

**THE RELATIONSHIP BETWEEN COMPLIANCE AND QUALITY OF LIFE  
AMONG ADOLESCENTS  
WITH DIABETES MELLITUS TYPE 1**

By

Mary Ng'andu

A dissertation submitted to the University of Zambia in partial fulfilment of the  
requirements of the Master of Arts in Child and Adolescent Psychology

July 2013

**Declaration**

I hereby declare that this research work is submitted in accordance with the rules and regulations governing the award of a master degree in child and adolescent psychology.

I also declare that the findings in this research were done through my own effort except where reference is made.

**Researcher**

Name.....

Signature.....

Date.....

**Supervisor**

Name.....

Signature.....

Date.....

**Certificate of approval**

This dissertation by Mary Ng'andu has been approved for the award of Masters in  
Child and Adolescent Psychology by the University of Zambia.

**Examiners:**

Name.....

Signature.....Date.....

Name.....

Signature.....Date.....

Name.....

Signature.....Date.....

## **Abstract**

This research aimed at investigating the relationship between compliance and quality of life among adolescents with diabetes mellitus type 1 (DMT1). The study explored the impact of an information giving intervention on compliance and quality of life in adolescents with DMT1. It also explored the factors related to compliance namely units of insulin, delay in meal timings, lapse in diet, physical exercises and hypoglycaemic episodes. The study further explored the effect of compliance on the quality of life of the adolescents with type 1 diabetes mellitus.

## **Sample**

A total of 40 adolescents with diabetes mellitus type 1 were recruited at diabetes association of Zambia centre in University teaching hospital. The sample was in the age range of 16 to 19.

## **Procedure**

The baseline measures for intervention and control group was done in week 1(time 1), where the 40 adolescents answered the demographic questionnaire, quality of life scale modified for youths and the rating scale for compliance. In week 2 to week 9, the researcher was with the intervention group and had 1 meeting with them once in a week. In week 10; time 2, follow up measure (same used at time 1 with intervention and control group) was done. The researcher met both groups at the Diabetes Association of Zambia Centre DAZ in University teaching hospital UTH. The participants were asked to complete the demographic questionnaire, rating scale for compliance and the diabetes quality of life scale modified for youths. These questionnaires were completed one after the other in both baseline intervention and follow up (post assessment). Instructions were read to them before they started answering each questionnaire in a plenary setup.

## **Results**

The demographic results indicate an even distribution of participants by age in both the control and intervention groups. There was equal number of participants both in the control and intervention group. The compliance levels were tested at a significant level of 0.05 using a Mann Whitney U test, the results showed that there was a significant difference between the control and intervention group at follow up in compliance to treatment, impact of diabetes and worries about diabetes. However, satisfaction with life showed a significant difference between the control and intervention group at follow up, where the control group showed more satisfaction with life compared to the intervention group at follow up. The bivariate correlation coefficient accepted the hypothesis that there was a relationship between compliance and quality of life among adolescents with diabetes mellitus type 1 at a significant level of 0.01 where  $r=0.468$  and  $p=0.002$ .

## **Conclusion**

The information that the adolescents received during the intervention period seemed to have had impacted positively in the lives of the adolescents and also influenced positive behaviour change to the treatment regime prescribed to them by the doctors. However, satisfaction with life had a different picture because the intervention group had less satisfaction with life compared to the control group at follow up.

This study will add value to the already existing knowledge of psychologists and health workers on management of diabetes mellitus type 1.

**Implications**

The results of this study have generally created valuable knowledge for patient compliance and the development of therapeutic information giving intervention programmes in other health facilities aimed at improving compliance and health related quality of life among adolescents with DMT1.

## **Dedication**

I wish to dedicate this study to my husband Mr. Julius Malipa and children, Skangele,Stabile,Joshua, Zenzo,Sibongile and Mitesh Julius Jr for having silently endured my absence from home and the support they offered to me during the period of my study.

## **Acknowledgements**

I wish to express my sincere appreciation to my supervisor Dr. Anitha Menon PHD for her constant guidance and support throughout my study.

Special thanks also go to the University of Zambia, Psychology department staff namely Professor Robert Serpell, Dr Imasiku Mwiya PhD and Dr Mwaba SOC PhD for the support and guidance rendered to me during my study period in the institution.

I also wish to thank the University Teaching Hospital and the Diabetes Association of Zambia staff members for the support rendered to me during the period of my research.