



The Effect of Communication Information Among Professional Nurses' Model on Stress Anxiety and Satisfaction to Family Members of Patients in The Emergency Department Chonburi Hospital

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Abstract

Background and Aim: Communication plays a vital role in professional nursing. Effective communication is an essential factor in high-quality nursing care. Therefore, the objectives of this research were to 1. Compare the effects of different communication information among professional nurses' models on family members of emergency patients in the emergency department of Chonburi Hospital in both a controlled and experimental group 2. compare the average stress levels of emergency patients' family members between those communicated with professional nurses' models and those with normal communication 3. Compare the average anxiety levels of emergency patients' family members between those communicated with the professional nurses' model and those with normal communication 4. Measure the average satisfaction of emergency patients' family members who have received communication information models with professional nurses.

Research Methodology: This research is Quasi-Experimental Research. The samples were 60 emergency patients' family members at Chonburi Hospital, divided into controlled and experimental groups with 30 members each. The experimental group received the communication information model through professional nurses, while the control group received information normally. The data is obtained by emergency patients' family members' survey submissions on personal information, stress levels, anxiety levels, and satisfaction levels which are analyzed with descriptive statistics and t-test statistics.

Results: The results showed that Level of stress of experimental group after receiving communication information model from professional nurses was significantly less than that before receiving communication information model ($p=.035$) and Level of anxiety of experimental group after receiving communication information model was significantly less than that before receiving communication information model ($p=.003$) Comparison of the mean scores and standard deviation of stress and anxiety among the experimental group and controlled group after receiving communication information model found that Level of stress between experimental group and controlled group after receiving communication information model was significantly less than that before receiving communication information model ($p=.022$) Level of anxiety between experimental group and controlled group after receiving communication information model was significantly less than that before receiving communication information model ($p=.011$), and the average satisfaction level of emergency patients' family members that have received information based on professional nurses' model are high.

Conclusion: Utilizing the professional nurse's communication information model can alleviate stress and anxiety in the family members of emergency patients.

Keywords: Family members; Communication Information Model; Stress; Anxiety; Satisfaction

Introduction

The emergency department offers care to a wide range of emergency patients, including those from accidents and other emergencies (Sangsongrit, et al, 2017). The emergency department is open for patients at all times, and the healthcare personnel within the emergency department are tasked with caring for emergency patients and focusing on saving the patients' lives. Consequently, emergency patients usually stay in the emergency department only for a short period. (Kongsuwan, et al, 2016). At present, the number of emergency patients has been continuously increasing every year. The data for the years 2020 through 2022 reveals that there were 16,202, 12,822, and 14,407 patients, respectively (Chonburi Hospital, 2022). The conditions of emergency patients exhibit a range of severity, leading to a need for prioritized care. This ensures that patients are attended to based on the urgency of their





conditions, particularly those with critical injuries that demand immediate medical attention (Ocak & Avsarogullari, 2018).

In a state of emergency, the patient's family members will always be affected (Boonyaratkalin, 2019) and show signs of discomfort, stress, anxiety, and fear when forced to face an unprecedented state of illness (Panchuay, et al, 2022; Ocak & Avsarogullari, 2018). Certain emergency patients' family members have exhibited physical manifestations, including symptoms like headaches, nausea, vomiting, sleep disturbances, fatigue, reduced appetite, and irregularities in their excretory system. They have also experienced emotional effects such as anger, fear, and anxiety (Yildirim & Karaman, 2018). Some emergency patients' family members also display extreme behaviors, such as bawling or crying, and would usually eagerly wait to hear about the patients' conditions in front of the emergency department with agitation. Therefore, family members of emergency patients should receive proper care and be well-informed to help them feel more comfortable and reduce their stress and anxiety. If the emergency department staff recognizes and provides care for the emergency patients' family members, it can enhance their satisfaction with the hospital's services (Yildirim & Karaman, 2018).

Apart from taking care of emergency patients, professional nurses must also acknowledge the importance of providing care to the emergency patients' family members (Botes & Langley, 2016) since the conditions of emergency patients often exhibit continuous fluctuations, leading to a heightened level of stress and anxiety among their family members. Therefore, emergency department nurses should have good communication skills to connect with the emergency patients' family members. Certain emergency patients might have a brief stay in the emergency department, while others may require consultations with specialist physicians, leading to extended periods of stay (Ocak & Avsarogullari, 2018). As a result, the department's complex environment increases the communication risks; moreover, nurses in the emergency department prioritize patients' survivability above all (Ocak & Avsarogullari, 2018), causing them to not have time to care for or attend to the family members of emergency patients' concerns. Ultimately, this resulted in the family members feeling dissatisfied with the service, despite the patient receiving appropriate physical care and timely attention. This underscores the significance of nurses' involvement in maintaining communication with the family members of emergency patients during medical procedures to attend to their needs. (Boonyaratkalin, 2019).

According to the literature review, it is found that in cases where patients experience severe accidents or unexpected critical illnesses, their family members are generally unprepared, both physically and emotionally, to confront the emergency of their loved ones (Botes & Langley, 2016). This has caused them emotional distress and heightened stress (Boonyaratkalin, 2019). and a significant increase in anxiety while waiting for the patients' treatment results as they are afraid to lose their families.

Furthermore, when receiving care, the emergency patients will be separated from their families. Therefore, in addition to the primary goal of rescuing the patient from a critical condition, family members also anticipate receiving updates regarding the patient's condition, its seriousness, and the medical interventions being administered. Effectively conveying information will respond to the family members' physical, emotional, and spiritual needs (Sangsongrit, et al, 2017). Family members of emergency patients also desire to have discussions with the attending physician, receive comprehensive information at each stage of the medical process, stay updated on the outcomes of the treatment, and expect to feel heard by the designated nurse (Panchuay, et al, 2022) Furthermore, family members of emergency patients in critical condition also wish to participate in assisting the patient, stay near the patient, receive encouragement, and have the opportunity to express their feelings and concerns. Research findings indicate that family members of emergency patients desire ongoing updates about the patient's well-being and seek reassurance that the patient is receiving the highest level of care from both doctors and nurses (Ocak & Avsarogullari, 2018). A study has also shown that satisfaction levels of emergency department services still fall within the low to moderate range, and one of the factors is the treatment information provision. Thus, professional nurses' communication skill is a necessity for caring, helping, and supporting emergency patients' family members (Panchuay, et al, 2022) especially when offering medical information.

Research has revealed that emergency department nurses often lack adequate communication skills for engaging with the family members of emergency patients and ensuring the ongoing provision



of medical information. It has also indicated that nurses' listening skills are at a moderate level, possibly due to fatigue resulting from their demanding workload, making them less tolerant of discussing intricate matters. Additionally, nurses possess only a moderate ability to convey easily understandable information to patients and others, which could be attributed to inadequate communication skills, resulting in a reduced capacity to interact effectively with patients and their family members (Sriwichai & Limprasert, 2019). Simultaneously, when the emergency patients' family members struggle to manage their reactions when confronted with the patient's emergency, they are likely to experience heightened agitation, confusion, and reduced receptiveness, creating obstacles to effective communication. Therefore, the nurse responsible for providing information should ensure consistent delivery of clear information (Panchuay, et al, 2022) and practice in supporting and giving the emergency patients' family members time to cope with their emotions. At present, a lack of knowledge often exists among the family members of emergency patients regarding the severity of the patient's condition, the condition itself, the required medical procedures, the expected duration of recovery, and other pertinent information. This led to stress and anxiety in the family members of emergency patients to the point where they expressed dissatisfaction with the services provided by the emergency department staff. The stress, anxiety, and satisfaction levels among family members of emergency patients treated at Chonburi Hospital have become a subject of interest for this reason.

Regarding the aforementioned problem, professional nurses in the emergency department should have a communication model to relay information to emergency patients' family members since the hectic environment in the emergency department and professional nurses' primary focus on helping the emergency patients might lead to a lapse in essential communication with emergency patients' family members. For this reason, the researcher is interested in developing a communication information model for professional nurses by using the following instruments: (1) four questionnaires: personal information questionnaire, stress level questionnaire, anxiety level questionnaire, and satisfaction level questionnaire—the reliability of all of which are proved by three medical professionals; (2) professional nurses' communication training with nurse consultants to foster understanding on information dissemination which includes creating communication information model for professional nurses in the emergency department and informational pamphlets containing Chonburi Hospital map layout, building names in which emergency patients reside, and emergency contacts for every patients' family member who use service at the emergency department.

Objectives

1. To compare the effects of different communication information among professional nurses' models to family members of patients in the emergency department of Chonburi Hospital in both controlled and experimental groups.
2. To compare the average stress levels of patients' family members between those communicated with the professional nurses' model and those with normal communication.
3. To compare the average anxiety levels of patients' family members between those communicated with the professional nurses' model and those with normal communication.
4. To measure the average satisfaction of patients' family members who have received communication with the professional nurses' model.

Literature Review

According to the intensive literature review, when emergency patients receive medical assistance in the emergency department, the patient's family members have to wait outside, causing their stress and anxiety levels to increase due to the fear of worsening conditions and the fear of losing their loved ones. If professional nurses in the emergency department do not understand and disregard the patient's family members, their stress and anxiety levels will increase to the point of emotional crisis. This corresponds to the study that shows the need for the patient's family members to receive the emergency patients' medical information. With proper information communication, the needs of the patient's family members will be met with satisfaction (Boonyaratkalin, 2019). Furthermore, it also



corresponds to the study which has found that the patients' family members' satisfaction will increase if their desire to periodically receive the patients' medical updates, such as patients' current status and medical results, are met (Ocak & Avsarogullari. 2018: Botes & Langley, 2016). Playing the most important role in caring for the patients, professional nurses, therefore, must provide proper communication since their responsibility is to act as an information liaison between the patients and the family members to provide holistic care (Tantiwinyupong, 2022). Transparent communication about the treatment plan alleviates anxiety and increases the overall satisfaction of the patient's family members. On the other hand, if professional nurses in the emergency department lack proper communication with their patient's family members, it is normal for the family members to be anxious and dissatisfied with the service. For that reason, professional nurses need to provide a service to the patient's family members with understanding and empathy to help the family members with their emotional crisis. Professional nursing must proactively respond to the patient's family members and provide holistic care, especially accurate and transparent communication to create mutual understanding (Sangsongrit, et al, 2017).

According to the study, emergency patients' medical information provided by the emergency department is not comprehensive and sufficient enough to satisfy the needs of the patient's family members. This finding follows another study by Higgins, et al. (2007), stating that one of the first demands of the patient's family members is receiving the diagnosis and medical treatment information. Yet this demand is often overlooked and ignored although sharing the status of the medical process is important. In addition, based on the study, the service users' satisfaction level in the emergency department is low to moderate level (Mitsungnern, et al, 2014). As per the reasons stated earlier, it is obvious that effective communication is an integral part of professional nurses' care (Kwame, A., & Petrucka, P. M. 2021). Providing clear and sufficient information can establish confidence and trust for any patients who currently undergo medical treatment as well as encourage the patients and medical providers to plan a mutual medical treatment (Panchuay, et al, 2022). So, there must be a proper information communication model for professional nurses to maximize the efficiency of communication for emergency patients' family members.

Conceptual Framework

The professional nurse's communication model is developed from Aguilera's Crisis Intervention, encompassing three key elements: 1) Accurate perception of the situation, theory (1998) 2) A functional support system, and 3) Appropriate stress management. Additionally, the model involves communication utilization techniques, which can be categorized into three main activities:

1. Accurate perception of the situation

The goal is to provide information in alignment with the designated model by professional nurses with over 5 years of experience. These nurses also have a background in offering information and advice to the family members of patients during emergencies.

2. Functional support system

The goal is for nurses to distribute Chonburi Hospital's brochure to the patient's family members. The brochure consisted of information about emergency patient wards' names, patient wards' contact numbers, shops, canteens, restrooms, patients' family members' resting areas, patients' necessities, and basic healthcare benefits (utilizing the Suggestion technique).

3. Appropriate stress management

The goal is for the nurse responsible for the patient to assess the patient's family members by observing their facial expressions and behaviors. The nurse should encourage the family members to express their emotions, for example, by asking open-ended questions so they can communicate their feelings (Giving Broad Openings). As aides to the family members of patients, nurses should enable them to ask questions to clarify their understanding, provide opportunities for them to be near the patient, and be open to the family members' decisions on how to best care for the patient, all while comforting and encouraging them.

The study's conceptual framework is shown in Figure 1

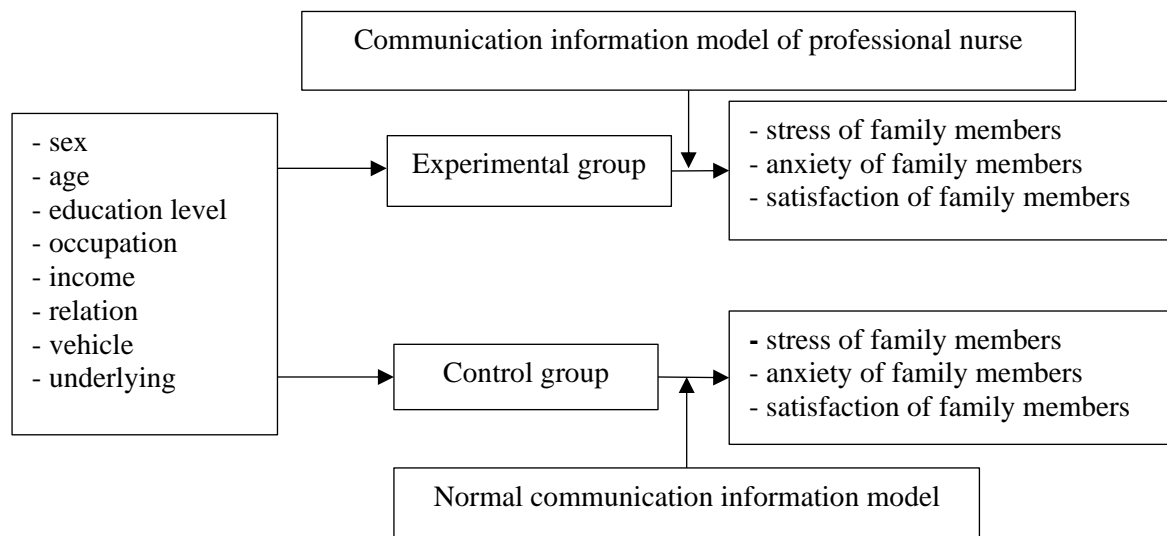


Figure 1 Conceptual framework

Methodology

The Population is family members of emergency patients who brought the patient to the emergency department, Chonburi Hospital.

Techniques and methods for selecting samples: The sample size used in this research study by randomly selected from the population within the data retrieval period which takes 4 months, extending from between August of 2023 to November of 2023. The sample group is designated by purposive sampling, selecting the group from all family members of the emergency patient who brought the patient to the Emergency Department and are eligible by the determined qualifications. The sample group's size is calculated based on a study with Glass's formula (1976). According to the results of the independent t-test, the effect size is 0.52. With Cohen's table, there are 26 people in the sample group. The group is increased by 10% to prevent disappearances of the sample group. In total, this study centers around 30 individuals in the control group and another 30 individuals in the experimental group.

Inclusion Criteria The patients' required qualifications are:

- 1) The patient is over 18 years old.
- 2) The patient has been triaged as level 1 and level 2 by ESI (Emergency Severity Index).
- 3) The patient was admitted to Chonburi Hospital's ward.

The patients' family members required qualifications are:

- 1) The patient's family member is part of the patient's family and household, which may include parents, siblings, or a spouse.
- 2) The patient's family member is between the range of 18 to 59 years old.
- 3) The patient's family member has full awareness and consciousness.
- 4) The patient's family member is capable of communication, able to read and write in Thai, and has no hearing disabilities.

The tools used for data collection in this research were a questionnaire as follows: 1) Personal data questionnaire 2) The stress of relatives of critically ill patient questionnaire 3) The State-Trait Anxiety Inventory Form Y2 4) The satisfaction questionnaire

Data Analysis and Processing: The researcher has analyzed the data by computer program. The sequence of the analysis steps is as follows. 1) Personal data of the emergency patient's family members were analyzed by using descriptive statistics mean, percentage, and standard deviation. 2) Stress and Anxiety rating data were analyzed by independent t-test and paired t-test. 3) Satisfaction data were analyzed by mean and standard deviation.



Results

There are 60 people in the sample groups, which are divided into 30 people for the experimental group and 30 people for the control group. The sample groups share similar demographic characteristics. A significant proportion of both the experimental and controlled groups are comprised of women, constituting 66.7% in the experimental group and 73.3% in the controlled group. The largest age bracket in both groups is individuals aged 50 and above, accounting for 30.7% in the experimental group and 40% in the control group. The average age for both groups is 42.75 years old (SD=12.38). The majority of participants in the experimental group have completed high school, vocational, or associate programs, totaling 23.3%. The controlled group predominantly consists of individuals with bachelor's degrees, comprising 36.7%. Both groups are mostly workers under employment/laborers, with 53.3% and 50.0% respectively. In the experimental group, 46.7% of individuals earn a monthly income ranging from 10001 to 30000 Thai Baht, whereas 60% of the control group earns less than 10000 Baht per month. Participants in both the experimental and controlled groups are the patients' children/grandchildren, comprising 53.3% and 50.0%, respectively. The experimental group's 53.3% means of transporting the patients are using personal vehicles, whereas 43.3% of the control group's means of transporting patients are using referral ambulances. In the experimental group, diabetes accounts for 20% of the underlying diseases, while in the controlled group, dyslipidemia constitutes 33.3%.

The sample group exhibited an average stress score of 2.64 ($M = 2.64$, $SD = 0.25$) before receiving communication based on the professional nurses' model, which decreased to 2.33 ($M = 2.33$, $SD = 0.68$) after receiving information based on the same model. Statistical analysis revealed a statistically significant decrease in the average stress score ($p = 0.035$) following the provision of information through the professional nurses' model. Similarly, the sample group displayed an average anxiety score of 2.67 ($M = 2.67$, $SD = 0.47$) before communication based on the professional nurses' model, which reduced to 2.33 ($M = 2.34$, $SD = 0.22$) after receiving information based on the model. Statistical analysis indicated a statistically significant decrease in the average anxiety score ($p = 0.003$) after receiving information through the professional nurses' model, as shown in Table 1.

Table 1 The comparison of the mean scores and standard deviation of stress and anxiety among the experimental group before and after receiving Communication Information Model ($n = 30$)

Variables		Mean	Standard Deviation	t	p
Stress	Pre-Communication Information Model	2.64	.25	2.21	.035*
	Post-Communication Information Model	2.33	.68		
Anxiety	Pre-Communication Information Model	2.67	.47	3.25	.003*
	Post-Communication Information Model	2.34	.22		

Individuals in the experimental group had an average stress score of after receiving information based on the professional nurses' model of 2.33 ($\bar{X} = 2.33$, $SD = .68$), whereas the controlled group has average stress score after receiving normal communication of 2.64 ($\bar{X} = 2.64$, $SD = .24$). The experimental group also has average anxiety score after receiving model-based communication of 2.34 ($\bar{X} = 2.34$, $SD = .22$), while the controlled group has 2.57 ($\bar{X} = 2.57$, $SD = .42$) with normal communication style. The statistical analysis illustrates that the average score of stress and anxiety between the experimental and controlled groups have shown a statistically significant decrease ($p = .022$, $p = .011$) as demonstrated in Table 2.



Table 2 The comparison of the mean scores and standard deviation of stress and anxiety among the experimental group and control group after receiving the Communication Information Model (n= 30)

Variables	Experimental group	Controlled group	p
	$\bar{x} \pm S.D.$	$\bar{x} \pm S.D.$	
Stress	2.33 \pm .68	2.64 \pm .24	.022*
Anxiety	2.34 \pm .22	2.57 \pm .42	.011*

p-value \leq 0.05

Study results show that the overall satisfaction level of the experimental group is strongly satisfied (\bar{X} 2.41, SD= .14). By examining the results, three key factors emerged with the highest scores: a concise and comprehensible explanation of the disease and treatment procedures (\bar{X} = 2.67), the emergency department staff's effective communication of vital and easily understandable information (\bar{X} = 2.57), and a clear overview of the service processes upon arrival at the emergency department (\bar{X} = 2.50) as shown in table 3.

Table 3 The mean and standard deviation of satisfaction among family members of emergency patients, categorized by different aspects (n = 30)

No.	Satisfaction	Mean	Standard Deviation	Satisfaction Level
1	Received clear overview of the service.....	2.50	.78	Strongly Satisfied
2	Received general advice while waiting.....	2.33	.76	Satisfied
3	Received information on the disease.....	2.67	.66	Strongly Satisfied
4	Received examination results, blood.....	2.27	.69	Satisfied
5	Involved in decisions regarding the.....	2.33	.71	Satisfied
6	Received information on medicines.....	2.47	.68	Strongly Satisfied
7	Visited your family member after the.....	2.40	.68	Strongly Satisfied
8	Received general advice after your.....	2.43	.73	Strongly Satisfied
9	Received a brochure containing rules.....	2.13	.78	Satisfied
10	Nurses offered updates on the patient.....	2.47	.68	Strongly Satisfied
11	Emergency Department staff offered.....	2.57	.68	Strongly Satisfied
12	Received information on benefits with.....	2.37	.81	Strongly Satisfied
Overall		2.41	.14	Strongly Satisfied

According to the study, when stress and anxiety levels are compared between the control and experimental group, the results reveal that emergency patients' family members in the experimental group have significantly lower stress and anxiety levels than their control group's counterparts, which are $p = .022$ and $p = .011$ respectively. When comparing the stress level average score of emergency patients' family members who received the communication information model from professional nurses and those who received regular communication, the results show that, after emergency patients' family members have received the communication information model, their stress level's average scores of emergency patients' family members has decreased significantly ($p = .035$). Moreover, when comparing the anxiety level average score of emergency patients' family members who received the communication information model and those who received regular communication, the results also demonstrate that the anxiety level average scores of emergency patients' family members decreased significantly after they received the communication information model. In terms of the satisfaction of emergency patients' family members, the results suggest that emergency patients' family members are strongly satisfied (\bar{X} = 2.41) after they receive the communication information model.

These results indicate that professional nurses in the emergency department, who are frontline health workers, have a crucial role in caring for both emergency patients and their relatives especially



when emergency patients are admitted to provide medical care in the emergency department; nevertheless, emergency patients' family relatives often do not receive any comprehensive, transparent, and intelligible medical information related to the emergency patients. Therefore, properly structured communication is essential for alleviating the stress and anxiety of emergency patients' family members and it is essential for increasing the satisfaction of emergency patients' family members who receive medical service in the emergency department.

Discussion

The result of this study goes in tandem with the established hypothesis. The experimental group that received the communication information model from professional nurses had a statistically significant decrease in stress and anxiety rates after the experimentation. This indicates the importance of establishing a structured communication approach for nurses in the emergency department when interacting with family members of emergency patients. This is particularly crucial because the family members who brought in the patients may be emotionally agitated due to the emergency involving their loved ones, which will cause them to express abnormal behaviors. Moreover, by the nature of the emergency department, marked by the hectic and perpetual ebb and flow of individuals, nurses and patients' family members are prone to stress, anxiety, and dissatisfaction with the services. Hence, emergency department nurses must adopt a communication information model when engaging with patients' family members. According to Aguilera's Crisis Intervention theory (1998), the severity of injuries or the heightened risk of losing a family member can induce an emotional crisis in individuals. Consequently, ensuring that family members of patients can appropriately adapt to the situation and be satisfied with the service requires the application of three fundamental factors outlined in Aguilera's Crisis Intervention theory (1998): 1) Accurate perception of the situation, 2) Functional support system, and 3) Appropriate stress management.

Professional nurses' communication information model will allow family members of patients to perceive the patient's condition and understand the situation more clearly. If family members of the patients are under stress and, at the same time, receive misinformation while lacking a clear understanding of the situation, they will be unable to effectively manage the stress. The study results show that the family members of emergency patients have a high level of stress, caused by insufficient information that obstructs them from anticipating the patients' conditions. For the family members of emergency patients to adapt, effectively handle the situation, and experience reduced emotional distress, communication by nurses in the emergency department should be structured. This involves assessing the family members' expressions before providing information, encouraging them to express their feelings, facilitating opportunities for them to ask questions, allowing them to see the emergency patient, and involving them in decisions regarding the care of the patient.

The family members of patients' anxiety is caused by the discomfort towards the emergency that happened to the patient. According to the study, the family members' anxiety levels in the experimental and controlled groups are significantly different ($p = .011$). This is because the communication model used by professional nurses not only establishes a connection with the patient's family but also involves suggesting that family members wait in the designated waiting area in front of the emergency department and also informing them that they will receive periodic updates about the patient's condition. After the staff has provided care for the emergency patient, supported the patient, and informed the family members, nurses should allow the family members to visit the patient as appropriate. Nurses should also inform the family members about the patient's transference to the ward while also handing out the brochure about the hospital's general information. Within the brochure, there are details about the names of the patient wards, contact numbers of the wards, facilities provided for patients' family members, stores, canteens, restrooms, resting areas, necessities for the patients, and general care benefits. This information will help the family members lessen their anxiety, similar to the study on informational support programs on smartphones with family members of emergency patients' stress. The study found that the program can decrease the family members' stress while waiting in front of the emergency department (Orawongphaisal, et al, 2023).



This study indicates that the number of family members of emergency patients is high after receiving information based on the professional nurses' communication model. This indicates that structured communication can enhance the understanding of family members whose loved ones are receiving care in the emergency department. It enables them to comprehend the care sequences, understand patients' conditions and treatments, receive information on inspection results, become familiar with prescribed medicines and interventions, participate in decisions regarding patient care, and stay informed about the patient's assigned ward, permitted visitation dates, and times. By consistently informing the family members of patients, the family members will be more at ease and more satisfied with the emergency department's service. This aligns with the research that identified a correlation between inadequate communication among medical staff, patients, and patient's family members, impacting both the outcomes of care and the perception of the care delivered, thereby increasing the likelihood of risks and reports. (Kwame & Petrucka, 2021)

Conclusion

Emergency department nurses can employ the professional nurses' communication model when interacting with the family members of emergency patients, aiming to alleviate their stress and anxiety. It will also enhance the satisfaction rates of family members, thereby increasing their overall satisfaction with the services provided in the emergency department.

Recommendation

1. Following the framework of the professional nurses' communication model, it is most effective in emergency departments with constrained timeframes. This involves delivering consistent information to provide family members with accurate details, establishing a robust support system by offering informative brochures about the hospital layout and ward numbers and employing various nursing techniques in communication to alleviate stress among the patients' family members. Emergency departments in other settings can tailor and adopt this model to align with their hospital's context, aiming to enhance overall satisfaction with the department's services.

2. Future research should incorporate the involvement of family members in patient care and hospital visitation rules into the professional nurses' communication model. This can be achieved by providing clarity on these aspects and collaborating with patient wards.

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