

The Role of Nursing in Caring for Bed Sore Patients

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Abstracts

The aim of the current study is to know the role of nursing for patients with bed sores, the reasons for the formation of bed sores in patients, and the importance of adjusting the side of patients with bed sores to the other side. The questionnaire was created electronically via the Google Drive program, and the 850 questionnaires were distributed via mobile phone on the electronic social networking program (WhatsApp), and 840 questionnaires (responses) were obtained (the target group is residents of the cities of Mecca and Jeddah who are between the ages of 25-55 years men and women). It concluded, that the importance of caring for patients with bed sores, by changing the wounds with cotton, and turning the patients on the bed to the other side. The treating physician should also be consulted about feeding them with vitamins and minerals to speed up the healing process and recovery of their wounds.

1. Introduction

A ulcer (1) or a bedsore (2) (in English: bedsore) or a decubitus ulcer (in English: decubitus ulcer) is an opening in the body as a outcome of the shortage of proper blood flow and thus the passing of layers of skin, because the skin is under pressure from the bed or Wheelchair or other

rigid roof for an extended period(3)(4)(5). It is often found in the lower back, the back of the shoulders, and the heels of the feet, due to the presence of a bony protrusion that puts pressure on the cells and tissues due to the weight of the body, which stops these cells from adequate perfusion and nutrition due to the obstruction of blood flow in these tissues. The skin is rich in blood, which sends oxygen to the rest of the layers. If the blood supply to the skin is cut off for more than 2 to 3 hours, the skin will die, starting from its outer layer. The main reason for decreased blood flow in the skin is pressure on it. As for normal body movements, they do not cause pressure on the skin because the body's position is constantly changing, and therefore blood flow does not stop for a long time. The presence of a layer of fat under the skin, especially on the bone area, helps prevent the blood vessels from closing. People who are paralyzed or unable to move are more likely to develop bedsores. Also, those who do not feel fatigue or pain are more susceptible to injury because feeling ache is an automatic incentive to move. Some diseases that impact the nerves, such as head injuries, stroke, diabetes, and some other illness, minimize the normal feeling of fatigue and pain. Coma is also a symptom that helps block fatigue. There are some other people who are susceptible to bed sores, and they are very thin people, because they do not have a layer of fat under the surface of the skin, and therefore the skin rubs directly and greatly with the bones. It is also hard for the wounds of these people to heal naturally due to the low level of nutrition in the body. When blood flow stops in a certain area as a outcome of pressure on the skin, the skin needs oxygen greatly, then it turns red and becomes inflamed and then an ulcer occurs. Even if there is a disruption in blood flow in the skin, or any defect in the outer layer of the skin can cause ulcers to appear. Also, some kind of uncomfortable clothing, rough beds, or shoes that rub against the skin can reason skin injuries. Prolonged exposure of the skin to moisture from sweat or urine can cause inflammation of the skin's surface. Pressure injuries are classified according to the severity of symptoms, from stage one, which is the mildest, to stage four, which is the worst. The first phase: a skin area with discoloration and pain. The color may vary depending on the skin tone: on fair skin, the spot may appear red; On dark skin, the spot may appear blue or purple. This is a sign of the beginning of a pressure injury. The skin may be warm or cold, hard or soft. Stage 2: The skin forms blisters or open sores. The area around the ulcer may be red or inflamed. The third stage: In this stage, the skin forms a deep open hole called a canal. The tissues under the skin are attacked. You may be able to see the fat in these ducts. Stage 4: The pressure injury becomes so deep that it damages muscles, bones, and sometimes tendons and joints. There are two other kind of pressure injury that do not fit into any of the four stages:

1- "Unstable" ulcers are covered with dead skin that is yellow, tan, green, or brown. dead skin makes it hard to tell how deep the ulcer is. 2- Pressure injuries that form in the deep tissues under the skin are called deep tissue injuries. The influenced area may be dusky purple or maroon in color, and a blood-filled blister may form under the skin. This type of skin injury may rapidly progress to the third or fourth stage of a pressure injury. Injury prevention is the most important priority, as proper health care stops major injuries. blocking the occurrence of ulcers always requires the participation of the patient's family and their care alongside the nurse or doctor. Examining the patient's skin and body periodically helps to recognize the occurrence of the disease early and attempt treatment. Signs of skin redness, that is, the first signs, are what alert you to the need to take the necessary precautions to prevent the occurrence of ulcers. As for the

bony areas of the human body, soft objects such as cotton can be used on the body, this is to prohibit friction with the skin. Beds and wheelchairs can also be stuffed with cotton. Or soft pillows so as to decrease the pressure. For people who cannot move, they must change the direction of sleep every once in a while, and on a regular basis. The best suggestions are to change the direction at least every two hours and always keep the skin surface tidy and dry. Special air mattresses can also be used to avoid injury. As for people who already suffer from bed sores in different parts of the body, air mattresses made of sponge rubber can be used to relieve pressure and also help relieve pain. Treating bedsores is much more difficult than stopping them. At the beginning of the ulcer stage, it can be healed easily by simply changing the pressure on the body. And also, by improving the general level of health and nutrition and eating excess proteins and calories. Honey can be used (if there are no infections or infections) as the best ointment, while maintaining strict hygiene through appropriate sterilization. If a wound occurs in the skin, it can be covered with gauze and protected, as this helps it heal quickly. If an ulcer occurs, it can be rinsed very gently with soap or anti-inflammatory agents to remove dead and infected material from the wound. Clean the wound severely increases the healing of the wound. As for severe (deep) types of bed sores, they are difficult to treat. Sometimes it is necessary to transplant a piece of healthy skin into the affected area (in the case of a severe injury), but this type of surgical treatment cannot be used in many issues, especially if the patient is an elderly person and weak in terms of healthy nutrition. It can also be cured with antibiotics. If a contaminated occurs to the bones under the ulcer (in late cases), it is very difficult to treat and the condition may demand many weeks and treatment with antibiotics. At the international level, there has been significant therapeutic development since 2014, when experts from the following countries: (Australia, New Zealand, Singapore, and Hong Kong) came together and published updated guidelines based on clinical evidence. These guidelines were developed by an international team that includes more than 100 specialists. Clinical and Therapeutic and Clinical Guidelines were updated in 2009. The guide includes recommendations on strategies for curing pressure ulcers, containing bed rest, redistribution of pressure to supporting surfaces, nutritional support, and wound care (eg debridement, dressing). Use of biophysics (eg electrical induction). It is significant for the doctor to supervise the intake of vitamins such as (arginine, glutamine, vitamin A, vitamin B complex, vitamin E, vitamin C, and minerals such as (magnesium, selenium and zinc). Since many of these can be harmful if incorrect doses are taken. (6).

2. Material and Methods:

The study started in (the holy city of Mecca in Saudi Arabia), began writing the research and then recording the questionnaire in January 2024, and the study ended with data collection in May 2024. The researcher used the descriptive analytical approach that uses a quantitative or qualitative description of the social phenomenon (the role of nursing in caring for bed sore patients). This kind of study is characterized by analysis, reason, objectivity, and reality, as it is concerned with individuals and societies, as it studies the variables and their effects on the health of the individual, society, and consumer, the spread of diseases and their relationship to demographic variables such as age, gender, nationality, and marital status. Status, occupation (7), And use the Excel 2010 Office suite histogram to arrange the results using: Frequency tables

Percentages (8). A questionnaire is a remarkable and helpful tool for collecting a huge amount of data, however, researchers were not able to personally interview participants on the online survey, only answered the questionnaire electronically, it consisted of eleventh questions, all of which were closed.

3. Results and discussion:

The percentage of those who agreed to participate in the research questionnaire was (98.8% yes and 1.2% who refused). As for the age of the participants, the percentage of their blindness was as follows: 25-34 (24.1%), 35-45 (55.4%), and from the age of 46 -55 years, 20.5%. As for their gender, it was as follows: males, 8.4%, while the percentage of females was higher, 91.6%. As for their nationalities, they were 92.7% Saudi and 7.3% non-Saudi. As for their professions, they were as follows: student 2.4%, government employee 39.8%, private sector employee 9.6%, self-employed 1.5%, housewife 42.2%, unemployed (caused) 4.5%. As for their educational status, it was as follows: 31.7% had a secondary school certificate, 32.9% had a university degree, 9.8% had an intermediate diploma, 15.9% had a diploma, 8.5% had a master's degree, and 1.2% had a doctorate. As for the questionnaire questions (those who agreed and disagreed, and their responses to each question), they were as follows: The first question about bed sores, which are lesions on the skin and lining tissue as a result of prolonged pressure on the skin? Yes 96.3% and no 3.7%. The second question is about the location of the mattress (heels - ankles - hips - back - coccyx)? Yes 97.6% and no 2.4%. The third question about the people most at risk of developing bedsores are: those with medical conditions that limit their ability to change their positions or cause them to spend most of their time on the bed or chair, such as (the elderly - patients with chronic diseases, etc.? Yes 98.8% and no 1.2%. The question the fourth question is about the formation of bed sores over the course of hours or days without movement? Yes 89.2% and no 10.8%. The fifth question is about the diagnosis of most ulcers with treatment, but some of them do not heal completely at all? Yes 71.1% and no 28.9%. The sixth question: What are the symptoms of bed sores (swelling - changes in the color or texture of the skin - pus-like secretions - painful areas? Yes 95.1% and no 4.9%. The seventh question is about classifying bed sores into one of several stages based on their depth, severity and some other characteristics? And it was The answer is the same as the previous answer. The eighth question about the degree of damage to the skin and tissues ranging from changes in the color of the deep injury that reaches the muscles and bones? Yes 93.9% and no 6.1%. The ninth question about people who use wheelchairs often develop bed sores? Yes 73.5 %No 26.5%. The tenth question: If you notice warning signs of bed sores, change your position to relieve pressure on the affected area of the body? Yes 98.8% and No 1.2%. The last question about: Seek medical care if you develop signs of infection such as fever, discharge from the ulcer, a foul-smelling ulcer, a change in skin color, or fever? Yes 97.6% and no 2.4%. (table.no.1)(figure.No.1).

Table.no.1: percentage of male and female participants in the questionnaire

Males	females
8.4%,	91.6%

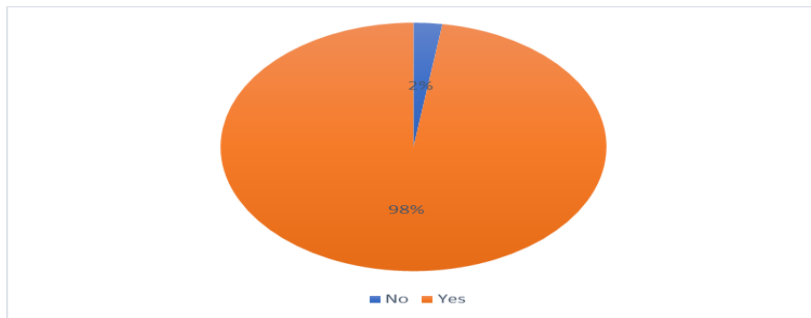


Figure No.1: Opinions of participants in a questionnaire about nursing homes for bed sore patients

4. Conclusion:

There are lesions that appear on the skin and lining tissues as a result of prolonged pressure on the skin. 96.3%. People with medical conditions that limit their ability to change their positions or cause them to spend most of their time on a bed or chair, such as (the elderly - patients with chronic diseases, etc.) 98.8%. Most are diagnosed Ulcers with treatment, but some of them do not heal completely 71.1% (bed sores (swelling - changes in the color or texture of the skin - pus-like secretions - painful areas) 95.1%. The importance of medical (nursing) care for bed sore patients, by changing the wounds with cotton, turning the patients on the bed to the other side, and consulting the treating physician about feeding these patients with vitamins and minerals to speed up the healing and recovery process for them.

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WORKS CITED

- Unified Medical Dictionary
Mounir Baalbaki; Ramzi Baalbaki (2008). Modern Resource: English-Arabic Dictionary (in Arabic and English) (1st ed.). Beirut: Dar Al-Ilm Lilmalayin. s. 118. ISBN:978-9953-63-541-5. OCLC:405515532. OL:50197876M. QJD:Q112315598.
- Moore, Z.E.; Cowman, S (January 5, 2015). "Repositioning for treating pressure ulcers". The Cochrane database of systematic reviews. C. 1: CD006898. DOI:10.1002/14651858.CD006898.pub4. PMID:25561248.
- Lyder, Courtney H. (8 Jan 2003). "Pressure Ulcer Prevention and Management". JAMA (in English). 289 (2). DOI:10.1001/jama.289.2.223. ISSN:0098-7484. Archived from the original on 12-01-2017.
- Pressure Relief and Wound CareIndependent Living (UK) Archived 30 September 2013 on Wayback Machine. https://ar.wikipedia.org/wiki/%D9%82%D8%B1%D8%AD%D8%A9_%D9%81%D8%B1%D8%A7%D8%B4#cite_note-6.
- Alserahy, Hassan Awad, et al (2008), The thinking and scientific research, Scientific Publishing Center, King Abdul-Aziz University in Jeddah, the first edition
- Al Zoghbi, Muhammad and AlTalvah, Abas (2000), Statistical system understanding and analysis of statistical data, first edition, Jordon- Amman