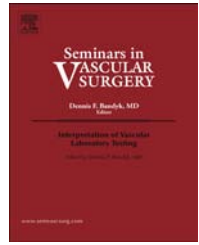


Available online at www.sciencedirect.com

ScienceDirect

www.elsevier.com/locate/semvascsurg

Impact of diabetic foot ulcer on health-related quality of life: A cross-sectional study



M. Sonal Sekhar^{a,*}, Roy Raymol Thomas^a, M.K. Unnikrishnan^a,
K. Vijayanarayana^a, and Gabriel Sunil Rodrigues^b

^aDepartment of Pharmacy Practice, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, India 576104

^bDepartment of Surgery, Kasturba Medical College, Manipal University, Manipal, India 576104

ARTICLE INFO

ABSTRACT

Studies have reported that health-related quality of life (HRQoL) is adversely affected by diabetic foot ulcer (DFU). There is a paucity of data on the effects of foot ulcers on HRQoL of diabetes patients in our population. Because South-Asians, especially Indians, have unique features related to diabetes and its complications, generalizing the data about their effect on HRQoL from any other part of the world is not a pragmatic approach. This study evaluated the impact of foot ulcers on HRQoL of diabetes patients. This cross-sectional study, conducted in Kasturba Hospital, Manipal (coastal South India), included 200 DFU patients in a study group (SG) and 200 diabetes patients in a control group (CG). The RAND-36 questionnaire was employed for evaluating HRQoL scores for the patients in both groups. DFU patients also completed the Diabetic Foot Ulcer Scale-Short Form questionnaire. Independent t-test was used to test the differences in mean scores. Results found that both CG and SG have “poor” HRQoL (mean score < 50) on all the subscales except for two in CG. There is a statistically significant difference between groups ($P < 0.05$) on all eight of the subscales of HRQoL. For both CG and SG, the Physical Component Summary domain score (44.9 ± 6.3 v 28.4 ± 3.4) and Mental Component Summary domain score (42.5 ± 3.8 v 29.5 ± 7.1) were poor. There were significant differences between CG and SG for both mean Physical Component Summary score and Mental Component Summary score of HRQoL ($p < 0.05$). The Diabetic Foot Ulcer Scale-Short Form found that HRQoL is very poor for DFU patients on all six domains. The study concludes that DFU patients have very poor HRQoL compared with diabetic patients. Likewise, the diabetic foot is associated with severely impaired HRQoL in both physical and mental health aspects. This study will help to develop a patient education model for DFU patients by looking at the various HRQoL domains that are adversely affected by the presence of foot ulcer.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

Patients with diabetes already have compromised health-related quality of life (HRQoL), which is further deteriorated

by the presence of foot ulcers [1-3]. Diabetic foot ulcer (DFU) can affect QoL by aggravating physical, social, psychological, and financial aspects of health [4,5]. Many reports say that DFU patients experience severely impaired HRQoL [6-10].

*Corresponding author.

E-mail addresses: sonalsekhar@gmail.com, sonal.sekhar@manipal.edu (M.S. Sekhar).

<http://dx.doi.org/10.1053/j.semvascsurg.2015.12.001>

0895-7967/\$ - see front matter © 2015 Elsevier Inc. All rights reserved.

Reduced mobility has been observed as a main factor, along with having to adapt to a lifestyle change [5,11]. Results from various studies suggested that DFUs have a significant impact on patient's physical health [6-12]. Several studies have reported that patient's daily, social, and leisure activities, as well as family life, are adversely affected when DFUs develop. Studies have revealed patients with DFU experience many psychological and emotional effects [5,13]. More recently, a large number of studies have been conducted on the economic aspects of DFU [14-16]. These studies report that DFUs have a significant impact on patients' employment and poses added financial hardships [17]. A review concluded that HRQoL for patients with DFU was significantly poorer than for those who have undergone amputation [18]. The reason is that many individuals feared the recurrence of ulcer, infection, and life-long disability, indicating that patients with DFU need support to cope with the future complications that might develop [18]. Overall, the HRQoL of patients with DFUs and their families or caregivers is significantly affected in all aspects [5,11].

Several measures have been used to assess HRQoL and the related concepts of functional status. There are both generic and disease-specific instruments to measure HRQoL. The generic scale involves the use of measures that are appropriate across health and illness groups. RAND-36 is an internationally accepted and reliable generic measure of HRQoL in patients with diabetes [19]. There are also disease-specific instruments like the Diabetic Foot Ulcer Scale (DFS), which is specific to people with DFU [20]. The disease-specific instruments provide a better description of the disease's features and related physical, emotional, and social function. For instance, the DFS is designed specifically to assess the impact of DFUs and their treatment on QoL. This questionnaire has been validated in cross-sectional and longitudinal studies [21,22]. The DFS can discriminate between patients with diabetes with healed ulcers and current ulcers because it is highly sensitive to changes in wound status. The Diabetic Foot Ulcer Scale-Short Form (DFS-SF) can detect changes in a clinical condition more consistently than the longer version [22]. Therefore, it is appropriate for use in the clinical study of patients with DFUs. When combined, the generic and disease-specific instruments provide a better indication of the patient's problems [17].

At the initial presentation to the foot clinic, DFU patients report severely hampered HRQoL [23,24]. A study of the impact of DFU on psychological and social characteristics concluded that patients without late complications experience significant abnormalities, mainly in the social rather than psychological areas of their lives. The results of this study show patients with DFU have a reduced standard of living in contrast to a well-functioning social background [13]. HRQoL measures can help us to identify the more vulnerable subgroups among DFU patients, which will be useful in the formulation of strategies to improve function and HRQoL in such patients, and to measure outcomes as a consequence of implemented interventions [25]. The knowledge about HRQoL helps to predict treatment success, which can help to formulate a multidisciplinary treatment plan that is not only focused on clinical factors, but also takes the patient's experiences and perceptions into account [26]. In addition, a

patient-centered approach and a better understanding of how patients with diabetes experience, interpret, and deal with diabetes and its late complications, should enable health care personnel to help their patients improve adherence to preventive foot care [25].

Numerous studies have highlighted the importance of holistic assessment as a requirement in assessing people's HRQoL [8-12]. Researchers emphasized that health professionals need to be aware of the difficulties that face patients presenting with DFU. An understanding of the specific effects of chronic DFUs on an individual patient's QoL is central to the direction of treatment, management of compliance, and patient-practitioner communication [20]. Management of DFUs requires effective treatment and patient compliance to promote wound healing, which in turn improves HRQoL of DFU patients. In many developed and developing countries, DFU is a leading debilitating complication with severe morbidity, possibly requiring amputation. The developing countries, however, have some specific cultural and social habits that might put a person with diabetes at an additional high risk [27]. It is evident from review of the literature that there have only been a few studies conducted on the HRQoL of DFU patients in India. Furthermore, HRQoL is often described in patients with DFUs, but comparisons with HRQoL in diabetes patients without foot ulcers have rarely been made. Such comparisons would give us a broader picture of HRQoL in our region by considering the way in which clinical and demographic characteristics affect HRQoL in diabetes patients with and without foot ulcers [7]. Extrapolating HRQoL data from any other part of the world is not a pragmatic approach because South Asians have some unique features related to diabetes and its complications [28,29]. In addition, most of our DFU patients live in rural areas with low socioeconomic status [30,31]. Studies are also needed to assess how significant DFU really is, and to establish whether additional support is required for this subset of patients. It is essential that health professionals recognize that a holistic approach is needed when treating an individual with DFU to assess the overall impact of DFU. Thereby, a multidisciplinary approach for effective management and care could be delivered. The aim of this study was to compare HRQoL between diabetic patients with and without foot ulcers.

2. Methodology

A cross-sectional study was conducted in the Department of Surgery and Department of Medicine, Kasturba Hospital, Manipal, India after obtaining Institutional Ethical Clearance (IEC 143/2012).

2.1. Study subjects

Of 260 DFU patients admitted to the surgery units during the study period (January 2012 to December 2014), 200 DFU patients (study group [SG]) were selected based on inclusion criteria. Diabetic patients without foot ulcer (control group [CG]) were selected from the medicine units during the same period. Both groups' patients were in 1:1 ratio. Patients included in the study were ambulatory at the time of study.

Download English Version:

<https://daneshyari.com/en/article/3026083>

Download Persian Version:

<https://daneshyari.com/article/3026083>

[Daneshyari.com](https://daneshyari.com)