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Insulin Refusal Among Type-2 Diabetics: Healthcare Provider's Perspective

Benazir Shafqat¹, Bakhtawar Abbasi² and Sabeeh Akbar³

¹Ex house officer Bahawal Victoria Hospital Bahawalpur

Email: benazirsh@yahoo.com

²Ex house officer Bahawal Victoria Hospital Bahawalpur

Email: beckya13@hotmail.com

³Ex house officer Bahawal Victoria Hospital Bahawalpur

Email: sabeehakbar@hotmail.com

ABSTRACT

Objective: Aim of this study is to determine frequency of patients with type-2 diabetes mellitus who refuse to take insulin therapy

Design & duration: This is a cross sectional study completed in six months duration.

Setting: Study was conducted in medical out-patient door of Bahawal Victoria Hospital Bahawalpur.

Patients & methods: Patients presenting to out-patient door of medical department having type-2 diabetes taking oral anti diabetics and having poor glycemic control. When these patients were advised to take insulin therapy their response was documented on a performa. Who refused they were asked about its reason and their perspective which was noted down. Consent was taken from all cases in study group. Permission was taken from ethical committee of the institution. Patients of either sex and of any age were included in the study. Confidence level. Confidence interval was 95% with 5% margin of error.

Results: Total 200 cases were studied including 62% female and 38% male patients. When these patients were advised to take insulin therapy, 5.5% agreed while 94.5% refused. Main cause of refusal was fear of injection pain in 41.3% cases and fear of addiction was in 27% cases. Mean age of patients was 40.3±8.5 years.

Conclusion: Majority of type-2 diabetic people on oral antidiabetics have fear to use insulin therapy. Injection site pain or fear of addition are main causes of refusal

Key words: Diabetes mellitus type-2, Insulin, Glycemic control

INTRODUCTION

Prevalence of type-2 diabetes mellitus has been increased much in previous years in Pakistan. According to a study there are 6.6 million diabetic patients between 20-79 years. When glycemic control is poor with oral anti diabetics, insulin therapy is necessary. In most of patients oral medicines are not sufficient to control blood glucose level hence complications develop. According to a study conducted in UK newly diagnosed type-2 diabetic patients were given insulin therapy initially. Increasing incidence of diabetes mellitus and meanwhile increasing refusal

of insulin therapy among people is a big challenge for healthcare providers in Pakistan. Insulin therapy is much effective but its use is usually delayed in our people hence increasing its resistance. A similar study conducted in Malaysia reported psychological insulin resistance due to fear of pain associated with injection and fear of hypoglycemia. Mutual decision of healthcare providers and patient for starting insulin therapy is necessary. Proper counselling of such patients is much required. Healthcare provider can help patient in making decision by giving them awareness about false fears and assuring them of better outcome. Encouragement and awareness to the patient is much required in our community where most of the people are illiterate.

PATIENTS AND METHODS

This is a cross sectional study conducted in a tertiary care hospital Bahawal Victoria Hospital Bahawalpur. Study was initiated in January and completed after six months in June 2020. Patients presenting to out-patient door of medical department having type-2 diabetes taking oral anti diabetics and having poor glycemic control. When these patients were advised to take insulin therapy their response was documented on a performa. Who refused they were asked about its reason and their perspective which was noted down. Consent was taken from all cases in study group. Permission was taken from ethical committee of the institution. Patients of either sex and of any age were included in the study. Confidence level. Confidence interval was 95% with 5% margin of error. Inclusion and exclusion criteria were followed for sample selection. Non probability consecutive sampling technique was used.

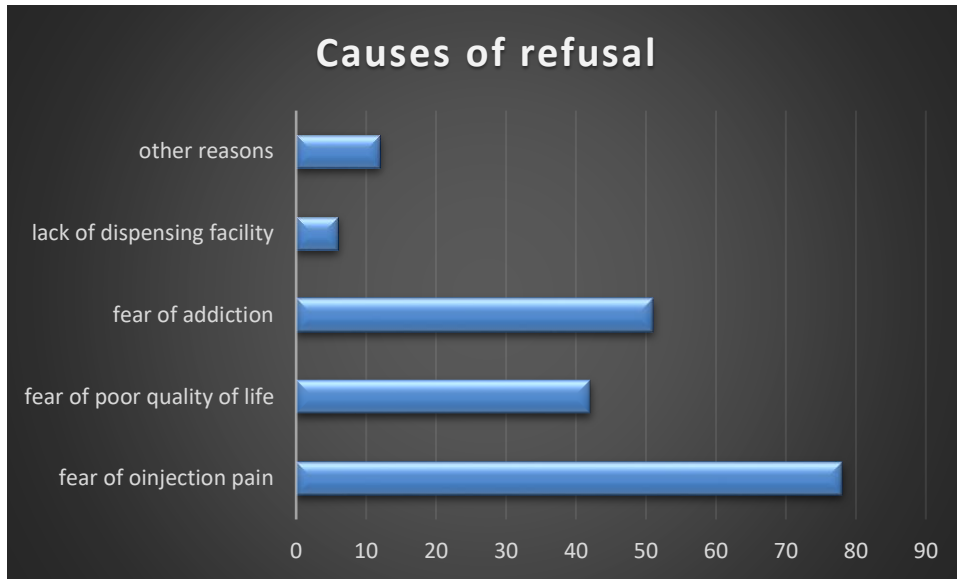
RESULTS

Total 200 cases were studied including 124(62%) female and 76(38%) male patients. When these patients were advised to take insulin therapy, 11(5.5%) agreed while 189(94.5%) refused. Main cause of refusal was fear of injection pain in 78(41.3%) cases and fear of addiction was in 51(27%) cases. Mean age of patients was 40.3±8.5



years. There were 42(22.2%) patients having fear of poor quality of life due to insulin therapy, 6(3.2%) patients were having excuse of lack of

dispensing facility and 12(6.4%) people were having reasons of refusal other than mentioned above.



(Figure-1) Causes of refusal from insulin therapy

(Table-1) Age distribution of cases in study group

| Age of patients (years) | N | % |
|-------------------------|-----|------|
| 20-30 | 11 | 5.5 |
| 31-40 | 25 | 12.5 |
| 41-50 | 19 | 9.5 |
| 51-60 | 103 | 51.5 |
| >60 | 42 | 21 |

DISCUSSION

Diabetes mellitus is a very common disease having high prevalence rate all over the world. It is much expensive disease having burden of cost on patients and healthcare system of any country. Its incidence is increasing with the passage of time. In this aspect healthcare system invest on prevention, diagnosis and management of disease, professional training, monitoring of services and pharmaceutical care. Healthcare providers noticed that when doctors advise diabetic patients to take insulin therapy due to their poor glycemic control, majority of patients refuse to take it due to poor awareness of its benefits. Prevalence of type-2 diabetes mellitus has been increased much in previous years in Pakistan. According to a study there are 6.6 million diabetic patients between 20-79 years. When glycemic control is poor with oral anti diabetics, insulin therapy is necessary. In most

of patients oral medicines are not sufficient to control blood glucose level hence complications develop. Total 200 cases were studied including 124(62%) female and 76(38%) male patients. When these patients were advised to take insulin therapy, 11(5.5%) agreed while 189(94.5%) refused. Main cause of refusal was fear of injection pain in 78(41.3%) cases and fear of addiction was in 51(27%) cases. According to a study conducted in UK newly diagnosed type-2 diabetic patients were given insulin therapy initially. This is a cross sectional study conducted in a tertiary care hospital Bahawal Victoria Hospital Bahawalpur. Study was initiated in January and completed after six months in June 2020. Patients presenting to out-patient door of medical department having type-2 diabetes taking oral anti diabetics and having poor glycemic control. When these patients were advised to take insulin therapy their response was documented on a performa. Who refused they were asked about its reason and their perspective which was noted down. Increasing incidence of diabetes mellitus and meanwhile increasing refusal of insulin therapy among people is a big challenge for healthcare providers in Pakistan. Insulin therapy is much effective but its use is usually delayed in our people hence increasing its resistance. Insulin needs to be stored in a refrigerator with proper temperature, but most of our people don't have this facility due to lack of refrigerator or mostly due to lack of electricity or frequent power failure.





CONCLUSION

Psychological insulin resistance by our community is a major challenge for our healthcare providers. Most of our diabetic patients come from rural areas and hence have very low awareness about their

disease and treatment. Most of them are illiterate. Majority of type-2 diabetic people on oral antidiabetics have fear to use insulin therapy. Injection site pain or fear of addition are main causes of refusal.

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