

Systematic Literature Review: “Effect of Hypoglycemia on Quality of Life among Patient with Diabetes mellitus

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Abstract

Background: According to the International Diabetes federation 8.8%, adults were having diabetes mellitus, which is the chronic disease. The pervasiveness of Diabetes mellitus is the basic interminable infections, with rising worldwide prevalence. Anxiety of hypoglycemia may add to an absence of adherence to treatment, hypoglycemia is one of the primary restricting components for controlling glycaemia in diabetes mellitus. The goals of this survey are to decide, utilizing the best degree of proof accessible, the impact of hypoglycemia on personal satisfaction among patients with diabetes mellitus. Selection of the investigations is finished by screening dependent on the screening based on title, unique, catchphrases and finding. The analyst and sentiment from two specialists taken for the determination of studies finish choice procedure. In view of this, all out, 25 investigations were chosen, out of that with incorporation and prohibition rules dependent on the PRISMA agenda 10 were chosen, and 15 were terminated. In all the examinations people with a background marked by hypoglycemia encountered a significant and more prominent weight of burdensome side effects and more unfortunate rest contrasted with those without a past filled with hypoglycemia. As helpless rest and gloom may bring about more prominent glycemie variety, clinical screening for these issues ought to be considered extensively in populaces with type 2 diabetes, particularly among those with hypoglycemia. It likewise shows critical assortment of proof that hypoglycemic scenes detrimentally affect Quality of life and treatment fulfillment in patients with diabetes. To comprehend these overwhelming connections further, exploration could incorporate distant observing of glucose levels, rest, and natural flashing appraisal. Understanding with diabetes mellitus should urged to take brief treatment for the counteraction of hypoglycemia. Further properly well-designed randomized controlled trials are required to add evidence-based information to the current knowledge.

Keywords: Hypoglycemia, Diabetes Mellitus, Quality of life, Depression, Dementia, Cognitive impairment

Background

Severe hypoglycemia make the financial impact and also affect the quality of life among patients with diabetes mellitus ⁽¹⁾ found in their study that continues hypoglycemia increases the risk of cardiovascular diseases and also morbidity and mortality in the diabetes patients. Another study found severe episode of hypoglycemia increase the risk of death and financial burden. ²⁾ In the study done on a Korean population,

the cost of medical facilities for treatment of severe hypoglycemia is high. Prospective Diabetes Study (1998) shows that diabetes patients having more episode of hypoglycemia have the lower quality of life compare to others. The episode of hypoglycemia gives an negative impact on the health of the individual with diabetes in longer period.³⁾ Diabetes patient always lives with the fear and anxiety for getting the episode of hypoglycemia anytime⁴⁾Therefore, it is clearly understood diabetes and the episode of hypoglycemia affect the quality of life of persons with diabetes mellitus. Insulin and a number of other glucose-lowering drugs may cause hypoglycaemia.⁽⁵⁾

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Objectives

The objectives of this systemic review are to find out the effect of hypoglycemia on quality of life among patients with diabetes mellitus by using the review articles

Material and Methods

Search strategy and selection criteria

We have selected, PubMed, Science Direct, and Scopus databases sources (2009-2019) for studies that evaluated the related effect of hypoglycemia on quality of life among the diabetes patients quality of life. QOL from October 2018 to March 2019.

All standardized and organized arrangements of words and phrases and provide a consistent way to describe data and free text terms were used to find the review. MeSH terms used were “diabetes mellitus”, “Hypoglycemia”, “Quality of Life”. Searches were limited to literatures available in full text and humans within a valid limit within the database. The suitable articles were further review by performing the screening of abstract and the full text article. Eligibility appraisal and data separation were done independently in a pure standardized mannered by researcher.

Selection criteria and data extraction

Selection of the studies is done by screening based on the screening on the basis of title, abstract, keywords and finding. Selection process is done by the researcher and opinion from two experts taken for the selection of studies. Based on this total 25 studies were selected and out of that with inclusion and exclusion criteria based on the PRISMA checklist 10 were selected and 15 were rejected.

The inclusion criteria for the article was if the studies were cross-sectional, case-control, or cohort; studies. The adult populations studies based on, intensity impact, risk and effect of hypoglycemia on quality of life among patients with Diabetes mellitus. Articles were removed in case letters, abstracts, conference proceedings, reviews, and meta-analysis.

Systemic Review of the Analysis

Result

Study Characteristics:

As is shown in above, all of the 10 studies included were cross-sectional studies, Prospective cohort, longitudinal cohort with a complete sample size of 127,006. The following different scales were used to research quality of life of type 2 diabetes patients: Case report, Questionnaire measures, patient reported symptoms, visual analog scale for quality of life, internet based survey, population based survey, self-reported history, web based survey. All the study shows that there is impact of hypoglycemia on quality of life like impair cognitive ability, Dementia, Depression, Fear, Absenteeism in work place, Insomnia.

Conclusion

The present systemic review on the effect of hypoglycemia on quality of life among patient with Diabetes mellitus. The systemic review was done on the 10 studies based on the selection criteria. The findings of the study show that the episode of hypoglycemia has Hyperglycemia Medical treatment, increased caloric intake, Fear, Absenteeism in job, Quality of sleep Depression. It shows that it has negative impact on quality of life among patient with Diabetes mellitus.

Discussion

In all the studies individuals with episode of hypoglycemia had symptoms of depression and insomnia compare with those who have no episode of hypoglycemia. The insomnia and depression symptoms have the impact on changes in blood glucose level of the patient so it is important to do the regular check up of the diabetes is patient is required mainly among those with hypoglycemia. It also shows significant body of evidence that hypoglycemic episodes have a detrimental effect on quality of life and treatment satisfaction in patients with diabetes. To know more about the hypoglycemia and quality of life further more research studies need to be conducted. Patient with diabetes mellitus should encouraged taking prompt treatment for the prevention of hypoglycemia. More well designed randomized controlled trials studies are required to get evidence-based information for the current knowledge.

These studies should help clinically for treatment on hypoglycemia and will produce more data to be use into a future update of this review.

Conflict of Interest -Nil

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