

Self foot-care practice and its determinants among Bangladeshi type II diabetic patients

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Aims: The aim of this study was to find out the practice and its determinants among Bangladeshi type 2 diabetic subjects.

Methods: A multi-center hospital based cross-sectional study was conducted among 1200 type 2 diabetic subjects selected from 16 different hospitals and health centers from Dhaka (central) and northern part of Bangladesh (peripheral) areas. Of total respondents, 53.3 % (640, M-38%, F-62%) were from central and 46.7% (560, M-36%, F-64%) were from peripheral area. Data were collected by face to face interview and physical examination. Data were analyzed by appropriate univariate and multivariate statistics.

Results: The percentage of subjects practicing various foot care methods were as follows: washing feet (82.3%), trimming nail (54.7%), usage of oil (32.1%), petroleum gel (15.0%), anti-microbial cream (3.6%), changing socks (1.9%). Significant difference between central and peripheral areas were found only for practice in trimming nail ($p=0.001$) and changing socks ($p=0.046$). Who examined their feet for any cut injury, broken skin, skin infection, foot abscess, limited foot mobility, changes of foot temperature, presence of swelling and changes of foot color ranged only from 3.2% to 32.9% and significant difference was found between central and peripheral areas in examining skin infection ($p=0.022$), foot temperature ($p=0.001$) and foot mobility ($p=0.001$). 56.6% central vs 43.4% peripheral ($p=0.001$) subjects used appropriate footwear. The usage of sandal was comparatively higher in peripheral area (94.3%) than in central area (83.9%) whereas using of shoe was higher in central area (32.0%) than that of peripheral (17.3%) area ($p<0.05$). A few respondents were found to use ideal foot materials like micro cellular rubber (MCR) (2.2%) and silicon (0.4%) for footwear. On logistic regression, self foot hygiene practice were found to be significantly associated ($p<0.05$) with educational and socio-economic status; and living area, sex, age, education and socio-economic status were found to be significantly associated with self foot care examination ($p<0.05$).

Discussion/Conclusion: More than half of the diabetic patients in Bangladesh do not examine their foot for the prevention of diabetic foot, and even those who examine they do not look for the principal components at desired level. One in every two respondents does not use appropriate footwear and almost all of them not to use ideal foot materials. Only washing feet is the common hygiene practice in Bangladesh. Peripheral location, female gender, older age group, low level of education and poor economic status are important predictors for self foot care practice which merit special attention.

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