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**ASSESSMENT OF ADHERENCE TO INSULIN SELF ADMINISTRATION AND
ASSOCIATED FACTORS AMONG TYPE I DIABETIC PATIENTS AT JUSH, JIMMA,
ETHIOPIA**

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Abstract

Background: *The term diabetes mellitus describes a metabolic disorder of multiple etiologies characterized by chronic hyperglycemia with disturbances of carbohydrate, fat and protein metabolism resulting from defects in insulin secretion, insulin action, or both. Adherence is defined as the extent to which a patient's behavior coincides with the prescribed health care regimen as agreed upon through a shared decision making process between the patient and the health care provider. Achieving glucose control requires adherence to a variety of self-management regimens, most notably to insulin injection for type I DM.*

Objective: *The aim of this study was to assess the level of adherence to insulin self administration and associated factors among type I diabetic patient at JUSH, Jimma, Ethiopia.*

Methods: *Institutional based cross sectional quantitative study supplemented with a qualitative method was employed on 263 sampled type I diabetes patients by simple random sampling from February 1 to April 30, 2013. Data was collected using structured and pre-tested questionnaire by trained data collectors and was entered to Epidata version 3.1 and analyzed using SPSS windows version 16.0. Bivariate and multivariate logistic regression analysis were used in analyzing the data and finally the result was presented in graphs and tables.*

Results: *According to this study 30.9% of the respondents were adhered and 69.1% were not adhered to insulin self administration within the last three months. About 7.4%, 73.1% and 19.5% of the respondents have poor, fair and good knowledge about insulin and its administration respectively. Most of the respondents 176(68.8%) mix insulin before injection by shaking. More than sixty percent of the respondents possess favorable attitude towards the insulin treatment. Logistic regressions showed that factors associated with adherence were, marital status ($p= 0.038$), forgetfulness ($p= 0.000$), lack of transportation ($p= 0.006$) and being busy ($p= 0.002$) but some socio demographic factors like religion and occupation were found to be insignificant with adherence to insulin self administration.*

Conclusion: *Finding of this study indicated that majority of the respondents were not adhered to insulin self administration (69.1%). Thus, it can provide alarming information for concerning bodies to take action since DM is a major public problems.*

Key words: *self administration, adherence, knowledge, attitude, insulin*

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Acronyms

ADA-	American Diabetic Association
BSC-	Bachelor of Science
CSA-	Central Statistical Agency
DM-	Diabetes Mellitus
EDA-	Ethiopian Diabetic Association
ETB-	Ethiopian birr
IDF-	International Diabetes Federation
IDDM-	Insulin Dependent Diabetes Mellitus
JUSH-	Jimma University Specialized Hospital
MSC-	Masters of Science
OPD-	Out Patient Department
ISA-	Insulin Self Administration
SPSS	Statistical Package for Social Sciences
WHO-	World Health Organization
PI-	Principal Investigator
MOH-	Ministry of health
RHB-	Regional health bureau
JHB-	Jimma health bureau
FST-	fear of self test
FSI-	fear of self injection

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