

## **Foot care knowledge and practices and the prevalence of peripheral neuropathy among people with diabetes attending a secondary care rural hospital in southern India.**

George H<sup>1</sup>, Rakesh P<sup>1</sup>, Krishna M<sup>1</sup>, Alex R<sup>1</sup>, Abraham VJ<sup>1</sup>, George K<sup>1</sup>, Prasad JH<sup>1</sup>.

### **Author information**

### **Abstract**

#### **BACKGROUND:**

Diabetes mellitus is a multifaceted disease and foot ulceration is one of its most common complications. Poor foot care knowledge and practices are important risk factors for foot problems among people with diabetes.

#### **AIMS:**

To assess the knowledge and practices regarding foot care and to estimate the proportion of people with peripheral neuropathy among people with diabetes.

#### **SETTINGS AND DESIGN:**

The cross-sectional study was conducted in 212 consecutive diabetes patients attending the out-patient department of a rural secondary care hospital.

#### **MATERIALS AND METHODS:**

A questionnaire which included demographic details, knowledge questionnaire, and Nottingham assessment of functional foot care was administered. The Michigan Neuropathy Screening Instrument was used to identify peripheral neuropathy.

#### **STATISTICAL ANALYSIS USED:**

Descriptive analysis with frequency distribution for knowledge and practice scores, univariate analysis, and multiple logistic regressions to find significant variables associated with good knowledge and practice scores.

#### **RESULTS:**

About 75% had good knowledge score and 67% had good foot care practice score. Male gender (OR 2.36, 95% CI 1.16-4.79), poor education status (OR 2.40, 95% CI 1.19-4.28), and lesser duration of diabetes (OR 2.24, 95% CI 1.15-4.41) were significantly associated with poor knowledge on foot care. Poor knowledge was associated with poor footcare practices (OR 3.43, 95% CI 1.75-6.72). The prevalence of neuropathy was 47% (95% CI 40.14-53.85) and it was associated with longer duration of the disease (OR 2.18, 95% CI 1.18-4.04).

#### **CONCLUSION:**

There exist deficiencies in knowledge and practices regarding foot care. Male gender, low education, and lesser duration of diabetes are associated with poor knowledge scores. The prevalence of diabetic peripheral neuropathy is high.

#### **KEYWORDS:**

Diabetes; foot care; knowledge; neuropathy; practices