

BACKGROUND

- Insulin pen administration technique is crucial for patients to safely and accurately administer their dose of insulin
- From discussions with pharmacists, mentors, and my personal experience, there is a lot of misinformation and a lack of understanding of insulin pen administration/use
- There is a lack of literature on insulin administration technique, specifically from a patient's perspective and regarding insulin pens

OBJECTIVES

- To evaluate insulin pen administration technique by patients via a phone-based survey (specifically if the patient uses alcohol swabs, if they prime the pen needle, and if they reuse pen needles)
- Based on the findings, create a handout specific for the issues identified to be given out with new prescriptions for insulin pens or to any patients who have questions regarding them

METHODS

Study Design

- Observational cross-sectional study that used a qualitative survey to collect information

Study Sample

- Inclusion criteria:** The study included patients who were prescribed an insulin pen in the previous 4 months, currently used the insulin pen, and consented to participate in the survey

Survey

- 8-question survey was conducted which contained survey items that were specifically created for this research
- The survey collected information regarding administration technique such as pen needle reuse, alcohol swabbing, and priming. It also included questions about patient age, history of pen needle use, and the source of information regarding insulin pen use

Statistical Analysis

- Descriptive statistics using percentages were used to describe the sample population. All the statistical information was gathered from algorithms built into Microsoft Excel

RESULTS

Table 1. Demographic Information

Characteristic	Overall N = 23 N (%)
Age	
<50	2 (9%)
50-59	6 (26%)
60-69	3 (13%)
70-79	7 (30%)
80-89	5 (22%)
>90	0
History of Use	
<1	2 (9%)
1-<2	3 (13%)
2-5	6 (26%)
>5	12 (52%)

Figure 1. Administration Technique

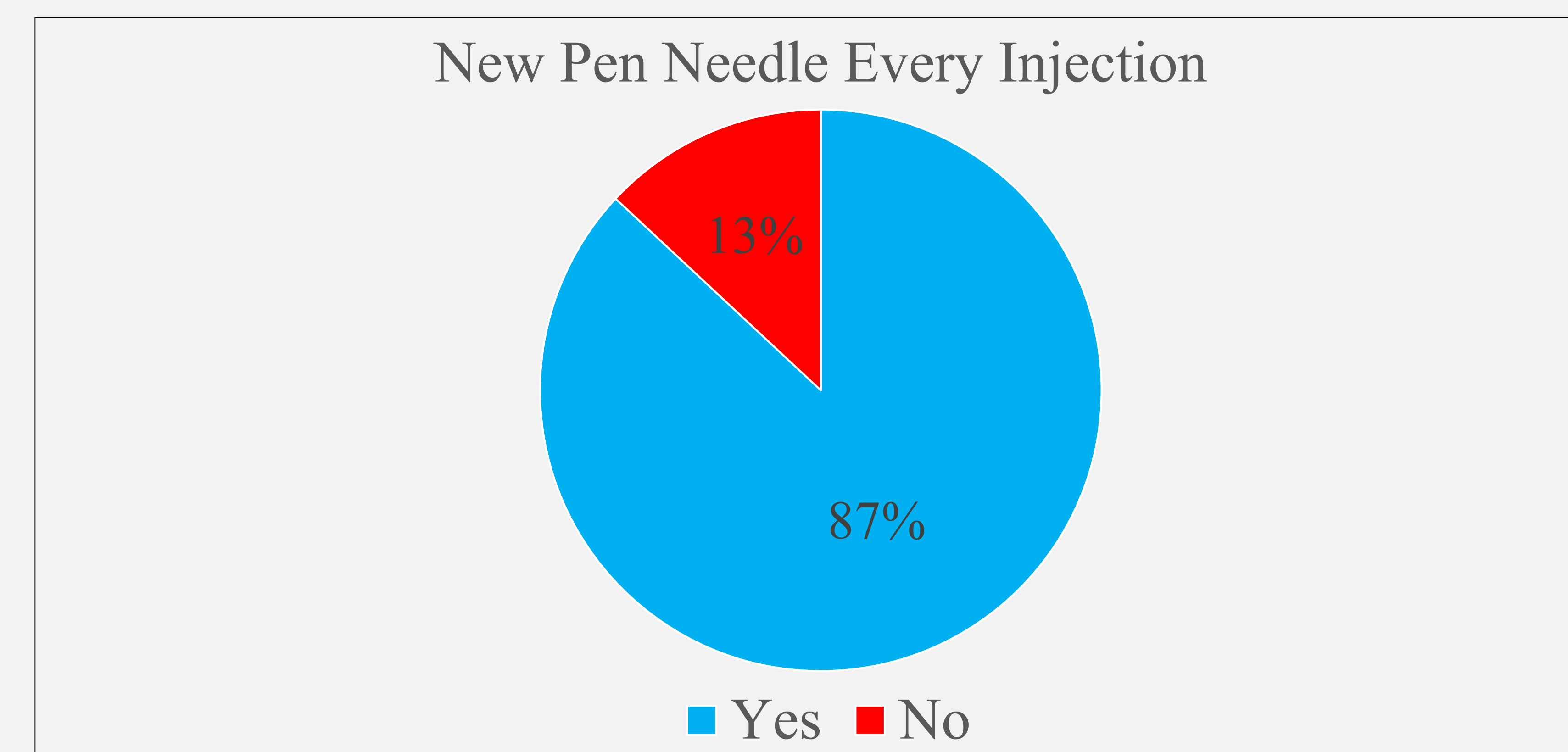
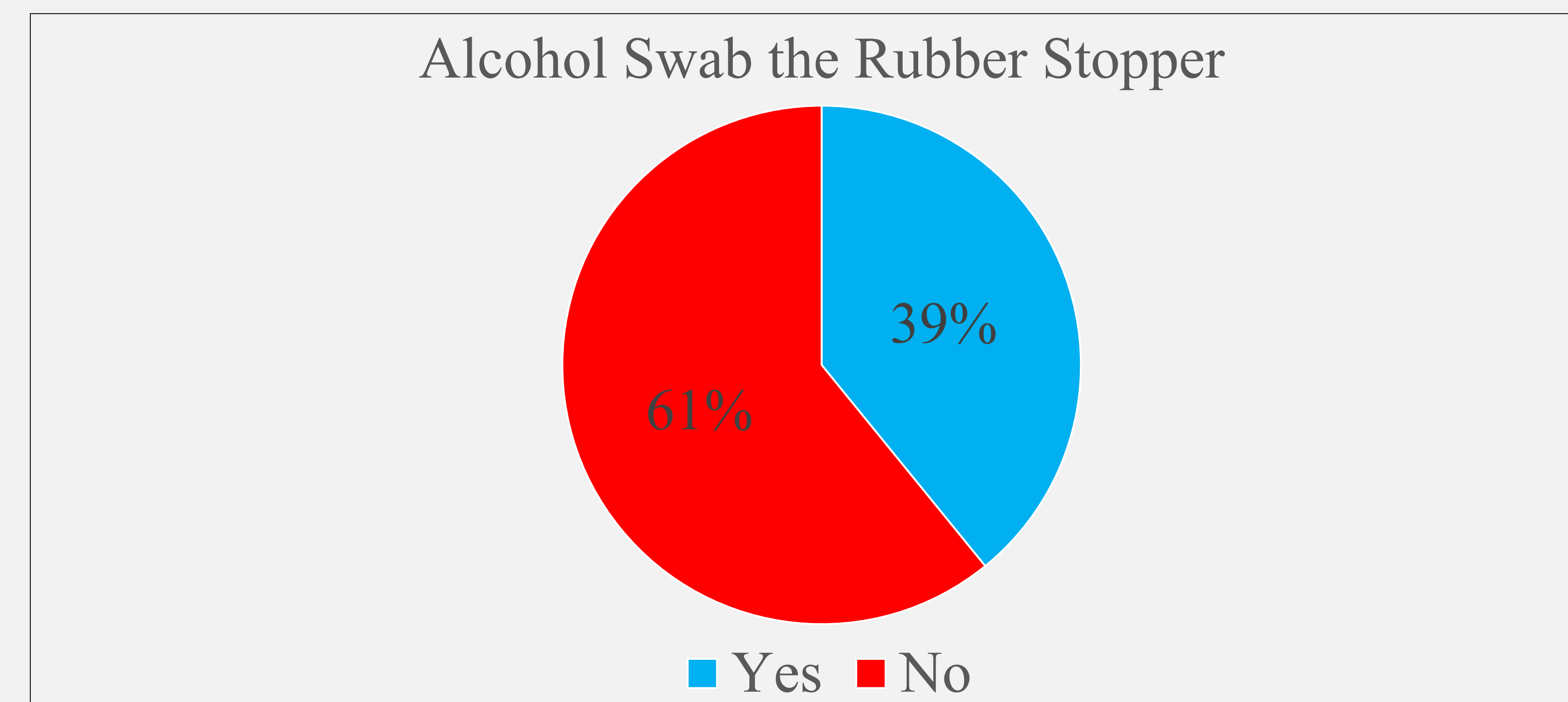


Figure 2. Administration Technique



RESULTS

Figure 3. Administration Technique

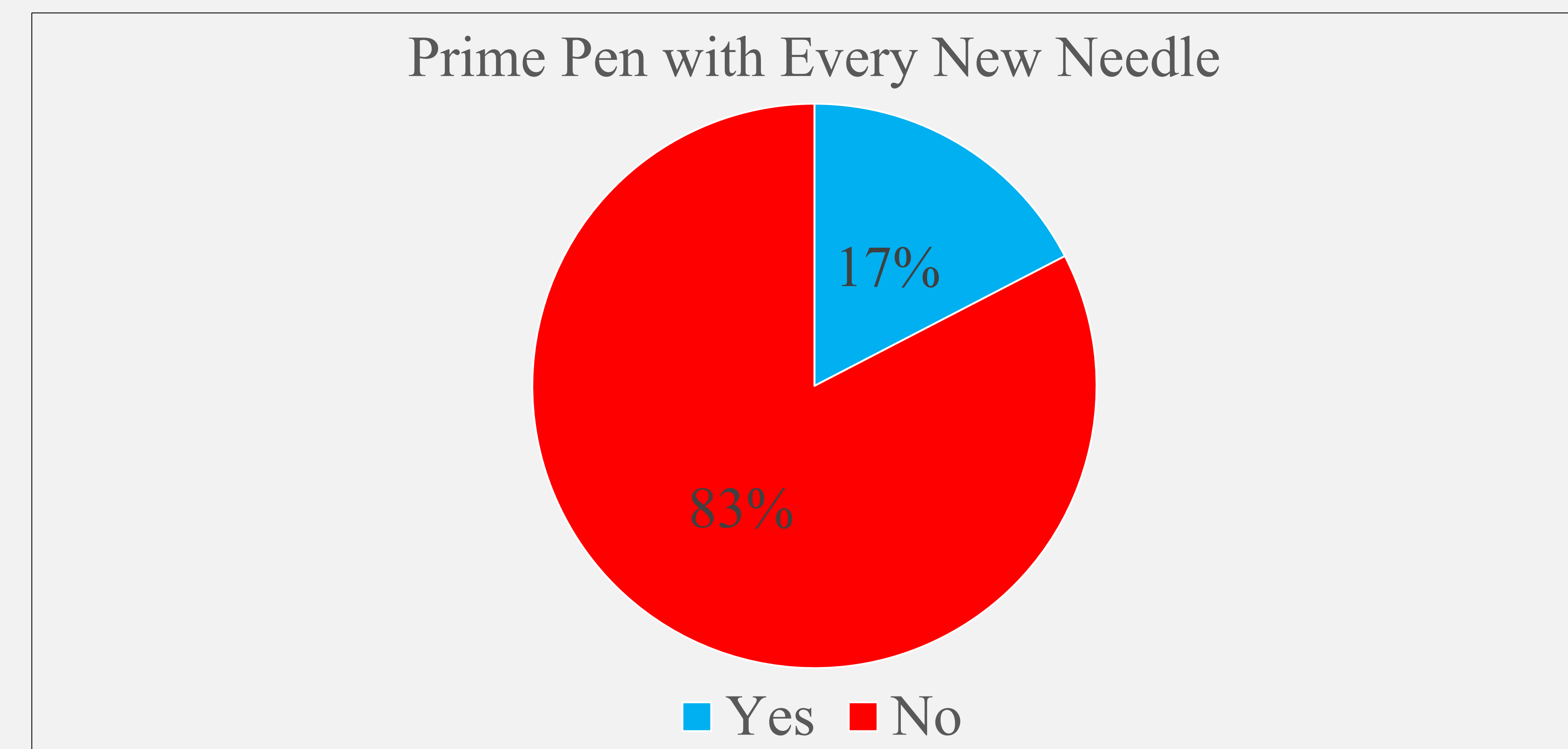


Table 2. Counseling Information

Where Did the Participants get Counseling Information From?	Overall N = 28 N (%)
Doctor	14 (50%)
Pharmacist	4 (14%)
Internet	0
Other	10 (36%)
None	0

CONCLUSION

Overall our survey received 23 out of 36 possible responses which is great based on typical survey research. The data gathered suggests there is definitely room for improvement in the administration technique by patients. This data suggests pharmacists should counsel more in depth when a patient is started on an insulin pen. Due to the fact that a majority of the participants had been using an insulin pen for more than five years, it may also be useful to encourage the regular patients to reach out with any questions or uncertainties they may have regarding administration technique. It would be beneficial to gather more information on this topic by increasing the sample size and by conducting it at various practice sites.