

Relationship between Satisfaction with Life and Health Promoting Lifestyle Practices among Patients with Type -2 Dm

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Abstract

Original Research Article

Type 2 diabetes mellitus (T2DM) is characterized by high blood sugar due to insulin resistance and reduced insulin production. Lifestyle changes, such as weight loss and physical activity, can help prevent or delay the onset of T2DM by improving insulin sensitivity. Regular physical activity reduces the risk of developing insulin resistance and impaired glucose tolerance. Life satisfaction, which reflects how much a person enjoys their life, is positively influenced by healthy behaviours, which not only reduce morbidity and mortality but also enhance well-being and self-actualization. **Aim:** To assess the relationship between satisfaction with life and health promoting lifestyle practices among patients with type -2 DM. **Materials and Methods:** This study employed a descriptive correlation survey design to investigate the relationship between life satisfaction and health-promoting behaviours among middle-aged Type-2 diabetes patients. A sample of 150 participants was purposively selected from HSK Hospital, and data was collected using the Satisfaction with Life Scale (SWLS) and the health-Promoting Lifestyle Profile (HPLP) Scale. **Results:** The study found a positive correlation ($r = 0.43$) between satisfaction with life and health-promoting lifestyle practices. The majority of participants (82.7%) had average health-promoting lifestyle practices, while 79.3% reported moderate satisfaction with life. Significant associations were found between health-promoting lifestyle practices and education, occupation, family history of diabetes, and regular exercise. Satisfaction with life was significantly associated with age and duration of diabetes. **Conclusion:** The study highlights the importance of promoting healthy lifestyle practices and addressing psychosocial factors to improve overall well-being among middle-aged adults with T2DM. **Keywords:** Assess, Relationship between, Satisfaction with life, Health promoting life style practices, in Type-2 diabetic mellitus.

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INTRODUCTION

Diabetes mellitus is a disorder of the endocrine system characterized by abnormal fluctuations in blood glucose levels [1]. Type 2 diabetes mellitus (T2DM) is marked by hyperglycaemia due to progressive insulin deficiency and insulin resistance [2]. T2DM significantly impacts satisfaction with life, affecting mental and emotional well-being [3]. Individuals with T2DM are at risk of cognitive decline due to age and disease-related complications [4].

However, research suggests that modest weight loss through lifestyle changes and regular physical activity can prevent or delay T2DM [5]. Studies have consistently shown that physically active individuals are less likely to develop insulin resistance, impaired glucose tolerance, or T2DM [6]. Life satisfaction is closely tied to overall well-being, and practicing positive health behaviours has been shown to decrease morbidity and mortality rates while enhancing self-actualization [7].

RESULT**Part I****Table 1: Frequency and percentage distribution of socio-demographic characteristics of sample N=150**

Variables	Frequency	Percentage (%)
1)Age		
45-50 years	81	54
50-55 years	39	26
56-60 years	30	20
2)Sex		
Male	87	58
Female	63	42
Others	0	0
3)Marital status		
Married	139	92.7
Unmarried and others	11	7.3
4)Religion		
Hindu	139	92.6
Muslim	7	4.66
Christian	4	2.66
If any others specify	0	0
5)Education		
a) Illiterate	46	30.7
b) Up to 10th Std	67	44.7
c) PUC and Diploma	26	17.3
d) Degree and above	11	7.3
6)Occupation		
Agriculture	88	58
Business	13	8.66
Private	13	8.66
Government	3	2
Others	33	22
7)Income per month		
Less than 10000	122	81.3
10000-20000	24	16.0
20001- 30000	2	1.3
Above 30000	2	1.3
8)Family history of DM		
Yes	82	54.66
No	68	45.33
9)Food habits		
Vegetarian	58	38.66
Non-vegetarian	23	15.33
Mixed	66	44
Eggetarian	3	2
10)Tobacco use		
Yes	69	46
No	81	54
11)Alcohol Use		
Yes	56	37.33
No	94	62.66
12)Duration of DM		
<6 years	74	49.33
6-9 years	66	44
9-15 years	8	5.33
>15 years	2	1.33
13)Regular exercise		
Yes	34	22.66
No	116	77.33

Part-II: Assessment of levels of health promoting life style practices and satisfaction with life among middle aged adults with Type-2 DM.

Categorization of the middle-aged adults based on the level of health promoting life style practices was done as follows: scores < 70 poor, scores 70-140 average, scores 141 and above.

Section-A: Assessment of levels of health promoting life style practices among middle aged adults with Type-2 DM.

Table 2: Levels of health promoting life style practices among middle aged adults with Type-2 DM N=150

Levels of life style practices	Range of Score	No of respondents	Percentage
Poor life style practices	<70	0	00.0
Average life style practices	70 to 140	124	82.7
Good life style practices	141 and above	26	17.3

Assessment of levels of health promoting life style practices among middle aged adults reveals that, most of the middle-aged adults (82.7%) had average health promoting life style practices, and remaining 17.3 percent of them had good health promoting life style practices, and no middle-aged adults had poor health promoting life style practices.

Section-B: Assessment of Levels of Satisfaction with Life among Middle Aged Adults with Type-2 DM.

Categorization of the middle-aged adults based on the level of satisfaction with life was done as follows: scores 0- 12 poor, scores 12-24 moderate, scores 25 and above high satisfaction.

Table 3: Assessment of Levels of satisfaction with life among middle aged adults with Type-2 DM N =150

Level of satisfaction	Range of score	No of respondents	Percentage
Poor Satisfaction	<12	14	9.3
Moderate Satisfaction	12 to 24	119	79.3
High Satisfaction	25 and above	17	11.3
	Total	150	100.0

Assessment of levels of satisfaction with life among middle aged-adults with type-2DM reveals that, majority of adults (79.3) had moderate satisfaction, 11.3% had high satisfaction, 9.3% had poor satisfaction.

Section-C: Mean, SD and mean percentage of health promoting life style practices among middle aged adults with Type-2 DM.

Table 4: Area wise mean, SD and mean percentage of health promoting life style practice score N = 150

Area	Maximum Score	Mean	S. D	Mean percentage
Health promoting life style practices	208	121.45	18.736	58.38%

The mean, SD and mean percentage of health promoting life style practices score of middle-aged adults reveal that, the total mean percentage of health promoting life style practices score of middle-aged adults was 58.38% with mean and SD 121.45 ±18.736.

Section-D: Area wise Mean, SD and mean percentage of satisfaction with life among middle aged adults with Type-2 DM.

Table 5: Area wise Mean, SD and mean percentage of satisfaction with life N = 150

Area	Maximum score	Mean	SD	Mean %
Satisfaction of life among middle aged adults.	35	18.34	4.696	52.4%

The mean, SD, and mean percentage of satisfaction of life of middle-aged adults illustrate that, the total mean percentage of life satisfaction of middle-aged adults was 52.4% with mean and 18.34±4.696.

Part- III: Correlation between satisfaction with life and health promoting life style practices among middle aged adults with Type-2 DM.

Table-6: Correlation between satisfaction with life and health promoting life style Practices among middle aged adults with type-2DM. N=150

Correlation between satisfaction of life with life style practices among middle aged adult with Type-2DM.	
Correlation coefficient (r)	0.43

Findings regarding correlation between satisfaction with life and Health promoting life style practices among middle aged adults with type-2 DM reveals that, Correlation coefficient (r) value of health promoting life style practices and life satisfaction of middle-aged adults with type-2 DM is 0.78.

Hence, as per the calculated value of correlation coefficient, there exists a positive correlation between satisfactions with life and health promoting life style practices among middle aged adults. Thus, research hypothesis.

H₁: stated that, there will be a significant correlation between satisfaction with life and health promoting life style practices among middle aged adults with type-2 DM.

Part-VI: Correlation of health promoting life style practices and satisfaction with life of middle-aged

adults with their selected socio-demographic variables.

Section-A: Association between health promoting life style practices among middle-aged adults with their selected socio-demographic variables.

To find out association between health promoting life style practices of middle-aged adults with their selected socio-demographic variables. a research hypothesis was formulated.

H₂: There will be a significant association between health promoting life style practices of middle-aged adults having Type-2DM with their selected socio-demographic variables.

The hypothesis was tested using Chi-square test and fisher's exact test.

Table 7: Association of health promoting life style practices of middle-aged adults with their selected socio-demographic variables. N=150

Sl. No	Socio-demographic variables	Df	Chi-square value/ Fisher's Exact Test	p value	Level of significance
1.	Age	2	3.512	0.177	P>0.05 NS
2.	Sex	2	0.227	0.669	P>0.05 NS
3.	Marital status	1	0.813	0.405	P>0.05 NS
4.	Religion	1	1.162	0.606	P>0.05 NS
5.	Education	2	29.054*	0.000	P<0.05 S
6.	Occupation	2	13.035*	0.014	P<0.05 S
7.	Income per annum	1	1.045	0.894	P>0.05 NS
8.	Family history of diabetes	1	6.287*	0.016	P<0.05 S
9.	Type of food habits	1	1.946	0.580	P>0.05 NS
10.	Tobacco use	1	0.920	0.390	P>0.05 NS
11.	Alcohol use	1	0.017	1.000	P>0.05 NS
12.	Duration of diabetes	1	0.804	0.843	P>0.05 NS
13.	Regular exercise	1	22.012*	0.000	P<0.05 S

Df = degrees of freedom NS = Not significant * S=Significant (P < 0.05)

Section-B: Association of the levels of satisfaction with life of middle-aged adults with their selected socio-demographic variables.

To find out correlation of the levels of satisfaction with life of middle-aged adults with their selected socio-demographic variables a research hypothesis was formulated.

H₃: There will be a significant association between levels of satisfaction with life of middle-aged adults with their selected socio-demographic variables.

The hypothesis was tested using Chi-square test and fisher's exact test.

Table 8: Association of satisfaction with life of middle-aged adults with their selected socio-demographic variables N=150

Sl. No	Socio-demographic variables	Df	Chi-square value	p value	Level of significance
1.	Age	2	10.510*	0.030	P<0.05 S
2.	Sex	1	5.651	0.059	P>0.05 NS
3.	Marital status	1	5.504	0.068	P>0.05 NS
4.	Religion	1	2.667	0.311	P>0.05 NS
5.	Education	2	6.977	0.319	P>0.05 NS
6.	Occupation	1	13.882	0.096	P>0.05 NS

Sl. No	Socio-demographic variables	Df	Chi-square value	p value	Level of significance
7.	Income per annum	1	6.380	0.357	P>0.05 NS
8.	Family history of diabetes	2	0.055	1.000	P>0.05 NS
9.	Type of food habits	2	11.780	0.080	P>0.05 NS
10.	Tobacco use	2	0.174	0.956	P>0.05 NS
11.	Alcohol use	1	1.153	0.591	P>0.05 NS
12.	Duration of diabetes	2	22.516*	0.008	P<0.05 S
13.	Regular exercise	1	5.041	0.087	P>0.05 NS

Df = degrees of freedom S= Significant NS=Not significant

Significant association was found between satisfaction with life of middle-aged adults with type-2 DM and their age and duration of diabetes (Table-6.8). Thus, the **H2** has accepted for age and duration of diabetes. And the **H2** stated is rejected for sex, marital status, religion, education, occupation, income per annum, family history of diabetes, type of food habits, tobacco use, alcohol use and regular exercise.

Conflict of Interest: None

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