

(56)

Awareness of the General Public within the District of Gampaha, Regarding the Biomedical Waste Disposed by Clinical Laboratories and its Consequences

Perera B.O.L.*, Peiris P.C., Jayathilake J.M.N.J.

School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka

**oshanthiperera602@gmail.com*

Abstract

The Waste management is a primary concern in a clinical laboratory for overall laboratory safety as biomedical wastes generated in medical laboratories are hazardous for humans and the environment. This study aimed to assess the awareness regarding biomedical waste and its consequences among the public in the Gampaha district and to observe the correlation between the level of education with this extent. 150 people between the ages of 18 and 55 years were considered for inclusion criteria, while current, retired, and minor healthcare workers were excluded. The convenience sampling method was used when selecting the target population, and data was collected through online surveys (google forms) with close-ended questionnaires. The age groups have been divided into four major categories: (18-25), (25-35), (35-45) and (45-55). SPSS software was used to analyze and evaluate the results. The results showed that people aged 18-25 years and 45-55 years have a low awareness of biomedical waste and its consequences, whereas people aged 25-35 years have good awareness. Individuals between the ages of 35 and 45 had the highest level of awareness. The responses obtained revealed that the highest level of awareness regarding the biomedical wastes disposed of by clinical laboratories and its consequences was given by 90% of the 35-45 age group, 60% of the 25-35 age group, 58% of the 45-55 age group, and 52% of the 18-25 age group. Except for a few exceptions, many participants in the 35-45 age groups were educated as most of them had completed their studies at least up to advanced level. Having a doctorate was the highest education level observed in the sample. According to the findings, the analyzed P value was 0.026, with a correlation coefficient of 0.6631 indicating that the results are statistically significant. Therefore, it can be concluded that there is a clear correlation between the levels of education and age regarding the awareness of biomedical waste. Therefore, strengthening the waste management systems and educating the public regarding biomedical waste would be recommended.

Keywords: Biomedical wastes, Awareness, Level of Education, General Public, Gampaha District