

## Fracture patient experience in undergoing traditional massage therapy (Topu Bara) in Maluku Province: phenomenology study

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### ABSTRACT

**Introduction:** In Indonesia, especially among the Maluku people, there was a culture of seeking traditional fracture treatment, namely "Topu Bara." Their belief has been passed down from generation to generation who believe that conventional medicine (Topu Bara) can cure the problem of fractures experienced by sufferers. The study aimed to explore patient's fracture healing experience in Topu Bara.

**Methods:** The method used was a phenomenological study that used deep interviews from August to September 2021. The participants were taken by purposive sampling, adults aged 21 to 59-years old, and were in the second or more of healing series. Data originated from 15 participants. Interviews were recorded, transcribed verbatim, and subjected to Colaizzi analysis.

**Results:** The results of the study found 7 themes, including causes of fracture, time events, action taken directly after inside, pain experiences during handling in "Topu Bara" therapy, coping of the patients, pain management, and advice given by healer to other participants.

**Conclusions:** Most of them stated that safety and comfort were the priority for fracture healing. The concept of culture in the behavioral alteration of fracture healing can have an impact on the participants.

**Keywords:** family; educational program; perspectives; maternal critically ill patient Fracture, traditional healing, topu bara, transcultural nursing

### Introduction

Fracture is a crucial problem that is difficult for health professionals to handle. Treatment failure often occurs so it is deemed necessary for proper treatment. Fractures have a high prevalence rate. Common causes of fracture are accidents, traffic accidents, work accidents, and other accidents (Nadler et al., 2014). Worldwide, road injuries cause disproportionately more than 1.3 million deaths and many more disabilities each year (Yuniar & Nasution, 2017). Based on studies conducted by Mirhadi et al. (2013), the average incidence of fractures associated with traffic accidents was 14.5 and 4.2 per 100,000 people (Sugiharto et al., 2016).

According to the World Health Organization (WHO), India ranks first as the country with the highest number of deaths due to traffic accidents. Meanwhile, Indonesia ranks 5<sup>th</sup> (Sudayasa et al., 2018). Indonesia is reported to have experienced an increase in the number of traffic accidents by more than 80% (Darmawan, 2013). In Indonesia, the death toll from traffic accidents reaches 120 people per day (Akhrani & Ardyaningrum, 2019). The prevalence of injury by province from 2007-2018 increased gradually with all age categories including in 2007 around 7.5% (Arie, 2017), increased in 2013 to 8.2% (Roma, 2013), and lastly in 2018 to 9.2%. Injury events can occur anywhere, such as on roads, homes and neighborhoods, schools, or workplaces (Mirhadi et

al., [2013](#)). Traffic accidents according to 35 provinces and the highest characteristics are in the North Sulawesi region (3.5%), and Maluku itself ranks 30th (2.0%). Types of fractures suffered, are namely in the tibia, hip, femur, ankle, and knee (Kemenkes RI, [2018](#)).

Fractures are indirectly treated by medical treatment. However, this is not following the reality in society (Agarwal-Harding et al., [2015](#)). Most people prefer alternative medicine, where they believe that massage therapy (Topu Bara) can solve the fracture problem in patients without surgery or plate placement. Massage is an effort to relax the stiff part of the muscle because it has not been moved for a long time before exercise therapy (Kautsar, [2018](#)). The proportion of utilization of traditional health services in Indonesia is 31.4 percentile, and in the Maluku area is 14.5 percentile (Kemenkes RI, [2018](#)). While Topu Bara therapy is a typical name from the Maluku region for one of the traditional therapies for patients with fracture problems, in the Java area it is known as a denial putting therapy (Maelissa et al., [2020](#)).

In Indonesia, Sangkal putung therapy is still widely used in the community; this is supported by research in Central Java that people prefer to seek treatment for alternative treatments of Sangkal Putung compared to modern hospitals that are easily accessible and have advanced developments in orthopedic and radiological surgery (Kautsar, [2018](#)). Based on a preliminary study in February 2021, it was found that, in the Maluku Region, four areas have Topu Bara treatment, including Liang (Ambon City), Masohi (Central Maluku Regency), Kamarian (West Seram Regency), and Namlea (Buru Regency). On average per day, there are about 10-16 people who come for treatment. Patients who received treatment experienced fractures in the tibia, hip, ankle, and knee areas, and the average number of patients came without complications. Topu Bara's treatment has never received a warning from the local government before. Based on the results of interviews conducted by researchers in February 2021, data from three participants showed that the reason those who had experienced fractures and underwent Topu Bara massage therapy was due to the fast-healing process, saturation, and ineffective medical services; information related to this treatment was obtained from relatives/family. Based on the results of the interview, the researcher wanted to explore the experiences of fracture patients who underwent traditional massage therapy in Maluku Province.

## Materials and Methods

### Study Design

We used a phenomenological study using in-depth interviews. This methodology allowed researchers to explore the phenomenon (Yuniar & Nasution, [2017](#)) of fracture sufferers who decided to go to traditional Topu Bara massage for fracture healing. These can be identified through clinical nursing problems and asking researchable questions (Suarilah et al., [2017](#)). Likewise, Sudayasa et al. ([2018](#)), suggest that self-interest can be the driving force needed to formulate research questions. To some extent, the practitioner then needs to identify and develop an interest in potential changes in practice problems, which are usually stimulated by patient preferences and dissatisfaction, quality improvement data, practitioner inquiries, evaluation data, or new research data (Mulyono, [2017](#)). The data collection process was for two months from August to September 2021.

For this study, the participants were taken by purposive sampling, adults aged 21 to 55-years old and were in the second or more of healing series visiting. Data originated from 15 participants. Interviews were recorded, transcribed verbatim, and analyzed. There are seven participants taken by purposive sampling, aged 21 to 55-years old and already treated with Topu Bara for less than two times, more and almost finished.

### Respondent

For this study, participants were taken by purposive sampling. The inclusion criteria in this study included: Adults aged 25 to 55 years and ranked second or more in the series of healing visits. Exclusion criterion was: Those who do not have a history of fractures with a history of Topu Bara treatment. Data come from 15 participants, recorded interviews, transcribed verbatim, and analyzed using the Collaizi method.

### Data Analysis

The data analysis method was adopted from Collaizi (1978) (Maelissa et al., [2020](#)) as below: Describing the phenomenon under study by trying to understand the phenomenon of the patient's experience as well as coping strategies they adopt through the study of literature. In addition, researchers were trying to dive in and immerse themselves in a state of participant's experience taking alternative healing by Topu Bara. Transcribing data interviews enabled to describe the experience of patients with fractures who went for Topu Bara. Thus, collecting descriptions of the phenomenon through the opinion of participants and reading those data two to three times thoroughly until able to

Table 1. The characteristics of participants

| Participants | Age | Sex    | Employee Status        | Type of Fracture | Reason           |
|--------------|-----|--------|------------------------|------------------|------------------|
| Ab           | 54  | Female | Midwife                | Right Hip        | Traffic accident |
| Jd           | 21  | Female | College student        | Right knee       | Fall             |
| Ds           | 37  | Female | Housewife              | Right Carpus     | Fall             |
| Da           | 47  | Male   | Motorcycle taxi driver | Left Tibia       | Traffic accident |
| Gh           | 59  | Female | Civil servant          | Left Clavicle    | Traffic accident |
| Hs           | 43  | Male   | Army                   | Right ankle      | Fall             |
| Jk           | 46  | Male   | Government employee    | Lumbar           | Fall             |
| Gi           | 55  | Male   | Fisherman              | Right knee       | Fall             |
| Dk           | 42  | Male   | Fisherman              | Right ankle      | Fall             |
| Hn           | 33  | Male   | Motorcycle taxi driver | Left Tibia       | Traffic accident |
| Mn           | 22  | Male   | College student        | Right Tibia      | Traffic accident |
| Rj           | 31  | Male   | Nurse                  | Left ankle       | Fall             |
| Hi           | 46  | Male   | Fisherman              | Left Tibia       | Traffic accident |
| Bd           | 27  | Female | Housewife              | Right Hip        | Traffic accident |
| Hi           | 34  | Male   | Fisherman              | Left Tibia       | Traffic accident |

understand the experience of patients. Additionally, reading the entire descriptions of the phenomena that have been submitted by participants. For understanding the experiences of the participants, the entire transcript of the interview was read, and significant statements selected and following the goals for analysis. Significant data were identified by re-reading the statement and trying to find keywords that were the core of the statement. Every keyword was studied and then grouped into categories. This is followed by re-reading the entire existing category, comparing, and looking for similarities between these categories, and eventually grouping similar categories into themes. Passed through to the theme found in the data it was then written into a description of the relevant experience of participants. Participants were then asked to read the description of the study. This was done to determine whether the description that had been developed by researchers followed the state of the respondent's experience. Analyzed data obtained during validation to the participants was put in the final description to enable the readers to recognize the experience of participants as perceived during the Topu Bara fracture healing process.

#### Data Collection

The Researchers conducted research in four locations for Topu Bara treatment located in the Maluku Region, including Liang (Ambon City), Masohi (Central Maluku Regency), Kamarian (West Seram Regency), and Namlea (Buru Regency). Participants were interviewed while undergoing treatment with the therapist. The average length of the interview ranged from 45-60 minutes per participant. Ten questions were asked to the participants by conducting in-depth interviews. The opening question posed to the participants was "How long have you been on Topu Bara treatment?" The interviews were stopped when the data were saturated. When collecting data, there were 15 participants due to data saturation. All data taken from the interviews were

recorded, transcribed, and validated by double-checking the participants. Thus, valid data are then analyzed.

#### Ethical Consideration

All the participants gave their informed consent to be involved in this study. This study has been registered and passed the research ethics committee of the Health Research Ethics Commission of the Faculty of Nursing, STIKes Maluku Husada with letter number RK. 089/KEPK/STIK/VIII/2021.

#### Results

The participants of this research are described in [Table 1](#). They are in the second and more visit to traditional massage therapy (Topu Bara) in Maluku Province. There are seven themes identified from the results of qualitative data analysis collected through in-depth interviews.

##### Theme 1: Causes of fracture

Almost half of the participants had fractures by falls and traffic accidents.

*"My father knew well the father of the healer. I was around ten when I fell from a mango tree and my father took me here and I was satisfied with the result. My leg was normal after that (he exposed his right leg), I had no difficulties. Even though not all my extended family agreed to go to this Topu Bara (for fracture healing, another family member went to another traditional massage), I am sure this one is the most suitable for me."* (Rj, 31-year-old with fractured left ankle).

##### Theme 2: Time events

A small percentage of participants experienced more than a year. Almost all of them suffered a closed fracture less than three months ago. There was one of the participants experienced a fracture one week ago. Those participants were already getting treatment

at the time of the interview which was at their third visit. Although each visit always brought positive progress, i.e., the range of motion that extends and pain are reduced, it was not denied that the pain was still present when the healer did massage. Overall, everything written above did not deter the participants to stop coming for treatment.

*"I broke a bone in my left leg while working as a motorcycle taxi driver for 2-3 months ago, when I was driving a motorcycle when it hit a tree." (Da, 47-year-old with fractured Left Tibia).*

#### Theme 3: Almost taken directly after inside

Almost no participant went directly to the traditional Topu Bara massage therapy location, where the interview was taken, at the time after the incident for healing. One participant went straight to other than traditional massage therapy. Most headed to the hospital. Less than half of them rushed to the traditional massage therapy after being less satisfied with the handling of service and they got suggestions as to the traditional massage therapy directly by the physician.

*"This was not my first experience going to Topu Bara to get treatment for my clavicle; I had gone to another traditional massage. It seemed I was a Topu Bara's adventure.hahaha (laugh). I heard too many suggestions, so I compared what my friend said, and which one was the best based on my personal views. Finally, this Topu Bara helped me much." (Gh, 59-year-old with fracture left clavicle).*

#### Theme 4: Pain experiences during handling in traditional massage therapy (Topu Bara)

Almost all participants said a similar statement when they began therapy/massage as a part of fracture treatment by a healer at the traditional Topu Bara massage therapy center, starting from the pain of mild to severe. One participant said that he combined the traditional massage therapy treatment with physiotherapy at one of the state hospitals. This respondent stated very significant progress in the healing process. The pain was present when the massage was processed by the healer. However, pain can be reduced to the level of mild pain after the massage is finished.

*"That was a magic power or something like that. In my religion (Islam), a selected person may be given by Allah (God) that kind of ability; they were able to cure without medication. I heard the healer always start with prayer before and after doing massage." (Tn Da, 47year-old, fractured left tibia)*

#### Theme 5: Coping of the patients

Almost all the participants had positive responses to the treatment they got from traditional massage therapy. There were no statements from the respondents that they would stop the treatment process any time when they had no intention as to the outcome.

*"Three days ago, after she finished (the healer) with massage, she told me that the bone was joined well. I was very grateful to hear that. I wish (now) she will inform me that the bone conjunctions were strengthening than before. My fracture is more difficult to be healed compared to others (because of that) I was suggested to immobilize this knee. At home, my husband and sons help me with my daily needs." (Gi, 55-year-old, fractured right knee).*

#### Theme 6: Pain management

Medication such as painkillers oral was suggested by the healer. The healer informed the participant the name of the analgesic oral and topical to buy at the medication store. In addition, the healer also recommended some multivitamins to support bone union and encouraged avoiding certain foods.

*"You must know this kind of analgesic? (She showed a blister of analgesic to reduce pain), feel free to ask all patients here (at Topu Bara), they should bring the similar thing." (Ds, 37-year-old with fracture right carpus)*

*"Look! This ointment is burning my skin (showing his right hip). The healer recommended me to have this. I bought it from medicine store. It is limited, so the price was a bit expensive." (Ab, 54-yearold, fracture right hip).*

#### Theme 7: Advice given by healer to other patients

The first participant was advised by the healer to go to a physician when they first arrived at traditional massage therapy. Participants thought that traditional massage therapy was advisable because it not only solved the physical problem but also psychological and/or spiritual problems caused by fracture Almost all of the participants declared that the severity of a fracture should be attended by a medical professional first before traditional massage therapy.

*"Before I went to Topu Bara for treatment, I was previously treated at a doctor. But after two months of treatment, it showed no cure. So, I was advised by my family to try the treatment at Topu Bara. Initially the therapist suggested that you must first believe that the fracture you experienced could heal after undergoing the*

*Topu Bara treatment. I was not allowed to undergo Topu Bara therapy at other therapists. Before treatment, the therapist first reads a prayer as a healing ritual.*" (Hs, 43-year-old, right ankle).

## Discussions

Traditional massage therapy (Topu Bara) as an alternative for fracture healing was recommended by family, relatives, and close friends. No one participant came to traditional massage therapy on her/his initiative. A positive statement from previous patients became a strong motivation to make a final decision regarding fracture healing (Sudayasa et al., 2018). The healer as the center of the healing process of fracture at a Topu Bara center practiced a supernatural approach through massage which was perceived by participants. They believed that every healer at a Topu Bara center had that kind of power.

They expressed that, during this massage process, participants experience a pain sensation. To reduce pain, the healer recommended the name of an oral or topical painkiller. Although they did not exactly know the series of visits needed for bone recovery, all participants said that they wanted to get well soon so they followed what the healer suggested.

The healer sometimes informed about the bone healing process after the massage was finished. Everything that comes from the healer during the healing process was perceived positively by participants. Implicit in the results of interviews was sources of hope and advice conveyed such as others suffered the same fracture. It was not merely because of lack of funds for medical treatment (Table 1) as all participants were financially independent, but they came to a Topu Bara center for various considerations and reasons.

Family, relatives, and close friends who suggested them to have Topu Bara treatment were fully attentive and followed the result of every visit. Further, during the waiting time for healing, most participants talked to each other and shared their experiences. Participants perceived that situation was not found in any hospital. It has been stated that perception is the major social aspect so that people are freed from using services of an alternative based on their perspectives (Mulyono, 2017). In addition, treatment by a healer at a Topu Bara center as perceived by the public works, most stating that cost was not relevant. Almost all of the respondents knew the suitability of the herb used in techniques and they believed the herb is very useful in fracture healing (Suarilah et al., 2017).

Additionally, based on the background of participants, demographics, economic, religion and culture, and economic, vary from middle to high economic level, Muslim, and Maluku Province. Further, even though the coverage of health insurance provided by Indonesia's government was fully funded for any hospital service, it does not replace the existence of Topu Bara.

Generally, participants believed in the medical services, but they are also searching for an alternative treatment that did not only focus on the physical problem as they perceived it. It is stated that negative perception makes public attitudes toward complementary medicine negative (Agarwal-Harding et al., 2015). It has been expressed by a participant that a Topu Bara healer was able to provide a sense of confidence that they will recover. The spiritual characteristic was a basic that bridged the participant's expectation as to the bone recovery (Mirhadi et al., 2013). This was the less than they got when going to the medical service.

## Conclusions

It can be concluded that participants put safety and comfort as a priority when they decide to get help for fracture. Pain which is commonly expressed by people with fractures decreases effectively when painkillers are combined with a safe and comfortable atmosphere and work in balance. In Topu Bara during the healing process, people with fractures experienced holistic care that combined multiple approaches of culture, cure, and care. Topu Bara as an alternative for fracture healing has been well-developed from generation to generation. The benefits of Topu Bara as an alternative treatment for fractures have been widespread in various ethnic groups and levels of society in Indonesia. This research was conducted in Maluku Province as a reference for health services for Eastern Indonesia. Further studies are needed to be explored considering cultural values and ethical practices.

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Appendix I. Family information needs from nurses' perspectives before and after receiving the training program

| Family needs items<br>(Items 15 to 23) information needs                | not important<br>n (%) | slightly<br>important<br>n (%) | important<br>n (%) | very<br>important<br>n (%) |
|---|------------------------|--------------------------------|--------------------|----------------------------|
| To know about the types of staff members taking care of the patient     |                        |                                |                    |                            |
| Before  | 2 (7.1)                | 10 (35.7)                      | 11 (39.3)          | 5 (17.9)                   |
| After   | 0 (0)                  | 1 (3.6)                        | 11 (39.3)          | 16 (57.1)                  |
| P value   |                        | 0.000                          |                    |                            |
| To know how the patient is being treated medically                      |                        |                                |                    |                            |
| Before  | 2 (7.1)                | 6 (21.4)                       | 14 (50.0)          | 6 (21.4)                   |
| After   | 0 (0)                  | 5 (17.9)                       | 6 (21.4)           | 17 (60.7)                  |
| P value   |                        | 0.000                          |                    |                            |
| To be assured that the best care possible is being given to the patient |                        |                                |                    |                            |
| Before  | 1 (3.6)                | 0 (0)                          | 11 (39.3)          | 16 (57.1)                  |
| After   | 0 (0)                  | 2 (7.1)                        | 11 (39.3)          | 15 (53.6)                  |
| P value   |                        | 0.000                          |                    |                            |
| To have a place to be alone while in the hospital                       |                        |                                |                    |                            |
| Before  | 11 (39.3)              | 11 (39.3)                      | 4 (14.3)           | 2 (7.1)                    |
| After   | 0 (0)                  | 0 (0)                          | 9 (32.1)           | 19 (67.9)                  |
| P value   |                        | 0.000                          |                    |                            |
| To know precisely what is being done for the patient                    |                        |                                |                    |                            |
| Before  | 3 (10.7)               | 10 (35.7)                      | 7 (25.0)           | 8 (28.6)                   |
| After   | 3 (10.7)               | 8 (28.6)                       | 11 (39.3)          | 6 (21.4)                   |
| P value   |                        | 0.000                          |                    |                            |
| To feel accepted by the hospital staff                                  |                        |                                |                    |                            |
| Before  | 1 (3.6)                | 5 (17.9)                       | 10 (35.7)          | 12 (42.9)                  |
| After   | 1 (3.6)                | 4 (14.3)                       | 8 (28.6)           | 15 (53.6)                  |
| P value   |                        | 0.000                          |                    |                            |
| To have someone to help with financial problems                         |                        |                                |                    |                            |
| Before  | 0 (0)                  | 11 (39.3)                      | 11 (39.3)          | 6 (21.4)                   |
| After   | 0 (0)                  | 1 (3.6)                        | 12 (42.9)          | 15 (53.6)                  |
| P value   |                        | 0.000                          |                    |                            |
| To have a telephone near the waiting room                               |                        |                                |                    |                            |
| Before  | 6 (21.4)               | 5 (17.9)                       | 13 (46.4)          | 4 (14.3)                   |
| After   | 0 (0)                  | 5 (17.9)                       | 13 (46.4)          | 10 (35.7)                  |
| P value   |                        | 0.000                          |                    |                            |
| To have a pastor visit  |                        |                                |                    |                            |
| Before  | 14 (50.0)              | 7 (25.0)                       | 3 (10.7)           | 4 (14.3)                   |
| After   | 2 (7.1)                | 4 (14.3)                       | 12 (42.9)          | 10 (35.7)                  |
| P value   |                        | 0.000                          |                    |                            |

Appendix II. Family proximity and assurance needs from nurses' perspectives before and after receiving the training program

| <b>Family needs items</b><br>(Items 24 to 32) proximity or closeness | <b>not<br/>important<br/>n (%)</b> | <b>slightly<br/>important<br/>n (%)</b> | <b>Important<br/>n (%)</b> | <b>very<br/>important<br/>n (%)</b> |
|--|------------------------------------|---|----------------------------|-------------------------------------|
| To talk about the possibility of the patient's death                 |                                    |   |                            |                                     |
| Before   | 3 (10.7)                           | 3 (10.7)                                | 15 (53.6)                  | 7 (25.0)                            |
| After  | 3 (10.7)                           | 8 (28.6)                                | 11 (39.3)                  | 6 (21.4)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To have another person with you when visiting the critical care unit |                                    |   |                            |                                     |
| Before   | 10 (35.7)                          | 6 (21.4)                                | 9 (32.1)                   | 3 (10.7)                            |
| After  | 0 (0)                              | 9 (32.1)                                | 13 (46.4)                  | 6 (21.4)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To have someone concerned with patient health                        |                                    |   |                            |                                     |
| Before   | 2 (7.1)                            | 1 (3.6)                                 | 10 (35.7)                  | 15 (53.6)                           |
| After  | 5 (17.9)                           | 10 (35.7)                               | 7 (25.0)                   | 6 (21.4)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To be assured it is all right to leave the hospital for a while      |                                    |   |                            |                                     |
| Before   | 8 (28.6)                           | 5 (17.9)                                | 12 (42.9)                  | 3 (10.7)                            |
| After  | 0 (0)                              | 3 (10.7)                                | 14 (50.0)                  | 11 (39.3)                           |
| P value  |                                    |   | 0.000                      |                                     |
| To talk to the same nurse every day                                  |                                    |   |                            |                                     |
| Before   | 14 (50.0)                          | 7 (25.0)                                | 6 (21.4)                   | 1 (3.6)                             |
| After  | 3 (10.7)                           | 8 (28.6)                                | 10 (35.7)                  | 7 (25.0)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To feel it is all right to cry                                       |                                    |   |                            |                                     |
| Before   | 5 (17.9)                           | 9 (32.1)                                | 9 (32.1)                   | 5 (17.9)                            |
| After  | 10 (35.7)                          | 12 (42.9)                               | 4 (14.3)                   | 2 (7.1)                             |
| P value  |                                    |   | 0.000                      |                                     |
| To be told about other people that could help with problems          |                                    |   |                            |                                     |
| Before   | 1 (3.6)                            | 6 (21.4)                                | 13 (46.4)                  | 8 (28.6)                            |
| After  | 0 (0)                              | 7 (25.0)                                | 10 (35.7)                  | 11 (39.3)                           |
| P value  |                                    |   | 0.000                      |                                     |
| To have a bathroom near the waiting area                             |                                    |   |                            |                                     |
| Before   | 1 (3.6)                            | 4 (14.3)                                | 15 (53.6)                  | 8 (28.6)                            |
| After  | 2 (7.1)                            | 1 (3.6)                                 | 17 (60.7)                  | 8 (28.6)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To be alone at any time  |                                    |   |                            |                                     |
| Before   | 9 (32.1)                           | 10 (35.7)                               | 8 (28.6)                   | 27 (96.4)                           |
| After  | 0 (0)                              | 2 (7.1)                                 | 8 (28.6)                   | 18 (64.3)                           |
| P value  |                                    |   | 0.000                      |                                     |
| <b>Family assurance needs items (items 33 to 39)</b>                 |                                    |   |                            |                                     |
| To be told about transfer plans while they are being made            |                                    |   |                            |                                     |
| Before   | 7 (25.0)                           | 6 (21.4)                                | 10 (35.7)                  | 5 (17.9)                            |
| After  | 6 (21.4)                           | 5 (17.9)                                | 13 (46.4)                  | 4 (14.3)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To be told about someone to help with family problems                |                                    |   |                            |                                     |
| Before   | 15 (53.6)                          | 6 (21.4)                                | 4 (14.3)                   | 3 (10.7)                            |
| After  | 4 (14.3)                           | 5 (17.9)                                | 12 (42.9)                  | 7 (25.0)                            |
| P value  |                                    |   | 0.000                      |                                     |
| To have explanations given that is understandable                    |                                    |   |                            |                                     |
| Before   | 1 (3.6)                            | 3 (10.7)                                | 14 (50.0)                  | 10 (35.7)                           |
| After  | 0 (0)                              | 3 (10.7)                                | 11 (39.3)                  | 14 (50.0)                           |
| P value  |                                    |   | 0.000                      |                                     |
| To have visiting hours start on time                                 |                                    |   |                            |                                     |
| Before   | 3 (10.7)                           | 10 (35.7)                               | 14 (50.0)                  | 1 (3.6)                             |
| After  | 0 (0)                              | 1 (3.6)                                 | 12 (42.9)                  | 15 (53.6)                           |
| P value  |                                    |   | 0.000                      |                                     |
| To be told about chaplain services                                   |                                    |   |                            |                                     |
| Before   | 3 (10.7)                           | 8 (28.6)                                | 3 (10.7)                   | 4 (14.3)                            |
| After  | 3 (10.7)                           | 8 (28.6)                                | 7 (25.0)                   | 10 (35.7)                           |
| P value  |                                    |   | 0.000                      |                                     |
| To help with patient's physical care                                 |                                    |   |                            |                                     |
| Before   | 6 (21.4)                           | 9 (32.1)                                | 12 (42.9)                  | 1 (3.6)                             |
| After  | 0 (0)                              | 3 (10.7)                                | 15 (53.6)                  | 10 (35.7)                           |
| P value  |                                    |   | 0.000                      |                                     |