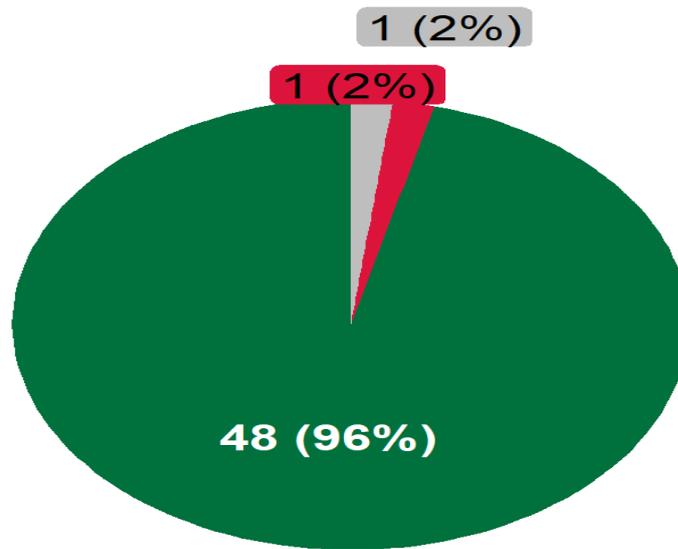


4.3.3. Part three of practice assessment: Compliance with the sharps disposal program

The third part of the practice assessment investigated the compliance of the participants with previous or current environmental educational program. At baseline, the proportion of the participants who complied with previous environmental educational program was 0% in both the intervention and nonintervention groups, and the proportion remained unchanged in the following two visits for the nonintervention group. Regarding the intervention group, as shown in figure (4.11), there was an apparent significant percentage of respondents who adhered to and completed all sessions of the program which recorded 96% at the first and second post-intervention visits after missing one participant due to failure to contact him and refusing another participant to bring the sharps container back to the clinic.

This high percentage of compliance in the present study suggests that the majority of insulin treated diabetic patients are ready to share in any structured community sharps disposal program particularly when it is implemented in an accessible and free manner.

Compliance to the Program at Visit 2



Compliance to the Program at Visit 3

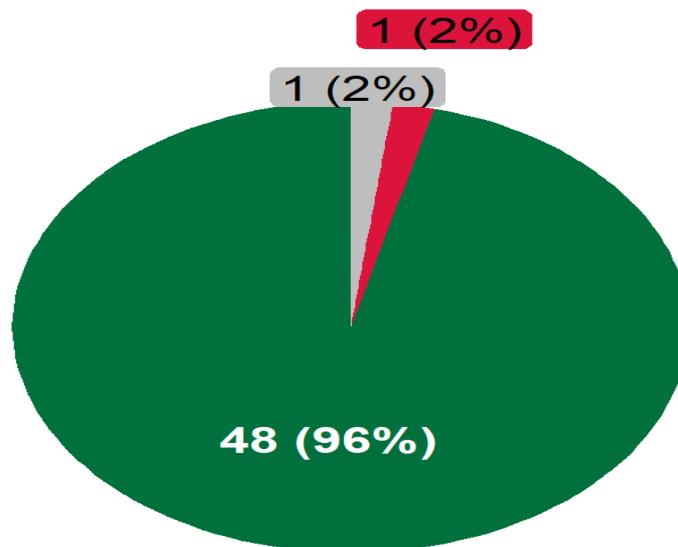


Figure (4.11): Compliance with the program

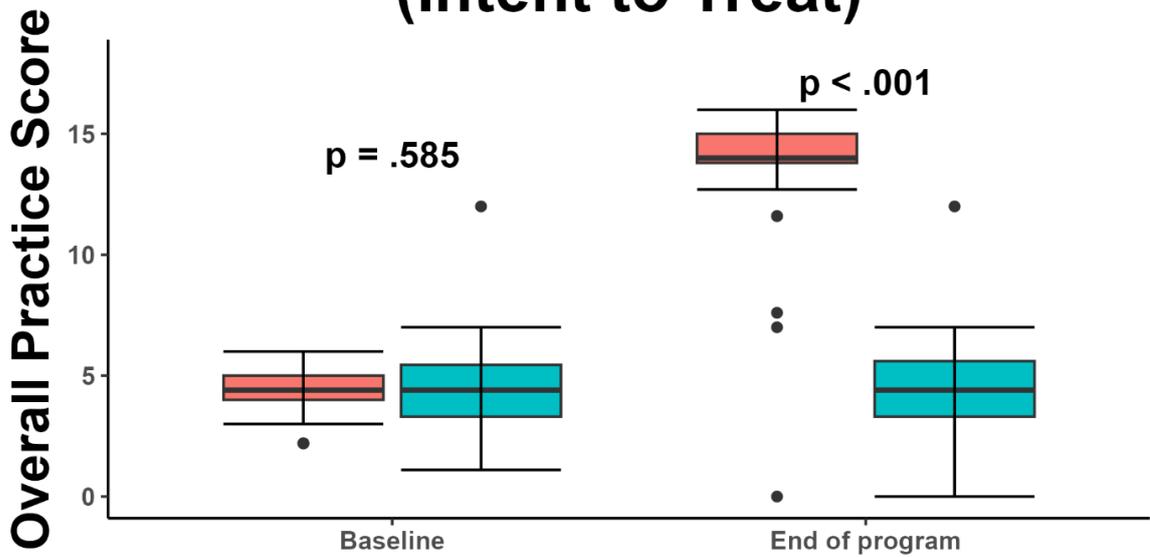
4.3.4. Overall Practice Scores

The findings of the two analyses for the overall practice scores at baseline and at the end of the program were identical, as shown in Table 4.15 and Figure 4.12. The median overall practice scores for both groups were the same at baseline and were 4.4/16 which corresponds to a poor practice level. At the end of the program, there was a significant difference in the median of the participants' overall practice scores, with the intervention group significantly outperforming the nonintervention group and registering a score of 14 which matched the good practice level, while the nonintervention group stopped unchanged at 4.4, which corresponds to a poor practice level. The within group analysis by the Wilcoxon signed rank test for paired measures showed a significant increase in the overall practice scores among the intervention group at the end of the program compared to baseline in the intent-to-treat ($V = 3$, $p < .001$) and the per-protocol analyses ($V = 0$, $p < .001$). These results reflected the positive impact of the program on the practice.

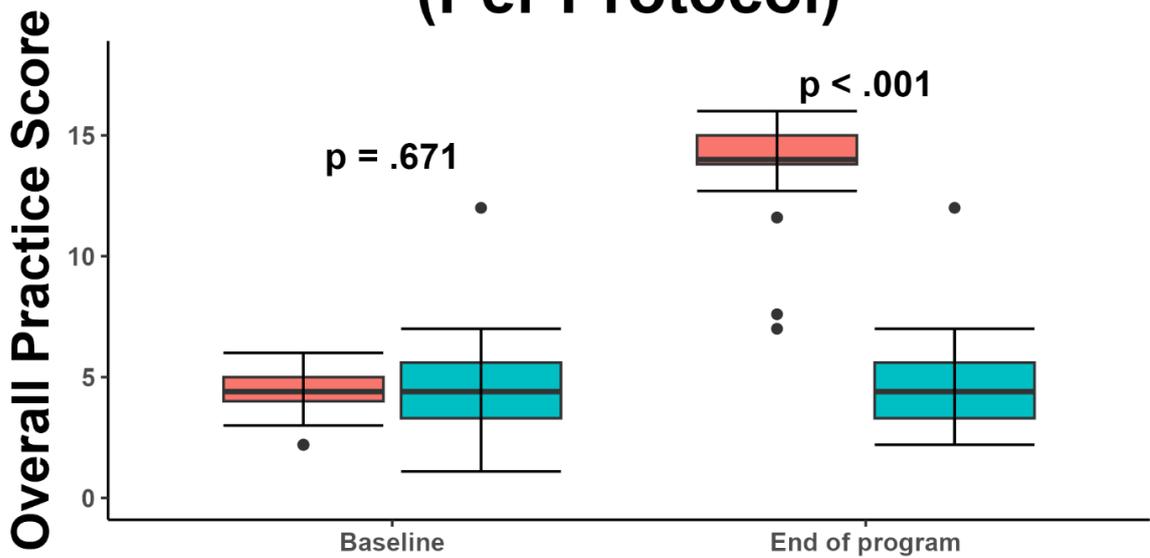
Table (4.15): Overall practice scores at baseline and at end of program

| Variable | Intent to treat analysis | | | Per protocol analysis | | |
|--|--------------------------|-----------------------------|------------------------------------|--------------------------|----------------------------|------------------------------------|
| | Intervention (n = 50) | Nonintervention (n = 50) | Between group <i>p value</i> | Intervention (n = 49) | Nonintervention (n= 48) | Between group <i>p value</i> |
| Overall practice score at baseline, Median (IQR) | 4.4 (4-5) | 4.4 (3.3-5.5) | 0.585 | 4.4 (4-5) | 4.4 (3.3-5.6) | 0.671 |
| Overall practice score at end of program, Median (IQR) | 14 (13.8-15) | 4.4 (3.3-5.6) | <0.001* | 14 (13.8-15) | 4.4 (3.3-5.6) | <0.001* |
| Within group p value | <.001* | .844 | | <.001* | .185 | |

Change in Overall Practice Score (Intent to Treat)



Change in Overall Practice Score (Per Protocol)



Group  Intervention  Non-intervention

Figure (4.12): Change in overall practice score between baseline and end of program