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PSYCHOSOCIAL IMPACT OF WOUNDS IN KENYA
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# PSYCHOSOCIAL IMPACT OF WOUNDS IN KENYA

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## ABSTRACT

*Background:* **Wounds have a psychological and social impact on patients, often affecting their quality of life. The psychological effects of wounds include increased levels of anxiety, low self-esteem, frustration, depression, fatigue, and sleep deprivation due to associated pain. Social well being is undermined by physical limitations that deprives social interactions and a negative self-image associated with wounds. Psychosocial stress harms the patient's overall well being and delays wound healing.**

*Objective:* **The aim of this study was to determine the psychosocial impact wounds impose on patients in Kenya.**

*Design:* **A cross-sectional study**

*Setting:* **The study was conducted across six hospitals in Kenya over a period of two weeks.**

*Subjects/participants:* **The study included patients of all ages who presented to the hospitals with wounds, and who gave informed consent; and excluded patients who declined to participate or could not give informed consent. The participants completed a comprehensive questionnaire capturing the wound details: Focusing on Etiology, Duration, Wound Care Experience, and Psychosocial Implications.**

*Results:* **The study recruited 500 patients; 55.8% were male, 44% were female, and 0.2% preferred not to disclose their gender. The mean age of the patients was 35.0 years, ranging from 0 to 94 years. More than 50% of the participants expressed anxiety, fears related to the wound never healing, limb amputation, loss of income, and inability to perform daily activities. Participants reported limitations in their ability to perform daily activities, including nutrition (21.1%), bathing (45.6%), dressing (38.7%), and use of the toilet (30.8%), sleep (37.8%), and recreation (51.9%). Socially, 30.7% of participants experienced stigma due to wounds.**

**Pain during dressing sessions was a source of stress, as 71.6% of the participants reported moderate to severe pain. In 71.7% of cases, no analgesia was administered before dressing.**

*Conclusion:* **Wounds can have a significant impact on the overall well being of patients, affecting their psychological and social health. In addition to attending to the physical aspects of care, effective wound management should encompass strategies to address these psychosocial effects. This may involve providing counseling services and integrating supportive social networks into the patient's care plan.**

## INTRODUCTION

Wounds impose a considerable physical, psychological, economic, and social burden on patients and society at large. While standard clinical care practices often seek to address the physical aspects of wound care, the psychosocial impact of wounds is often overlooked, to the detriment of the patient's quality of life (1). McKenzie highlighted the shortcomings of the term "wound care" which often reduces wound management to a mechanical process focused on the defect instead of the patient (2). While both acute and chronic wounds impose a burden on patients, chronic wounds, because of prolonged duration, pose a heavier burden and have been the subject of most studies investigating the psychosocial impact of

wounds (1). The psychosocial well being of individuals with wounds often stems from impairments in their physical health and sub-optimal clinical outcomes (3). Notably, pain associated with wounds causes distress while compounding psychological distress by causing sleep disturbance and limiting movement. Lack of sleep is common among patients with chronic wounds due to pain and anxiety; sleep deprivation, in turn, leads to fatigue and reduced productivity (4). Additionally, psychological well being is affected by an individual's loss of economic independence due to a wound. Wounds are generally associated with limitations in physical activities, which often affect an individual's productivity. The consequent loss of a source of income not only creates psychological distress through anxiety and depression but also affects their ability to access wound care services (4).

Individuals with wounds experience social isolation. One of the major causes of social isolation is limitations in physical movement. Wound dressings and pain often limit an individual's mobility, thus prohibiting them from attending social engagements (5). Secondly, wounds represent a defect in an individual and hurt their self-esteem. The foul odor of certain wounds can discourage individuals from engaging in social interactions. Additionally, wounds affect the social well being of patients by limiting their independence, forcing them to depend on other individuals to perform activities of daily living and financial support for those without a source of income. Increased dependence on others not only heightens the feelings of being a burden to others but also lowers their self-esteem, precipitates a sense of frustration, and increases anxiety levels (6).

Addressing the psychological well being of patients is essential to wound healing. Psychological stress can hinder wound healing through various pathways. One mechanism involves the activation of the immune system and subsequent release of pro-inflammatory cytokines during the initial phases of wound repair (7). Additional pathways include sustained elevation of glucocorticoids, heightened catecholamine production, and reduced levels of oxytocin. (8). Social support is an equally important pillar of wound management. This premise is supported by evidence from a review by Parkler et al., where patients living alone were observed to be at a higher risk of developing leg ulcers (9). Furthermore, a group of patients who received a social model of care had significantly better improvement in pain and ulcer healing compared to patients who received individual care at home (9). Postulated mechanism by which social well-being promotes wound healing is by buffering against stress. Experimental animal studies attributed better wound healing outcomes among social individuals to high oxytocin levels and subsequent reductions in cortisol levels (10). The importance of psychosocial factors in comprehensive wound management informed the need to study the psychosocial impact of wounds in the Kenyan context. This study on the psychosocial impact of wounds is part of a more extensive study on the prevalence of wounds and their management in Kenyan hospitals.

## MATERIALS AND METHODS

**Study Design:** Cross-sectional descriptive study

**Study Setting:** The study was conducted across six hospitals in Kenya.

**Study Subjects/Participants**: The study participants included patients with wounds in outpatient and outpatient settings.

**Sampling procedure**: Purposive sampling was used, and all patients who presented to the hospital with a wound were included irrespective of gender or age.

## SELECTION CRITERIA

### Inclusion Criteria

All patients, irrespective of age or gender, who gave consent to participate were included in the study.

### Exclusion Criteria

Patients who declined to participate in the study or could not provide consent were excluded.

**Data Collection:** Data was gathered using questionnaires.

**Data Analysis:** Data was entered into and analyzed using *Statistical Package for Social Sciences (SPSS Version 25, IBM, US).*

### Ethical Consideration

Ethical approval was granted the Kenyatta National Hospital / University of Nairobi Ethics and Standards Committee. Prior to data collection, approval was received from the respective hospital administration. A written informed consent was signed by all participants. Information obtained from the study was treated with confidentiality and used only for purposes related to the study.

## RESULTS

### Demographics

The study was conducted across six hospitals in Kenya. 500 patients were evaluated; 55.8% were male, 44% were female, and 0.2% preferred not to disclose their gender.

The mean age of the patients was 35.0 years, with a range from 0 to 94 years. The age categories were

≤5 years (8.5%), 6 to 18 years (9.3%), 19 to 60 years (72.1%), and above 60 years (10%). The majority of patients were inpatients (68%), while 32% were outpatient clinic attendees.

**Fears about the wound**

The data revealed that a significant percentage of patients had concerns and fears regarding their wounds. Approximately 57.5% of patients expressed fear that their wounds may never heal, while 43.4% were concerned about their inability to perform daily duties due to the wound. In addition, 52.4% of patients expressed fears of losing their job or income as a result of the wound, and 69.5% had concerns about the possibility of amputation.

**Social and Lifestyle Effects**

Socially, stigma was reported by 30.7% of patients, indicating that they felt stigmatized due to their wounds.

A variable number of participants reported limitations in their ability to perform daily activities, including nutrition (21.1%), bathing (45.6%), dressing (38.7%), and use of the toilet (30.8%), sleep (37.8%), and recreation (51.9%).

**Wound Pain**

Wound pain was assessed in three categories: dressing pain, interval pain, and background pain. The results are summarized in Table 1 below.

*Table 1: Pain Severity*

| | | Count | % |
|---|---|---|---|
| Dressing Pain | Milds | 140 | 28.5% |
| | Moderate | 212 | 43.1% |
| | Severe | 140 | 28.5% |
| Interval Pain | Mild | 274 | 55.6% |
| | Moderate | 142 | 28.8% |
| | Severe | 77 | 15.6% |
| Background Pain | Mild | 300 | 60.9% |
| | Moderate | 133 | 27.0% |
| | Severe | 60 | 12.2% |

Among the patients, 43.9% reported receiving regular or ongoing analgesia for pain management, while 56.1% did not receive such treatment. In terms of pre-dressing analgesia, 28.3% of patients received it specifically before wound dressing, while the majority (71.7%) did not receive pre-dressing analgesia. These findings indicate that a significant portion of patients were not receiving regular or ongoing analgesia, and a substantial number did not receive pre-dressing analgesia specifically.

## DISCUSSION

The study affirmed that wounds hurt the patients' psychosocial well-being. Psychologically, patients admitted to anxiety regarding their prognosis and the impact of the wounds on their lives. The study participants acknowledged experiencing pain, which was often undertreated, and their ability to perform activities of daily living was limited. Socially, some participants were stigmatized on account of having wounds, while others did not. More than half of the study participants experienced anxiety over the impact of their wounds on their daily lives. In particular, they worried about their prognosis, the possibility of the wounds never healing or limb amputation, as well as the impact the wounds would have on their independence, such as their ability to perform daily duties and maintain a source of income. The findings are comparable to observations made by Olsson & Friman; their review of nursing documentation revealed that patients were anxious over the possibility of limb amputation or wounds never healing (11). To varying degrees, the study participants acknowledged that wounds limit their ability to perform daily activities such as nutrition, recreation, and personal hygiene practices such as bathing and using a toilet. Similar observations were made by Ebbeskog and Ekman, who attributed the limitations to the exacerbation of pain. Furthermore, the need to keep wound dressings clean and dry and protect the wound from damage limits the ease of performing daily activities (12). Pain was a cause of concern to the psychosocial well-being of this study's participants. While more than half of the participants reported experiencing moderate to severe interval pain and dressing pain, no form of analgesia was administered in more than 50% of cases before dressing sessions or as an ongoing form. Overall, pain management was inadequate and may have contributed to psychological distress. In a study that involved patients with chronic wounds, Upton et al. observed that acute pain during dressing sessions contributed to a state of chronic stress that delayed wound healing (13)with a mean age of 71.7 ± 14.6 years. The sample included 18 male (42%. Although pain is a common feature of wounds, adequate management is essential for psychological well-being to alleviate stress and anxiety and for timely wound healing.

## CONCLUSION

Wounds hurt the psychosocial well-being of patients. In addition to addressing the patient's physical needs, comprehensive wound care should acknowledge the psychosocial consequences of wounds and address them. Wound care providers should offer

patient education and counseling to alleviate anxiety. Furthermore, comprehensive assessment and management of pain should be practiced to further minimize stress. The social well-being of wound patients should be promoted through measures such as integrating family members into the wound care process.

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