



## Liaison psychiatric service on burn patient (a case report)

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### ARTICLE INFO

#### Keywords:

Burns  
Adjustment disorder  
Psychiatric assistance  
Good health  
Well-being

### ABSTRACT

Burns affect people differently. Not just physically, but also mentally. After the fire and the loss of her husband, we found an adult woman with an adjustment condition, anxiety, and post-combustion depression. Since treatment in the burn unit, psychiatric aid has been provided to overcome treatment hurdles, build patient trust and connections with caring professionals, prepare patients for breaking bad news about their husbands, and treat PTSD in patients. Case management incorporates the FRAMES technique, relaxation treatment, supportive psychotherapy, and family psychoeducation.

### Background

Individuals react differently to burns. Not only physically, but also mentally. Losing a spouse is also one of life's most difficult stressors (Blakeney et al., 2007). Adjustment disorder is frequently one of the psychiatric problems consulted in CLP practice when there is a history of trauma or medical treatment, or both (Egberts et al., 2016).

### Case illustration

Female patient, 55 years old, Javanese, Muslim, married, with a high school diploma, working as a baby massage counselor at the Mother and Child Foundation. She was hospitalized for 12 h and sustained burns to her face, neck, right and left hands, and feet as a result of fire bursts from LPG cylinders. At the time of the occurrence, she was asleep. She felt the heat, especially in her lower region, as well as her husband's shouts, which woke her up. RSI Jemursari directed her to RSUD Dr. Soetomo. She complained of numerous nighttime awakenings due to nightmares and being unable to sleep till dawn for the first three days. Her nightmare involves seeing a cloud of smoke, much as it did at the moment of the tragedy. She is terrified that the incident may happen again once she awakens. She can only sleep when there are a lot of nurses on duty, and she feels protected. The patient sobbed as she expressed her fear of being fired from her job owing to a handicap caused by burns. She is also concerned about her husband's weight, which she claims is more than her own. She is also upset since she does not have a daughter who could take better care of her when she comes home. She is now hopeful that her condition and that of her spouse will improve soon and that she will be able to return home. She sees her current state as a test, but she

has no idea why she is being tested. With all of her efforts in the form of therapy and surgery, the patient stays sure that all will work out in the end. Her spouse died of heart arrest after 14 days of therapy at the Burn Unit. The other family was already aware of the patient's husband's death but requested that she not be notified until her physical condition improved and she returned home.

### Procedural management

Preliminary findings showed that the patient was in poor overall health with full awareness and low SpO<sub>2</sub> (98%) and a pain rating of 3 on the VAS (Visual Analog Scale), with superficial dermal combustion 9%, mid-dermal 7.5%, and deep dermal 9% (total burn surface area 25.5%). The patient's nutritional condition was satisfactory at 57 kg and 160 cm (BMI 22.3: Normal). Hypoalbuminemia (Albumin 2.7), transaminase (OT/PT: 145/84) and hyperglycemia (250 mg/dL). Debridement and STG in the operating room for plastic surgeon colleagues. 40 mg Sucralfate suspension; 20 mg Zinc; iron supplement, probiotics; 1000 cc IVFD Kalbamin; 1000 cc IVFD RL; 1 gr Metamizole; 40 mg Omeprazole; and Insulin Novorapid 3 × 18 IU sc, Insulin Levemir 20 IU sc overnight as blood glucose regulator.

The Burn Unit provided psychiatric help from day one. Findings included patients who had good orientation but were depressed and anxious. The patient's DASS-21 scores were normal. These results show that patients' anxiety, sadness, and stress levels are typical. BAI 14 (moderate depression) BDI 12 (mild anxiety). The patient is presently in the acceptance phase (Kubler-Ross), having accepted her condition after being informed of the burn treatment method. An adjustment disorder with anxiety and depression was diagnosed (F43.22). During the acute

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<https://doi.org/10.1016/j.psycr.2022.100027>

Received 28 June 2022; Accepted 28 June 2022

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period, patients get supportive psychotherapy with suggestions and reassurance. Relaxation treatment is used to treat anxiety. During therapy, sertraline 25 mg was taken in the morning and lorazepam 1 mg at night to prevent worsening of depression and development of PTSD.

Patients work with a lot of individuals. The patient's view of her "disability" due to burns makes her fear losing her job. The therapist organizes occupational activities to preserve the patient's social function. The patient's younger brother was given psychoeducation to help encourage her during therapy. Psychoeducation is also given on the significance of properly breaking bad news so that patients may accept her spouses' deaths without repercussions.

Communication is maintained with colleagues in Plastic Surgery as primary doctors addressing sufficient pain management to allow patients to relax and families' reluctance to inform patients of her spouses' deaths. Psychoeducation of patients and families is provided in collaboration with plastic surgeon colleagues on the condition, action plans, expected period of hospitalization, and probable burn complications.

## Results

The patient had three times debridement and one skin graft for wounds on his left arm and both legs. The patient's recovery is going well, and the outlook is excellent.

Initially, the patient had trouble sleeping. After establishing rapport with the examiner, she expressed numerous more problems. The patient uses relaxation techniques to alleviate any pain or worry associated with wound cleansing without anesthesia. She accepts her condition and expresses gratitude for the apparent progress. The therapist identifies the patient's condition knowledge, expectations, and beliefs/values. Giving psychopharmaceuticals helps with insomnia, nightmares, and anxiety. She recognizes the severity of the burn and the treatment options. So, the patient will concentrate on her recovery and will attempt to remain calm when the wound is being cleaned.

The family recognizes the significance of breaking the bad news of her husband's death. However, if it had to be filed while the patient was still in the hospital, the family declined. The family will share the bad news when the patient returns to Jombang, and they are ready to face the risk of not sharing the bad news under professionals' assistance. The patient longs to return to the village, where she hopes to find solace, serenity, and start a business. The family is aware of the patient's decision, has agreed on it, and has prepared for it.

## Discussion

Aside from the physical effects, the most common and devastating post-burn consequence for patients and their supporting families throughout therapy is psychological stress (Blakeney et al., 2007). Burns can cause stress, discomfort, and deformity in the form of scars if they reach the dermal layer. [2]. The degree of burns is a significant risk factor for the development of mental illnesses. At least one psychological illness is present in one-third of patients with mild burns (TBSA 5%), two-thirds of those with moderate burns (TBSA 5–20%), and nearly all of those with severe burns (TBSA >20%). The burn care team will undertake a mental consultation for 54.6% within the first week after therapy, and the most common diagnosis based on psychiatric evaluation is adjustment disorder at 31.4%, and in another research, 61.5% (Erdogan and Delibas, 2020; M et al., 2017). Adjustment and recovery are affected by various of elements, including the patient's psychological state, the nature/severity of the injury, and the patient's continuing medical treatment (Navarrete and Rodriguez, 2016).

Psychotherapy is a key treatment for adjustment disorders, with the goal of reducing stressors or the effects of their disease, improving coping to deal with stressors that cannot be removed, and creating a support system to optimize adaptability (Strain, 2015). Because adjustment disorder is classified as a subclinical ailment, it is thought that it responds to low-intensity therapies such as short interventions. This is in accordance

with the findings of an intervention research project, which found that adjustment disorder was modestly responsive to self-help bibliotherapy and other online self-help therapies (O'Donnell et al., 2019).

In this situation, the patient is driven to recover. However, if the patient's expectations for the husband's recovery are too high, along with the importance of the wife's function, it might lead to depression if the sad news of the husband's death is not delivered correctly. Throughout the therapy, she was aware that her husband's condition was not as excellent as her own due to other conditions such as high blood pressure and pulmonary tuberculosis. The patient does not expect much improvement in her husband's condition and prefers to concentrate on her rehabilitation first. Patient experiences discomfort every time the wound is cleansed. Psychological variables have a role in the management of pain and anxiety. Before cleansing the wound, Plastic Surgery colleagues perform regular pain evaluations to convince patients and families that medical professionals would manage pain as well as possible. This validates the patient's concerns and assures them that their suffering will be relieved. The patient's fear and despair about pain will also be decreased, lowering the likelihood of future depression or PTSD (Strain, 2015).

Receiving bad news is a condition that can drastically alter a patient's life or view of the future. In order to protect patients, some people opt to conceal unpleasant news. Despite being motivated by compassion, this behavior is detrimental to one's mental health. Breaking bad news (BBN) is an important aspect of clinical practice, but it may be unpleasant for both doctors and patients if communication is difficult. When performed poorly, BBN can create tension, worry, and patient confusion regarding diagnosis, treatment, and prognosis, resulting in a negative overall outcome (Erdogan and Delibas, 2020; Gremigni et al., 2021; Holmes and Illing, 2021). In this situation, the liaison service has constraints, including the patient's unwillingness to receive information and the family's formal refusal to carry out BBN regarding the patient's husband's death. To prevent the patient's psychological condition from deteriorating, the family is educated to continue mentoring with a psychiatrist in Jombang to help the patient through grief if the patient discovers the reality of her husband's death, so that the patient can maintain the acceptance phase that she is currently in.

Psychopharmaceuticals are thought to help patients who have difficulties sleeping due to nightmares. The patient's anxiousness continued even after the relaxation training at the start of therapy. Other factors to consider are the extended period of burn treatment, psychological stresses such as financial issues, and anankastic personality characteristics, which might worsen the patient's psychological response when she discovers her husband's death. Sertraline treatment was chosen because, in addition to alleviating depressive symptoms, sertraline possesses one receptor that may act as an anxiolytic drug (Stahl, 2013). Sertraline, a selective serotonin reuptake inhibitor (SSRI), has an anti-inflammatory impact in burn patients by controlling and decreasing the rise of pro-inflammatory cytokines. In one study, topical SSRIs were demonstrated to enhance wound healing in the skin in vivo (Nguyen et al., 2019). Lorazepam was administered to the patient, as benzodiazepines are the most widely utilized psychotropic drugs in anxiety-related disorders. Given the reclassification of adjustment disorder as a trauma and stress-related disease, it is important to note that professional recommendations advocate the use of benzodiazepines for the prevention and treatment of PTSD (Stein, 2018). Because these serotonergic drugs frequently enhance activity, are difficult to tolerate at first dosages, and have a long onset of effect, the use of benzodiazepines is beneficial when starting SSRIs (Stahl, 2013).

## Conclusion

Psychiatric support is provided from the outset in burn cases to minimize problems that may occur following the burns. Along with collaborating with the Plastic Surgery department on holistic therapy for patients, assistance is offered to avoid post-traumatic stress disorder.

der (PTSD) and depression following the death of a life partner. The FRAMES technique, supportive psychotherapy, relaxation therapy, and psychopharmaceuticals are all used in this case as therapeutic modalities.

#### Declaration of Competing Interest

Authors declared they have no conflicts of interest.

#### References

- Blakeney, P., Rosenberg, L., Rosenberg, M., Faber, A., 2007. Psychosocial care of persons with severe burns. *Burns* 433–440.
- Egberts, M.R., Schoot, R.v., Boekelaar, A., Hendrickx, H., Geenen, R., Van Loey, N.E., 2016. Child and adolescent internalizing and externalizing problems 12 months postburn: the potential role of preburn functioning, parental posttraumatic stress, and informant bias. *Eur. Child Adolesc. Psychiatry* 791–803.
- Erdogan, E., Delibas, D.H., 2020. Psychiatric disorders, delirium and mortality in patients referred for consultation in a burn center: a four-year retrospective study. *Med. J. Bakirkoy* 62–70.
- Gremigni, P., Casu, G., Zaia, V., Montagna, E., Santos, K.L., 2021. Development and validation of The Breaking Bad News Attitudes Scale. *BMC Med. Educ.* 196.
- Holmes, S.N., Illing, J., 2021. Breaking bad news: tackling cultural dilemmas. *BMJ Support. Palliat. Care* 128–132.
- M, J., N. K., A. D., 2017. Burn-related factors affecting anxiety, depression and self-esteem in burn patients: an exploratory study. *Ann. Burns Fire Disasters* 30–34.
- Navarrete, N., Rodriguez, N., 2016. Epidemiologic characteristics of death by burn injury from 2000 to 2009 in Colombia, South America: a population-based study. *Burns Trauma*.
- Nguyen, C.M., Tartar, D.M., Bagoood, M.D., So, M., Nguyen, A.V., Gallegos, A., ..., Gareau, M.G., 2019. Topical fluoxetine as a novel therapeutic that improves wound healing in diabetic mice. *Diabetes J.* 1499–1507.
- O'Donnell, M.L., Agathos, J.A., Metcalf, O., Gibson, K., Lau, W., 2019. Adjustment disorder: current developments and future directions. *Int. J. Environ. Res. Public Health*.
- Stahl, S., 2013. *Stahl's Essential Psychopharmacology: Neuroscientific Basis and Practical Applications*. Cambridge University Press, New York.
- Stein, D.J., 2018. Pharmacotherapy of adjustment disorder: a review. *World J. Biol. Psychiatry* 546–552.
- Strain, J.J., 2015. Trauma and stressor-related disorders 2: adjustment disorder. In: Leigh, H., Streltzer, J. (Eds.), *Handbook of Consultation-Liaison Psychiatry*. Springer, New York, pp. 250–254.



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