WOUND MANAGEMENT: EMPIRICAL PRACTICES UNDER THE CULTURAL AND RELIGIOUS POINT OF VIEW

TRATAMENTO DE FERIDAS: PRÁTICAS EMPÍRICAS SOB O PONTO DE VISTA CULTURAL E RELIGIOSO

Bernadete de Lourdes André Gouveia¹, Adriana Montenegro Albuquerque², Simone Helena dos Santos Oliveira³, Aline Pereira da Silva⁴, Lanisia Bianca Passos de Oliveira⁵, Marta Miriam Lopes Costã⁶

ABSTRACT

Objective: to know the empirical methods used in treating wounds by the population of Cuité, under the cultural and religious point of view. Method: descriptive-exploratory study of a quantitative approach, held in the period from July to August 2011, with 16 subjects, adults and elderly, affected by skin lesions, most of the elderly aged from 60 to 100 years old (12) and adults from 30 to 59 years old (04), who signed the Free and Clear Commitment Term, after approval of the Ethics Committee in Research, CAAE number: 0065.0.133.000-11 Results: injuries have been identified with devitalized tissue, infection, wounds, granulation and epithelialization. The substances used were 38.12% soap water, 26.60% bath with leaves; 5.88% Chamomile tea, mastic and babatenor rind, coconut oil, cashew water and urine. Conclusion: the population incorporates medicinal herbs as an alternative or complementary therapeutic in the treatment of their injuries. Descriptors: Wounds and injuries; Empirical Practices; Population.

RESUMO

Objetivo: conhecer os métodos empíricos utilizados no tratamento de feridas pela população de Cuité sob o ponto de vista cultural e religioso. Método: estudo exploratório-descritivo, de abordagem quantitativa, realizado no período de julho a agosto de 2011, junto a 16 sujeitos, adultos e idosos, acometidos por lesões de pele, a maioria idosos com idade que varia entre (12) 60 a 100 anos e uma representação de adultos com uma faixa etária entre (04) 30 a 59 anos, que assinaram o Termo de Compromisso Livre e Esclarecido, após aprovação do projeto de pesquisa Comitê de Ética em Pesquisa, CAAE nº 0065.0.133.000-11, Resultados: foram identificadas lesões com tecido desvitalizado, infecção, esfacelos, granulação e epitelização. As substâncias utilizadas foram água e sabão, 38,12%; banho com folhas 26,60%; chá de camomila, âmbar e casca de babatenor, óleo de coco, água de caju e urina totalizando 5,88%. Conclusão: a população incorpora ervas medicinais como alternativa ou complemento terapêutico no tratamento de suas lesões. Descritores: Feridas e Lesões; Práticas Empíricas; População.

RESUMEN

Objetivo: conocer los métodos empíricos utilizados en el tratamiento de heridas por la población de Cuité, sobre el punto de vista cultural y religioso. Método: estudio exploratorio-descriptivo, de enfoque cuantitativo, realizado en el periodo de julio a agosto de 2011, junto a 16 sujetos, adultos y ancianos, acometidos por lesiones de piel, la mayoría de los ancianos con edad que varía entre 60 a 100 años (12) y una representación de adultos entre 30 a 59 años (04), que firmaron el Término de Compromiso Libre y Esclarecido, luego de la aprobación del proyecto de investigación del Comité de Ética en Pesquisa, CAAE: 0065.0.133.000-11, Resultados: fueron identificadas lesiones con tejido desvitalizado, infección, esfacelos, granulación y epitelización. Las sustancias utilizadas fueron 38,12% agua y sabão, 26,60%; banho com folhas, 26,60%; chá de camomila, âmbar y casca de babatenor; óleo de coco, água de caju e urina totalizando 5,88%. Conclusión: la población incorpora hierbas medicinales como alternativa o complemento terapéutico en el tratamiento de sus lesiones. Descriptores: Heridas y Lesiones; Prácticas Empíricas; Populación.

¹Nurse, Master Degree Professor in Nursing, Bachelor's Degree in Nursing, Federal University of Campina Grande–Campus Cuité. Cuité (PB), Brazil. E-mail: bernagouveia@yahoo.com.br; ²Nurse, Master Degree in Nursing, Master Degree Professor in Nursing, Bachelor's Degree in Nursing, Federal University of Campina Grande–Campus Cuité. Cuité (PB), Brazil. E-mail: montenegroadriana@ig.com.br; ³Nurse, Ph.D. Professor in Nursing, Technical School of Health, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: simonhesoliveira@gmail.com; ⁴Nurse, Federal University of Campina Grande–Campus Cuité. Cuité (PB), Brazil. E-mail: alinep96@hotmail.com; ⁵Nurse, Federal University of Campina Grande–Campus Cuité. Cuité (PB), Brazil. E-mail: biancapassos_tik@hotmail.com; ⁶Nurse, Ph.D. Professor in Sociology, Graduation in Nursing, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: marthamiriam@hotmail.com
INTRODUCTION

Wound is represented by the interruption of the continuity of the skin, to a greater or lesser extent, caused by physical, chemical, mechanical trauma or triggered by a disease clinic, which triggers the body's defense fronts.1 The treatment involves systemic and local aspects, which need to be known by health professionals. Local treatment is called bandages, consisting of the cleaning procedure and injury coverage, with the objective of assisting in the restoration of integumentary tissue integrity.1

The concern with the treatment emerged from the past, when in his struggle for survival, the man were affected constantly for injuries of different kinds. Searching for treatment, humanity began to use empirically plants that, in most cases, were used in religious rituals to ward off evil spirits, which attributed their diseases.2

The first bandages for treating wounds are from 3000 - 2500 B.C. which they are mentioned in Papyrus, including the use of substances such as grease, honey, flax yarn and fresh meat for the cure, because of their hemostatic properties values. Adhesive bandages were also applied.3 However, Hippocrates (460-377 b.c.) was who created the scientific basis regarding signs of inflammation and the method of injuries treatment; understanding that most wounds should be kept clean and dry and recommended to clean them with warm water, wine and vinegar.3

Currently, in spite of the existing scientific and technological advances in the health area, the treatment of wounds remains a divisive issue and brings a lot of concern and interest to professionals in the area, especially in Nursing.

The use of natural products, based on empirical practices passed down from generation to generation, persists in some scenarios, especially in small towns with low social and economic development that are located far from major urban centers, where access to health services is limited. In this way the popular use of plants for different purposes, including medicinal healing has contributions brought by slaves and immigrants with popular knowledge creating a rich medicine and Brazil offers the greatest diversity of environments and specific flora.4

Before the exposed, there was the need to develop research on the main methods and substances used in the treatment of wounds for people residing in the municipality of Cuité, region of Curimatão Brazil, proposing the following questions: what are the methods and substances used by the community of Cuité for wounds treatment? Did the use of methods and substance. Do you have scientifically proven action?

OBJECTIVES

- To meet the empirical methods used in treating wounds by the population of Cuité, under the cultural and religious point of view.
- To identify the methods and substances used for the treatment of wounds.

METHODOLOGY

Exploratory and descriptive study, quantitative approach, carried out in Curimatão region of the city of Cuité, in Paraíba. A research with individuals with skin lesions was carried out in the Family Health Strategy (FHS), to have access to their addresses. Users were contacted and guided about the research, to schedule their beginning. Some individuals participating in the research were interns at the Municipal Hospital of that city and institutions of long permanence (ILPIs).

For the composition of the sample inclusion criteria was established, including: presenting skin lesion; be over 18 years old; be registered in the Family Health Strategy. There were 16 users evaluated of the FHS.

The data collection took place in July to August 2011, with a form, after approval of the research project by the Ethics Committee in Research under CAAE number: 0065.0.133.000-11. Participants signed an Informed Consent Term (TCLE) and the investigation followed the ethical aspects recommended by Resolution 466/2012.5

The form used in the research consisted of objective questions, containing socio-demographic data (age, gender, profession/occupation, education) and the type of lesion: varicose ulcer, diabetic foot, pressure ulcer, traumatic injury, others; classification (acute, chronic); exudate (yes or no); characteristics of the tissue (wounds, infection, devitalized, granulation tissue and tissue of epithelialization); treatment of injury (based on medical advice, indication of relatives, friends or acquaintances, knowledge/experience acquired). Open-ended questions, free to answer, addressed the methods and substances used in the treatment of wounds.

Researchers observed all skin lesions of individuals at the time of the visits, in institutions of long permanence (ILPIs) or at the local hospital, by evaluating the...
characteristics of the lesions on the tissue type, depth and breadth. They researched the substances used in the wounds by individuals participating in the research. The collected material was organized and registered in worksheet of Microsoft Excel 2008, to encourage the grouping into categories and data analysis.

RESULTS AND DISCUSSION

The sample was composed of 16 individuals, 12 of them were elderly, 60 to 80 years old (8) and 81 to 100 years old (4) and also four adults, from 30 to 59 years old (04). There were female gender prevailed in nine participants, with seven elderly and there were seven men, with five elderly. The professions of the participants were: farmers mostly retirees, housewives and pensioners. Currently, Brazil presents a growing elderly population with more than 14 million modifying the Brazilian social economic profile.6

Observing the sample, the female gender is presented with seven elderly with skin lesions. Elderly women are highlighted in Brazilian population7 and the research justifies this phenomenon taking into consideration that they seek more health services, and then practicing initiatives for the prevention and treatment of diseases. The appearance of skin lesions associated with pre-existing base diseases may be interfering with the healing process resulting in chronic debilitating injuries.8

Before this, the 12 elderly research participants faced a frustrating situation and became anxious for a fast recovery, adopting several types of treatments many times using inappropriate substances for therapeutic without knowing of their active principle and its contraindications, because these methods outlined by the family, friends or acquaintances that before their empirical knowledge believe to encourage the recovery process.

It was observed that 6 (38.90%) presented infectious lesions such as: breast infection (mastitis), injuries of lower limb Erysipelas type; 4 (27.77%) traumatic, 3 (16.66%) varicose ulcers, 2 (11.11%) in diabetic foot ulcers and 1 (5.55%) pressure ulcers. Some factors influence the appearance of infectious agents, in which we highlight the mastitis, due to improper cleaning of the place, in this case performed after periods of breast-feeding, resulting from an inadequate asepsis.

The presence of infection prolongs the inflammatory phase and it is the biggest enemy for the healing of wounds. Often, the infection originates from exogenous, when the micro-organism is transported into the injury.9

However, many infections have their endogenous ancestry, that is arising from the own microbiota of the individual, considering an imbalance in the body’s natural defense mechanism of individuals with chronic disease, immunosuppression, malignant neoplasms, peripheral venous insufficiency and coagulopathies.

Another type of lesion with high content according to sample, 4 (27.77%) to the traumatic injuries, because they are farmers, maids, at daily risk, so these lesions vary from a simple cut to a larger aggression for the skin. The correct indication of treatment, starting with cleaning/irrigation to minimize even debridement, but not eliminate the risk of infection.

Acute or traumatic wounds and lacerations have a high risk of contamination when it is done with a cutting edge instrument such as a knife or broken glass in a domestic accident or at work and, depending on the clinical condition and the age of the individual, leading to infection causing damage at the time of treatment and healing.8

Considering the research took place with mostly elderly individuals, suffering traumatic injury brings risks of complication, because if there is loss of tissue and the edges cannot be approximated, the wound should heal by second intention, that requires a longer time to tissue repair, and depend on the existence of underlying diseases, such as chronic degenerative that the elderly are predisposed, not only will be extended healing time, but also higher risk of local infection.

The prevalence of at least one chronic degenerative disease covers 69% of the elderly population and the hypertension and arthritis are 81.4% of the aggravations. The occurrence of the disease in this age group presents inefficiency of the procedure therapeutic intervention and changes in the healing process.9

As to varicose ulcers surveyed, they constitute serious health problem worldwide, being responsible for significant morbidity and mortality rates.10 The existence of these diseases is directly related to the educational level of education of the population. On this situation, prevention is necessary in the process of care.11

Chronic venous insufficiency is the main cause of leg ulcers,1 may be caused by decreased diffusion of nutrients through the interstitial space by the capillaries. Therefore, venous hypertension leads to skin
malnutrition and to a limited depth of subcutaneous tissue.\textsuperscript{8}

The diabetic foot present in the sample, is a chronic complication of diabetes mellitus, characterized by infection, ulceration or deep tissue destruction, associated with neurological abnormalities and various degrees of peripheral vascular disease in the lower limbs. The sequence of events of the diabetic foot starts with soft tissue injuries, interdigital formation of cracks and dry skin cracks, and formation of callus.\textsuperscript{12}

As a result of peripheral neuropathy, the individual with diabetic foot becomes insensible to injury. When there is not the habit to observe the feet daily, the injury or even crack is unnoticed. It is an injury with difficult treatment, with prognosis reserved of necrosis/infection when the approach and treatment are inadequate, which leads the individual requiring hospitalization for invasive procedures such as debridement, revascularizations and even amputation.\textsuperscript{13}

The treatment of injuries requires bandages for long periods, providing clinical and functional and esthetic disorders on the quality of life of these individuals, in addition to representing individual and collective high cost.\textsuperscript{14}

The pressure ulcer (PU), present in 1 participant (5.55%), comes from cellular hypoxia that evolves into tissue necrosis. Generally, it is located in bony prominence areas, with higher incidence in the sacred region. In this way the nurse must be aware and evaluate the conditions of risk and benefits of the patient, regarding the PU, for the positioning in bed, whose procedure prevents injuries, complications and provides comfort.\textsuperscript{15}

The PU, generally is caused by pressure, moisture, shear, friction or a combination of these extrinsic factors, still suffering the interference of intrinsic factors, such as the general state of the individual, age, reduced mobility, neurological deficits, impaired nutritional status, body weight, incontinence and loss of blood supply, fairly common in elderly people, becoming a major health problem in this population.\textsuperscript{15}

\textbf{Figure 1.} Skin injuries characteristics. Cuité - PB, 2011.

According to Figure 1, the participants showed a predominance of devitalized tissue with 06 injuries and local infection was identified in 05 injuries. The presence of devitalized tissue injury is the loss of substances, growth medium conducive to infection and risk of abscesses, fistulas and even tunnels, depending on the affected area and the overall clinical condition of the individual. With these injury characteristics, there is a need for immediate evaluation for indication of proper treatment, favoring the bacterial balance and control of the infected lesion.\textsuperscript{8}

The five cases of infection on the injuries occurred in participants who were in hospital and also in ILPIs institutions. Hospital infections still have a big impact because they debilitate patients, increasing the morbidity and mortality, triggered by a longer hospitalization, and in ILPIs there are causes of death in residents with this type of injury.\textsuperscript{16}

Figure 1 shows three participants with injury in granulation phase. It is considered that the graining in the wound bed is inserted in the physiological process of healing, in phase of maturation, which is quite delicate for complete healing of the injury, however, representing the successful treatment on wounds.

The epithelialization phase was identified in only 01 injury, being characterized by covering the area with epithelial cells. For favoring this phase it is necessary that the place is moist and, concomitantly, a move from the edges of the lesion toward the center of the wound, called contraction, being the apex of the healing process.\textsuperscript{8}
In Figure 2, most of the surveyed uses water and soap (38.12%) for cleaning wounds. Products for wound cleansing are used to remove secretions and foreign bodies, such as blood, macromolecules and scaly cells adhering to the injured tissue. In view of the characteristics of the lesions, mostly ulcers, the use of sterile materials and solutions for cleaning and coverage are indicated. In this sense, it is recommended the use of saline solution to 0.9% and antiseptic soap in the area for cleaning; the wound bed should be cleaned with pressure jet, using 20 ml syringe and 40x12 French needle, carefully not to harm new and vascularized tissues. Therefore, running water is not recommended directly on the wound bed, since the concentration of minerals used to keep drinking it can be detrimental to the healing process, as well as the fact of not being sterile.

The soap contains substances such as fatty acids, obtained from vegetal and animal fats, with metals or basic radicals (sodium, potassium, ammonia, among others) are anionic surfactants in the form of soaps, domestic soaps, and shampoos, acting on Gram+ bacteria, characterized by a moderate toxicity and can cause irritation to the skin, lesion and toxicity to the wound bed if kept in concentration for long periods, impairing cellular mitosis.

In a study about topical therapy, the fluids used in wound cleaning were tap water 3 (15.8%), soapy water 7 (36.9%), water, soap and saline solution 0.9% 3 (15.8%), mainly using of water and soap to clean wounds, justifying that the most bandages were carried out at home.

The leaves bath represented by 26.60% of the surveyed the example as coffee, passion fruit, plums, beans and other leaves. The tea from the coffee leaves has high concentration of phenolic compound known as Mangiferina. The growing scientific interest by mangiferina is assigned to its great pharmacological potential, whose study has enabled the discovery of various activities, such as antioxidant, anti-inflammatory, hypoglycemic and others. However, there were no studies found addressing its use and benefits in the treatment of injuries, even showing antioxidant and anti-inflammatory actions.

Passion fruit (Passiflora edulis) cited by participants of the research, is a fruit in the form of infusion leaves used by the population to combat anxiety, insomnia, epilepsy, fever, headache, neuralgia, cough, asthma, diarrhea and abdominal pain. While its preparation as a poultice and lotion is used to treat infections and cutaneous inflammations.

Chamomile, Matricaria recutita L., is a plant used topically in disorders like stomachache and gingivitis. It presents antispasmodic, carminative, cicatrizant, tonic, calming, emollient, anti-inflammatory, antiseptic actions and can act on wound healing of skin with success, possible to join other substances that contribute to a curative action.

It should be noted that the coffee leaf, jurema preta, plum, beans and passion fruit, babatenon bark tea, coconut oil and cashew water have medicinal actions that deal with different diseases, it cannot be said that these substances could be used in treating injuries without scientific evidence confirming the beneficial effects.
It is important to report the correct way of use of medicinal plants to be satisfactory, using them with preparing as teas, baths, decoctions, infusions, inhalation, plaster, juice, among others. However, in a research held the most ignorance identified were concerning the form of preparation of plants for use with warning about indiscriminate attitude plant dose (amount used for the preparation of teas, infusions, fruit juices and other forms), leading to complications or intoxications.

The importance of glimpsing the popular knowledge about the preparation and use of medicinal plants is given with regard to underreporting of these practices and the risks of their indiscriminate use. Considering that the plant is used in various forms and their actions on the human body are diverse, the number, shape, and purpose of each prepared must be rigorously analyzed to avoid overdose, intoxications and adverse effects. It is necessary a proper handling and processing of these plants considering its characteristics in order to avoid contamination of the product, preserving its active principle. In addition, the concentrations should be compatible with the way of administration and the goals to achieve, namely: simple cleaning, reduction of microbial load, debridement, hemostasis and wound healing, among others.

Medicinal plants require proper handling and preparation so its use can bring beneficial results to patients, otherwise, the effects may aggravate the problem. To this end, the National Policy of Medicinal Plants and Herbal Remedies, published the Decree number 5.813/2006, with common goals aimed at ensuring secure access and rational use of medicinal plants and herbal medicine in our country.

The healing of injuries is a complex phenomenon and of great importance for the survival of human beings. Many substances are used with the intention of interfering in the process of healing satisfactorily. Existing elements in nature may constitute alternative materials for the local treatment of wounds, due to high costs of occlusal, synthetic or bio-synthetic bandages of advanced technologies available on the market. However, there is a lack of experimental scientific studies with substances used by users in a study confirming its effectiveness, as well as provide guidelines as to the indication and their proper implementation.

With that, despite the predominance of synthetic substances in the therapeutic arsenal, in recent years there has been the development of therapeutic practices considered by many health professionals as empirical, with a popular or incorporation of medicinal herbs as alternative therapy or in a supporting role. We can warn that a multitude of herbal medicines are tested and used in the process of healing of wounds and skin lesions that proved conducive. However not all of them have been proven scientifically, although they show good results in the speech of the population studied.

Study of Aloe Vera substance use extract has shown success in implementing the product and reinforces the importance of seeking alternative treatments for the healing of wounds. However, it is necessary that the health team is ahead in the pursuit of these new forms of assistance to the healing of wounds and the population exchange knowledge on local culture, avoiding complications and aggravations in the healing process.

It is worth pointing out that the “human urine” was also informed by the participants as an alternative for cleansing and treatment of wounds. However, the literature states that urine is a substance with acid composition of ammonia, which causes rashes, dermatitis skin type and further damaging the injured tissues.

Home medicine, such as teas, homemade ointments, Aloe Vera, “papaya milk”, clay and mud, leaves and pepper on the lesions, besides the use of poultices or exotic substances like cat and dogs feces with licking of such animals are included in popular use for the care of wounds in some contexts.

It is important to expose that these customs are passed from generation to generation regardless of current and upcoming education of the population, because in these areas the local belief and religious values are superimposed, however the scientific community has brought research to adopt medicinal plants with the proper security.

CONCLUSION

Based on the study of 16 individuals, all showed commitment to integrity of the skin. It was observed the search for other ways of supporting treatment for healing of lesions, highlighting venous ulcer, diabetic foot, pressure ulcer, injury and damage for biological agent with infection showing greater incidence, which may be associated with the inadequate treatment, improper disinfection or even use of medicinal plants without proof of effectiveness for treating wound, based only on beliefs and cultures of...
the region, thus constituting a self-care based on experience.

Health professionals should be alert to the population that makes use of these natural resources without scientific basis, which may lead to aggravation of wounds. It is noted the need to educate individuals who suffer from skin lesions on commitment to treatment and qualified professional to perform daily bandages with appropriate products and substances. Thus, it is important that individuals surveyed and their families are informed about the risks the indiscriminate use of substances found in nature.

Even with the existence of the current technology and therapeutic arsenal with products and synthetic substances used for the care of wounds, the population includes medicinal herbs as an alternative or complement to the therapeutic treatment of their injuries. There are several herbal medicines tested in the process of healing of skin wounds. However not all are suitable and accessible to the needy community, which also seeks to find low-cost resources to health range.

REFERENCES


Wood management: empirical practices under the...
Gouveia BLA, Albuquerque AM, Oliveira SHS et al.

m/index.php/revista/article/view/4688/pdf_4509


Gouveia BLA, Albuquerque AM, Oliveira SHS et al.

Wood management: empirical practices under the...
