

Available online at www.sciencedirect.com

# **ScienceDirect**

journal homepage: www.elsevier.com/locate/burns



# Injury-related fear-avoidance and symptoms of posttraumatic stress in parents of children with burns



### M. Willebrand\*, J. Sveen

Department of Neuroscience, Psychiatry, Uppsala University, Sweden

#### ARTICLE INFO

Article history:
Accepted 7 August 2015

Keywords:
Burns
Child
Fear-avoidance
Injury
Parent
Posttraumatic stress disorder

#### ABSTRACT

Parents of children with burns experience a range of psychological reactions and symptoms, and parents' health is known to impact children's health. So far, there is little research into potential mechanisms that maintain parents' symptoms. The aim was to investigate parental injury-related fear-avoidance, and its associations with injury severity and health measures. Parents (n = 107) of children aged 0.4–18 years that sustained burns 0.1–9.0 years previously completed questionnaires on fear-avoidance, posttraumatic stress, and health of the child. Analyses showed that the average level of fear-avoidance was low and positively associated with measures of injury severity and parents' symptoms of posttraumatic stress, and negatively associated with parents' ratings of their child's health. In two separate multiple regressions with parents' symptoms of PTSD and the child's health as dependent variables, fear-avoidance made the largest contribution in both models while injury severity was non-significant. Results were not related to comorbid conditions of the child, scarring, or parent-related socio-demographic variables. In summary, injury-related fear-avoidance is more likely among parents whose children sustain more severe burns. In turn, fearavoidance contributes significantly to parents' symptoms of PTSD and to poorer health ratings regarding the child, irrespective of injury severity or child comorbidity.

© 2015 Elsevier Ltd and ISBI. All rights reserved.

#### 1. Introduction

A child burn can be a devastating event for the whole family, and parents of children with burns face great challenges. A recent qualitative study suggests that parents go through a range of difficult situations during the accident, hospitalization and early rehabilitation, such as witnessing the accident, driving their screaming child to the hospital, witnessing traumatic medical procedures, early hospital discharge, and

having to care for the burn and handle the pain at home, dealing with people staring at their child, noticing changes in the child's behavior such as fearfulness and clinging, and changes in their own behavior [1]. Later in the recovery period, parents describe a major impact on family life such as difficulties and worries due to remaining physical problems, affected family relations, alterations in everyday life, and the need for parental and family support [2].

Previous studies have found that 19–44% of the parents have symptoms of depression and up to 47% have symptoms

E-mail address: mimmie.willebrand@neuro.uu.se (M. Willebrand). http://dx.doi.org/10.1016/j.burns.2015.08.004

<sup>\*</sup> Corresponding author at: Department of Neuroscience, Psychiatry, Uppsala University, Uppsala University Hospital, SE-751 85 Uppsala, Sweden. Tel.: +46 18 611 52 32.

of posttraumatic stress disorder (PTSD) during the first months after injury, and long-term studies indicate that 31–54% have symptoms of depression and 14–42% still have symptoms of PTSD up to 5 years after the burn [3].

Parents' health is a possible risk factor regarding the child's adjustment. For example, it has been seen that parents' anxiety increases conflicts in the immediate and extended family [4] and that parents' PTSD symptoms directly contribute to PTSD symptoms among adolescents [5]. One psychological factor that serves to maintain PTSD symptoms is avoidant behavior, and avoidance has also been found to mediate the relationship between disaster exposure and PTSD for both adolescents and their parents [5]. Furthermore, it is known that children can acquire both fears and avoidant behavior by parent modeling [6].

In the aftermath of a burn, parents might associate certain activities with a risk for re-injury or harm, and it is plausible that they may develop fear-avoidant cognitions regarding their child. The concept of fear-avoidance comprises the beliefs that certain actions or behaviors are associated with a risk for harm. The concept has been extensively investigated in patients with chronic pain and entails both: (1) the belief that one is at risk for future episodes of pain; and (2) avoidance of pain-related situations and movements [7]. The mechanism was described in the fear-avoidance model developed by Lethem et al. [8], and was shown to be a strong predictor of disability in patients with low back pain [9-12], as avoidance promotes physical inactivation [13]. Recent studies suggest that both fear-avoidant cognitions and symptoms of PTSD may play a part in the maintenance of pain disability [14,15].

In trauma survivors, the corresponding belief is fear of reinjury or harm. This is a potentially debilitating belief that can lead to excessive use of avoidant behavior. Avoidant behavior is problematic because it immediately reduces the fear of reinjury, which in turn makes further avoidant behavior more likely and also maintains the fear. In a previous study on adult patients with burns, injury-related fear-avoidance was associated with perceived poorer burn-specific health, longer periods of sick leave, less likelihood of being employed, and more contact with somatic health care. Even low to moderate levels of fear-avoidance were found to be associated with poorer outcomes, and therefore a cut-off level of  $\geq 1$  (mean score range 0–4) was recommended [16]. Injury-related fear-avoidance was also found to correlate with symptoms of PTSD among adult patients with burns [17].

As of yet, no study has directly focused on the presence of fear-avoidance in the parents of children with burns. However, the fear-avoidance data collected for the present study were used in a partly overlapping sample as a correlate of parents' ratings on the Burn Outcomes Questionnaire (BOQ) for children aged 5–18 years. It was found that parents' fear-avoidance scores were associated with the BOQ subscales for pain, appearance, and parental concern [18]. Thus, there is reason to hypothesize that parents' fear-avoidant cognitions are associated with their perception of their child's health. Furthermore, whether this proposed association mirrors parents' current psychological symptoms, or the severity of the child's injury, or if fear-avoidance is an independent contributing factor, has not been investigated.

The present study has a cross-sectional design with the aim of describing injury-related fear-avoidance and its associations with symptoms of posttraumatic stress on the part of the parents, as well as parents' ratings of their child's health. The hypotheses for this study are that fear-avoidance among parents is more pronounced in parents of children with more severe burns, and that the presence of fear-avoidance will in turn be associated with more symptoms of PTSD in parents and poorer ratings of child health, irrespective of injury severity.

#### 2. Material and methods

#### 2.1. Participants and procedure

The Uppsala Burn Center and the Linköping Burn Center are the two main Swedish burn centers with nationwide responsibility for treating patients with severe burns. Admission criteria are based on the recommendations of the American Burn Association (ABA). At the time of the study, the catchment area for the two centers included approximately 6.3 million inhabitants (approximately 70% of the Swedish population) and covered most of the northern and southern parts of Sweden, and some parts of central Sweden. The sample for this study comprised consecutively admitted patients at the two Burn Centers between January 2000 and December 2008. Inclusion criteria for the parents were (1) age of the afflicted child <18 years at the time of the investigation, and (2) ability to understand and respond to questions in Swedish. A total of 220 children fulfilled the age criterion; however, 14 families had no known address, leaving a total possible sample of 206 families. All families of these children received an information letter describing the study. One week later, they were sent a questionnaire booklet and a prepaid response envelope. The questionnaire booklet contained questionnaires covering the child's post-burn health, which has been reported earlier [18,19], as well as questionnaires regarding the parents' own current psychological symptoms, and questions regarding perceived need for support and care utilization. Three weeks after the initial questionnaire booklet was sent, non-responders received a reminder letter and a new copy of the questionnaire booklet. As outlined in the invitation letter, responders received a lottery ticket worth 2.5 Euros. The study was approved by the Regional Ethics Review Board in Uppsala.

#### 2.2. Measures

#### 2.2.1. Fear-avoidance

Four questions assessed fear-avoidance beliefs:

- The burn has put my child's body at risk for the rest of his/ her life.
- 2. My child can't do the same things other people do since there is too great a risk that he/she will get burned again.
- I'm afraid my child might get hurt again if he/she puts himor herself in risky situations.
- 4. It is really not safe for my child to be physically active.

The items have been used before in a first-person format in an adult population of burn patients and have been found to

## Download English Version:

# https://daneshyari.com/en/article/3104049

Download Persian Version:

https://daneshyari.com/article/3104049

<u>Daneshyari.com</u>