



Analysis on the observational evaluation on impact of patient counseling for enhancing the attitude and knowledge on diabetic patients

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ABSTRACT

Diabetes mellitus (DM) is a assorted collection of Metabolic issue described by hyperglycemia. It may be connected with abnormalities in carbohydrate, fat, also protein digestion system and might bring about Ceaseless difficulties including microvascular, microvascular and neuropathic issue. Patient Counseling is a key component of Patient Care. Objective: The detached investigation on the patient demographic particulars and evaluate the patient's Knowledge, Attitude & Practice and Quality of Life amid select Diabetic Patients and to improve them by providing Patient Counseling. Materials & Methods: An Observational study was carried out at a tertiary care hospital in Krishnagiri, Tamil Nadu by phase of 6 months. 52 patients were included in the investigation created on presence and segregation criteria. Knowledge, Attitude & Practice and Quality of Life is evaluated using validated Questionnaires and the score thus obtained before counseling was compared with the corresponding score obtained after counseling. Consequences: by conclusion of the learning, there was a important improvement in the Knowledge, Attitude & Practice (KAP) and Quality of Life (QoL) between the patients ($p < 0.05$). We conclude that Patient counseling is a key part of Diabetic care. Patient Counseling stressing the importance of lifestyle Management, Drug therapy and knowledge of the disease can improve Quality of Life and prevent further Complications.



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INTRODUCTION

The occurrence of diabetes mellitus (DM) is significantly increased completed the past two periods. It is a silent disease and is more prevalent with increase in age (Nagavi *et al.*, 2007). Those budgetary load of dm approximated \$174 billion in 2007, including immediate therapeutic Also medicine costs and in addition backhanded fetches attributed with inability and mortal sin. Dm is those major reason for visual deficiency clinched alongside Grown-ups age-old 20 with 74 years, and the significant donor should improvement for conclusion stage renal sickness. It also accounts for pretty nearly 71,000 easier limit amputations

yearly. Finally, two-thirds by passing's for people for sort 2 DM, happen because of a cardiovascular occasion. Moreover, An investigation toward american diabetes affiliation reports that india will harbor the vast majority amount for individuals diagnosed for diabetes by 2030 (Mohan *et al.*, 2007).

Patient counseling is an important procedure that progresses patient's capacity to keep up by the disease to variety of choices concerning lifestyle and therapy. It aids affected role to keep themselves motivated about dietary and lifestyle habits (Lewis *et al.*, 1997). There are essentially no epidemiological investigations starting with Krishnagiri region about India surveying the level from claiming attention to dm Around those diabetic number. Hence, this investigates ahead.

Malady consciousness and the key part about guiding in the management about dm. This study expects with distinguish the levels about knowledge, disposition & act and nature of life from claiming diabetic patients going by a tertiary consideration doctor's facility. The effects were used to create a guiding system also should survey if tolerant guiding might transform at whatever change for diabetes consciousness What's more polishes.

Target

Those target might have been should ponder the tolerant demographic points What's more assess those patient's Knowledge, disposition & act What's more personal satisfaction of existence "around select diabetic Patients.

MATERIALS AND METHODS

Study site

The learning is directed at the Department of General Medicine at both male and female General ward and with out-patients in Govt. Headquarters Hospital, Krishnagiri. The learning is accepted by Institutional Human Ethics Committee (IHEC).

Study population

Inpatient and outpatient with Diabetes, visiting Govt. Head Quarters Hospital, Krishnagiri were considered for this study. A batch of 107 patients were screened and obtained their consent in native Tamil language for studies. Based on the inclusion and exclusion criteria 84 patients were selected and were assessed out of which only 52 patients visited the hospital for follow up for the next month.

Study period

The learning is directed for a phase of 6 months from February 2018 to July 2018.

Data source

1. Patient data collection form
2. Knowledge, Attitude and Practice questionnaire
3. Quality of Life questionnaire

Inclusion criteria

1. Both male and female diabetic patients
2. Both Type I and Type II Diabetic Patients (IP & OP).

Exclusion criteria

1. Paediatric patients
2. Pregnant women
3. Patients under the age of 18
4. Patients with uncontrolled complications

Study tools

Knowledge of the patients is measured by utilizing patient Knowledge, Attitude and Practice Questionnaire and Patient's Quality of Life were assessed using SF - 36 Questionnaire. Patients were educated and counselled orally and by using Patient Information Leaflet.

Numerical study

All Composed data is investigated utilizing IBM SPSS Version 25.0. The results are expressed in percentage and mean. The Statistical significance was taken at 95% assurance break ($p < 0.05$).

RESULTS

A entire of 52 affected role is comprised in this learning. As per the results, maximum subjects (38.52%) were in the age group 50-59 years, similar results were obtained from a study at Nepal by Maheshwari (2016) and Adam *et al.* (2003), followed up by 60-69 years (26.9%). Among them 22 patients (42.3%) were male and 30 patients (57.7%) were female. Most of the patients had primary level education (46.2%).

BMI wise, it was also observed that most of the patients (36.5%) were overweight and (32.7%) of them were normal weight followed by a (26.9%) of the patients being Obese. Social status wise 12 patients had the habit of smoking and 14 patients had the habit of alcohol consumption.

Table 1: Socio demographic details of Patients

Patient Characteristics	No. of patients	Percentage
Sex		
Male	22	42.3%
Female	30	57.7%
Age (years)		
<30	3	5.8%
30-39	4	7.7%
40-49	5	9.6%
50-59	20	38.52%
60-69	14	26.9%
>70	6	11.5%
Education level		
Illiterate	4	7.7%
Primary schooling	24	46.2%
Secondary schooling	16	30.8%
Any Degree	8	15.4%
DM history in family		
Present	24	46.2%
Absent	28	53.8%
BMI		
Normal	17	32.7%
Overweight	19	36.5%
Obese	14	26.95
SeverelyObese	2	3.8%
Smoking status		
Yes	12	23.1%
No	40	76.9%
Alcohol consumption		
Yes	14	26.9%
No	38	73.1%

Table 2: Mean scores obtained during baseline review and follow up

K.A.P.	Mean	P-value
Knowledge		
Baseline Review	23.65	0.001
Final Review	24.75	
Attitude & Practice		
Baseline Review	8.71	0.015
Final Review	9.17	
Total score		
Baseline Review	32.37	0.00026
Final Review	34.12	

Table 3: Mean Quality of life scores obtained before and after counseling

Score	Mean	p-value
QoL before counselling	54.71	0.014
QoL after counselling	56.70	

Out of 52 patients studied, 24 patients had a family history of diabetes which shows that diabetes could have been inherited genetically in them. A total of 53.8% (n=28) patients did not have any family history of diabetes but 46.2% (n=24) had family history of diabetes. The circulation of diabetic patients conferring to the socio demographic features is revealed in Table 1.

Assessing KAP AND QoL

The questionnaire for assessment of KAP's regarding diabetes enclosed in 3 areas: Knowledge, Attitude & Practice. Here was a entire of 25 queries in the KAP (knowledge-18, attitude-4, and practice-3 questions) with some questions having multiple correct answers. Patients were given marks based on the number of correct answers they provide for such questions. The questionnaire was prepared such that there was 35 marks for knowledge and 15 marks for Attitude and Practice with a total of 50 marks in all. This survey is occupied in at a face-to-face conference by participant after obtaining a proper consent from the patients (Shah et al., 2009).

We tried to improve the knowledge of the respondents by providing the counseling regarding lifestyle and medications. Final review was taken a month after, when they arrived at the hospital for refilling their medications. Mean scores obtained by all patients regarding knowledge, Attitude & Practice during baseline review and during follow up are summarized in Table 2.

The means were analyzed with paired samples t-test using IBM SPSS. The results obtained from paired samples t-test using IBM SPSS shows a statistically significant improvement in KAP of the patients ($p < 0.05$).

Similarly, Quality of Life among Diabetes patients were assessed using SF-36 Questionnaire which included 36 Questions covering various aspects like Pain, Social and Psychological factors. Mean scores obtained are summarized in Table 3.

DISCUSSION

Our study evaluated the impact of patient counseling in improving KAP and QoL among diabetes patients. The management of DM requires implementation of nutritional and drug regimen along

with intensive counseling and education of the patient about the disease and lifestyle (George et al., 2017). For patients by chronic diseases like Diabetes, home is the major site of illness management where they spend the most amount of time. And so, there is a need for the patients to have knowledge about their illness in order to manage it properly (Lewis et al., 1997).

Diabetes Mellitus has damaging influence on the patient's quality of life. Owing to lack of awareness and proper Glycaemic control, Diabetic Patients produce other complications quickly. There are many evidences to suggest that patient teaching is the greatest operative way to reduce the problems of diabetes (Raisch, 1993). Proper knowledge about diabetes is the key for choices about diet, exercise, weight control, blood glucose monitoring, and alcohol consumption, use of medications, foot and eye care, and prevention of microvascular complications (Gourley, 2000).

In our study, the responses to the practice questions indicates that the participants were unaware of the need for regular health check-ups, which may otherwise lead to further complications and increase the economic burden to the patients. In case of chronic diseases like diabetes, drug therapy solely cannot produce definite cure. Thus, controlling the symptoms and reducing the pace of further progression of the disease and improvement in the function becomes important in the management of Diabetes (Bollu et al., 2015). The pharmacist is monitor and keep track of patients' blood glucose levels.

While contacting the pharmacist, patients can clear their queries that they might have been hesitating to ask their physicians. In general, it is responsibility of the pharmacist to help patients to keep up with their disease (Dipiro et al., 2011). It is important to allot an suitable amount for period to the patients should accomplish progressed tolerant guiding. The measure for duration of the time went through with those tolerant relies once numerous parts for example, such that patient's interest, patient's schedule, number for medications needed, those reality of the restorative condition, and the pharmacist's fill in calendar.

Absence of chance furthermore dialect goes about as major obstructions will give guiding. Pharmacists'

inclusion in tolerant consideration need.

Brought about brought down amount about clinic admissions and more crisis division visits, and in addition enhanced wellbeing status about patients. As confirm from our results, the KAP score and the QoL of the patients moved forward fundamentally ($P < 0.05$) after tolerant guiding by those pharmacist, for huge change On the whole parameters of the analysis, viz. , knowledge, state of mind & practice and quality life.

CONCLUSION

The study concluded that the better information and attitude obviously indicates the assistances of pharmacist-given Patient counseling. The pharmacist is in a extremely noticeable and accessible Position will address tolerant worries and queries around their drugs, malady and lifestyle. It may be essential to clinical pharmacists to give appropriate, justifiable and right majority of the data and replies to patients regarding their pills and lifestyle transforms. Tolerant guiding by the clinical drug specialist assumes a paramount part clinched alongside incorporating instruction of the diabetic patients. We reason that drug specialist given tolerant guiding is An of service apparatus for choice making clinched alongside arranging Also observing sickness and is a part of management of Diabetes.

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Conflict of Interest

The authors declare that there is no conflict of interest among the authors and research.

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