



# A study to assess the effectiveness of structured teaching program on knowledge of diabetic mellitus and its management among adults in Malwal, Firozpur.

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**Abstract:** A study was conducted to assess the effect of structured teaching program on knowledge of adults regarding diabetic mellitus and its management in Firozpur, Punjab. The study has revealed that the level of knowledge during pretest, majority of subjects (90%) were having below average knowledge score and 10% have average knowledge regarding diabetes mellitus and its prevention. The study has also revealed that the level of knowledge during post-test, majority of subjects (52%) were having average knowledge score and 44% were having above average knowledge score followed by 4% having below average knowledge score regarding diabetes mellitus and its prevention. The knowledge score has been increased after giving structured teaching to the sample.

**Keywords:** Diabetic mellitus, Adults, Structured Teaching Program, Effectiveness

## I. INTRODUCTION:

Diabetes mellitus is important chronic disorders in terms of the number of persons affected and the considerable associated morbidity and mortality. It is a costly disorder both to the health agencies, to persons with diabetes and their families in terms of loss of productivity and reduced quality of life and also in terms of provision of additional services. Diabetes can be found in almost all populations throughout the world, but the incidence and prevalence varies between the countries and between different groups within countries. Diabetes is emerging as a major and growing health problem in the world. The rapid socioeconomic development, accompanied by characteristic cultural changes including changing dietary patterns, decreased physical activity and emergence of non-communicable diseases as the dominant feature of ill health in the community. Among this non-communicable disease, diabetes mellitus has emerged as one of the most common non-communicable diseases prevalent in the world.

Diabetes is a chronic disease that arises when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. Insulin is a hormone made by the pancreas that enables cells to take in glucose from the blood and use it for energy. Failure of insulin production, insulin action or both leads to raised glucose levels in the blood (hyperglycemia).

## II. REVIEW OF LITERATURE:

Diabetes mellitus (DM), as a growing epidemic of bipolar disorder, affects near 5.6% of the world's population. Its global prevalence was

about 8% in 2011 and is predicted to rise to 10% by 2030. Likewise, its prevalence in China also increased rapidly from 0.67% in 1980 to 10.4% in 2013. Therefore, DM is a contributing factor to morbidity and mortality. So far, various organizations have developed various diabetic guidelines to clarify the definition, classification, diagnosis, screening, and prevention of this disease, which are used not for clinical management but also the monitoring of ongoing care with laboratory check-ups at regular intervals, lifestyle counselling, and prevention of diabetic-related complications.

The diagnostic criteria for DM are based primarily on fasting plasma glucose (FPG), random plasma glucose or oral glucose tolerance test (OGTT) 2-hour plasma glucose (2hPG). In 2011, WHO recommended wherever conditions permit, countries and regions may consider adopting the hemoglobin A1c (HbA1c)  $\geq 6.5\%$  as the cut-point for a diabetes diagnosis. Several studies have shown that the optimal cut-off value for HbA1c to diagnose diabetes in Chinese adults is 6.3%. However, HbA1c has not yet been included in the latest guidelines for diabetes in China.

### III. METHODOLOGY:

Research Approach: Quantitative Research Approach

Research Design: descriptive Research design (Pre-Experimental research design)

Target population: 40-50 Year of age

Sample size: 50

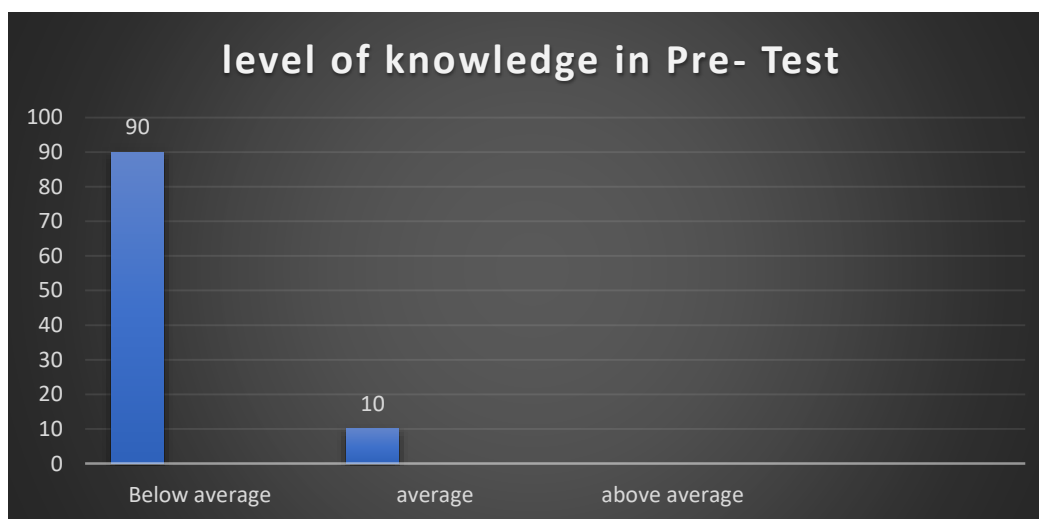
Sampling Technique: Purposive sampling

Research Setting: Malwal village

Demographic variables: Age, Sex, Education, income, occupation, Food Practices, life style.

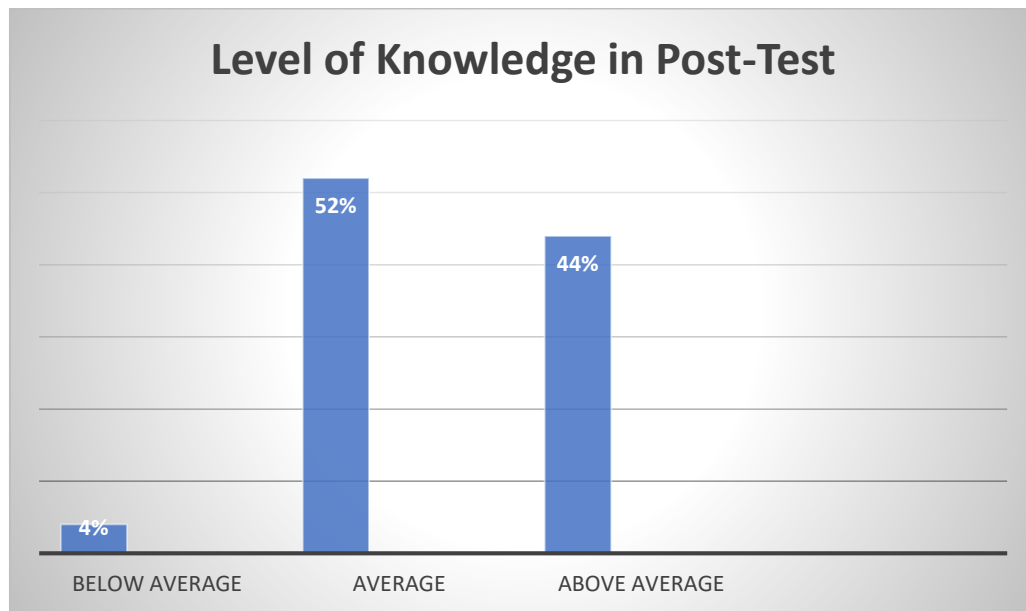
### IV. ANALYSIS & RESULT:

The analysis and results of the study has revealed that the level of knowledge during pretest, majority of subjects (90%) were having below average knowledge score and 10% have average knowledge regarding diabetes mellitus and its prevention.

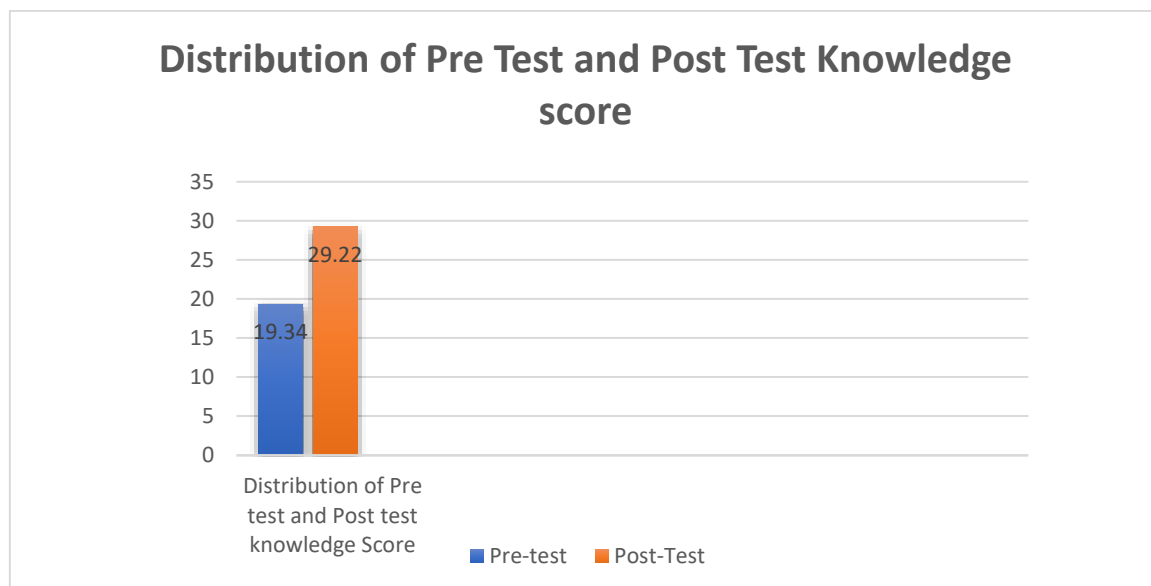


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The mean score for the pre test was 19.34 and standard deviation was 2.90, post test score was 29.22, standard deviation was 4.55, mean differences was 9.88. the statistical test value supports that there is a gain in knowledge after receiving the structured teaching program on diabetes mellitus and its prevention.



## V. CONCLUSION:

The study has revealed that the level of knowledge during pretest, majority of subjects (90%) were having below average knowledge score and 10% have average knowledge regarding diabetes mellitus and its prevention. The study has also revealed that the level of knowledge during post-test, majority of subjects (52%) were having average knowledge score and 44% were having above average knowledge score followed by 4% having below average knowledge score regarding diabetes mellitus and its prevention. The knowledge score has been increased after giving structured teaching to the sample.

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