

Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)



Article DOI:10.21474/IJAR01/7951 **DOI URL:** http://dx.doi.org/10.21474/IJAR01/7951

RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE AND PRACTICE OF TYPE 2 DIABETIC PATIENTS – A CROSS-SECTIONAL STUDY.

Abroo Bashir.

Manuscript Info

Manuscript History
Received: 17 August 2018
Final Accepted: 19 September 2018
Published: October 2018

Abstract

Background: Diabetes is highly prevalent globally as well as in India. It is a leading cause of morbidity and mortality. Increasing awareness about prevention of Diabetes and its complications is of key importance. Knowledge, attitude and practices regarding diabetes reduce complications and decrease the mortality and morbidity rate.

Objective: To assess knowledge, attitude and practices of patients with Diabetes?

Material and Methods: A cross-sectional study was conducted on 168 diagnosed cases of Type 2 Diabetes Mellitus attending OPD of Sub District Hospital Hazratbal which is the field practice area of Community Medicine Department of GMC Srinagar from December 2017 to March 2018. Patients were given a predesigned prevalidated pretested structured questionnaire.

Results: 45% of the subjects know what diabetes is but only 10% knows what causes diabetes. The subjects had poor knowledge regarding features of diabetes, drug therapy. 62% subjects believe that exercise and diet modification both should be done to control Diabetes but Misconceptions about the diet is prevailing like 78% of the subjects still believes that bitter substances can cure diabetes. 50% of the subjects believe that insulin should be avoided and majority (90%) believes that it is habit forming. The overall attitude and practice towards diabetes was low. Only 36% of the population still believes that doctor is responsible for their diabetic care. Only 26% of the populations were checking their sugar regularly and only 15% of the population had glucometer at their home. 40% of the populations were taking herbal medicine.

Conclusion: Although KAP regarding Diabetes among Diabetic Patients Is low but majority of patients in our study have misconceptions about causation and treatment of the Disease like sweet foods causing Diabetes (95%) and Insulin as habit forming drug (95%).

Copy Right, IJAR, 2018,. All rights reserved.

Introduction:-

Currently, in the world 387 million people are living with Diabetes Mellitus and by 2035, this figure is going to touch 592 million¹. A United Nations resolution in 2007 confirmed diabetes mellitus as a significant global public health issue ². 80% of people with Type 2 Diabetes mellitus live in middle and low income countries and almost half of them are undiagnosed ³. Diabetes mellitus prevalence is increasing globally ⁴ more so in developing countries like

India (9.1%) ^{3,5,6}. Prevalence of DM in Kashmir was found to be 6.5% and is showing a rising trend in Kashmir valley as per study by ⁷

As one of the major social determinant in the progression of Diabetes is poor health literacy ^{8,9,10}. Awareness among diabetic patients can prevent chronic co morbidities of the disease, which will impact significantly on the quality of life of such patients. Awareness of diabetes can help people to assess their risk, to seek proper care and treatment and inspire them to take charge of their disease for their lifetime ⁷

Knowledge, Attitude and Practice studies have generated enough evidence regarding the need to create awareness among diabetics regarding prevention, control of risk factors and disease management^{11,12,13}. Further Diabetes is showing a rising trend in Kashmir valley⁷Thus we conducted a KAP study regarding Diabetes.

Material & Methods:-

A cross-sectional study was conducted on 168 diagnosed cases of Type 2 Diabetes Mellitus attending OPD of Sub District Hospital Hazratbal which is the field practice area of Community Medicine Department of GMC Srinagar from December 2017 to March 2018. Patients were given a predesigned prevalidated pretested structured questionnaire ^{14,15} in order to assess knowledge, attitude and practice of such patients towards the disease. Those who were not physically or mentally fit were excluded.

Results:-

Table no.1:-Age wise distribution of patients (n=168)

Age	No. of patients (%)	
30-39	7(4.1)	
40-49	29(17.3)	
50-59	78(46.4)	
60-69	43(25.6)	
70-79	9(5.4)	•
>80	2(1.2)	•

Tableno.2:-Gender wise Distribution of patients

Gender	n=168
Male	54%
Female	46%

Table no.3:-Assessment regarding Diabetes and its features (N=168)

Questions to assess Knowledge	Percentage (n=178)	
_	Yes response (%)	
What is diabetes?	45	
What causes diabetes?	15	
	95	
Sugar containing foods	5	
Insulin as a cause		
Can diabetes be cured?	30	
How can diabetes be detected?		
Features of Diabetes		
Polyuria	32	
Polyphagia	30	
Weight Loss	5	
Numbness in feets	3	
Can be asymptomatic	15	
Excessive Thirst	31	
Don't know	28	
Is diabetes hereditary?	30	
Is diabetes infectious?	10	

Regarding Knowledge of Diabetes Mellitus, 45% of the subjects know what diabetes is but only 15% knows what causes diabetes. Majority of Patients (95%) believes that sugar containing foods cause Diabetes. Further, the subjects had poor knowledge regarding the features of diabetes.

Table no.4: Assessment regarding Knowledge of exercise and diet among diabetics (N=168)

Knowledge of drug therapy	Percentage
Once DM is control drug should be stopped?	
	42
Drug is more important than diet control?	40
Herbal drugs are better?	20
Insulin Should be avoided?	50
Insulin is habit forming	92

Regarding Knowledge of exercise and diet, 62% subjects believe that exercise and diet modification both should be done to control Diabetes but Misconceptions about the diet is prevailing like 78% of the subjects still believes that bitter substances can cure diabetes.

Table no. 5:-Knowledge regarding drug therapy (N=168)

Knowledge of exercise and diet	Percentage
What should be done to control DM?	
Exercise	42
Diet Modification	70
Both	62
Exercise should be done only by obese?	19
Bitter substances can cure diabetes?	78

Regarding knowledge of drug therapy, the subjects had poor knowledge about drug therapy. 50% of the population believes that insulin should be avoided and majority (92%) believes that it is habit forming.

Table 6:-Assessment regarding Attitude and practice towards diabetes

Respondent attitude and practice	Percentage
Who is responsible for your diabetic care?	
Yourself	68
	36
Doctor	12
Family	
Do you include fruits?	88
Do you include GLV's in your diet?	80
Do you have glucometer?	15
Do you check your sugar regularly?	16
Do you check your foot regularly?	24
Do you take herbal drugs?	40

The overall attitude and practice towards diabetes was low. Only 36% of the population still believes that doctor is responsible for their diabetic care. Only 26% of the populations were checking their sugar regularly and only 15% of the population had glucometer at their home. 40% of the populations were taking herbal medicine. While majority of patients were taking fruits (88%) and GLV (80) in their diet.

Discussion:-

Knowledge regarding Diabetes and its features among diabetic patients in our study was not good. The results are similar with previous studies which have also reported poor knowledge ^{16,17,15} Low levels of knowledge were also reported in a Western Nepal study¹⁸. Also, Bangladesh study¹⁹ reported poor knowledge of DM in rural areas even in patients suffering from type 2 DM. Islam FMA *et al* ¹⁹ and Thabit MF ²⁰ also found limited levels of knowledge of diabetes management, its risk factors and complications. In contrast, Ng SH *et al*²¹, Saleh F *et al*²² and Saadia Z *et al*²³ found good knowledge of Diabetes among diabetic patients in their studies. Saleh F *et al*²² found that 82% of diabetic patients had basic knowledge of diabetes in an urban area. In our study majority of patients had misconceptions about causation of Disease like sugar containing foods causing diabetes. A study by **Shah VN et al**¹⁵ also found that only 17% of subjects know about causation of Diabetes.

Regarding attitude and practices, the overall attitude and practices in our study were poor. This is similar to study by Saadia Z et al ²³ who reported lower than desirable levels of attitude and practices. In contrast, Ng SH et al ²¹ reported good attitude and practices among respondents.

The management of DM not only requires appropriate nutritional and pharmacological regimen prescriptions by the physician but also intensive counselling and education of the patient 15

Conclusion:-

Although KAP regarding Diabetes among Diabetic Patients Is low but majority of patients in our study have misconceptions about causation and treatment of the Disease like sweet foods causing Diabetes (95%) and Insulin as habit forming drug (95%).

Bibliograpy:-

- 1. IDF (2013) International Diabetes Atlas Sixth edition. Available at: http://www.idf.org/atlasmap/atlasmap.
- 2. Wild S, Roglic G, Green A, Sicree R, King H. Global prevalence of diabetes estimates for the year 2000 and projections for 2030. Diabetes Care. 2004; 27(5):1047–53.
- 3. Tajali N Shora, Davinder S J, Rajiv K Gupta. Prevalence of diabetes mellitus and co-morbid conditions among people aged 30 years and above in a rural area of Jammu. J of Scientific Innovative Res, 2014; 3 (1): 11-157.
- 4. Kuller LH. Dietary fat and chronic diseases: epidemiologic overview. J Am Diet Assoc 97: S9-S15.
- 5. Grol ME, Halabi YT, Gerstenbluth I, Alberts JF, O'Niel J (1997) Lifestyle in Curação. Smoking, alcohol consumption, eating habits and exercise. *West Indian Med J* 46: 8-14.
- 6. Ramachandran A, Snehalatha C, Baskar AD, Mary S, Kumar CK, et al. Temporal changes in prevalence of diabetes and impaired glucose tolerance associated with lifestyle transition occurring in the rural population in India. *Diabetologia* 47: 860-865.
- 7. Ahmad J, Muneer Ahmad Masoodi, Mohd Ashraf, Rauf Rashid, Rafiq Ahmad, Ashfaq Ahmad, and Sheikh Dawood. Prevalence of Diabetes Mellitus and Its Associated Risk Factors in Age Group of 20 Years and Above in Kashmir, India. Al Ameen J Med Sci. 2011;4 (1):38-44
- 8. Demaio AR, Otgontuya D, de Courten M, Bygbjerg IC, Enkhtuya P, Oyunbileg J, Meyrowitsch DW. Exploring knowledge, attitudes and practices related to diabetes in Mongolia: a national population-based survey. BMC Public Health 2013 18;13:236. doi: 10.1186/1471-2458-13-236.
- 9. Rani PK, Raman R, Subramani S, Perumal G, Kumaramanickavel G, Sharma T. Knowledge of diabetes and diabetic retinopathy among rural populations in India, and the influence of knowledge of diabetic retinopathy on attitude and practice. Rural Remote Health 2008;8(3):838.
- 10. Zaman MJ, Patel A, Jan S, Hillis GS, Raju PK, Neal B, Chow CK. Socio-economic distribution of cardiovascular risk factors and knowledge in rural India. Int J Epidemiol. 2012;41(5):1302-14. doi: 10.1093/ije/dyr226.
- 11. Norris SL, Engelgau MM, Narayan KM. Effectiveness of self-management training in type 2 diabetes: a systematic review of randomized controlled trials. Diabetes Care 2001;24(3):561-87.

- 12. Al-Maskari F, El-Sadig M, Al-Kaabi JM, Afandi B, Nagelkerke N, Yeatts KB. Knowledge, attitude and practices of diabetic patients in the United Arab Emirates PLoS One 2013;8(1):e52857. doi: 10.1371/journal.pone.0052857
- 13. Mazzuca SA, Moorman NH, Wheeler ML, Norton JA, Fineberg NS, Vinicor F, Cohen SJ, Clark CM Jr. The diabetes education study: a controlled trial of the effects of diabetes patient education. Diabetes Care 1986;9(1):1-10.
- 14. Kant R and Thapliyal V. Knowledge attitude and practice of type 2 diabetic patients in a tertiary care teaching hospital in India. *Integr Food Nutr Metab* 2015;2(1): 131-135
- 15. Viral N Shah, Kamdar PK, Nishit Shah. Assessing the knowledge, attitudes and practice of type 2 diabetes among patients of Saurashtra region, Gujarat. *Int J Diabetes Dev Ctries* 2009; 29: 118-122.
- 16. Al-Maskari F, El-Sadig M, Al-Kaabi JM, Afandi B, Nagelkerke N, Yeatts KB. Knowledge, attitude and practices of diabetic patients in the United Arab Emirates PLoS One. 2013;8(1):e52857. doi: 10.1371/journal.pone.0052857.
- 17. Kamel NM, Badawy YA, el-Zeiny NA, Merdan IA. Sociodemographic determinants of management behaviour of diabetic patients. Part I. Behaviour of patients in relation to management of their disease. East Mediterr Health J. 1999;5(5):967-73. Erratum in: East Mediterr Health J 1999 Nov;5(6):1242.
- 18. Upadhyay DK, Palaian S, Shankar PR, Mishra P. Knowledge, Attitude and Practice among Diabetes Patients in Western Nepal. Rawal Med J 2008;33:8-11.
- 19. Islam FM, Chakrabarti R, Dirani M, Islam MT, Ormsby G, Wahab M, Critchley C, Finger RP. Knowledge, attitudes and practice of diabetes in rural Bangladesh: the Bangladesh Population based Diabetes and Eye Study (BPDES). PLoS One 2014 Oct 14;9(10):e110368. doi:10.1371/journal.pone.0110368.
- 20. Thabit MF. Awareness regarding Diabetes Mellitus and Its Complications in Type 2 Diabetic Patients. KCMJ 2013; 9(2):25-28
- 21. Ng SH, Chan KH, Lian ZY, Chuah YH, Waseem AN, Kadirvelu A. Reality vs Illusion: Knowledge, Attitude and Practice among Diabetic Patients. Int J Collab Res & Pub Health 2012; 4(5): 723-732.
- 22. Saleh F, Mumu SJ, Ara F, Begum HA, Ali L. Knowledge and self-care practices regarding diabetes among newly diagnosed type 2 diabetics in Bangladesh: a cross-sectional study. BMC Public Health. 2012 Dec 26;12:1112. doi: 10.1186/1471-2458-12-1112.
- 23. Saadia Z, Rushdis S, Alshela M, H Saeed, M Rajab. A study of knowledge, attitude and practices of Saudi women towards diabetes mellitus: A KAP study in Al-Qassim Region. The Internet Journal of Health 2010:11(2).