

ORIGINAL ARTICLE

Impact of foot ulcer-related factors on quality of life in patients with diabetes: Prospective observational study

Makoto Oe¹ | Supriadi Syafie Saad² | Suriadi Jais² | Junko Sugama³¹Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan²Institut Teknologi dan Kesehatan Muhammadiyah Kalimantan Barat, Pontianak, Indonesia³Faculty of Nursing, Fujita Health University, Toyoake, Japan**Correspondence**

Makoto Oe, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, 5-11-80 Kodatsuno, Kanazawa, Ishikawa 920-0942, Japan.
Email: moe-ky@umin.ac.jp

Funding information

Japan Society for the Promotion of Science, Grant/Award Number: 23H03193

Abstract

Quality of life (QOL) may be impacted by foot ulcer-related factors, with prevention of diabetes-related foot ulcers or more effective early healing helping to improve overall patient QOL. This study, which examined the relationship between foot ulcer-related factors and QOL in patients with diabetes, was conducted as a secondary analysis of a prospective observational study entitled: “Factors associated with the discontinuation of wound care specialist clinic visits in patients with diabetic foot ulcers”. We investigated EQ-5D-5L, patient characteristics and foot ulcer-related factors of 73 patients with diabetes-related foot ulcers who visited one wound clinic in Indonesia between August 2020 and February 2021. Results showed that the mean health utility was 0.294 ± 0.371 . Factors selected for the multiple regression analysis included inflammation/infection of DMIST, first-ever foot ulcer, and size of DMIST. First-ever foot ulcer ($\beta = 0.309$, $p = 0.003$) and size of DMIST ($\beta = -0.316$, $p = 0.015$) were significantly associated with the health utility ($p < 0.001$). Significant improvement in the health utility of 15 patients was observed when the ulcer healed (Wilcoxon signed-rank sum test, $p = 0.001$). In conclusion, not only ulcer severity but also the first-ever foot ulcer itself affected the QOL in patients with diabetes. These results suggest there will be a greater impact on the QOL of patients who develop diabetes-related foot ulcers for the first time, along with the importance of prevention and early healing, through early infection control and wound size reduction.

KEYWORDS

DMIST, first-ever foot ulcer, infection, recurrent foot ulcer, wound size

Abbreviation: QOL, Quality of life.

Makoto Oe and Supriadi Syafie Saad equally contributed to this work.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2024 The Author(s). *International Wound Journal* published by Medicalhelplines.com Inc and John Wiley & Sons Ltd.