

Examination of Menstrual Waste Disposal Techniques used by the Millennials in Sri Lanka**Perera H.P.N.* , Edirisinghe E.W.R.S.***Department of Sports Science, University of Sri Jayewardenepura, Nugegoda, Sri Lanka***piumiri@sci.sjp.ac.lk***Abstract**

Menstrual waste (MW) disposal practices are not subjected to discussion in many Asian countries and religious beliefs/norms have created misleading perceptions putting females at risk of being stigmatized. Therefore, the disposal techniques used in such countries can harm the environment irrespective of the education levels of the people due to their attempts in hiding the traces of menstrual blood. This paper is mainly aimed at discussing the MW disposal techniques and Menstrual Hygiene Management (MHM) techniques used by the millennials in Sri Lanka. As a secondary objective, this study evaluates whether the MW disposal technique used by the respondent is stressful to her and the effect of education level on it. 52.1% of the Sri Lankan population is female and the current study considered the millennials. Due to the social stigma that comes with menstruation, referrals were used to engage responders and the snowball sampling technique was used. A self-developed questionnaire was distributed and the Pearson's Chi-square Goodness-of-fit and Rank Biserial Correlation were used along with Estimated Population Proportions (EPP). Of the 150 respondents, 52% use burning (open), 18% throw-in routine waste bins, 8.7% throw with proper grading and 8% use toilet pits to dispose of their MW. The remaining respondents used incinerators, washing or dumped/burned waste in open areas such as land, rivers etc. The chi-square goodness-of-fit test indicated that each of the disposal methods was not equally represented by the respondents ($\chi^2(7)=586.903, p=0.0001$), with just over half of the respondents using open burning as the method of disposal. Commercial sanitary pads and reusable/washable sanitary pads were the only techniques reported for MHM. The majority of the respondents reported the use of commercial sanitary pads and the EPP was 0.93 ± 0.042 . The majority of the respondents reported feeling stressed due to their method of disposal. There was a positive correlation between the status of stress and education level, which was statistically significant ($r_{pb}=0.178, p=0.003$). Based on the above-said results, burning inorganic materials such as commercial sanitary pads at low temperatures release dioxins that are poisonous and carcinogenic, leaving an impact on both health and the environment. Hence, it is recommended to introduce more environment-friendly absorption materials such as reusable sanitary items made of easily decomposed materials and to implement proper incineration facilities. When considering the negative impact on the environment, educating the Sri Lankan female population on better disposal practices can be identified as a necessity.

Keywords: Menstrual waste, Waste disposal, Millennials, Menstrual hygiene management, Stress