

# Identifying Barriers to Insulin Acceptance among patients with Type 2 Diabetes at a Tertiary Centre in the South-South Region of Nigeria

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## Background

Early insulinization improves glycemic control and helps to minimize or delay complications in persons living with type 2 Diabetes. However, many patients refuse insulin therapy even when it is indicated due to their beliefs or perspectives about Insulin.

## Aim

The aim of the study was to identify the perspectives and barriers to Insulin therapy among patients with type 2 Diabetes at the Federal Medical Centre Yenagoa, Bayelsa State.

## Methods

This was a cross-sectional study in which a semi structured interview protocol was administered to 105 consecutive Insulin-naïve patients attending the Medical Outpatient clinics of the Federal Medical Centre Yenagoa. Their knowledge about Insulin, and concerns about initiating therapy were explored in depth.

## Results

- 56% of the patients were male and the mean age was 53 + 5.9 years. 27% of the participants had a tertiary level of education and the level of education positively correlated with the degree of Insulin acceptance.
- While 71.4% of the patients interviewed had some prior knowledge about Insulin therapy, concerns and beliefs about Insulin influenced its acceptance.
- 43.7% of all participants felt that Insulin should only be used as a last resort while 15.4% were worried about stigmatization. There were also concerns that once Insulin was started, it would be for life, and this had a negative impact on its acceptance.
- In spite of their concerns, 21 patients were willing to use Insulin but after receiving some education about Insulin and its benefits during the study, a total of 66 patients (62.9%) were willing to consider Insulin therapy in the future while 39 patients were not willing to consider using Insulin under any circumstances.

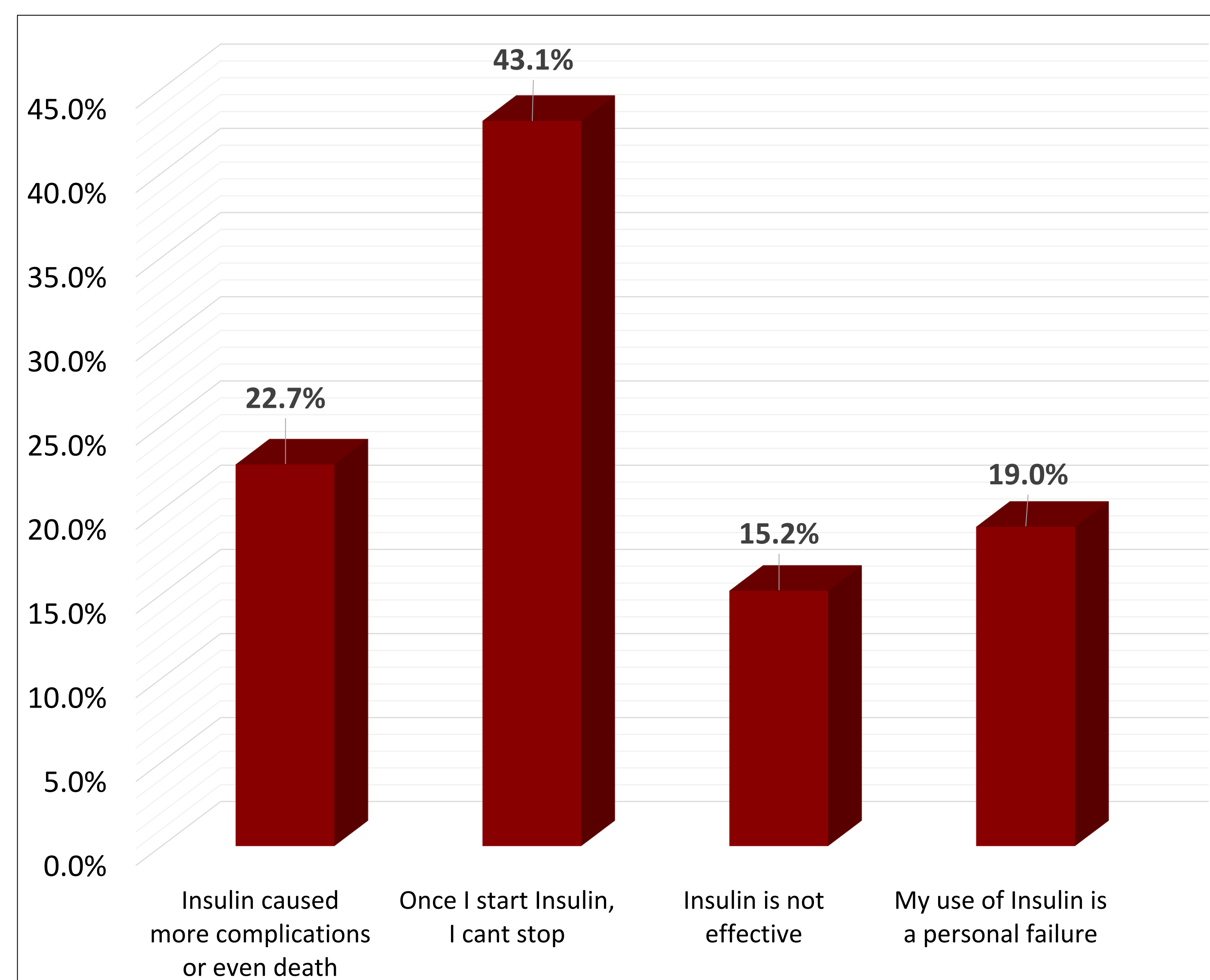


Figure 1: Concerns about Insulin therapy among study participants

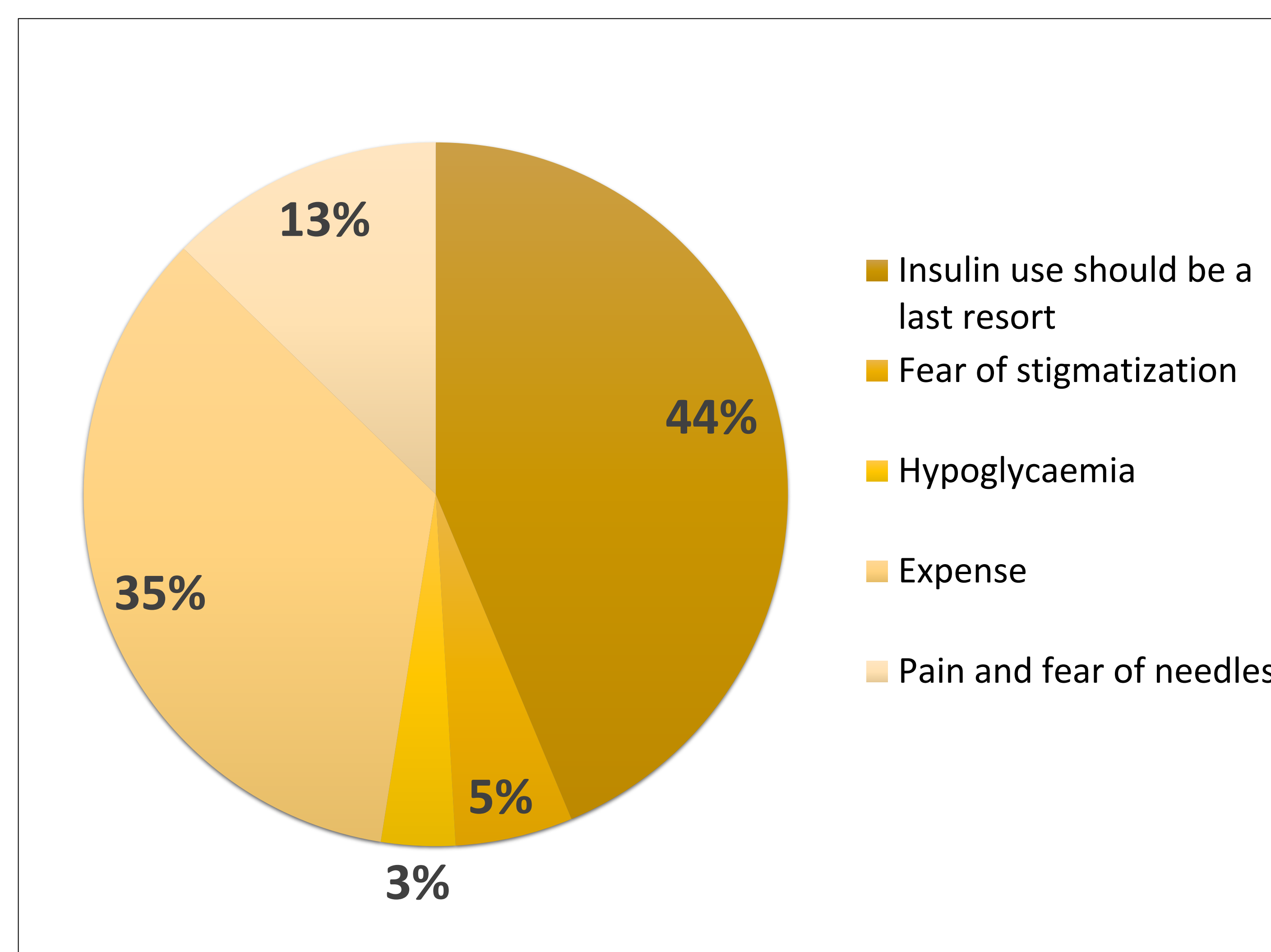


Figure 2: Misconceptions about the use of Insulin among Study participants

Table 1: Sociodemographic characteristics of Study Participants

Age	Frequency (N = 105)	Percentage
< 25 years	2	1.9%
25 - 34 years	4	3.8%
35 - 44 years	6	5.8%
45 - 54 years	37	35.2%
55 - 64 years	44	41.9%
≥ 65 years	12	11.4%
Gender	Frequency (N = 105)	Percentage
Male	59	56.70%
Female	46	48.30%
Marital Status	Frequency (N = 105)	Percentage
Married	69	65.70%
Single	28	26.70%
Widowed	8	7.60%
Educational Level	Frequency (N = 105)	Percentage
No Formal Education	8	7.6%
Primary Education	11	10.5%
Secondary Education	58	55.3%
Tertiary Education	28	16.6%

## Conclusion

There is a high rate of refusal of Insulin therapy among patients with type 2 Diabetes. Some of the barriers to Insulin acceptance include the cost of medication, fear of injections and patient misconceptions.

It is important that patient concerns are addressed through effective strategies including improving patient-health care provider communication so as to increase the rate of Insulin acceptance among patients with type 2 Diabetes.

## References

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2. Tan AM, Muthusamy L, Ng CC, Phoon KY, Ow JH, Tan NC. Initiation of insulin for type 2 diabetes mellitus patients: what are the issues? A qualitative study. *Singapore Med J.* 2011;52(11):801–809