

Case Studies of Sam and Sandra

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Background

Physical immobility, nutritional status changes, and complete bed rest frequently cause impairment of peripheral circulation, jeopardising skin integrity and tissue nutritional delivery. Nursing assessment and early detection enable reasonable intervention. Employing a risk for poor skin integrity treatment strategy can assist in avoiding further health problems, particularly pain and infection risk. Since general skin evaluation is never a one-time incident limited to hospitalisation, nurses ought to possess the knowledge and skills to cope with high-risk patients with impaired skin integrity. It must be repeated on a regular basis to determine whether any changes in skin condition have occurred (Bonifant & Holloway, 2019).

This paper focuses on two case studies of Sam and Sandra; the interpretation of their assessment data; the development of goals for care using the SMART framework; evidence-based and person-centred interventions to address the goal for care; and the evaluation of the efficacy of interventions. The chosen priority problem is the potential for impaired skin integrity.

Interpretation of Assessment Data

Both cases have been relevant to the norovirus. Both Sam and Sandra had a risk of contracting norovirus. Norovirus causes inflammation in the intestines or stomach. This is referred to as acute gastroenteritis. Noroviruses have been extremely contagious, considering that as just 10 molecules can adequately induce the illness, the spread is via the orofecal route and spikes during the timespan when clinical signs are most extreme, as well as up to three days following healing. Noroviruses come in a wide range of strains, so getting infected does not confer immunity (Chaiprasongsuk & Panich, 2022). Noroviruses rewire the digestive process within a day of inflammation, causing food to return from both sides. To cause diarrhoea, the viruses

affect the intestinal wall, inducing cells to expel their liquids, which are then cleaned out of the human body system—along with a slew of noroviruses. When sick individuals vomit or experience diarrhoea, they shed a significant amount of water and salt from their system and can rapidly become dehydrated. Dehydrated people have less elasticity in their skin and are more likely to suffer open wounds and tissue injuries (García-Mayor et al., 2017).

Furthermore, the assessment data presented in the cases of Sam and Sandra have some similarities and differences. Primarily, there is the age difference in both cases. Sam is the child, and Sandra is the aged individual. Children are more likely than older individuals to vomit. Part of it can be a simple gag reflex. Sam's body weight is 15 kg, while Sandra's is 70 kg. However, both patients have no allergies and are nil-significant. Their paracetamol dosage varies as Sam is a child and requires lower doses of paracetamol than Sandra. Both are taking small sips of water. Both have not vomited in the last 5 hours. Both patients were of the large BO type 7. Sandra has become drowsy and disoriented, while Sam has become increasingly irritable. Both patients do not have any special nutrition or hydration considerations.

Additionally, Sam's body temperature is 37.9 degrees Celsius while Sandra's body temperature is 37.3 degrees Celsius. Both patients have low blood pressure. Sam has a slightly higher pulse rate than Sandra, who has a normal pulse rate. Both patients have slightly higher respiratory rates. Both Sam and Sandra have a normal range of SpO2 in room air. The oral mucous membranes of both patients are dry. The skin turgor of patients is less than 2 seconds. Sandra's pain is higher than Sam's, as Sandra's score on the pain scale is 7, while Sam's score is 5. Both patients have no palpable bladder. The extremities of both patients were cold to the touch.

Development of Goals for Care using the SMART Framework

Following the assessment and diagnostic approach, the nurse needs to establish attainable and measurable long-and short-term goals for both patients, such as: shifting from chair to bed at least three or four times a day; retaining proper nutritional requirements by eating fewer, more regular meals; managing disputes through counselling; or controlling pain through appropriate medication. Diagnosis, goals, and assessment data are documented in the patient's treatment plan so that health professionals and nurses treating the patient can access them (Konieczny et al., 2019).

The first nursing goal for this potential problem of impaired skin integrity is that the patient's pain at the site of tissue derangement will be reduced after 3 days of intervention, and the pain of Sam will be reduced to 1/10 on the FLACC scale and the pain of Sandra will be reduced to 2/10 on the Abbey pain scale. The second nursing goal for this potential problem of impaired skin integrity is that nurses will be able to avert the wound complications precipitated by skin breakdown, which is caused by hydration issues in the next 48 hours. This can be measured when the skin of Sam and Sandra will have normal thermal conditions and will not be cold to the touch (Lichterfeld-Kottner et al., 2020).

Assessment is essential to determine any potential issues that may have resulted in poor tissue integrity and to recognise any episodes that may have occurred throughout nursing care. A nursing SMART goal has been shown to help nursing professionals stay focused on their professional goals as well as track their career paths. These goals are primarily the how-to manual for developing a nursing strategic plan. SMART stands for the guidelines that nurses should follow when establishing objectives. SMART goals specify the ways a group or organisation will accomplish a specific objective (Okonkwo et al., 2020).

Evidence-Based and Person-Centred Interventions to Address the Goal for Care

It is critical for nurses to fully comprehend the way to evaluate, avert, cure, and educate both patients, Sam and Sandra, with compromised skin integrity. The first nursing intervention to address impaired skin integrity is the application of emollients to the affected parts. Emollients are necessary for healthy skin, restricting dry skin as well as mending the skin barrier, which has been undermined in inflammatory conditions of the skin. This is a kind of skin moisturiser that ends up leaving a barrier of artificial lipids on the surface of the skin, including mineral oil or petrolatum, trapping liquid throughout the stratum corneum (Singh et al., 2018). The continuity and inotropic attributes of an emollient are determined by the thresholds of oil or lipid as well as water, which is why emollients are classified as topical applications, moisturisers, or lotions. The optimum washing and emollient intervention eliminate dirt and oils from the skin while avoiding irritation or dryness and maintaining or promoting skin integrity and ease. To enforce consistency, the intervention ought to have no side effects and components that are reasonable to the individual utilising them (Sparber et al., 2019). In the case of Sam, the nurse should put a small portion of emollient to the affected area with her finger. The nurse can extend it well beyond the region's edge. The nurse should ask Sam not to reach or touch the affected area so that the emollients can do their task. In the case of Sandra, the nurse should explain the process to Sandra thoroughly because the patient may have to practise the emollients herself after discharge. The nurse should assist the patient in getting into a relaxed position that allows access to the region to be considered (Zheng et al., 2018).

Another nursing intervention for the potential problem of impaired skin integrity is patient education. Every healthcare professional is responsible for educating patients, their families, at-home carers, and society. Nurses should strengthen health literacy to encourage patient learning

and involvement. A wide range of practical knowledge must be grasped to deliver efficient patient education. Determining patients' educational requirements; recognising learning barriers; counselling succinctly; assessing and utilising written, audio, and visual, as well as computer-based client educational material; and integrating education into routine care are all part of the job (Sparber et al., 2019). It is the nurse's responsibility to help patients possess more obtainable communication and contexts that encourage well-being and health. In the case of Sandra, it is critical to treat her as a distinct individual who can learn and modify as required. In the case of Sam, the nurse should make extensive utilisation of repetition as well as positive reinforcement. The nurse should make sure her objectives are suitable for their developmental level and age. The nurse should ask Sam and his mother to repeat whatever they have managed to learn to make sure that they have comprehended the information (Singh et al., 2018).

Evaluation of the Efficacy of Interventions

Intervention is a structural approach for establishing the worth, merit, or value of intervention strategies. The efficacy of the interventional approach using emollients can be evaluated by observing and assessing the skin of both patients. In the case of Sam, his skin will be healthy to touch and see. He will not be irritable or cry when talked to. In the case of Sandra, her skin will be at its normal temperature; she will not be drowsy; she will be properly oriented to time. Moreover, considering the intervention of patient education, Sam will be able to demonstrate his learning and active summarisation of important health terms and healthy habits. Moreover, Sandra will be able to communicate each healthy habit and process verbally and clearly.

Conclusion

Considering the cases of Sam and Sandra, it can be concluded that comprehensive nursing care entails both treating a patient and safeguarding them from possible risks. Making an adequate nursing diagnosis in the case of impaired skin integrity is a component of a healthcare professional's daily assessment and is necessary to safeguard the skin integrity. As a result, nursing professionals must have the necessary tools and skills. Early detection of risk factors and prevention of impaired skin integrity can result in positive outcomes.

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