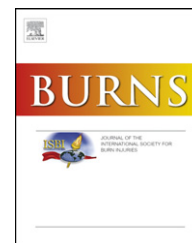


Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SciVerse ScienceDirect

journal homepage: [www.elsevier.com/locate/burns](http://www.elsevier.com/locate/burns)

## Predictors of health-care needs in discharged burn patients

C.Y. Liang<sup>a</sup>, H.J. Wang<sup>b</sup>, K.P. Yao<sup>c</sup>, H.H. Pan<sup>a</sup>, K.Y. Wang<sup>d,e,\*</sup>

<sup>a</sup> Graduate Institute of Medical Sciences, National Defense Medical Center, Taipei, Taiwan

<sup>b</sup> Department of Surgery, Taipei Medical University, Taipei, Taiwan

<sup>c</sup> Department of Psychology, National Taiwan University, Taipei, Taiwan

<sup>d</sup> Department of Nursing, Taipei Veterans General Hospital, Taipei, Taiwan

<sup>e</sup> School of Nursing, National Defense Medical Center, Taipei, Taiwan

### ARTICLE INFO

#### Article history:

Accepted 8 September 2011

#### Keywords:

Discharged burn patients

Predictors

Health care needs

Physiological care needs

Psychosocial needs

### ABSTRACT

Patients' health-care needs are an important issue, but have not been studied in the burn field. The aims of this study were to explore discharged burn patients' health-care needs and related factors. This cross-sectional study used convenience sampling and four questionnaires, including basic information, Mental Status Inventory, Burn Patients' Social Support and Burn Patients' Healthcare Needs for data collection. There were 93 adults, injured on average 45% of total body surface area, who completed the study. Results indicated that the level of psychosocial care needs were higher than physiological needs. The level of physiological care needs changed over time, but psychosocial needs did not change. Self-reported psychosocial needs and physiological care needs correlated with each other. The multiple regressions showed that the most important predictors of overall health-care needs were numbers of visible scarred areas, time since discharge and previous psychiatric history. The findings revealed the burn patients provided clinically useful information and supported further evaluation in the area of care needs for burn patients.

© 2011 Elsevier Ltd and ISBI. All rights reserved.

## 1. Introduction

Burn is a major event for those affected. Even after survival is ensured, many people require surgical and medical interventions and rehabilitation for many years. According to National Health Insurance research data, there were a total of 7126 inpatient cases involving burn in Taiwan during 2007. The total medical expenditure for these patients was 2 426 254 USD [1]. The medical treatment of burns has significantly improved in recent decades and the outcome measures in burns care have shifted from mortality to areas that are more likely to enhance the quality of life of burn survivors [2].

Burn can cause severe impairment, both physically and psychologically. In the hospitalisation phase, burn patients are managed by health-care professionals. Discharge from

hospital does not mean the end of treatment for burn survivors. It means that burn survivors and their families must resume the responsibility of managing their own lives without hospital-based professionals to help them. Burn patients need to adapt to a new situation that includes implementing self-care at home, lifestyle changes, and a return to the community. After 1 or 2 years, severe physical and psychological problems are still reported [3]. Eight years after being burned, 34% patients still contacted health-care providers due to their burn and had significantly lower scores on simple ability, work, hand function and social desirability [4]. Even 3–13 years after burn, 23% patients suffered from long-term problems [5]. Burn patients developed a multitude of physical and psychosocial problems after discharge, including skin-related difficulties, pain, itching, distress, low self-esteem, anxiety, depression and posttraumatic stress disorder (PTSD) [3,6,7].

\* Corresponding author at: No. 201, Sec. 2, Shipai Rd., Taipei 112, Taiwan. Tel.: +886 2 28757233/87923100x18766; fax: +886 2 28752932.

E-mail addresses: [w6688@mail.ndmctsgh.edu.tw](mailto:w6688@mail.ndmctsgh.edu.tw), [kywang7@vghtpe.gov.tw](mailto:kywang7@vghtpe.gov.tw) (K.Y. Wang).

0305-4179/\$36.00 © 2011 Elsevier Ltd and ISBI. All rights reserved.

doi:10.1016/j.burns.2011.09.010

Burn patients facing these problems produced many health-care needs. To help them during their recovery after discharge, health-care professionals need to understand their care needs. However, most studies explored burn-related problems with little attention given to burn patients' health-care needs. A previous study indicated that 12% of burn patients wanted more psychosocial support, another 12% preferred better rehabilitation and 9% wanted better help with physical problems after discharge [4]. No articles were found that describe in detail the burn outpatients' health-care needs after discharge. It is also not clear what types of burn patients tend to have more health-care needs after discharge. This study aimed to predict burn patients' health-care needs after discharge in terms of demographic, disease characteristics, mental status and social support factors. By being aware of burn outpatients' health-care needs and related factors, the burn patients who may have more care needs after discharge could be detected during the inpatient phase. By being involved promptly, health professionals can meet their health-care needs in good time and physical and psychosocial problems after discharge can be managed in advance and will improve quality of life. Based on the above, in order to help burn patients and their family members after discharge, the purposes of this study were to explore the health-care needs of burn patients after discharge from hospital and to identify the factors relating to those needs.

## 2. Materials and methods

### 2.1. Participants and procedure

This study was a cross-sectional survey design. The data were collected by face-to-face interviews with a convenience sample of burn patients from a medical centre in Taiwan during 2005–2007. The inclusion criteria for participants were as follows: discharged burn patients over 18 years old at the time of the burn. We requested burn outpatients who met the criteria to participate in this study in the plastic surgery clinic. If they were willing to participate, a written explanation and an informed consent letter with the questionnaires were given to them. Participants were informed that they could withdraw from the study and refuse to answer the questionnaires at any time and confidentiality of response was assured. Participants completed the questionnaires by themselves or with verbal help from the first author. A total of 93 patients were recruited.

### 2.2. Measures

#### 2.2.1. Basic information

Basic information included demographics and disease characteristics. Demographic characteristics included gender, age, economic status (expenditure not over income; expenditure over income), employment status (return to previous job; change to a new job; unemployed), time since discharge, diagnosed psychiatric history before burn (e.g., schizophrenia, mood disorder, anxiety disorder and sleep disorders) and diagnosed psychiatric history after burn (e.g., schizophrenia, mood disorder, anxiety disorder, sleep disorders and PTSD). Disease characteristics included burn degree, burn percentage

of total body surface area (TBSA), numbers of burned areas and visible scarred areas (including head, neck, upper arm, lower arm, hand, thigh, lower leg, feet, chest, back, buttocks and genital area) of the body, joint scarred or not and numbers of visible scarred joints (including knuckle, wrist, elbow, shoulder, armpit, knee, ankle, toe and spine) were recorded.

#### 2.2.2. Mental Status Inventory

In order to measure symptoms of depression and anxiety over the previous 7 days, two subscales of the Symptom Checklist-90-Revised (SCL-90R), which is an internationally used self-reported instrument, were administered. The depression subscale contained 13 items, the anxiety subscale contained 10 items: 23 items in total. Answers were scored on four-point Likert scales (1 always; 2 often; 3 sometimes; and 4 not at all). The global severity index was obtained by dividing the sums of all ratings. The higher the score, the more negative the mental status was. The internal consistency index was 0.88 for the total scale, 0.63 for the depression subscale and 0.94 for the anxiety subscale.

#### 2.2.3. Burn Patients' Social Support

This inventory was based on the Discharged Burn Patients' Social Support inventor [8]. It consisted of 16 items to be answered on a four-point Likert scale to indicate the frequency of support that burn patients received. The source of support divided into family support and health-care professional's support. At the same time, participants had to indicate the level of support they received from families and individual health-care professionals. The higher the scores, the more social support they received. The internal consistency of family support was 0.95 and 0.92 for health-care professional's support.

#### 2.2.4. Burn patients' health-care needs

The questionnaire, containing 31 items to assess burn patients' health-care needs, was self-developed. The level of health-care needs to be answered on a 4-point Likert scale (1: no need at all; 2: need somewhat; 3: need moderately; and 4: need very much) to indicate how many needs of each item did they had during the past 7 days. The higher the score, the greater the need for health care. In terms of factor analysis, two subscales were identified, namely physiological care needs and psychosocial needs. Both of them explained 54.5% of total variance. The physiological care needs subscale contained 20 items and the psychosocial needs subscale contained 11 items. The alpha reliability was 0.96 for physiological care needs and 0.91 for psychosocial needs. For overall health-care needs, the alpha reliability was 0.96.

### 2.3. Statistical analysis

The questionnaires were checked by the researcher to ensure that the respondents had considered each item. No response bias existed in the sample. All 93 questionnaires were used for the analysis. The data were analysed using SPSS version 17.0 for Windows. Continuous data were expressed as mean and standard deviation (SD). Categorical data were expressed as numbers and percentage (%). The variable of health-care needs met the assumption of normal distribution. By

Download English Version:

<https://daneshyari.com/en/article/3105248>

Download Persian Version:

<https://daneshyari.com/article/3105248>

[Daneshyari.com](https://daneshyari.com)