Title:
Efficacy of Video-Assisted Teaching Program (VATP) on Diabetic Foot Care: A Trinidad Perspective

Esther Shirley Daniel, PhD
UWI School of Nursing, The University of The West Indies, St. Augustine, Trinidad and Tobago

Katy-Ann Knights-Dyett, MSN, RN
School of Nursing and Allied Health, University of the Southern Caribbean, St. Joseph, Port of Spain, Trinidad and Tobago

Hazel O'Garro, MSN, RN, LM
School of Nursing, The University of the West Indies, El Dorado, Port of Spain, Trinidad and Tobago

Session Title:
Diabetic Care

Slot:
G 02: Monday, 30 October 2017: 1:15 PM-2:30 PM

Scheduled Time:
1:35 PM

Keywords:
diabetic foot, knowledge and video assisted teaching program

References:
Al-Maskari F, El-Sadig M, Al-Kaabi JM, Afandi B, Nagelkerke N, Yeatts KB (2013)


http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0052857


**Abstract Summary:**
This study explored the efficacy of using a Video Assisted Teaching Program (VATP) for foot care education as a means of public education for diabetic patients to determine the significant role if any on the foot care practices in prevention of lower limb amputations and ulcers among diabetics in Trinidad.

**Learning Activity:**

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To assess the existing Knowledge of diabetic foot care among the subjects.</td>
<td>Several studies have shown that a majority of people with diabetes do not receive guideline-recommended foot care, including regular foot examinations. Most lower limb amputations in patients with diabetes are preceded by a foot ulcer, whose risk factors apart from Peripheral Vascular Disease (PVD) and Peripheral Neuropathy (PN), are barefoot walking, inappropriate footwear, poor foot hygiene and delay in seeking medical attention. Hence assessing the knowledge of diabetic foot care among diabetics will support to put the knowledge into practice.</td>
</tr>
<tr>
<td>2. To evaluate the effectiveness of video assisted teaching programme on ‘diabetic foot care’ among the subjects.</td>
<td>In Trinidad it has been observed at the selected health facility that diabetic foot care education is not carried out using a consistent standardised program. There is very little or no structured formal education for diabetic patients’, especially concerning foot care. It was also observed that the little foot care education provided followed a traditional outline of a nurse lecture without demonstration or feedback from patients and no follow up on education result. This research will seek to explore the efficacy of using a Video Assisted Teaching Program (VATP) for foot care education as a means of public education for diabetic patients to determine the significant role if any on the foot care practices in prevention of lower limb amputations and ulcers among diabetics.</td>
</tr>
</tbody>
</table>

**Abstract Text:**

**Aim:** In Trinidad it has been observed that diabetic foot care education is not carried out using a consistent standardised program. There is very little or no structured formal education for diabetic patients’, especially concerning foot care. This study aimed exploring the efficacy of using a Video Assisted Teaching Program (VATP) for foot care education as a means of public education for diabetic patients to determine the significant role if any on the foot care practices in prevention of lower limb amputations and ulcers among diabetics.
Method: A quasi-experimental pre-test post-test one group design with a convenience sample was used to select the 46 type 2 diabetic mellitus patients in a selected outpatient clinic of a hospital in Trinidad. Self-structured questionnaire was used to assess the knowledge regarding diabetes and diabetic foot care. The conceptual framework for this study was based on modified health belief model of Rosenstock. The data was analysed by using descriptive and inferential statistics.

Results: In the study most subjects understood what diabetes was and 95% knew diabetes was caused by an insulin problem, however only 7% knew that tingling pain or numbness in the feet was a symptom of diabetes and a sign of nerve damage which precipitates foot ulcers. 24% knew that walking bare feet indoors was a risk for foot injury while 20% knew not to delay medical attention if the foot is injured for more than one day. 52% did daily foot examinations but only 39% used a mirror to inspect under the feet, while only 26% inspected the shoes prior to wearing it.

Apart from the category of “meaning of diabetes”, all other areas of knowledge tested (causes, signs and symptoms, risk factors, treatment and prevention and foot care practice) showed a significant difference of improvement in scores. Therefore, there was enough evidences to conclude that the Video Assisted Teaching Programme (VATP) is making a difference in the five tested aspects of knowledge of subjects. Hence research hypothesis $H_1$ was accepted.

Conclusion: The study found Knowledge score about foot care practices among the subjects increased from 38% to 61% after the VATP was administered.