



Family Support Relationships Degrees of Diabetic Foot Wounds

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Abstract

Changes in lifestyle can cause degenerative diseases such as Diabetes Mellitus (DM). The prevalence and incidence of this disease has increased drastically in industrialized and developing countries, including Indonesia. WHO predicts that DM data will increase to 300 million in the next 25 years. The International Diabetes Federation (IDF) estimates that in 2020 there will be 178 million DM sufferers in Indonesia aged over 20 years and assuming a DM prevalence of 4.6%, there will be 8.2 million DM patients. Currently, the prevalence of DM based on the International Diabetes Federation (IDF) in 2019, Indonesia is ranked 6th in the world with 10 million people. Based on the 2007 Riskesdas results, it is estimated that 463 million people suffer from diabetes currently and it is projected to reach 578 million in 2030. and 700 million in 2045. This study was to determine the relationship between family support and the degree of Diabetic Foot Ulcers (DFU). The design of this research is an analytical observational study with a cross-sectional approach design. The subjects of this study were DM sufferers with diabetic foot ulcers who underwent treatment at the Independent Wound Nursing Practice in Bone Regency. The sampling technique uses the Total Sampling method. After carrying out the Pearson correlation test, test results were obtained with a p value = 0.000 and an r value = 0.648** so it can be concluded that there is a very strong correlation between family support and the degree of diabetic foot ulcers. So it can be concluded that the higher the family support for patients with diabetic foot ulcers, the lower the degree of injury. The results of this study can be concluded that there is a strong relationship between family support and the degree of injury in Diabetic Foot Ulcer (DFU) patients so that caring for families with diabetic foot ulcers will provide good encouragement for diabetic foot ulcer patients so they can heal and follow the treatment program. the good one.

Introduction

The occurrence of degenerative diseases, such as Diabetes Mellitus (DM), can be attributed to alterations in one's lifestyle. The frequency and occurrence of this disease have experienced a significant rise in both industrialized and developing nations, including Indonesia. According to a projection made by the World Health Organization (WHO), it is anticipated that the prevalence of diabetes mellitus (DM) will escalate to approximately 300 million cases within the forthcoming 25-year period. According to the estimates provided by the International Diabetes Federation (IDF), it is projected that in the year 2020, there will be a total of 178 million individuals in Indonesia who are afflicted with diabetes mellitus (DM) and are above the age of 20. Assuming a prevalence rate of 4.6% for DM, this would correspond to approximately 8.2 million individuals diagnosed with DM. According to the International

Diabetes Federation (IDF) data from 2019, Indonesia is ranked sixth globally in terms of the prevalence of diabetes mellitus (DM), with a population of 10 million individuals affected. According to the findings of the 2007 Riskesdas survey, the current prevalence of diabetes is estimated to affect approximately 463 million individuals. Projections indicate that this figure is expected to rise to 578 million by the year 2030. According to Saeedi et al. (2019), the projected population is expected to reach 700 million by the year 2045. I apologize, but I am unable to provide a response as there is no text provided. If you

The condition referred to as diabetic foot encompasses a range of syndromes characterized by tissue changes or ulcers resulting from microtrauma, which are caused by neuropathy, ischemia, and infection. When discussing diabetic feet, we are referring to the presence of wounds or ulcers, which are a distinctive characteristic observed in individuals with diabetes. The occurrence of peripheral nerve dysfunction is observed in patients of this particular type. Diabetic foot poses a significant and enduring threat to individuals with diabetes, serving as a critical complication that exacerbates the patient's clinical state. Moreover, it diminishes their quality of life and engenders substantial socio-economic consequences. The current likelihood of limb amputation in individuals with diabetes is substantial. The investigation and exploration of the correlation between family support and the severity of diabetic foot injuries is a topic of significant interest. The substantial prevalence of individuals afflicted with such injuries warrants further scholarly examination.

Methods

The present study employs an analytical observational design with a cross-sectional approach. The participants of this study were individuals diagnosed with diabetes mellitus who were experiencing diabetic foot ulcers and received treatment at the Independent Wound Nursing Practice in Bone Regency. The sampling technique employs the Total Sampling method. According to Dharma (2011), Sugiyono (2013), and Veer (2014), it can be observed that... Subsequently, each participant in the study was carefully observed in order to assess the severity of diabetic foot ulcers using the Meggitt Wagner classification. Additionally, the level of family support for the patient was assessed through the utilization of a respondent observation data sheet. This sheet was employed to meticulously record all pertinent information gathered from the participants during the course of the research observation activities. The questionnaire is completed by the respondent in order to gather data pertaining to the respondent's personal attributes.

Results and Discussion

The results of this research are presented in the characteristics of respondents based on gender, age, education and occupation as follows:

Table.1 General Data of Respondents

Characteristics Respondent		Frequency	Percentage
Gender	Man	8	26.7
	Woman	22	73.3
Total		30	100%
Age	40-50 years	10	33.3
	51-60 years old	10	33.3
	>60 years	10	33.3
Total		30	100%
Education	No school	6	20.0
	elementary school	7	23.3
	JUNIOR HIGH SCHOOL	4	13.3
	SENIOR HIGH SCHOOL	5	16.7

	Diploma/	8	26.7
Total	Bachelor	30	100%
Work		19	63.3
	Doesn't work	2	6.7
	Farmers / Fishermen	5	16.7
	Self-employed	3	10.0%
	Civil servants / TNI / POLRI	1	3.3%
Total		30	100%

According to the data presented in Table 1, the prevailing gender category is women, comprising 22 individuals (73.3%), while men account for 8 individuals (26.7%). The data pertaining to age groups indicates that each age group is represented by an equal number of individuals, specifically 10 people, which accounts for 33.3% of the total population. Regarding education, the survey results indicate that the largest proportion of respondents possessed a diploma or bachelor's degree, comprising 8 individuals or 26.7% of the total sample. Conversely, the group with the lowest educational attainment was comprised of 4 individuals or 13.3% who had completed junior high school. The majority of the participants, specifically 19 individuals (63.3%), did not engage in any form of employment. Conversely, the category of "other work" had the lowest representation, with only one person (3.3%) falling into this category.

Table 2. Family Support, Patient Compliance and Degree of Injury based on Meggitt Wagner

Family support	Frequency	Percentage
Get Support	29	96.7
Not Getting Support	1	3.3
Total	30	100%
Degree of Wound		
Grade 0	0	0
Grade 1	4	13.3
Grade 2	12	40.0
Grade 3	11	36.7
Grade 4	2	6.7
Grade 5	1	3.3
Total	30	100%

Table 2 presents the findings indicating that 96.7% of the respondents, specifically 29 individuals, reported having family support. Additionally, 30% of the respondents, comprising 9 individuals each, exhibited hemoglobin levels ranging from 10.00 gr/dl to 13.00 gr/dl. Conversely, the lowest proportion of respondents, amounting to 6.7%, reported hemoglobin levels below 6 gr/dl, with only 2 individuals falling into this category. In relation to the severity of diabetic foot ulcer wounds, the majority of participants, comprising 40% of the total, exhibited grade 2 wounds. Conversely, no participants presented with grade 0 wounds, indicating the lowest prevalence in the sample.

Table 3. Results of Spearman Correlation Test Analysis between Family Support and the degree of injury

<i>p-value</i>	0.000
Correlation coefficient	0.648**

Source: SPSS

Based on the findings presented in Table 3, the Pearson correlation test was conducted, yielding test results indicating a p-value of 0.000 and an r-value of 0.648**. These results suggest a highly significant and robust correlation between family support and the severity of diabetic foot ulcers. It can be inferred that there exists an inverse relationship between the level of familial support provided to individuals suffering from diabetic foot ulcers and the severity of the resulting injury.

Discussion

Description of family support for Diabetic Foot Ulcer (DFU) patients

The factors that contribute to the support of wound care include familial assistance, acquisition of knowledge, and the individual's motivation to adapt to the necessary changes by allocating sufficient time and opportunities for adjustment. The health behavior of individuals is also impacted by the support provided by their family. The primary challenge in the dietary management of diabetic foot wounds lies in the patient's inclination towards monotony when adhering to diet therapy, a crucial component for achieving favorable outcomes. The successful implementation of the Diabetes Mellitus diet is significantly impacted by the level of familial support received. Support can be defined as a sentiment of affiliation or conviction that an individual is a proactive contributor to routine endeavors. Experiencing a sense of connection with individuals in one's surroundings fosters resilience and mitigates sentiments of social isolation.

The findings presented in Table 1 indicate that a majority of the respondents who suffered from diabetic foot wounds were women, accounting for 73.3% of the total sample. It is noteworthy that these women received substantial support from their families, particularly in relation to the management of their wounds. This finding aligns with the research conducted by Chokkalingam et al. (2021), which indicates that the incidence of diabetic foot ulcers is higher among women compared to men. The presence of familial support plays a crucial role in facilitating the recovery process of patients. Moreover, the impact of family support on an individual's health and overall well-being is a concurrent phenomenon. The successful implementation of the DM diet is significantly influenced by familial support. Support can be defined as a sensation of inclusion or conviction that an individual is an engaged contributor in routine endeavors. Experiencing a sense of connection with individuals in one's surroundings fosters resilience and mitigates sensations of social isolation.

Analysis of family support in patients with degrees of diabetic foot ulcers (Diabetic Foot Ulcer)

Based on the findings of the Pearson correlation analysis, it was determined that the p-value was 0.000 and the r-value was 0.648**. These results indicate a significant association between family support and the severity of diabetic foot ulcers, with a robust correlation strength. Based on the findings of the study, it is anticipated that the family can offer effective care services for individuals with diabetic foot ulcers. Emotional experiences encompass the initial reaction of the family members when providing care for patients diagnosed with diabetic foot ulcers. The emotional response following a diagnosis is frequently characterized by negativity and distress. Individuals may experience feelings of disappointment, lowered expectations, a need for time to accept their condition, confusion, anger, and a subsequent lack of comprehension. This finding is consistent with the research conducted by Chapman et al. (2014) and Inzucchi et al. (2015), which documented that families encountered challenges in coping with changes, such as difficulties in accepting the situation, a diminished desire to engage with family members, as well as experiencing anger and feelings of sadness. The process of acceptance entails addressing unforeseen circumstances, typically commencing with a state of denial or refusal. This process does not occur rapidly, as it requires a significant amount of time and subsequent acceptance from the mother, coupled with sincerity and patience in navigating the challenges

of daily life within families affected by diabetic foot ulcers (Kartini et al., 2018; Nizar et al., 2021). The presence of diabetic foot ulcers within a family necessitates significant financial resources, particularly in relation to the management and treatment of these wounds. This requirement encompasses the provision of medical treatment, as well as traditional and alternative therapies, in response to the occurrence of diverse issues, particularly those related to health (Chrisanto & Agustama, 2020; Ruvalcaba Ledezma et al., 2020).

This finding aligns with the research conducted by Kusananto et al. (2020), which demonstrates that the regular practice of self-motivated diabetes management, supported by spirituality-based family assistance, can enhance self-care behavior and self-efficacy among individuals with type 2 diabetes mellitus. Furthermore, based on the findings of the blood examination, a reduction in HbA1C levels was observed. Therefore, this intervention may be deemed suitable for implementation in individuals with diabetes mellitus.

Conclusion

The results of this study can be concluded that there is a strong relationship between family support and the degree of injury in Diabetic Foot Ulcer (DFU) patients so that caring for families with diabetic foot ulcers will provide good encouragement for diabetic DFU patients so they can recover and follow the appropriate treatment program Good.

Suggestion

There is further research on the relationship between family support and the degree of diabetic foot injuries. A large sample is needed so that the various problems experienced by families in caring for diabetic foot ulcer patients can be addressed.

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