Continuum of Care Management for Victims and Families Assaulted in the Social Unrest, Southern Thailand: A Situation Analysis*

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Abstract

Purpose: To analyze the existing continuum of care services and its system for patients who had been assaulted from terrorism in the unrest areas of three southern border provinces, Thailand.

Design: Qualitative design.

Methods: The participants were 67 health care providers working in the unrest areas of three southern border provinces, and 12 patients and their family caregivers who had been assaulted in the unrest situation. Continuum of care management data were collected by focus group interviews, individual interviews, and observation plus interviews during home visits. In addition, 44 patients' charts were reviewed to identify some issues related to care management. Data were analyzed by content analysis.

Main findings: Both physical and psychological problems were assessed for all victims since admission. The victims received continuum of psychological support incorporated with physical care through home visits. The care system provided was more hospital-based, which remained poor coordinated or communicated among the care providers. The barriers in the current care system were related to the inadequate competency of health care providers, lack of specific discharge planning for these victims resulting in poor communication and transfer of information between health care providers working in each phase of care.

Conclusion and recommendations: These results could be used for further development of the continuum of nursing care management system to make it more congruent with the current situation in order to enhance the outcomes for these victims.

Keywords: continuum of care, trauma patients, social unrest, situation analysis

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ระบบการจัดการดูแลต่อเนื่องสำหรับผู้บาดเจ็บและครอบครัวที่ได้รับผลกระทบจากเหตุการณ์ความไม่สงบในภาคใต้: การวิเคราะห์สถานการณ์*

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บทคัดย่อ

วัตถุประสงค์: เพื่อวิเคราะห์สถานการณ์ปัญหาและระบบการดูแลต่อเนื่องในผู้บาดเจ็บจากสถานการณ์ความไม่สงบใน 3 จังหวัดชายแดนภาคใต้

รูปแบบการวิจัย: การวิจัยเชิงคุณภาพ

วิธีดำเนินการวิจัย: กลุ่มตัวอย่าง คือ บุคลากรทางด้านสุขภาพที่ปฏิบัติงานในพื้นที่สามจังหวัดชายแดนใต้จำนวน 67 ราย และผู้บาดเจ็บรวมทั้งผู้ดูแลที่เป็นสมาชิกครอบครัวจากเหตุการณ์ความไม่สงบจำนวน 12 ราย เก็บรวบรวมข้อมูลโดยการสัมภาษณ์กลุ่มและรายบุคคล รวมทั้งการสังเกตแบบไม่มีส่วนร่วมและการสัมภาษณ์ในระหว่างการเยี่ยมบ้าน นอกจากนี้เก็บข้อมูลการรักษาจากรายงานผู้ป่วยจำนวน 44 ราย ข้อมูลที่ได้นำมาวิเคราะห์ข้อมูลเชิงเนื้อหา

ผลการวิจัย: ผู้ป่วยทุกรายจะได้รับการประเมินสภาพทางกายและจิต ตั้งแต่ระยะแรกเมื่อรับไว้ในโรงพยาบาล โดยได้รับการเยียวยาทางจิตควบคู่กับทางกายอย่างต่อเนื่องโดยการเยี่ยมบ้าน รูปแบบการดูแลจะเน้นการดูแลที่โรงพยาบาลเป็นหลัก ซึ่งยังคงมีปัญหาในการประสานงานและการสื่อสารของทีมสุขภาพ อุปสรรคในระบบการดูแลจะเกี่ยวข้องกับสมรรถนะของบุคลากรทางด้านสุขภาพ รวมทั้งยังไม่มีแนวทางการวางแผนจำหน่ายสำหรับการดูแลผู้บาดเจ็บที่ชัดเจน ส่งผลต่อการสื่อสารและส่งต่อการดูแลระหว่างทีมสุขภาพในแต่ละระยะของการดูแล

สรุปและข้อเสนอแนะ: ผลการศึกษาสามารถนำข้อมูลไปพัฒนาระบบการดูแลอย่างต่อเนื่องที่สอดคล้องกับสถานการณ์ในปัจจุบันเพื่อเพิ่มผลลัพธ์การดูแลสำหรับผู้บาดเจ็บจากสถานการณ์ความไม่สงบ

คำสำคัญ: การดูแลต่อเนื่อง ผู้บาดเจ็บ สถานการณ์ความไม่สงบ การวิเคราะห์สถานการณ์

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Background and Significance

Insurgency has been rife in the three southern provinces of Thailand including Pattani, Yala, Narathiwat, and four eastern districts of Songkhla province since 2004. The consequences of the violence are tremendous. One adverse effect is related to the victims' health condition. The magnitude of deterioration of health conditions varies from minimal to severe disability[1]. Some victims have respiratory problems leading to their being dependent on respirators. Some have problems in relation to urination or defecation, or have skin breakdown, immobilization, muscle weakness, joint stiffness or impaired activity of daily living[1]. In addition, patients with multiple injuries have low quality of life after 6 months discharge from the hospital[2]. Patients who resided in rural or unrest areas in particular were potentially more affected and at increased risk of complications due to poor accessibility to the hospital care system and lack of knowledge[3]. Therefore, the participation of nurses and health care team in preparing victims and their families in care management throughout the continuum of hospitalization, discharge transition, and after discharge is essential.

A previous review[1] explored the adverse effects occurring in victims assaulted in the unrest situation, but did not specifically describe care provision. The adverse effects may have an impact not only on the patients, but also on their family caregivers[1]. Disability, especially due to organ amputation[1], had been viewed in terms of both short- and long-term physical and psychological impacts. Victims who are in the grief process for a long time may develop depression, panic, fear of being assaulted again, or fear of living in the uncertain situation with unknown outcomes. Therefore, the care system provided to these victims is more complex and challenging since their multiple special needs must be addressed. In addition, the need to organize a specific continuum of care for patients living under conditions of social unrest is important. The question is how best to provide care for patients/families after discharge in the social unrest areas. Hence, an understanding of the current situation of continuum of care provided to these victims is crucial. The increased presence of injuries within the unsafe environment will provide rich information to the health care providers to identify what is available or what are the gaps in the continuum of care.

Objective

The purpose of this study was to analyze the continuum of care provided to patients who had been assaulted from terrorism in the unrest areas of the three southern border provinces and one neighboring district of Songkhla province, Thailand.

Methods

This study was approved by the Ethics Committee, School of Nursing, Prince of Songkla University, and the directors of six hospitals in southern Thailand where most of the victims of assault had been admitted. Informed consent was gained from all participants including nurses, patients and their family members.

Sample and sampling technique

Two-main groups of participants were purposively selected. The first group of participants consisted of health care providers working in each of the hospitals who had performed various functions in emergency and trauma care for these victims for at least one year (n = 63), non-profit personnel (n = 1) and community providers (n = 3) who provided care of the victims in the community. The second group was victims and their families (n = 12). Data were collected in the study hospitals, victims' houses, and the offices of the participants where they were convenient.

Instruments and data collection techniques

Participant demographic data were obtained from the demographic questionnaire. Focus group interviews, in-depth interviews, and observation were employed to retrieve information of continuum of care management starting from admission through hospital discharge that the health care providers provided to the victims. The victims and their family caregivers were also interviewed to obtain information of care management that they received from the health care providers. A semi-structured questionnaire was used to guide the interviews and observations. In addition, a checklist form was used to review information in the nursing documents related to care provision, such as wound care information, nasogastric tube care, and Foley's catheter care. A total of 44 charts were reviewed

in the study. Individual interviews and observations using semi-structured questionnaire were also conducted with each patient and family caregiver to obtain data on care management issue during home visits. All interviews were tape-recorded. Individual and group interviews were verbatim transcribed. Data and investigator triangulations were checked for the consistency of data from focus group interviews, individual interviews, observations, and chart reviews. Accuracy of the data by member checking was also validated with one representative of the health care providers and one representative of the patients. Data collection and analysis continued until no new information emerged.

Data analysis

Data were analyzed by content analysis in Thai language since it was used by the participants and investigators. Data obtained from different sources were coded and categorized and checked throughout the analysis process using triangulation. Significant statements related to patient's care, and care management from hospital to home, were extracted from the respective transcriptions. The principal investigator (PI) also translated statements into English with the team and the consultation with a native English editor, who also understands Thai to retain the meaning of Thai context. Demographic and care management data retrieved from the chart reviews were summarized using frequency and percentage.

Findings

Demographic and relevant data of the participants

Of 67 health care personnel, the key participants in this study were nurses (74.6%), followed by physicians (3.0%) and other related personnel (7.5%). The majority of them were female, aged between 24 and 59 years old ($\overline{X}$ = 40.32, SD = 9.05). More than half of the participants (58%) were married and almost all (94%) lived in their home town. Most had completed a bachelor degree in nursing but only 34.3% of them were trained in caring for patients with traumatic injuries or assault from terrorism. Soldiers/policemen were the large group who were cared for by the participants as shown in Table 1. In addition to health care personnel, 12 victims and their family members were interviewed to assess their perceptions regarding their experiences of care and treatment received from the health care personnel.

Data analysis from chart reviews showed that psychological care was the most frequently documented data in the victims' charts (n = 42, 95.5%) during follow-up visits, followed by wound care management (n = 41, 93.2%), and the combination of psychological and wound care management (n = 41, 93.2%). However, it was revealed that no wound managements were documented in the charts (n = 10, 22.7%) even though there were traumatic wounds in particular patients.

Table 1 Demographic data of the health care personnel (n = 67)

Demographic data	n	%
Gender		
Male	3	4.5
Female	64	95.5
Religious		
Buddhism	40	59.7
Islam	27	40.3
Age (years)		
$\overline{X}$ = 40.32, SD = 9.05		
Min = 24, Max = 59		
Marital status		
Single	25	37.3
Married	39	58.2
Widow	3	4.5
Education		
Undergraduate	60	89.1
Graduate	7	10.9

Demographic data	n	%
Work place		
Provincial hospitals	41	61.2
District hospitals	25	37.3
Non-profit organization	1	1.5
Years of working in the unrest areas		
$\overline{X}$ = 16.49, SD = 8.78		
Min = 2, Max = 38		
Training experience		
No	44	65.7
Yes	23	34.3
Home town		
In the unsafe areas	63	94
Outside unsafe areas	4	6
Care experiences with group of victims		
Soldiers/policemen	34	50.7
Community dwelling	16	23.9
Teachers/health care personnel	1	1.5
All above careers	16	23.9

Three main themes emerged from the focus group, in-depth interviews, and observations: 1) continuum care provision for the victims, 2) hospital-based care system provided to the victims, and 3) strengths, weaknesses, and obstacles of the care provided to the victims. The details of each theme were reported as follows.

1. Continuum of care provision for the victims

Results showed that the continuum of care started from the scene of the assault. The care provided at the scene in the unrest areas was quite different from that provided to casualties of road traffic accidents or other events that were unrelated to the unrest situation. In general, in the case of a road traffic accident, for example, nurses working in the emergency department (ED) would be informed of the numbers and conditions of the victims by the policemen, non-profit organization, or persons who were at the accident scene. After nurses received the information from the informants in terms of place of the accident and numbers of the victims, they assessed the severity of the injuries. If the victims had mild injuries, they coordinated with the staff nearby or network hospitals and asked for help from those hospitals. In the case of moderate or severe injuries, nurses working in the ED went out to the scene to help the victims and transfer them to the hospital.

In case of injuries from a terrorist situation, different care systems were provided to those victims, as one nurse described:

"First, the ED nurses were informed by the policemen, people staying nearby, or non-profit organization. The information that nurses received was related to where the violence occurred, the type of violence (such as car bomb, gut shooting, or explosion), numbers of victims and severity of the injuries. In case of the violence/terrorist attack near to the study hospitals, the emergency medical service (EMS) nurses checked for the accurate news before going out to help the victims to ensure that it was safe to help them at the scene".

The safety at the scene must be a priority when working at the social unrest area. Nurses were often informed by the policemen to confirm security check that there were no second or third bombs or explosions before the health care team arrived at the scene. Usually, one or two EMS nurses were allocated in the morning and evening shifts. In addition, nurses working in the in-patient units and ED were allocated to the on-call work after midnight. In the case that the insurgency incident occurred after midnight, these nurses were asked to help when the victims arrived at the ED.

In the case of an incident occurring in the community/village, alternative actions were undertaken, as one nurse reported:

"The EMS team often coordinated with the community hospitals or community volunteers who were trained in the first responder program or the first-aid training program. These health care providers went out to the scene and helped the victims before transferring them to hospital. To be safe, first aid such as giving oxygen with mask, stabilizing neck and spine with collar and spinal board was performed at the scene".

Another important and common event was revealed by community providers who had experiences of working in unsafe areas as one nurse noted:

"When an insurgency incident occurs in an unsafe area or an area that was difficult to access, the chief executive of the Local Administrative Organization (LAO) was asked to go to the scene and community volunteers were asked to perform first aid for the victims before transferring them to the nearby community hospital. If the victims needed definite trauma care, they would be transferred by nurses of the community or provincial hospitals to the provincial or regional hospital for proper care".

Information on the numbers of the victims and the severity of the victims was transmitted in advance by the nurses before transfer. When the victims arrived at the hospitals at destination, either regional or university hospital, definite care was provided until victims received the proper care. For example, one participant said "if the victims were soldiers or policemen from the central areas, such as Bangkok or nearby provinces, and complex problems existed or a request was made by the victims or their families, they might be transferred to the Police Hospital or Military Hospitals in Bangkok".

In addition to physical care, psychological care for the injured victims was provided by a special care team called "YealYa" or healing team, which comprised a psychiatrist and psychiatric nurse. All victims were assessed at the ED until they were discharged and were followed up at least one time after they returned to the community. In the case of post-traumatic distress syndrome, they were visited by the "YealYa" team periodically for one year. In addition, the "YealYa" team often worked in coordination with social workers and the provincial "YealYa" team. However, due to different levels of function and the unclear system of follow-up home-visit, most of "YealYa" team worked separately with others in the health care team, such as home health nurses or ward nurses. For example, each team individually set a home visit and sometimes asked other teams to join in the visiting schedule using personal contact by making a phone call. As a nurse reported: "We might make a phone call and ask for the visiting schedule when we want to visit our victim and ask our friend who works in another team to join the home visit, but the system has not yet started".

2. Hospital-based care system provided to the victims

The results from interviews and chart reviews showed that the victims were treated by a multidisciplinary team, composed of physicians, nurses, psychiatrists, psychiatric nurses, occupational therapists and social workers. The victims were admitted to the intensive care unit, general ward, or private ward depending on the severity of the injury. The hospital provided a safety system for victims to prevent repeated assault by concealing their name or using a pseudonym, limiting the visitors and allowing only visitors with a letter of permission. The care focused not only on the physical problems, but also on psychosocial support when the patients were discharged from the hospital.

The physical care for victims assaulted by social unrest was similar to that provided to victims from other causes. After the critical problems were solved, the victims with disability or their family caregivers were often taught how to perform certain caring tasks when the victims were at home such as wound care, tube feeding and catheterization. In addition, physical exercises were taught by the physical therapists and preparation of diet for tube feeding was taught by the nutritionists. However, some complications might occur and limit their ability to take care adequately when they were at home partly due to limited accessibility to hospital and economic reason. For example, some cases did not know how to manage when a nasal gastric tube slipped, or when a urinary catheter became obstructed. As a family caregiver said: "it involved a lot of problems to transfer my son to the regional hospital to change the urinary catheter and also was costly to hire a car to transfer my son to the hospital". Some victims could not use or manage their equipment properly when they went home and did not

receive the continued care from the multidisciplinary team, especially from the physical therapists and psychiatrists.

3. Obstacles and strength of the care provided to the victims

Unsafe situations may affect the care provision for victims. The result showed some obstacle of continuum of care that can be categorized into two aspects. Firstly, obstacles related to care system were: 1) delayed transferring system for victims from the scene to the emergency department, 2) limited health care providers especially after office hours, during weekends, or holidays, 3) limited effective information technology to transfer victims' information between each hospitals, 4) no life safety insurance for nurses or other health care providers when they went to the scene to help the victims, 5) lack of trust among the victims, their family, and health care providers, as a family caregiver said that "we are afraid that they (health care providers) are also terrorists ", and 6) lack of financial support for home visits and limited physical therapy after discharge.

The second obstacles were related to care providers. Nurses had limited knowledge in assessing or transferring the victims to the ambulance or helicopter. In addition, nurses working in the community or primary hospital had limited knowledge and skills in critical care because most of them were young staff. As a nurse reflected an issue of nurse's competency that: "They usually had less experience in caring for patients with mass casualty especially from unsafe situations, and also lacked confidence in caring for these victims". Moreover, a lack of knowledge and skills in psychological care for the victims was found as most nurses had not been trained to care for victims with psychological problems.

However, some strengths of the care provided to the victims were addressed. Several training programs were set up in some hospitals such as in-house training programs relevant to first-aid, helicopter transfer, self-safety procedure from bombs, or using a flak jacket. Healing centers were also established in the community comprising occupational training centers, psychological rehabilitation center, recreation center for children and elders, and a centre for disabled persons or widows. The community volunteers were trained to help victims who needed continuing care. In addition, there were collaborative activities between the hospital and community. The regional hospitals set up training programs either for the nurses working in the primary hospital or for the community volunteers. The training program was held every year on cardiopulmonary resuscitation (for nurses) and first-aid (for community volunteers).

Discussion

The situation analysis of care provided to the assaulted victims in the unsafe situation indicates that care provided to the victims was mostly similar to that provided to other patients except care related to safety and psychological issues. All victims promptly received psychological care from the "YealYa" team starting from the emergency department through discharge from the hospitals to home. Holistic care is regarded as important because the victims experience not only physical suffering, but also psychological suffering[3]. This holistic care helps the victims to adjust their daily life under the unsafe situations. This is similar to a previous study that the care provision for victims could promote self-esteem and help the victims confront or cope with the problems well and adjust to daily life within the social unrest situation[1].

However, the problem in the care provided to the victims was related to discharge planning. It was not specific to the victims assaulted from the unrest situations. Currently, discharge planning for reducing physical and psychological problems was segmented, and not combined in a single package, leading to ineffective communication between multidisciplinary team within and among hospitals or between hospitals and non-profit organizations. This is similar to a previous study of nurses' experience in working with trauma patients, in which it was found that communication and human relationships with all people in the team were essential in trauma nursing care[6]. Ultimately, the victims received ineffective continuum of care and might develop complications, such as pressure ulcer, pneumonia, joint stiffness, or muscle weakness, although these are all preventable. Similarly, a systemic review concluded that increased continuity of care was associated with decreased hospitalization and emergency visits[7].

In addition, the wards did not have clinical practice guidelines specific to the victims. Therefore, prompt and effective care may be delayed or conditions left untreated. This is partly because of the limited

communications between multidisciplinary team. Similarly, in a study of the trauma care system in Australia, it was found that care for multiple trauma patients in the tertiary care hospital was segmented and patients, therefore, received ineffective care[4]. Furthermore, previous evidence has shown that the presence of a trauma team could improve survival and the presence of a primary trauma team at pre-hospital level could reduce the delay in delivering patients to definite care[5]. The development of clinical practice guideline or care pathways starting at the stage of pre-hospital care through the emergency room and continuing until the victims are discharged from hospital is, therefore, recommended. The care coordination statement must be clear within the same or among the different hospitals to which patients are referred.

In conclusion, care provided to the victims assaulted in the social unrest situation remains fragmented. Several weaknesses were identified, such as ineffective communication among multidisciplinary teams due to lack of guidelines or pathways used. In addition, the adequate number of health care staff working at emergency departments in these unrest areas is a critical issue that should be addressed by the Thai government. Moreover, nurses' competencies in working in these areas should be raised, and intensive training programs especially for the young staff nurses are required. However, the interpretation of the findings of chart reviews might be caution due to incomplete documentations of care management information.

Implications for practice and future studies

Development of continuum of care for assaulted victims in social unrest situations is necessary because terrorism is rising with unexpected and long-term events. To develop a model or system of continuum of care and strategic plan, responsible organizations in the areas, both governmental and nongovernmental, should be committed. The weaknesses identified must be addressed to improve the quality of care. An effective multidisciplinary team is also recommended in utilizing clinical pathways as a tool to develop effective communication among nurses, physicians, physical therapists, psychiatrists, social worker, community volunteers, and non-profit organizations. In addition, training programs are needed to enhance the competencies of nurses working in these unrest areas.

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