

# **Title: Impact of Diabetes Education on Quality of Life in Diabetes Patients seen in LUTH**

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## **ABSTRACT**

### **Background**

Diabetes mellitus is an NCD with profound effects on morbidity and mortality. Unfortunately, many people fail to measure the impact on quality of life and mental health of these patients who are under severe health, finance and psychological burden.

### **Aims and Objectives**

This study aims to measure the impact of diabetes education over 16 weeks on the quality of life of type 2 DM patients seen in the Lagos University Teaching Hospital, (LUTH)

### **Methods**

A total of 153 participants were available for randomization into three groups (Group Diabetes Education, Individual Diabetes Education and Control). Patients had a 16 weeks diabetes education course given by one of the authors in 2 formats (group or individual setting and there was a control group. The questionnaire used was SF-36(tm) Health Survey

### **Results**

A total of one hundred and forty-two (142) completed the study giving a completion rate of 92.8% and attrition rate of 7.2%. Completion rate for the females was 93.1% with attrition of 6.9% while the completion rate for males was 92.4% with an attrition of 7.6% ( $\chi^2=0.026$ ,  $p=0.872$ )

Participants in the intervention group in this study had significant improvements in all the QoL domains (100%) from baseline to the end of study at week 16. While the participants in the control group had improvements in QoL scores from baseline to the end of study but only three domains (27.3%) were significantly improved. The mean changes in all QoL scores were significantly higher in the intervention group compared to control group and the NNT was significant for QoL.

### **Discussion**

This finding is important more so now that emphasis is shifting from survival or longevity to quality of life adjusted years. It's no longer how long we live but how well we live. It has been reported that emotions related to the psychological burden of diabetes such as anxiety, depression and poor confidence have been shown to be associated with poor control, higher complication rates and decreased quality of life. Several studies have shown that DE improves emotional well-being and quality of life

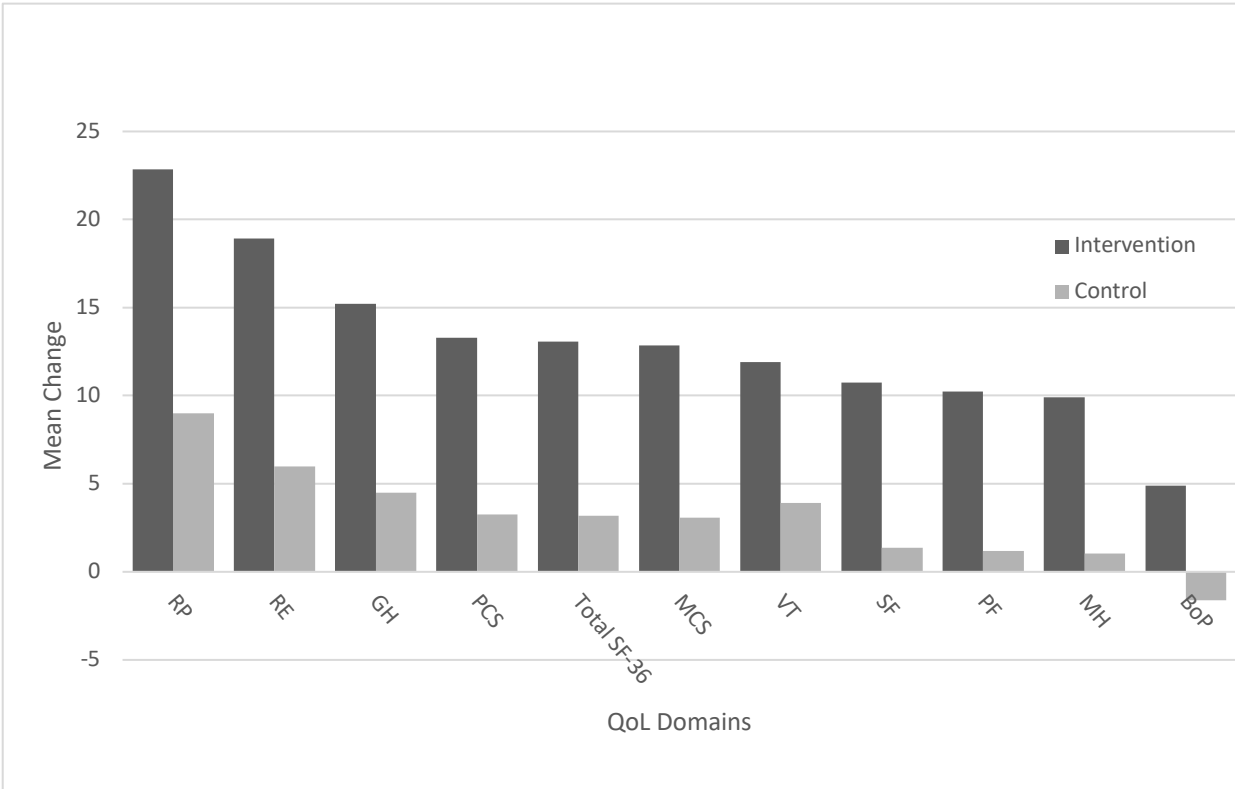
Another finding of this study was that, the female participants in the intervention group had clinically significant improvement in mental health compared with their male counterparts. The mean changes in other domains were comparable between the sexes. This study revealed that diabetes education improves mental health significantly in women. The importance of this can't be downplayed bearing in mind the role women play in the family.

**Conclusion**

In conclusion, DE significantly resulted in improvement all domains of QoL in T2DM patients and especially so for mental health in women.

**Magnitude of change in quality of life**

Figure 1 compares the mean changes in QoL scores between intervention and control groups. The mean changes in QoL scores were statistically and clinically significantly higher in the intervention group compared to the control group in all the domains and component summaries of the SF-36 questionnaire.



**Figure 1: Magnitude of Change in Quality of Life.** The mean changes in all the QoL domains and component summaries scores of the intervention group were significantly higher compared to control group. *BoP: Bodily Pain, GH: General Health, MCS: Mental Component Summary, MH: Mental Health, PCS: Physical Component Summary, QoL: Quality of Life, RE: Role Emotional, RP: Role Physical, SF: Social Functioning, VT: Vitality, Values are expressed as mean (95%CI). Mean changes in all the Domains were significantly higher in the intervention group.*

