



AWARENESS REGARDING TYPE II DIABETES MELLITUS AND ITS COMPLICATIONS AMONG ADULTS IN SELECTED RURAL COMMUNITY OF MIZORAM

Ms.Cicilia Vanpekchinpar¹, Ms.Jerusalem Lallawmzuali¹, Ms. Anita Shrestha²,
Prof(Dr). Ruth Lalhmingthang³

Students¹, Assistant Professor², Professor cum Principal³, BN College of Nursing

ABSTRACT

Type II Diabetes Mellitus represents a major global health burden, currently affecting more than 346 million individuals, with projections exceeding 853 million by 2050. Inadequate glycemic control contributes to severe complications including diabetic foot, nephropathy, neuropathy, and retinopathy. Despite this, awareness of Type II Diabetes Mellitus and its complications remains limited in many communities. This study sought to evaluate the level of awareness regarding Type II Diabetes Mellitus and its complications among adults in a rural community of Aizawl, Mizoram, and to examine the association between awareness levels and selected demographic variables. A quantitative descriptive cross-sectional survey was conducted among 120 adults in Hualngohmun, Aizawl, Mizoram, selected through systematic random sampling. Data were collected using a validated demographic proforma and a self-structured awareness questionnaire. Most participants were aged 40–59 years, male (52%), undergraduates (73%), unemployed (64%), married (73%), and living in joint families (51%). Family members constituted the primary source of health information for 36% of respondents. Findings revealed that 1% of participants had inadequate awareness, 56% had moderately adequate awareness, and 43% demonstrated adequate awareness of Type II Diabetes Mellitus and its complications. Statistical analysis showed no significant association between awareness and age, gender, occupation, or family type. However, educational qualification, marital status, and source of information were significantly associated with awareness levels. The majority of adults in Hualngohmun demonstrated moderate to adequate awareness of Type II Diabetes Mellitus and its complications. Awareness was significantly influenced by education, marital status, and information sources, rather than by age, gender, occupation, or family type. These findings suggest that targeted health education programs addressing specific demographic groups may further enhance diabetes awareness and preventive practices.

KEY WORDS: Awareness, Type II Diabetes Mellitus, complications, rural community, Mizoram

INTRODUCTION

Type II Diabetes Mellitus is a chronic, progressive, non-communicable metabolic disorder characterized by insulin deficiency or insulin resistance, leading to elevated blood glucose levels. It constitutes over 90% of all diabetes cases and poses a major global public health challenge, with the WHO estimating 830 million affected individuals worldwide. Type II Diabetes Mellitus develops when insulin production is insufficient or when cells fail to respond effectively to insulin, resulting in glucose accumulation in the bloodstream. Common symptoms include polyuria, polydipsia, polyphagia, unexplained weight loss, fatigue, blurred vision, delayed wound healing, frequent infections, and tingling sensations in the extremities. The disease is associated with serious complications such as cardiovascular disease, stroke, retinopathy, and nephropathy. WHO projections indicate that the global burden may double by 2030 if preventive measures are not strengthened. Although mortality from Type II Diabetes Mellitus continues to rise, efforts to improve public knowledge for prevention have shown limited success. Enhancing awareness remains critical, as early diagnosis and education are key to reducing disease prevalence and burden. Therefore, assessing public awareness of Type II Diabetes Mellitus and its

complications, especially in low-awareness populations, is essential for effective health planning.

STATEMENT OF THE PROBLEM

A Study to Assess the Awareness regarding Type II Diabetes Mellitus and its Complications among adults in a selected rural community of Aizawl, Mizoram.

HYPOTHESIS

H₁: There is significant association between level of awareness regarding Type II Diabetes Mellitus and its complications among adults with selected demographic variables.

METHODOLOGY

A quantitative descriptive cross-sectional study was conducted to assess awareness of Type II Diabetes Mellitus and its complications among adults in Hualngohmun, a rural community of Aizawl, Mizoram. Using systematic random sampling, 120 adults ≥18 years who understood Mizo and consented to participate were selected from an accessible population of 1,130, with sample size determined by Cochran's formula and finite population correction. Data were collected



from 22nd–24th April 2026 using a validated demographic proforma and a 20-item self-structured awareness questionnaire, categorized as adequate, moderately adequate, or inadequate based on mean $\pm$ SD scores. Content validity was established by five experts in Medical-Surgical Nursing, and reliability was confirmed through split-half method with Spearman-Brown $r=0.75$. A pilot study on 12 adults in Melriat confirmed feasibility. After obtaining ethical clearance from IEC, BN College of

Nursing on 12/03/2026 and permission from the Village Council President, written informed consent was obtained and data were collected through face-to-face interviews. Data were analyzed using SPSS with descriptive statistics for awareness levels and Chi-square test to examine associations with demographic variables like age, gender, education, occupation, marital status, family type, and information source, with $p<0.05$ considered significant.

RESULT

Table 1: Frequency and Percentage Distribution of demographic variables. (n= 120)

Demographic Variables	Frequency (f)	Percentage (%)
Age		
18-39	29	24
40-59	59	49
Above 60	32	27
Gender		
Female	58	48
Male	62	52
Educational qualification		
Illiterate	10	8
Undergraduate	87	73
Graduate	22	18
Postgraduate	1	1
Occupation		
Employed	40	33
Unemployed	76	64
Student	4	3
Marital status		
Married	87	73
Unmarried	22	18
Divorced	1	1
Widow	10	8
Type of family		
Nuclear	59	49
Joint	61	51
Source of information		
Health personnel	31	26
Family	43	36
Friends	24	20
Mass media	7	5
No information	15	13

The above data shows that majority i.e. 59 (49%) of adults are in the age group of 40-59 years, 62(52%) of adults are males,

87(73%) of adults were undergraduate, 76(64%) of adults are unemployed, 87(73%) are married, 61(51%) belong to joint family and 43(36%) received information through family.



Table 2: Frequency and percentage distribution of level of awareness regarding Type II Diabetes Mellitus and its complications among adults

Level of awareness	Score range	Level of awareness	
		Frequency (f)	Percentage (%)
Inadequate Awareness	0-9	1	1
Moderately Adequate Awareness	10-14	67	56
Adequate Awareness	16-20	52	43

Data on table 2 shows that the majority i.e., 67 (56%) of adults had moderately adequate awareness, followed by 52(43%) of adults had adequate awareness and only 1(1%) of adults had

inadequate awareness regarding Type II Diabetes Mellitus and its complications.

Table 3: Association between the level of awareness score with demographic variables (n=120).

Sl No	Demographic variables	Awareness Scores			χ^2	df	Tab value	p value	Inference
		Poor	Fair	Good					
1	AGE				1.43	4	9.49	0.8390	NS
	18-39	-	17	12					
	40-59	1	31	27					
	Above 60	-	19	13					
2	GENDER				1.18	2	5.99	0.5543	NS
	Female	-	34	24					
	Male	1	33	28					
3	EDUCATION QUALIFICATION				13.37	4	9.49	0.0096	S
	Illiterate	1	6	3					
	Undergraduate	-	48	39					
	Graduate	-	13	9					
	Postgraduate	-	-	1					
4	OCCUPATION				2.39	4	9.49	0.6644	NS
	Employed	-	22	18					
	Unemployed	1	44	31					
	Student	-	1	3					
5	MARITAL STATUS				48.40	6	12.59	0.0001	
	Married	1	46	40					
	Divorced	-	8	1					
	Widow	-	-	2					
6	TYPE OF FAMILY				2.58	2	5.99	0.2753	NS
	Nuclear	1	36	22					
	Joint	-	31	30					
7	SOURCE OF INFORMATION				8.19	8	15.51	0.4151	S
	Health personnel	-	17	14					
	Family	-	21	22					
	Friends	1	13	10					
	Mass media	-	6	1					
	No information	-	10	5					

$p < 0.05$ level of significance

S: Significant

NS: Not Significant

The above table shows that there is no significant association between level of awareness with age in years, gender, occupation, type of family and source of information regarding Type II Diabetes Mellitus and its complications.

However educational qualification ($\chi^2=13.37$, $df=4$, $p=0.0096$) and marital status ($\chi^2=48.40$, $df=6$, $p=0.0001$) showed significant association with the level of awareness.

Hence, the research hypothesis H_1 was accepted with regards to educational qualification and marital status.



CONCLUSION

From the present study, it can be concluded that the majority (56 %) of the adults had moderately adequate awareness regarding Type II Diabetes Mellitus and its Complications while (43%) of the adults had adequate awareness and only (1%) of the adults had inadequate awareness regarding Type II Diabetes Mellitus and its complications. It was also found that educational qualification ($\chi^2 = 13.37$, $df=4$, $p=0.0096$) and marital status ($\chi^2=48.40$, $df=6$, $p=0.0001$) is significantly associated with the level of awareness. Thus, the research hypothesis H1 was accepted with regards to educational qualification and marital status.

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