

## **Footwear and foot care knowledge as risk factors for foot problems in Indian diabetics.**

[Chandalia HB<sup>1</sup>](#), [Singh D](#), [Kapoor V](#), [Chandalia SH](#), [Lamba PS](#).

### **Author information**

#### **Abstract**

We assessed 300 diabetic and 100 age- and sex-matched controls for correlating foot wear practices and foot care knowledge and the presence of foot complications. A structured questionnaire evaluated the knowledge about foot care, type of footwear used, education level, association of tobacco abuse, and any associated symptoms of foot disease. Clinical evaluation was done by inspection of feet for presence of any external deformities, assessment of sensory function (vibration perception threshold, VPT), vascular status (footpulses and ankle brachial ratio) and presence of any infection. In the diabetes category, 44.7% patients had not received previous foot care education. 0.6% walked barefoot outdoors and 45% walked barefoot indoors. Fourteen (4.7%) patients gave history of footulceration in the past and comprised the high risk group; only 2 out of 14 had received footcare education, 6 gave history of tobacco abuse, 8 had symptoms of claudication, 9 had paresthesias, 2 walked barefoot indoors. Average duration of diabetes in the high-risk and low-risk diabetes group was 10.85 +/- 6.53 and 9.83 +/- 7.99 years, respectively. In the high- and low-risk diabetic groups, VPT was 19.57 +/- 11.26 and 15.20 +/- 10.21 V ( $P < 0.02$ ), ankle brachial ratio was 1.05 +/- 0.19 and 1.14 +/- 0.18 ( $P < 0.05$ ), and the questionnaire scores were 40.8% and 57%, respectively. In the diabetic and the control group, VPT was 15.62 +/- 10.39 and 8.36 +/- 3.61 V ( $P < 0.01$ ), ankle brachial ratio was 1.14 +/- 0.18 and 1.15 +/- 0.12, and the questionnaire scores were 57% and 40.3%, respectively. In conclusion, poor knowledge of foot care and poor footwear practices were important risk factors for foot problems in diabetes.

#### **KEYWORDS:**

Diabetic foot; education; footwear practices; risk factors

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