Description of Practices Related to Insulin Injection Therapy and Sharps Disposal among Patients Attending the Diabetic Clinic, Colombo North Teaching Hospital, Sri Lanka

Kushani Rasangika Atukorala, MBBS; Deepama Sumanasekera, MBBS; Kumudu Hasantha Wickramasinghe, MBBS; Sumudu Wickramasinghe, MBBS

Department of Physiology, Faculty of Medicine University of SriJayawardenapura Gangodawila, Nugegoda, Sri Lanka kushaniatukorala@yahoo.com

Background:

Patients with diabetes on insulin therapy are compelled to use sharps, such as insulin needles and lancets, on a regular basis. As a result, they generate thousands of used sharps and bloodstained materials. While there is a huge concern over sharps disposal practices in health care settings, the sharps disposal practices of patients with diabetes living at home has been poorly documented.

Method:

A randomly selected sample of 158 diabetes patients were obtained from the diabetes clinic, Colombo North Teaching Hospital. Data were collected using an interviewer-administered questionnaire and clinic records.

Results:

Sample population was aged between 21-90 years and mean age was 60 years. The majority, 131/158 (83%), had used insulin for more than 1 year. Very few, 5/158 (3%), used the insulin pen while the majority used syringes to inject insulin. Only 10 (6%) regularly checked their blood glucose level using needles/lancets. The majority, 132/158 (84%), injected insulin more than twice per day and $\geq 50\%$ used the same needle more than six times for more than 3 days. The majority, 150/153 (98%), of the syringe users recapped the needle. A significant number, 73/158 (46%), also involved others when injecting and disposing needles. Patients disposed of used needles/pens in a common household garbage bin, sharps container, toilet pit, garbage dump, and indiscriminately: 66 (42%), 9 (6%), 8 (5%), 4 (8%), 11 (7%), respectively. Some have collected sharps since the beginning without disposing: 15/158 (9.5%). Many respondents had received no information on how to dispose of their sharps. Those who recalled receiving information were more likely to dispose of their sharps safely.

Conclusion:

Diabetes patients who are insulin dependent are not educated on safe sharps disposal methods, leading to unsafe disposal of needles. Appropriate education on the correct disposal of sharps should be an integral part of their diabetes counseling.