### International Journal of Science and Research (IJSR) ISSN: 2319-7064

**Impact Factor 2024: 7.101** 

# A Study to Assess the Effectiveness of Structured Teaching Programme on Foot Care among Patients with Diabetes Mellitus Residing at Kalankuzhi

#### L. S. Sheeba

Bethlahem College of Nursing, Ulaganvillai, Tamil Nadu, India

Abstract: 1) To assess the knowledge of patients with diabetes mellitus regarding foot care before and after structured teaching programme. 2) To compare the knowledge of foot care before and after structured teaching programme. 3) To associate the selected demographic characteristics with post-test knowledge of foot care in patients with diabetes mellitus. Pilot study was conducted to know the feasibility of the study. 3 samples were taken for the pilot study. The study was conducted in community area, Kallankuzhi among 30 patients by using convenience sampling method. Demographic profile, structured questionnaire was used to collect the data. The study was based on the Kenney's open system model. After data collection it was analyzed in terms of descriptive statistics, chi-square and paired T-test.

Keywords: Diabetes mellitus, foot care, community, structured teaching programme

#### 1. Findings

#### 1) Demographic Statistics of the participants:

The data shows that about 53.3% had primary education, 40% had high school education and 6.6% of patients are graduate. While we see occupation 20% of patients were unemployed, 30% of them were doing agriculture, 30% of them are doing business and 20% of patients are doing other works

## 2) Participants based on their level of knowledge before and after structured teaching programme:

The data shows that about 96.6% have inadequate knowledge 3.4% of them had moderately adequate knowledge before teaching programme and about 53.3% of patients had moderately adequate knowledge,43.3% of patients had adequate knowledge and 3.4% of them had inadequate knowledge after structured teaching programme.

#### 3) Mean and Standard deviation of level of knowledge:

The data shows that the mean values of level of knowledge regarding foot care in diabetes mellitus patients before structured teaching programme was 19.9 with standard deviation 5.053 and after structured teaching programme was 45.93 with standard deviation 1.005.

### 4) Association between post-test knowledge with selected demographic variables:

The findings revealed that there was no significant association between the level of post knowledge with age ( $x^2=2.609$ , d(f)=6), in relation to sex ( $x^2=1.42$ , d(f)=2) in relation to religion ( $x^2=2.53$ , d(f)4 in relation to family set up ( $x^2=0.909$ , d(f)=2, in relation to educational status ( $x^2=4.36$ , d(f)=6) in relation to occupation ( $x^2=7.48$ , d(f)=6, in relation to health information media ( $x^2=1.547$ , d(f)=6).

There was significant association between the level of post test knowledge in relation to income ( $x^2=17.08$ , d(f)=6) in relation to duration of the disease ( $x^2=17.44$ , d(f)=6).

Major findings of the study are about 96.6% patients had inadequate knowledge 3.4% patients had moderately

adequate knowledge and no patients had adequate knowledge regarding foot care before structured teaching programme. About 53.3% had moderately adequate knowledge, 43.3% had adequate knowledge and 3.4% of them had inadequate knowledge regarding foot care after structured teaching programme.

The computed 't' value suggests that there is a significant difference between pre test and post test knowledge regarding foot care because calculated value (17.01) is more than the table value (2.045).

There was no significant association between the demographic characteristics and post test knowledge in patients with diabetes mellitus.

#### 2. Conclusion

This study brought out the conclusion that structured teaching programme was very effective among diabetes mellitus patients. A study shows that 53.3% had moderately adequate knowledge 43.3% had adequate and 3.4% of them had inadequate knowledge after giving the structured teaching programme.

#### References

- Basavanthappa, B.T., (2003). Medical Surgical Nursing: foot problems. (1<sup>st</sup> ed). Jaypee brother publishers. P.no: 505
- [2] Brunner & Suddarth, (2003). Text book of medical surgical nursing: foot care tips; (10<sup>th</sup> ed). Published by Elsevier. P.no: 1186.
- [3] Davidson, (1999). Principles and practice of medicine: Foot complications (18<sup>th</sup> ed); Published by Churchill Livingstone; P.No 502-504.
- [4] Dorothy, A.J., Mike, W., Claire, F.D & Mary, M.J. (1978). Medical Surgical Nursing: Instructions for care of the foot. (7thed). Published by MC. GRAW-HILL Book company. P.No. 689.

Volume 14 Issue 9, September 2025
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
www.ijsr.net

Paper ID: MR25905222848 DOI: https://dx.doi.org/10.21275/MR25905222848

## International Journal of Science and Research (IJSR) ISSN: 2319-7064

**Impact Factor 2024: 7.101** 

[5] Joan, A & Mike, w. (1994). Medical Surgical Nursing and related physiology: Foot care on Diabetes; (4<sup>th</sup> ed). Published by Butter and Tranner.P.No. 606.

[6] Joslin (2006) Diabetes Mellitus: Treatment and Prevention of ulcerations. (14<sup>th</sup> ed); Published by Lippincott Williams and Wilkins.P.No. 1186.

Volume 14 Issue 9, September 2025
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
<a href="https://www.ijsr.net">www.ijsr.net</a>