

RESPONSE OF PEOPLE WITH TYPE 1 DIABETES FOR FOLLOW UP

Sarfraz Ahmad Khan ^{*1}, Faiza Kamal, Rozina Arshad, Bilal Bin Younis & Rashid Ahmed

Corresponding Author:

Sarfraz Ahmad Khan

Medical unit 2 DHQ Teaching Hospital Sahiwal

Email: dr.sarfrazahmadkhan@gmail.com

Contact number: 03009453186

Abstract

The main objective of the study is to find out attitudes of people with type 1 diabetes especially with regards to their follow up. A cross-sectional study was planned and a total of 97 people with type 1 diabetes were included for the period of one year. To analyze the data SPSS 20.0 version were used. Results showed that out of 97, 48 (49.5%) were male and 49 (50.5%) were female. The mean age of total type 1 diabetics were 17.03 ± 6.54 years. Hemoglobin A1C (HbA1c) mean was 10.59 ± 3.09 . The results of our study revealed that 45% showed positive attitude and 55% showed negative behavior towards follow-up. It was concluded that Overall follow up of people with type 1 diabetes was poor and they want complete cure that contributes to miss follow up.

Introduction

Diabetes is a long standing health problem. According to WHO, diabetes comes at 4th position in non-communicable diseases like heart attack, stroke, cancer, and chronic respiratory disease. It is categorized by hyperglycemia that is increased levels of glucose in blood due to inadequate amount of insulin and insulin resistance (1).

Diabetes is a serious health concern all over the world including Pakistan. According to International Diabetes Federation(IDF) 387 million individuals have diabetes worldwide (2). This is expected to be 592 million in 2035 with the increase of 53% all over the world and 85% increase in Middle East and North Africa (MENA) region.

Type 1 diabetes arises when body cannot produce the insulin it requires and body's own defense system bout back insulin producing beta cells in the pancreas. It generally affected children and young adults. Fortunately it only accounts 3-5% from all the diabetics. For the survival these people with type 1 diabetes are dependent on peripheral sources of insulin(3).

Diabetes is not only a disease it's a developmental concern. If it left untreated it possess short term and long term complications. People with type 1 diabetes with diabetes require a wide range of health care professionals to achieve good blood glucose control and to minimize the cost and related end stage complications (4).

Material and Methods

A cross-sectional study was planned to assess the attitudes of people with type I diabetes towards follow up. The study was conducted from December 2016- December 2017. Only People with type 1 diabetes were included. Type II DM, GDM & Pregnant ladies with type 1 diabetes were excluded. A total 98 type 1DM were contacted, it was noted that one patient who was lost in follow up died during this period. Data of 97 patients was recorded. The data was analysed using SPSS 20.0 version (Statistical Package for the Social Sciences).

Results

Table 1: Basic clinical characteristic

Parameter	Percentages
Age (years)	16.03 ±6.54
Gender	
Male	48(49.5%)
Female	49(50.5%)
HbA1c (%)	11.59±3.09
Socioeconomic class	
General	59(60.85)
Private	38(39.2%)
Frequencies of pricks	
2	51(49.47%)
3	39(37.8%)
More than 4	7 (6.79%)

Data are represented as n (%) and M±SD, where applicable.

Table 1 shows that out of 97, there was almost equal distribution amongst the gender. The mean age of total type 1 diabetics were 16.03±6.54 years. Hemoglobin A1C (HbA1c) mean was 11.59±3.09. Sixty one percent 60.8% of the people with type I diabetes belongs to low socioeconomic status and falls in general group. Number of pricks data revealed that 49% people pricked twice a day and 37.8% pricked thrice whereas more than 4 pricked were noticed in only 6.79%.

FIG: 1 RESPONSE OF TYPE I PEOPLE TOWARDS FOLLOW UP

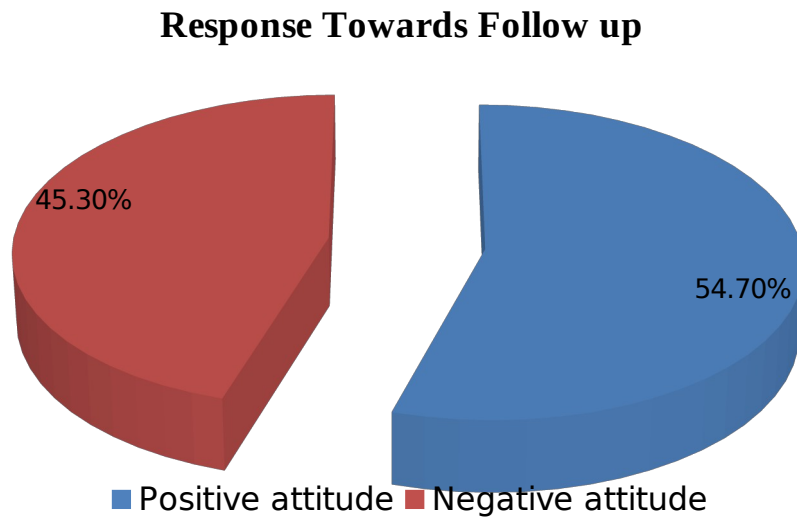


Figure 1 shows the response of type 1 diabetic patients; they were asked to visit the center for an educational group session. The people who showed positive feedback were 45% and 55% showed no or little interest.

Discussion

According to IDF survey in 8 African countries, one of the major principle hazards in the health belief system is the dependence of people with type 1 diabetes on traditional medicine in treating diseases rather than use of allopathic medicine. Traditional healers and health quacks do not talk about the disease, with the people having type I diabetes, as they are themselves not aware of the complications of the disease. They often mislead the people with type 1 diabetes regarding treatment of the disease (6). In Pakistan, government is offering planned educational programs for homeopathic and “Tibb” (herbal medicine) and offering them license to practice in the country, however the regulatory bodies are not effectively monitoring their activities nor have defined their sphere of responsibilities. One of the reasons to skip follow up in the people

with type I diabetes is that, they want total cure and they hesitate or get frustrated with the use of insulin and rush towards them.

According to a study published in Pakistan at Gomal Journal of Medical Sciences, which was conducted at Nishter Hospital Multan. It was also shown that one of the reasons of non-compliance in the diabetic patient is not keeping up with their follow up visits (7).

In our study it was seen that 45% of type 1 diabetic people showed positive feedback and 55% showed no or little interest towards follow up. A study published in Journal of Community Medicine, results showed the regularity of follow up of diabetics in the clinic, results showed that only 7.9% of the participants never missed any appointment in the last year, although near to half of them missed appointments 49.9% once or twice and 41% more than twice. Half of the respondents (50%) didn't showed up on the day of interview, and out of half of them 42.9% stated inaccessibility of transport, 15.5% said they had forgotten whereas 28.7% ignored as they are taking medicine from other sources (8).

These different type of responses, drawn the importance towards the establishment of some sort of health care system, by which health care facilities should provide to the people with type I diabetes through continuous contact and awareness about regular follow ups for diabetics to prevent the long term complications of diabetes (9).

It is a well proved fact that tighter control of blood glucose level can go a long way in preventing the complications in diabetes (10). In our study the pregnant type I ladies were not included however the follow up in type I female diabetics there is even more importance especially in childbearing age as it is concerned with two lives and a planned pregnancy is always advisable for the better outcome of mother and child. In uncontrolled pregnant mothers

the large forte babies are at more risk at developing future diabetes and to more prenatal complications (11).

Conclusion

It is concluded from our study that only a small number of person showed positive response towards follow up. The A1C levels were significantly poor. It is therefore suggested that in our part of the world we need to put in more efforts regarding the awareness of diabetes as a whole and specially type 1 as these younger individual are future hope of our country and a more prone to be misguided by the people with type 1 diabetes who claims to cure the disease. We also recommend that the government put more rationale legislation regarding the advertisement and the activities of all registered practitioner.

References

1. Colagiuri R, Brown J, Dain K. Global diabetes plan 2011–2021. International Diabetes Federation. Brussels; 2011.
2. International Diabetes Federation. IDF Diabetes Atlas update poster, 6th edn. Brussels, Belgium: International Diabetes Federation, 2014.
3. Loghmani E. Diabetes mellitis: Type 1 and type 2.
4. Gillespie KM. Type 1 diabetes: pathogenesis and prevention. CMAJ : Canadian Medical Association Journal. 2006;175(2):165-70.
5. Nathan DM, Kuenen J, Borg R, Zheng H, Schoenfeld D, Heine RJ. Translating the A1C assay into estimated average glucose values. Diabetes care. 2008;31(8):1473-8.
6. Mbanya JCN, Motala AA, Sobngwi E, Assah FK, Enoru ST. Diabetes in sub-Saharan Africa. The Lancet.375(9733):2254-66.

7. Imtiaz S, Ullah H, Rasool MF, Hashmat F, Saleem M, Khan N. ASSESMENT OF COMPLIANCE OF DIABETIC PEOPLE WITH TYPE 1 DIABETES AT NISHTAR HOSPITAL MULTAN, PAKISTAN. Gomal Journal of Medical Sciences. 2014;12(2).
8. Khan AR, Al-Abdul Lateef ZN, Al Aithan MA, Bu-Khamseen MA, Al Ibrahim I, Khan SA. Factors contributing to non-compliance among diabetics attending primary health centers in the Al Hasa district of Saudi Arabia. Journal of family & community medicine. 2012;19(1):26-32.
9. Shrivastava SR, Shrivastava PS, Ramasamy J. Role of self-care in management of diabetes mellitus. Journal of diabetes and metabolic disorders. 2013;12(1):14.
10. Diabetes Control and Complications Trial (DCCT): results of feasibility study. The DCCT Research Group. Diabetes care. 1987;10(1):1-19.
11. Evers IM, de Valk HW, Visser GH. Risk of complications of pregnancy in women with type 1 diabetes: nationwide prospective study in the Netherlands. BMJ (Clinical research ed). 2004;328(7445):915.