



### 3. Research Methodology

Pre experimental one –group pretest –posttest design is adopted for the present study which aimed to assess effectiveness of intervention, self instruction module on knowledge, attitude, and practice regarding prevention of complications among diabetic patients in selected hospitals in Pune. With this research design the researcher attempts to test how effective the intervention is in improve the knowledge, attitude, and practice regarding prevention of complications among diabetic patients.

### 4. Discussion

This study was carried out to test the hypothesis that significant difference between pretest score and post test score on knowledge, attitude and practice regarding prevention of complications among diabetic patients. The findings lead to the acceptance of the hypothesis that there was significant difference between pretest score and post test score on knowledge, attitude and practice regarding prevention of complications among diabetic patients.

The majority of the samples were 40-45 years of age. According to CDC in 2011, 12% were diagnosed at age 30–39 years, 21% of the adult incident cases of diabetes were diagnosed between the ages of 40 and 49 years. About 29% were diagnosed at age 50–59 years.48. The majority of the samples were males. A similar report were was also given by CDC, In 2012 there were an estimated 15.5 million men and 13.4 million women diagnosed with diabetes. That means about 13% of men in the United States and 11% of women are affected by diabetes(49).The present study showed that respondents with <12 years of education had excess risk compared with those with more education for diabetes. A similar report also given by International Journal of Epidemiology which showed that respondents with <12 years of education had 50% excess risk compared with those with more education. (49) (50 ). Thus the present study is in alignment with studies done at global and South East Asian countries.

Occupation and income and marital status were not significantly associated with increased risk of diabetes. A similar report was also made in a study published in International Journal of Epidemiology by Sacerdote C, Ricceri F, Rolandsson O et al which reported that income and occupation were no longer significantly associated with increased risk. 50 The present study showed that the difference of incidence of Non vegetarian (46.7%), and Vegetarian (33.3%) for diabetes. a similar study conducted by Nico S. Rizzo et al which reported that the diabeted was highest in nonvegetarians (39.7%), and lowest in vegetarians (25.2%). 51 Self instruction module is very effective for prevention of complications among diabetic patients. It is important that people with diabetes get adequate information regarding diabetes and its management to improve their quality of life.

### 5. Main Findings of the Study

8.3% of the diabetic patients had age 30-35 years, 13.3% of them had age 35-40 years, 45% of them had age 40-45 years and 33.3% of them had age 45-50 years.

66.7% of them were males and 33.3% of them were females.

5% of them were illiterate, 33.3% of them had primary education, 56.7% of them had secondary education and 5% of them had other education.

38.3% of them had private service, 33.3% of them had government service and 28.3% of them had other occupation.

26.7% of them had family income Rs.5000-10000, 36.7% of them had income Rs.10000-25000, 28.3% of them had family income Rs.25000-50000 and 8.3% of them had family income Rs. 50000-100000.

33.3% of them were vegetarians, 46.7% of them were non-vegetarians and 20% of them were egg vegetarians.

80% of them were married, 10% of them were unmarried and 10.5% of them were divorced.

In pretest, 48.3% of the diabetes patients had average knowledge (score 6-10), 31.7% of them had poor knowledge (score 0-5) and 20% of them had good knowledge regarding prevention of diabetes complications. In pretest, majority of 71.7% of the diabetes patients had least favorable attitude (score 15-35) and 28.3% of them had favorable attitude (Score 36-55) regarding prevention of diabetes complications. In pretest, 13.3% of the diabetes patients had poor practices (Score 0-3), 48.3% of them had average practices (score 4-7), 36.7% of them had good practices and 1.7% of them had very good practices (score 12-15) regarding prevention of diabetes complications.

In pretest, 48.3% of the diabetes patients had average knowledge (score 6-10), 31.7% of them had poor knowledge (score 0-5) and 20% of them had good knowledge regarding prevention of diabetes complications. In posttest, majority of 83.3% of them had very good knowledge (score 16-20) and 16.7% of them had good knowledge (score 11-15) regarding prevention of complications. This indicates that there is remarkable improvement in the knowledge of diabetes patients after self-instructional module regarding prevention of complications.

### 6. Scope of the Study

The findings of the study have implications for nursing practice, nursing education, nursing administration, and nursing research.

#### a) Nursing Practice

The findings of this study showed that Self Instruction Module is effective for increasing the knowledge, attitude and practice of diabetic patients regarding prevention of complications. This result can be used effectively in nursing practice in the hospital setting as well as community setting.

This self instruction module is very simple and easy to understand to the patients, which will benefit their health outcome.

#### **b) Nursing Education**

The nursing curriculum should include opportunities and learning experiences to make students assess, plan, implement and evaluate nursing interventions related to prevention of complications among diabetic patients. Nurses, both in community and hospital settings should be given educational programmes to be updated on the measures of prevention of complications that will benefit those people suffering from diabetes mellitus. Student centered projects could be given for developing Modules that is related to different disease condition helps the patients in self care as indirect Nursing Intervention.

#### **c) Nursing Administration**

Self Instruction Modules could give in OPDs; Nurses can use SIM for giving Health Education to relatives and provide SIMs at the time of Discharge with other documents.

#### **d) Nursing Research**

Nursing research promotes nursing profession establishing a scientific base of knowledge for nursing. The research methodology used in the present study can be used as avenues for future research in the same or different context. Exploring the different ways in which the present study can be done will also help in exploring new ideas and gain different evidences for nursing practice.

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