

Development and Evaluation of Information Booklet on Type 3 Diabetes Mellitus Among Type 2 Diabetes Patient

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ABSTRACT:

Diabetes is a complex, chronic condition with a vital effect on the existence and well-being of families, society and individuals. Type 3 diabetes is a term some people use to describe Alzheimer's disease. Some scientists proposed the term because they believe insulin deregulations in the brain causes dementia. There risk factor is a diet high in calories, sugar, and fat and low in fiber, low socioeconomic status, exposure to stress race and ethnicity, lack of physical activity genetics, family history birth weight etc. The best way to help prevent or delay type 3 diabetes (Alzheimer's disease) and cognitive decline: increasing physical activity, monitoring blood pressure, doing cognitive training.

Keywords: Development, Evaluation, Information Booklet, Type 3 Diabetes Mellitus.

BACKGROUND OF THE STUDY

Diabetes is a serious, long-term condition with a major impact on the lives and well-being of individuals, families, and societies worldwide. The global diabetes prevalence in 2019 is estimated to be 9.3% (463 million people), rising to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045 recommended by National institute of health India. In 2022 recommended by National institute of health India, with the accumulation of findings suggesting that AD may represent a brain-specific form of DM (type 3 diabetes), there has been a growing interest in the role of β -amyloid and tau protein in the peripheral nervous system and its organs, as well as in inducing insulin resistance. Studies have shown that AD and T2DM share many common pathophysiological mechanisms associated with insulin resistance, such as oxidative stress, insulin signalling disorder, mitochondrial dysfunction, neuro inflammation, advanced glycosylation end products (AGEs) and metabolic syndrome. Type 3 Diabetes (T3D) is a neuro-endocrine disorder that represents the progression of Type 2 Diabetes Mellitus (T2DM) to Alzheimer's disease (AD).

PROBLEM STATEMENT:

“Development And Evaluation Of Information Booklet On Knowledge Regarding Type 3 Diabetes

Mellitus Among Patients Of Type 2 Diabetics In Selected Hospitals Of Indore City. ”

OBJECTIVES OF THE STUDY-

1. To assess the pre-test knowledge score regarding type 3 diabetes mellitus among patients with type 2 diabetes mellitus in selected hospital of Indore city.
2. To develop information booklet on knowledge regarding type 3 diabetes mellitus among patients with type 2 diabetes mellitus in selected hospital of Indore city.
3. To assess the post-test knowledge score regarding type 3 diabetes mellitus among patients with type 2 diabetes mellitus in selected hospital of Indore city.
4. To assess the association between their selected demographic variable regarding type 3 diabetes mellitus among patients with type 2 diabetes mellitus among selected hospital of Indore city.

HYPOTHESIS OF THE STUDY:

There is no significant relationship pre and post test knowledge score related to Type 3 diabetes mellitus in patients with type 2 Diabetes Mellitus among selected hospital of Indore city.

H1: There is significant relationship between pre and post test knowledge score related to Type 3 diabetes mellitus in patients with type 2 Diabetes Mellitus among selected hospital of Indore city

H2: There is significant association between selected demographic variables related to Type 3 diabetes mellitus in patients with type 2 Diabetes Mellitus among selected hospital of Indore city

METHODOLOGY

Research methodology is a way to systematically solve problem. A quantitative evaluative research approach was used for the study, the size of population included in the study were 60 patient with type 2 diabetes mellitus. They were chosen by convenient sampling technique. The study was conducted in SNG and Jupiter Hospital Indore. They were given self-structure questioner to give the response to assess the knowledge regarding type 3 diabetes mellitus. And then an information booklet was provided to read then post test was given after 2-3 days.

INTERPRETATION AND CONCLUSION

The pre-existed knowledge of patients was found at an average level which can be easily measured by analyzing the pre-test scoring. However, major part of the population of patients noted with poor and average knowledge about type 3 diabetes at baseline stage.

Before administration of information booklet exactly 34 patients observed with poor (0-5) knowledge about type 3 diabetes mellitus indicates that major part of population of patients(34, 56.33%) identified with poor knowledge. Further analysis showed that 10 patients having average (6-10) knowledge regarding type 3 diabetes mellitus before administration of information booklet This was also notice that some (12, 20%) patients had good knowledge(11-15) and at baseline stage that few (1, 1%) patients had excellent knowledge (16-20) regarding type 3 diabetes mellitus .

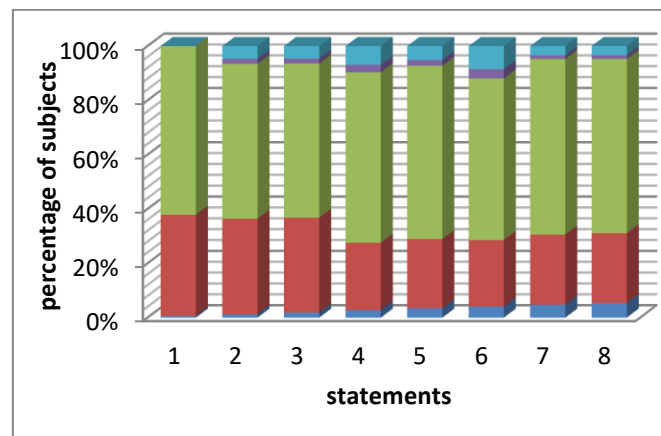
After administration of information booklet, the knowledge assessment among type 2 diabetic patients had been indicated the improvements in knowledge of type 3 diabetes, found at large at post administration stage as compared to baseline stage.

However, post administration very low (6.6%) of the patients identified with poor (0-5) knowledge regarding Type 3 diabetes mellitus .

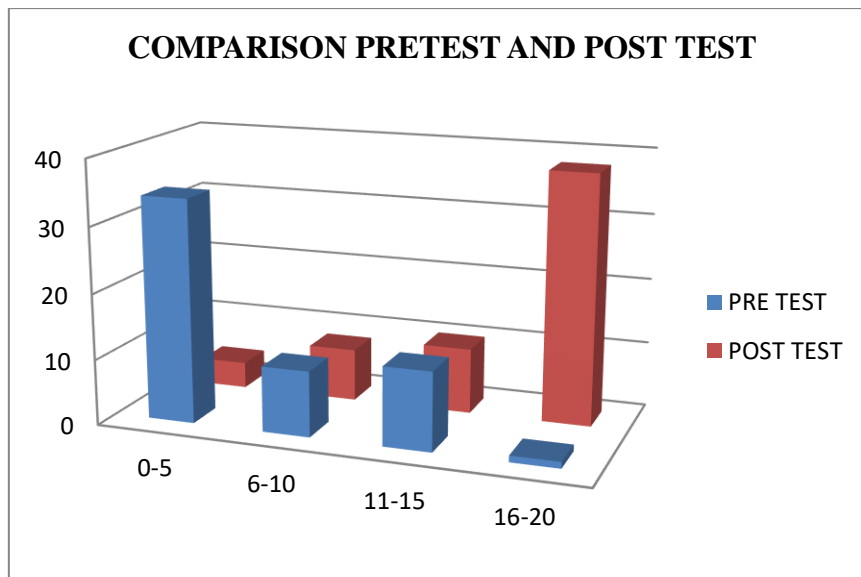
After administration of information booklet, major part of population of patients (13.3%) patients measured with average (6-10) knowledge had much aware about Type 3 diabetes mellitus which highlighted the effectiveness of information booklet in terms of better gain in knowledge.

This was also noted that 10 (16%) patients had obtained with good (11-15) knowledge about type 3 diabetes mellitus .This was also noted that 38 (63.3%) patients had obtained with excellent (16-20) knowledge about type 3 diabetes mellitus.

The association gained between the knowledge score and selected demographic variables was significant. The computed chi square values between gained in knowledge score and selected variables were higher than the table value($\chi^2(1)= 3.84$) at 0.05 level



Graphical presentation of evaluation information booklet



Graph showing comparison of pre test and post test

RESULT:

After the detailed analysis, this study leads to the following conclusion: that the maximum patients with type 2 Diabetes mellitus had poor knowledge regarding type 3 Diabetes mellitus while only 1 patients in excellent score.

After the administration of information booklet there is a significant increase in knowledge of type 2 Diabetic patients regarding type 3 Diabetes, which is calculated by t-test and the result were 11.1.

Hypothesis H1 made by the investigator that there is significant increase of knowledge regarding selected Type 3 Diabetes mellitus among the type 2 Diabetes mellitus patients was accepted.

CONCLUSION:

The study intends to find out effectiveness of information booklet as a means to aware the knowledge of patients regarding Type 3 diabetes mellitus. The overall experience was satisfying one. The investigation found that the information booklet is an effective awareness strategy to improve and create awareness among the patients with type 2 diabetes mellitus.

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