question items	<p>Priority for family needs from the highest, namely:</p> <ol style="list-style-type: none"> <li>1. Guarantee (Mean = 3.52)</li> <li>2. Information (Mean = 3.36)</li> <li>3. Proximity (Mean = 3.24)</li> <li>4. Support (Mean = 3.19)</li> <li>5. Comfort (Mean = 3.05)</li> </ol>



**Table 2.** List of Literature Review Journals to Determine Factors Associated with Family Needs of ICU Patients

No Article	Research result
1	<p><b>Age:</b> Age has a significant relation with the family needs of ICU patients, especially in the domain of proximity needs, with <math>p</math> value = 0.02</p> <p><b>Family relationship:</b> The level of kinship has a significant relation to the family needs of ICU patients (<math>p = 0.004</math>)</p> <p><b>Level of education:</b> Education level has a significant relation with the needs of ICU patients' families, among others, with the need for support (<math>p = 0.007</math>), the need for assurance (<math>p = 0.006</math>), and the need for closeness (<math>p = 0.03</math>).</p> <p><b>Length of Hospitalization:</b> Length of stay is related to several domains of family needs of ICU patients, including support needs (<math>p = 0.03</math>), and comfort needs (<math>p = 0.02</math>).</p>
2	<p><b>Age:</b> There is a relation between age and family needs of ICU patients (<math>p = 0.03</math>)</p> <p><b>Level of education:</b> Education level has a significant relation with several family needs of ICU patients, including security needs (<math>p = 0.007</math>), comfort needs (<math>p = 0.02</math>), and information needs (<math>p = 0.04</math>)</p>
3	<p><b>Length of Hospitalization:</b> Length of stay related to family needs of ICU patients with <math>p</math> value (<math>p = 0.000</math>)</p> <p><b>Level of education:</b> The level of education has a significant relation with the family needs of ICU patients at a low level of education with <math>p = 0.01</math>.</p>
4	<p><b>Level of education:</b> Education level has a significant relation with several domains of family needs of ICU patients, including: Need for assurance: <math>p &lt; 0.001</math>, Need for closeness: <math>p &lt; 0.001</math>, and Information need: <math>p &lt; 0.001</math></p> <p><b>Family relationship:</b> Family relationships or kinship levels have a significant relation with several domains of family needs of ICU patients, including: Comfort needs: <math>p &lt; 0.001</math>, Closeness needs: <math>p &lt; 0.001</math>, Information needs: <math>p &lt; 0.001</math>, and Needs support: <math>p &lt; 0.001</math></p> <p><b>Patient's Condition:</b> There is a relation between the patient's condition or condition with one of the domains of the ICU patient's family needs, namely: Information needs: <math>p &lt; 0.001</math></p>
5	<p><b>Gender:</b> Gender affects the family needs of ICU patients with <math>p</math> value (<math>p &lt; 0.05</math>)</p> <p><b>Age:</b> There is a relation between age and the needs of the patient's family in the ICU (<math>p &lt; 0.05</math>)</p> <p><b>Level of education:</b> The level of education has an effect on the priority needs of the ICU patient family with a significant value (<math>p &lt; 0.05</math>)</p>
7	<p><b>Sociocultural:</b> There is a relation between the priority needs of the patient's family in the ICU with the culture of an area (<math>p = 0.0001</math>)</p>
8	<p><b>Age:</b> Age has a relation with several domains of patient's family needs in the ICU, namely: Comfort needs: <math>p = 0.02</math>, and Support needs: <math>p = 0.04</math></p>
9	<p><b>Gender:</b> Women had a significant relation with the need for closeness on the items "informed about the transfer plan" (<math>p = 0.02</math>), "Frequently see the patient" (<math>p = 0.02</math>), and "called home about changes in the patient's condition" (<math>p = 0.02</math>). Then also had a relation with the need for information on the item "helping the patient's physical care" (<math>p = 0.02</math>) and the need for support on the item "talking about feelings" (<math>p = 0.04</math>).</p> <p>Men had a significant relation with the need for information on the item "know what has been done for the patient" (<math>p = 0.02</math>), and the need for support on the item "talking about the possibility of the patient's death" (<math>p = 0.04</math>).</p> <p><b>Age:</b> Age has a significant relation with several domains of family needs of ICU patients, age &gt; 40 years has priority need for assurance, namely on the item "assured that the best care is provided to the patient" (<math>p = 0.04</math>), and the item "gets an understandable explanation" (<math>p = 0.04</math>). = 0.02). In addition, information needs: on the item "knowing the patient's prognosis" (<math>p = 0.03</math>) and the item "assisting with physical care" (<math>p = 0.02</math>).</p> <p><b>Level of education:</b> The level of education has a significant relation with one domain of the patient's family needs in the ICU, namely the need for information on the item "knowing how the</p>

patient is cared for ( $p = 0.04$ ), the item "knowing why it is done to the patient" ( $p = 0.04$ ), and the item "knowing the patient's prognosis" ( $p = 0.00$ ).

**Table 3.** List of Journal Literature Review Knowing the Differences in Each Article

No Article	Research Place	Number of Samples	Level of education (Majority)	Respondent Age (Average)	Items from Priority Requirement Domain	Most Gender	Family relations hip (Majority)
1	Palestine	240 families of ICU patients	Bachelor n = 79 (29.58%)	23.3 years	"Confident that the best care is provided to patients"	Male (57.92%)	Patient's child (29.17%)
2	Malaysia	60 family members of ICU patients	Undergraduate (45.0%) High school graduate (38.3%)	35.57 years old	"Confident that the best care is provided to patients"	Female (65%)	Patient's child (51.7%)
3	Qazvin, Iran	235 families of ICU patients	Higher education n = 81 (38.6%)	47.85 years old	"Need to improve support system"	Man (59.8%)	Patient's child (36%)
4	Saudi Arabia	233 families of ICU patients	Middle education n = 94 (40.3%)	28 years	"Confident that the best care is provided to patients"	Man (65.2%)	Patient's child (36.4%)
5	Tanzania	110 family members of ICU patients	Elementary school education or lower (60%)	49.6 years	"Having someone to call at the hospital when family members are not around"	Woman (53.6%)	Brother/sister (46.4%)
6	Saudi Arabia	Total 132 samples Family n= 53 Health workers n= 79	Higher Education (38.6%)		"Questions answered honestly"		
7	Rasht, Iran	167 family members of ICU patients	Bachelor (37.4%)	40 years	"Questions answered honestly"	Man (57.4%)	Parent (38.9%)
8	Malaysia	60 family members of ICU patients	High School (56.7%)	38.45 years old	"Confident that the best care is provided to patients"	Woman (56.7%)	Parent (30.8%)
9	United States of America	50 family members of ICU patients	Bachelor n = 32 (64%)	42.5 years	"Confident that the best care is provided to patients"	Woman (60%)	Patient's child (48%)
10	Banda Aceh, Indonesia	104 families of ICU patients		37 years old	"Questions answered honestly"	Woman (57.7%)	Parent (35%)
11	Malaysia	Total 110 samples Family n=59 Nurse n=51	Secondary education (68.4%)	29 years	"Confident that the best care is provided to patients"	Woman (53.4%)	



## Discussion

The priority needs of the patient's family in the ICU include: the need for insurance, nine out of eleven articles explain that insurance is the most important need. Insurance is a necessity that is considered the most vital and crucial for families who accompany ICU patients (Liew et al., 2018). The majority of families or six out of nine articles said the most important need for assurance was on the item "patients are given the best care" (Akhilak & Shdaifat, 2016; Al Barraji et al., 2018; Alsharari, 2019b; Dharmalingam et al., 2016; Liew et al., 2018; Salameh et al., 2020). While the other three articles said "to answer questions honestly" is the most important guarantee requirement (Al Faydhi et al., n.d.; Khoshnodi et al., 2017, atika et al., 2018). Assurance is perceived as an important aspect in promoting trust, safety, and freedom from doubt regarding the treatment and health system received by patients. In addition, the guarantee of "best care" from health professionals can increase trust between family members in the services provided by medical personnel. Assurance is felt to be important because the patient's family members are worried and experience various emotional stresses that require reassurance for a realistic assessment of the situation they are facing (Dharmalingam et al., 2016)

Eight of the eleven articles listed the second most important need, is information. The family said the most important information needs were "knowing exactly what to do for the patient" and "knowing how the patient is being treated medically" (Akhilak & Shdaifat, 2016; Al Barraji et al., 2018; Al Faydhi et al., n.d.; Alsharari, 2019b; Dharmalingam et al., 2016; Hasandoost et al., 2018; Liew et al., 2018; Atika et al., 2018). This is different from the results of research by Kohi, *et al* in 2016, although with different instruments, but these instruments have the same items as the domain of information needs, such as 'have someone who can be contacted at the hospital when family members are not there" and stated that the item was the first most important need (Kohi et al., 2016). Complete and clear information can increase understanding, satisfaction, and reduce psychological stress

and can help families who are experiencing emotional stress to improve their coping. Families feel that they need information about the actions taken for patients who are treated every day because lack of information about patients can cause anxiety, confusion, and even anxiety so that accurate information can provide psychological benefits for the families of ICU patients (Khoshnodi et al., 2017).

The third need is closeness. There are seven articles mentioning that proximity is a need that is less important or ranks third after assurance and information (Akhilak & Shdaifat, 2016; Al Faydhi et al., n.d.; Alsharari, 2019b; Dharmalingam et al., 2016; Hasandoost et al., 2018; Khoshnodi et al., 2017). But this is different from the results of research by Salameh *et al* in 2020 and Khoshnodi *et al* in 2017 which said that proximity is the second most important need after guarantee (Khoshnodi et al., 2017; Salameh et al., 2020). This is due to the movement restrictions imposed on Palestinians by residency policies and practices which account for the fact that close proximity and constant telephone contact with ICU staff is more important than any other domain. "Calling home about changes in the patient's condition" became the most important point of the need for closeness in this study. When the family is not close to the patient, they will feel worried about the patient's condition, therefore, the family needs communication with the nurse as an intermediary to provide information about the patient because the family cannot always be near the patient (atika et al, 2018). In addition, when compared to developed countries, family relations in developing countries are stronger between one family and another, especially those who have very close relationships with patients, they tend to want to accompany patients (Khoshnodi et al., 2017).

Comfort is the fourth need or is considered less important by the patient's family members. Six out of eleven articles show that the need for comfort is in fourth place (Al Barraji et al., 2018; Al Faydhi et al., n.d.; Alsharari, 2019b; Dharmalingam et al., 2016; Salameh et al., 2020; Atika Et., al., 2018). Comfort is considered a less important need

for families with different items including "having a telephone in the waiting room" (Salameh et al., 2020), "access to the toilet is close to the waiting room" (Khoshnodi et al., 2017), "have comfortable furniture in the waiting room" (Akhlak & Shdaifat, 2016; Dharmalingam et al., 2016) and "to make good food available at the hospital" these items are considered unimportant because if the hospital is close to the family's home so that they do not need to eat in the hospital, so that the food needs in the hospital become less relevant (Alsharari, 2019b). In addition, comfort is the lowest need because comfort facilities for patient companions have been provided in hospitals and because the emotions that dominate families in Iran they think less about their own comfort while one of their family members is in critical condition, they actually think more about comfort and well-being of their loved ones (Hasandoost et al., 2018).

The fifth need is support, support is also considered a less important need by the family because eight out of eleven articles mention that the need for support is the most recent need (Al Barraaj et al., 2018; Al Faydhi et al., n.d.; Alsharari, 2019b; Dharmalingam et al., 2016; Kohi et al., 2016; Liew et al., 2018; Atika et al.; Salameh et al., 2020). The highest support needs items differ from one study to another, including "being told about other people who can help solve problems" (Liew et al., 2018; Salameh et al., 2020). Then "it's okay to cry when they want to" (Akhlak & Shdaifat, 2016; Dharmalingam et al., 2016). and "have someone to help with financial matters" (Alsharari, 2019b). In addition, "having a solitary place while in the hospital" (Al Faydhi et al., n.d.). Then according to the NMI questionnaire the item on the lowest support need was "talking about the possibility of the patient's death" (Al Barraaj et al., 2018). this is because of the occurrence of trauma after death, the cause of death is considered a community responsibility and also due to the myth that talking about the patient's death can make the patient lost hope (Kohi et al., 2016). However, this is actually different from the results of research conducted by Khoshnodi *et al* in 2017 which states that support is a rather

important need or is in third place (Khoshnodi et al., 2017). In addition, differences are also found in a study conducted in Qazvin, Iran by Hasandoost *et al* in 2018 which stated that support was the number one most important need and it was said that the families of ICU patients really needed support which emphasized the need for a support system to support patients in the ICU and their families (Hasandoost et al., 2018). Comfort and support are two of the less important needs because when a patient or loved one is in critical condition, the family's primary concern is with the patient's well-being and not their own need for support or comfort (Al Barraaj et al., 2018). This indicates that family members place less emphasis on their own physical and personal needs (Liew et al., 2018).

Factors related to the family needs of ICU patients include: Sociocultural factors, the priority needs of family members of ICU patients differ according to the socio-cultural context (Alsharari, 2019b). Cultures in Malaysia, Palestine, Saudi Arabia and the United States share the same priority needs for assurance, namely "Believe that the best care is provided to patients" (Akhlak & Shdaifat, 2016; Al Barraaj et al., 2018; Alsharari, 2019b; Dharmalingam et al., 2016; Hasandoost et al., 2018; Liew et al., 2018). Cultures in Iran, Saudi Arabia, and Aceh have different priority needs for assurance that is "questions answered honestly" (Al Faydhi et al., n.d.; Khoshnodi et al., 2017). One of the studies conducted by Hasandoost, *et al* in 2018 in Qazvin, Iran stated that families have priority needs for support, this is different from the research conducted by Khoshnodi, *et al* in 2017 in the city of Rasht, Iran which mentions that families have priority needs for insurance (Hasandoost et al., 2018; Khoshnodi et al., 2017). The results of a study conducted by Kohi, *et al* in 2016 in Tanzania stated that the priority need for families is to have certain people who can be contacted at the hospital when the family is not there. This is because in African culture, family members prefer to be around a dying person because many people do not write a will so the last words will provide important information at the time of death. Therefore, the family felt they

needed someone who could be contacted at the hospital (Kohi et al., 2016).

Factors related to the priority of family needs are not only sociocultural factors, but also sociodemographic factors. Six of the eleven articles described the majority of families in the ICU is female (Akhlak & Shdaifat, 2016; Al Barraaj et al., 2018; Dharmalingam et al., 2016; Kohi et al., 2016; Atika et al., 2018; Liew et al., 2018). Research by Kohi, *et al* in 2016 said that in Tanzania the wife or mother is the one who takes care of the household, in terms of taking care of children and ensuring the health of the family. This is the reason why more women volunteer to help critically ill patients at bedside during visiting hours than men (Kohi et al., 2016). Meanwhile, five other articles stated that families with male sex were more dominant in the ICU. Men have higher needs on all dimensions except proximity (Alsharari, 2019b). According to research by Al-Barraaj, *et al* in 2019, the male family prioritizes information needs, to know exactly what has been done for the patient and related to the need for support, like discussing the possibility of the patient's death. Meanwhile, women's families, mentioned in this study, prioritized the need for closeness, namely frequently seeing patients, information needs, namely helping the patient's physical needs and support needs, namely talking about feelings (Al Barraaj et al., 2018).

Family age also affects priority needs. All articles show that the families of patients in the ICU generally have the age category of adults (20-60 years). The results of research conducted by Salameh, *et al* in 2020 said that respondents with an older age (age 46-59) were more concerned with needs related to closeness than respondents with a younger age. This is in contrast to the results of the study of Al-Barraaj, *et al* in 2019 which stated that family members aged >40 years had higher security and information needs. Older members feel the need to be reassured that the best care is provided to patients and want to get explanations that are more understandable than younger families (Al Barraaj et al., 2018). The next sociodemographic factor is the level of education. The average level of education of the patient's family is undergraduate and

high school. Families with a bachelor's degree consider security needs to be more important than other needs (Dharmalingam et al., 2016). This agrees with the research conducted by Alsharari in 2019 which said that family members with a higher education level considered the need for security to be much more important while information needs were considered a less important need because families with a higher education level could seek better information. Both about the patient's condition, diagnosis, and management in the ICU and easy to understand explanations about the various diseases suffered by the patient, causing reduced anxiety among family members. Meanwhile, family members with lower education have higher needs in the proximity domain, which is talking to nurses every day (Al Barraaj et al., 2018).

Relationships with patients also affect the level of priority needs of the family. The majority of the results of the study stated that the respondents were boys/girls of ICU patients. While the next most respondents are parents. Respondents who were parents of patients had higher levels of need for reassurance, closeness, support and information and considered comfort needs less important than other family members. This is due to the biological closeness they have with their children (Salameh et al., 2020). The results of the study stated that the length of stay of patients in the ICU was >24 hours. The needs of the patient's family decreases as the length of treatment increases. This is because during the first days of admission to the ICU, the patient experiences a critical period which causes an increase in the needs of the patient's family. But over time, the family gradually accepted the situation and tried to adapt (Alsharari, 2019b). Families with patients who have been treated in the ICU for 7 days tend to have a high need in the support needs domain, like being told about other people who can help solving problems and the need for comfort, such as having a telephone in the waiting room. The patient's condition also affects the priority needs of the ICU patient's family, families with patients in an unconscious/semi-conscious state have a higher level of information need compared to respondents who have families in a conscious condition

because the family does not receive a direct response from the patient so that the family want to continue knowing any developments related to their families who are in the ICU in a state of decreased consciousness .

**Conclusion:** The results of a review of eleven research articles state that the patient's family in the ICU room has five domains of needs, such as the need for reassurance, information, closeness, support, and comfort. The priority needs of family members of ICU patients are security needs. The priority needs of family members differ according to the socio-cultural context. In addition, factors related to the family needs of ICU patients are sociodemographic factors including gender, age, education level, relationship with patients, length of stay of patients, and patient's condition.

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