



Effects of Facilitative Nurse-Patient Interaction using an Informational Leaflet on Emergency Care

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Purpose: The purpose of this study was to develop an informational leaflet on emergency care and to explore effects of facilitative nurse-patient interaction behavior using an informational leaflet on patient satisfaction with nurse-patient interaction behavior, patient anxiety, and patient satisfaction with use of emergency care. **Methods:** This study was a quasi-experimental study that applied a nonequivalent control-group posttest-only design. The participants were 81 patients who visited the emergency department of a hospital in Korea; the experimental group (n=40) received facilitative nurse-patient interaction behavior using an informational leaflet, and the control group (n=41) received care under routine protocols without an information leaflet. The effects of the two groups were analyzed using an independent t-test with SPSS computer program. **Results:** Patient satisfaction with nurse-patient interaction behavior and use of emergency care in the experimental group were significantly higher than in the control group. Patient anxiety related to using emergency care in the experimental group was significantly lower than the control group. **Conclusion:** Therefore, facilitative nurse-patient interaction behavior using an informational leaflet to the patient may be useful interventions that are easily implemented by nurses in emergency settings.

Key Words: Nurse-patient relations; Emergency nursing; Patient satisfaction; Anxiety

**This article is a revision of the first author's master's thesis from Chosun University.*

Received Mar 18, 2019 Revised May 14, 2019 Accepted May 14, 2019

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INTRODUCTION

Emergency medical services (EMS) are basic medical care services of high public interest provided to guarantee people's right to life [1]. Due to changes in lifestyle and illness structure, the number of emergency patients in South Korea needing EMS increased from 7,470,000 in 2005 to 10,400,538 in 2017, and their demands and expectations for professional and high-quality emergency care are being raised in accordance with changes in economic standards and lifestyle [1,2].

However, the level of patient satisfaction with emergency care was still low despite the increase in the number of users [3]. The increase in emergency care users led to overcrowding of emergency rooms, and the provision of medical care and treatments in emergency rooms was delayed in many cases; therefore, patients complained about the waiting time [4] while strongly demanding prompt and satisfactory treatment and care [5]. In addition, patients demanded that any explanation or guidance concerning such a situation should be offered in emergency rooms where treatments and medical care were being delayed [6]. Patients go to emergency departments (EDs) because they are worried about their health; often, they do not know what is wrong with them or whether it is something serious. Delays followed by complicated tests, procedures, and treatment processes intensify their anxiety [7]. Therefore, emergency nurses must often choose between prioritizing patient satisfaction and nursing care efficiency [8]. It has been shown that nursing interventions to relieve patient fear and anxiety are useful, and offering information to emergency patients can help relieve anxiety [9]. Study has shown that, when nurses provided patients with exact information and communicated with them about emergency care, patient understanding and satisfaction increased, and anxiety was reduced [10].

Nurse interaction behaviors are an essential part of the ED visit, since it is the nurses who have the first, most meaningful interactions with patients in ED [7,11]. During nurse-patient interaction, patients need to be encouraged to express their needs and be provided with enough relevant information so that treatment and recovery from illness are optimized [12].

Although ED patients need nurses' care due to physical pain and emotional anxiety, nurses usually prioritize taking care of physical pain [11,13], so the dynamics of the nurse interaction behavior in EDs differ from those in other clinical fields. Kim [11] divided four nurse-patient interaction patterns in EDs based on Roter's interaction analysis system [14]. Type I is a closed nurse-patient interaction

pattern characterized by orientation and negative talk. Type II is a positive nurse-patient interaction pattern characterized by positive affective talk. Type III is an informative and directing nurse-patient interaction pattern characterized by task-focused behavior. Type IV is a facilitative nurse-patient interaction pattern characterized by balancing information exchange and psychosocial exchange and patient-centered behavior. The Type IV, facilitative nurse-patient interaction leads to higher levels of patient satisfaction than Types I-III [12]. Type IV was used in the present study.

As for patient satisfaction, providing patients with relevant information and informing them of how much longer they had to wait was more effective in improving their satisfaction than actually reducing the waiting time [15]. Additionally, patient satisfaction was improved when staff made an effort to explain the situation causing patient delays and interacted with waiting patients occasionally [16]. A previous study on offering information to a patient in ED and nurse-patient interaction revealed that patient satisfaction was improved when a nurse provided the patient with individual information, including an explanation of the clinical characteristics of the presenting condition [17], and when an information leaflet about the process of using the emergency room and treatment, which had been explained verbally, was given to the patient [18].

Few studies have examined the effects of interventions using informational leaflets to improve patient satisfaction with use of emergency care in South Korea, with only two studies by Kim et al. [18] and An [19]. There was also a study researching patient satisfaction with use of emergency care after providing patients with an intervention offering information [16], but no study of patient anxiety related to using emergency care and patient satisfaction with nurse interaction behavior was found.

The aim of this study was to determine whether a specific intervention by emergency nurses could reduce patients' anxiety and increase patients' satisfaction with use of emergency care. The intervention involved facilitative nurse-patient interaction behavior using an informational leaflet (Appendix 1) with an explanation of what to expect in an emergency setting. The detailed objectives were as follows: (a) to develop an informational leaflet on emergency care; (b) to compare patient satisfaction with nurse interaction behavior between two groups; (c) to compare patient anxiety related to using emergency care between two groups; and (d) to compare patient satisfaction with use of emergency care between two groups.

METHODS

1. Study Design

This was a quasi-experimental study that applied a non-equivalent control-group posttest-only design. No pre-test data could be collected since the nature of an emergency means it is unplanned.

2. Participants

The participants were patients who visited a hospital in Korea, understood the goals of this study, and agreed to participate. The inclusion criteria for participants were as follows: aged 19 or older, visited the ED between 9 a.m. and 5 p.m., understood the contents of the questionnaire with clear consciousness, had no physical and mental difficulties completing a questionnaire, and were able to discharge from ED after receiving emergency care. The participants were assigned to the control and experimental groups based on whether their medical record numbers ended with even or odd numbers, respectively. However, this study could not reflect the differences in the triage level of participants in the ED.

Analysis to determine desired sample size was done using G*Power 3.1.2 program. The minimum sample size needed for this study was calculated to be 36 people individually on significance level ($\alpha = .05$), power ($1-\beta = .80$), and effect size ($d = .60$) in an independent t-test. Effect size was based on the medium effect size suggested by a previous study [20]. The actual sample was 81 people with 40 in the experimental group and 41 in the control group. Participants were assigned via allocation concealment to prevent selection bias.

3. Measurements

1) Patient satisfaction with nurse-patient interaction behavior

Patient satisfaction with nurse-patient interaction behavior was measured using a self-reported questionnaire developed by Heavey, Layne, and Christensen [20]. The instrument was translated into Korean and amended by Lim [21], and then further modified in the emergency care context by Kim [7]. The instrument consists of nine items from three content areas: nurse attitude, interaction anxiety, and problem-solving level, and contains on a five-point Likert scale (1=“highly unsatisfactory” through 5=“highly satisfactory”) ranging from 9 to 45 total points. Higher scores indicate higher levels of patient satisfaction with nurse-patient interaction behavior. The reliability of the

instrument indicated by the Cronbach’s α , was .80 for Heavey, Layne, and Christensen [20], and .87 for Kim [7]. The Cronbach’s α in this study was .93.

2) Anxiety related to using emergency care

Anxiety related to using emergency care was measured using a self-reported questionnaire developed by Spielberger and colleagues [22]. The instrument was translated into Korean and used by Kim and Shin [23]. In this study, content validity of the questionnaire was verified by four experts (one emergency medical doctor, one nursing professor, and two emergency nurses). The questionnaire contains 20 items on a four-point Likert scale (1=“absolutely not” through 4=“absolutely”) ranging from 20 to 80 total points. Higher scores indicate higher levels of anxiety. The reliability of the instrument indicated by the Cronbach’s α , was .83 for Spielberger et al. [22], and .87 for Kim and Shin [23]. The reliability in this study was .94.

3) Patient satisfaction with the use of emergency care

Patient satisfaction with the use of emergency care was measured using a self-reported questionnaire developed by Kim et al. [18]. The content validity of the questionnaire was verified by four experts (one emergency medical doctor, one nursing professor, and two emergency nurses) in this study. This instrument is composed of 14 questions covering the reception and guidance procedures (2), treatment process (10), and environment (2). There are 14 items on a five-point Likert scale (1=“highly unsatisfactory” through 5=“highly satisfactory”) ranging from 14 to 70 points. Higher scores indicate higher levels of patient satisfaction with the use of emergency care. When the instrument was developed, the reliability was Cronbach’s α of .93; the reliability in this study was $\alpha = .97$.

4. Treatment

1) Development of an informational leaflet on emergency care

The first step in this study was to develop the informational leaflet. To create this leaflet, 10 patients in ED were given a survey requesting information about treatment processes, the facility, and the environment, and were asked to answer open-ended questions about what processes they found unsatisfactory or what information they considered inadequate with respect to using emergency care. An analysis of the completed surveys showed that 7 of the 10 participants suggested an explanation regarding the procedures for using emergency care and medical treatment. The remaining three patients answered that they had experienced trouble with using emergency care

owing to the lack of information about amenities of the hospital and the ED. Based on the results the patients' survey suggestions in ED and other relevant literature [19,20], the researchers created an informational leaflet on emergency care for this study that covered the following content: the procedure for using the ED; the priority in which patients receive emergency medical treatment; expenses for emergency care; standard emergency signs and symptoms; the process of examination and treatment; the process of surgery and procedures, injections, and medications; the process of admission and discharge; the process of documentation; the layout of facility; additional services and amenities of the hospital; inquiry about using the ED; and the emergency exit route. The leaflet also included pictures and maps showing the treatment process, the floor plan of the facilities, and the emergency exit route. The nurse gave the informational leaflet to the experimental group of patients to promote interaction, and explained the content to ensure the patients' understanding. Finally, to confirm how much each patient understood about the information leaflet, a nurse explained the leaflet to four other patients who used emergency care, identified their level of understanding through an interview, and amended and revised incomprehensible phrases in the leaflet. Ten experts (one nursing professor, two emergency medical doctors, one ED head nurse, one charge nurse, and five nurses who had more than five years of experience) evaluated the composition and content validity of the informational leaflet on using emergency care. After providing each expert with an informational leaflet, the authors asked them to evaluate the informational leaflet by answering four questions on a four-point scale. The questions asked whether the leaflet contents were consistent with its purpose, whether the contents described objective information accurately, whether the composition was brief, and whether it was proper for emergency care users to understand the contents or not. The content validity index was .92, showing high congruence among the experts. Authors produced the validated informational leaflet on emergency care in the form of a trifold brochure so that it could be easily distributed in the ED (Figure 1).

2) Application of the facilitative nurse-patient interaction behavior with an informational leaflet on emergency care

The first researcher administered the intervention to the experimental group, providing facilitative nurse-patient interaction behavior using the informational leaflet in the emergency triage room before medical treatment. The researcher conducted patient-centered interaction, balanc-

ing information and psychosocial exchange. The interaction behavior involved facilitative talk to encourage patients' participation by using empathy, showing concern, and providing assurance, and included participants' questions and nurses' answers. Subsequently, the patient was given medical treatment in the ED. The control group was provided with treatment under the routine protocols of the ED without an informational leaflet.

5. Data Collection

The data of this study were collected from August 17 through December 31, 2015. To prevent the cross-contamination of treatment, the authors collected data from the experimental group after doing so from the control group. The data were collected by a research assistant who helped any participant who did not understand the questionnaires to complete them and sometimes read the contents to the person. It took 15 minutes for each participant to complete the questionnaire, and the authors offered a nominal gift to each participant.

6. Data Analysis

The SPSS/WIN 21.0 program was used for data analysis. The authors analyzed general and medical-related characteristics of the experimental and control groups by frequency, percentage, mean, and standard deviation. χ^2 and Fisher's exact tests were performed to test characteristic homogeneity in the two groups. The effect of the two groups was analyzed using an independent t-test.

7. Ethical Consideration

Approval was obtained from the institutional review board (IRB) (IRB No. KCHIRB-M-2014-035) and nursing department of a hospital in Korea. Participants were recruited from the ED and were informed about the aim and method of data collection of the study. Informed consent forms were presented, and participants were asked to voluntarily complete the forms and study questionnaires. The authors explained that participants could withdraw at any time without needing to explain their reasons.

RESULTS

1. General and Medical-related Characteristics of Participants and Homogeneity Test

A total of 81 patients who visited the ED participated in

this study. The gender component ratio was 45.7% (male) and 54.3% (female). The mean age of participants was 37.16 years; 56.8% were married, and 43.2% were not married. For education, 51.9% had college or higher educational level, and 90.1% had medical insurance. On medical-related characteristics, the main types of symptoms when they visited the ED were fever and cold (30.9%), abdominal pain (29.6%), trauma (29.6%), allergic reaction, and

others (9.9%). The mean time spent in the ED was 151.25 minutes. Referral routes were by direct admission (84.0%) and by transfer or outpatient department (16.0%). The general and medical-related characteristics of the experimental and control group are shown in Table 1. There were no statistically significant differences between the two groups in general and medical-related characteristics, meaning the two groups were homogeneous.

Table 1. Homogeneity Test for General and Medical-related Characteristics of Participants (N=81)

Characteristics	Categories	Total (n=81)	Exp. (n=40)	Cont. (n=41)	p
		n (%) or M±SD	n (%) or M±SD	n (%) or M±SD	
Gender [†]	Men	37 (45.7)	15 (37.5)	22 (53.7)	.183
	Women	44 (54.3)	25 (62.5)	19 (46.3)	
Age (year)	≤30	31 (38.3)	16 (40.0)	15 (36.6)	.828
	31~40	21 (25.9)	11 (27.5)	10 (24.4)	
	≥41~50	29 (35.8)	13 (32.5)	16 (39.0)	
		37.16±13.31	36.64±13.68	38.75±13.93	
Marital state [†]	Married	46 (56.8)	22 (55.0)	24 (58.5)	.824
	Not married	35 (43.2)	18 (45.0)	17 (41.5)	
Educational level [†]	High school or under	39 (48.1)	17 (42.5)	22 (53.7)	.377
	College or higher	42 (51.9)	23 (57.5)	19 (46.3)	
Medical Insurance [†]	Yes	73 (90.1)	39 (97.5)	34 (82.9)	.057
	No	8 (9.9)	1 (2.5)	7 (17.1)	
Main symptoms	Fever and cold	25 (30.9)	15 (37.5)	10 (24.4)	.610
	Abdominal pain	24 (29.6)	11 (27.5)	13 (31.7)	
	External injury	24 (29.6)	11 (27.5)	13 (31.7)	
	Allergic reaction and others	8 (9.9)	3 (7.5)	5 (12.2)	
Treatment departments	Emergency medicine	20 (24.7)	7 (17.5)	13 (31.7)	.156
	Medicine	26 (32.1)	17 (42.5)	10 (24.4)	
	Surgery	34 (42.0)	16 (40.0)	18 (43.9)	
Length of stay [†] (minutes)	≤60	17 (21.0)	7 (17.5)	10 (24.4)	.587
	>60	64 (79.1)	33 (82.5)	31 (75.6)	
		151.25±67.80	155.25±68.91	147.34±67.31	
Referral routes of emergency department [†]	Direct admission	68 (84.0)	36 (90.0)	32 (78.0)	.226
	Transfer or outpatient department	13 (16.0)	4 (10.0)	9 (22.0)	
Transportations [†]	Car and on foot	59 (72.8)	30 (75.0)	29 (70.7)	.804
	Ambulance	22 (27.2)	10 (25.0)	12 (29.3)	
Frequency of visit [†] (times)	≤1	44 (54.3)	20 (50.0)	24 (58.5)	.507
	≥2	37 (45.7)	20 (50.0)	17 (41.5)	
		1.72±0.94	1.85±1.03	1.59±0.84	
Reasons for selecting this emergency department	Regular clients	16 (19.8)	12 (30.0)	4 (9.8)	.069
	Near distance	18 (22.2)	10 (25.0)	8 (19.5)	
	General hospital	40 (49.4)	16 (40.0)	24 (58.5)	
	Recommendation	7 (8.6)	2 (5.0)	5 (12.2)	
Findings after medical care [†]	Discharge	60 (75.3)	32 (80.0)	28 (68.3)	.312
	Hospitalization	21 (24.7)	8 (20.0)	13 (31.7)	

Exp.=experimental group; Cont.=control group; [†] Fisher's exact test.

2. Patient Satisfaction with Nurse–Patient Interaction Behavior

The authors analyzed the level of patient satisfaction with nurse-patient interaction behavior. A statistically significant difference was found between the experimental and control groups ($t=12.69, p < .001$). This result indicates that the experimental group that received facilitative nurse-patient interaction behavior with an informational leaflet and explanation in an emergency setting showed a higher level of patient satisfaction with nurse interaction behavior compared to the control group (Table 2).

3. Anxiety related to Using Emergency Care

The authors analyzed the level of anxiety related to using emergency care. A statistically significant difference was found between the experimental and control groups ($t=-10.41, p < .001$). This result indicates that the experimental group showed a lower level of anxiety related to using emergency care compared to the control group (Table 2).

4. Patient Satisfaction with Use of Emergency Care

The authors analyzed the level of patient satisfaction with the use of emergency care. A statistically significant difference was found between the experimental and control groups ($t=13.59, p < .001$). Therefore, the experimental group that received facilitative nurse interaction behavior with an information leaflet and explanation in an emergency setting showed a higher level of patient satisfaction with use of emergency care compared to the control group (Table 2).

showed a higher level of patient satisfaction with nurse interaction behavior, a lower level of anxiety related to using emergency care, and higher patient satisfaction with use of emergency care compared to the control group.

The researchers performed facilitative nurse-patient interaction behavior using the informational leaflet. The interaction behavior included facilitative talk to encourage the patient to participate in the talk by using empathy, showing concern, and providing assurance. This type of nurse-patient interaction behavior is one of four types identified in a previous study [11]. The experimental group showed a significantly higher level of patient satisfaction with nurse interaction behavior compared to the control group. It is difficult to directly compare these findings with previous ones, however, since this is the first study to examine an intervention of facilitative nurse-patient interaction behavior that focused on providing informational leaflets to patients in ED. Nevertheless, this result was similar to that of Kim's study [7], which analyzed data collected by videotaping 63 patients in an ED for four hours of their stay, reported identified improved patient satisfaction following interaction with an ED nurse. It was also similar to a study by Nielsen [16], which found that patient satisfaction was improved when the triage nurses tried to explain the reasons for the wait, waiting periods, any unusual situation, and interacted with patients during waiting room rounds every half hour on their shifts. In a previous study [11, facilitative interaction led to the highest level of patient satisfaction with ED nurses' interaction behavior, meaning that it reflects the needs of emergency care users very effectively. Accordingly, it is thought that the facilitative interaction featuring patient-centered interaction pattern applied in this study, in which a nurse offered and explained an informational leaflet to a patient, contributed to improving patient satisfaction with nurse interaction behavior. A close look at the subjective reactions of participants in this study revealed that they felt relieved emotionally and psychologically when a nurse explained emergency care (showing concern) to them in-

DISCUSSION

Our findings showed that the experimental group that received facilitative nurse-patient interaction behavior using an informational leaflet in an emergency setting

Table 2. Differences in Dependent Variables between the Experimental and Control Groups (N=81)

Variables	Exp. (n=40)	Cont. (n=41)	t	p
	M±SD	M±SD		
Patient satisfaction with nurse-patient interaction behavior	37.35±3.57	24.19±5.52	12.69	< .001
Anxiety related to using emergency care	38.18±7.11	58.26±9.98	-10.41	< .001
Patient satisfaction with use of emergency care	58.15±6.22	35.53±8.54	13.59	< .001
Procedure of reception and guidance	8.00±1.13	5.19±1.70	8.74	< .001
Treatment process	41.90±4.96	25.60±6.52	12.62	< .001
Environment	8.25±1.29	4.73±1.51	11.21	< .001

Exp.=experimental group; Cont.=control group.

dividually. Patients tended to express anxious feelings while maintaining eye contact and to converse with the nurse who was offering and explaining the information leaflet to them in a triage room, and their anxiety decreased when a nurse supported and relieved their anxiety. Following the interaction behavior, through which the nurse came to understand and sympathize with patients, the patients showed more cooperative and stable attitudes while receiving medical treatment because they understood the ED situation and recognized the nurses' efforts to help them. Considering that patients in ED gain emotional and psychological stability due to a nurse's verbal and nonverbal positive attitude, this suggests that it is advantageous for nurses to use this strategy with patients in ED, and further suggests that such facilitative nurse-patient interaction behavior should be encouraged in the ED field.

The experimental group showed a significantly lower level of anxiety related to using emergency care compared to the control group. This finding was similar to the results of two studies: Park, Park, and Yoon [24] identified decreased patient anxiety after conducting a supportive nursing intervention through explanation including physical, emotional, and informational support for patients in ED; Ekwall [10] found that patient anxiety was lowered when a nurse had a conversation with patients waiting for their turns in an ED. This indicates that the nurse was able to reduce the anxiety of the patients, who felt uneasy in an unfamiliar and busy emergency room, by providing information and explaining emergency care using the leaflet.

The experimental group showed a significantly higher level of patient satisfaction with use of emergency care compared to the control group. Additionally, the level of patient satisfaction with subcategories such as reception and guidance, medical treatment process, and environment showed significantly higher scores in the experimental group than in the control group, revealing that offering information about the procedure of reception and guidance and the treatment process subcategory in advance contributed to improving the level of patient satisfaction with use of emergency care. Likewise, guidance for the layout of facilities in the environment category was revealed to be effective as well, decreasing patient anxiety caused by an unfamiliar environment. This result was similar to a study by An [19], which found that the level of satisfaction was improved when users in ED were given an information pamphlet related to using EDs and the treatment process, and a study by Thompson et al. [15], whose survey via telephone of 1631 patients who had used EDs found that the level of satisfaction was improved

when users in ED were informed about treatment processes and reasons for delayed treatment. On the other hand, according to a study by Kim et al. [18], which surveyed the level of patient satisfaction related to emergency care of patients in ED, there was no meaningful difference in the level of satisfaction related to using emergency care between the experimental group provided with an ED guidance paper and the control group not provided with it, revealing that just offering a guidance paper to a patient without explanation fails to help patients understand the utilization of emergency room and does not affect the level of patient satisfaction. Additionally, according to a study by Roper [25], patient satisfaction related to using EDs was improved by doctors' quick medical treatment rather than by offering information. However, since it is realistically difficult to change the emergency medical system, it is important to note that, despite the shortage of manpower in emergency medical teams, patient satisfaction with nurses and with the ED can be increased, and patients' anxiety reduced, by distributing and explaining an information leaflet.

On the implications for nursing practice, the use of facilitative nurse-patient interaction behavior with the informative ED leaflet was demonstrated to improve patient satisfaction and anxiety in an emergency setting.

This study had some limitations, including these. First, because participants in this study were selected from only one hospital in city, there is a limitation on generalizability of the study results. Second, this study could not reflect the differences in patient satisfaction with use of emergency care according to the triage level of participants. Third, this study could not reflect the characteristics of patients in ED who had rejected participating in the study. Fourth, this study could not compare the effects on patient anxiety before and after the completed ED visit no pre-visit anxiety evaluation could be performed. Lastly, this study could not rule out the possibility of involvement of a third variable by not having simultaneously collected data from the experimental and the control group.

Based on the findings, the authors suggest the following. First, further study should be done to compare the change of effects according to the various ways of offering information other than written leaflets, such as developing video clips or waiting room signage and displays. Second, it is necessary to conduct further studies to develop various nursing interventions to facilitate nurse-patient interaction in EDs, decrease patient anxiety, and improve patient satisfaction related to using emergency care. Third, emergency rooms need to designate a nurse for each shift to be in charge of giving explanations to patients.

CONCLUSION

This study developed an informational leaflet reflecting the actual needs of emergency care users and turned it into a printed trifold brochure for convenient distribution and reference in ED. Also, the first author performed facilitative nurse-patient interaction behavior, explaining the informational leaflet to patients in an emergency setting. The interaction behavior involved facilitative talk to encourage the patient to participate in the talk by using empathy, showing concern, and providing assurance and also included participants' questions and nurses' answers. Based on the finding of this study, the authors identified that patient satisfaction with nurse interaction behavior was improved, patient anxiety was lowered, and patient satisfaction with use of emergency care was improved when a nurse conducted facilitative interaction, confirming that it can be used as effective nursing intervention.

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Appendix 1. Informational leaflet on emergency care



우승환 응급진료과 체계적인 의료시스템

우승환 응급진료과 체계적인 의료시스템

우승환 응급진료과 체계적인 의료시스템



응급센터 구조 / 시설안내

응급센터 구조도: 응급진료과, 응급수술, 응급내과, 응급외과, 응급영상, 응급치료, 응급수술, 응급내과, 응급외과, 응급영상, 응급치료



병원 응급센터

응급실은 365일 24시간 진료합니다.



응급센터 구조도 / 시설안내

ATM, 약국, 식당, 응급환자실, 응급치료실



이용안내

응급센터 이용법, 응급센터 위치, 응급센터 접수, 응급센터 진료



우승환 병원 소개

100년이 넘는 역사와 전통을 자랑하는 Kwanjeong Christian Hospital



응급센터 소개

응급센터는 24시간 응급진료와 응급수술을 실시합니다.



응급센터 소개

응급센터는 24시간 응급진료와 응급수술을 실시합니다.



응급센터 이용절차

응급환자 접수, 응급진료, 응급수술, 응급치료, 응급수술, 응급치료, 응급수술, 응급치료



응급센터 접수절차

응급환자 접수, 응급진료, 응급수술, 응급치료, 응급수술, 응급치료, 응급수술, 응급치료



응급센터 진료절차

응급환자 접수, 응급진료, 응급수술, 응급치료, 응급수술, 응급치료, 응급수술, 응급치료