

Association of cellulitis with socio-demographic factors, BMI and diabetes mellitus among patients admitted to the surgical casualty ward of Teaching hospital, Jaffna

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Introduction and objective: Cellulitis is a preventable condition which causes a considerable amount of hospital admissions. Understanding the common risk factors for the development of cellulitis is useful to prevent it. This study aimed to determine the association of cellulitis with socio-demographic factors, BMI and diabetes mellitus among patients admitted to the surgical casualty ward of Teaching Hospital, Jaffna.

Methods: An institution-based descriptive cross-sectional study was conducted from February 2022 to July 2023 among 279 patients admitted to the surgical casualty ward of Teaching Hospital, Jaffna. Data were collected using interviewer-administered questionnaire and entered and analyzed using SPSS. Chi-square test was used to assess for associations (critical level 0.05 level).

Results: Of 279 participants, majority were males 178 (63.8%), and many were within the age range of 21-40 years (38%). In the sample, 66 (23.7%) patients had diabetes and 24 (8.6%) had cellulitis. A significant association of cellulitis with sex and age was observed, where being female (58.3%) and age above 40 years (73.9%) had more risk. Religion and highest educational qualification had a significant association with cellulitis, whereas ethnicity, occupation and BMI category did not have any significant association at the p value of 0.05. Meanwhile, diabetes had significant association with sex and age where males (54.5%) and being above 40 years of age (87.8%) had more risk. No significant association was observed between ethnicity, religion or BMI category with diabetes. Development of cellulitis was significantly associated with diabetes (54.2%) than non-diabetes (45.8%) at the p value of 0.05.

Conclusion and recommendations: As a significant association between diabetes and cellulitis was observed, enhanced focus on diabetic patients is crucial to prevent development of cellulitis with the consideration of socio-demographic factors such as sex and age.

Key words: Cellulitis, Diabetes mellitus, BMI