Madam, bullying among adolescents is a serious public health problem. Several studies have reported its association with age, sex, loneliness, inability to sleep, absence in classes, and suicide consideration.\textsuperscript{1-4} There are no studies on adolescent bullying in Pakistan. To describe factors associated with self-reported bullying and its prevalence, we used data from the two-stage cluster sample-based nationally representative Global School-Based Health Survey for Pakistan, which was conducted in 2009 by the Ministry of Health in collaboration with the World Health Organization and Centers of Disease Control and Prevention, United States.\textsuperscript{5} Pakistani students of class 8-10 who had been victimized in the past 30 days were included in the study. Design-based analysis using STATA-12 was done using bivariate and multivariate logistic regression. Factors found statistically significant at $p<0.10$ level on bivariate logistic regression model were used for multiple logistic regression.

The overall prevalence of bullying victimization in the past thirty-days was 41.3\% [95\% confidence interval (CI): 34.4\%, 48.3\%] ($n = 4676$). In male students, the prevalence was 45.1\% [95\% CI: 39.3\%, 51.0\%], while among females the prevalence was 35.5\% [95\% CI: 21.7\%, 49.3\%] Table 1 provides the description of the respondent’s demographic and psychosocial factors, as well as the association with bullying victimization in bivariate and multivariate analyses. Age and sex were not found to be statistically significant in the bivariate logistic regression model, and hence were not included in the final multivariate logistic regression model. Final model included having felt lonely in the past twelve months, worrying to the point of not being able to sleep in the past twelve months, having missed classes without permission in the past thirty days, and having seriously considered attempting suicide in the past twelve months. Results of the goodness-of-fit test concluded that this model was a good fit for the data.

Compared to students who neither felt lonely nor had been worried that they could not sleep at night in the past twelve months, those students who did feel lonely and were unable to sleep were twice as likely to report having been bullied in the past thirty days. These results augur the need for parents, teachers, paediatricians and general practitioners to keep a high index of suspicion when students in class 8-10 present with these warning signs and to appropriately intercede. Public health education campaigns targeting parents and teachers to raise awareness are needed in addition to providing resources for

\begin{table}
\centering
\begin{tabular}{|c|c|c|c|}
\hline
Factor & Total n* (\%) & Unadjusted OR§ & Adjusted OR§ \\
\hline
\textbf{Age (years)} & & & \\
\leq 14 & 966 (22.8) & 1 & N/A \\
14 & 2148 (38.9) & 1.27 (0.90, 1.79) & \\
15 & 1899 (35.3) & 1.22 (0.78, 1.62) & \\
\geq 16 & 172 (3.0) & 1.27 (0.67, 2.43) & \\
\textbf{Sex} & & & \\
Male & 3897 (61.2) & 1.49 (0.81, 2.78) & N/A \\
Female & 1287 (38.8) & 1 & \\
\textbf{During the past 12 months, how often have you felt lonely? (Never vs. Rarely/Sometimes/Most of the time/Always).} & & & \\
No & 2014 (38.8) & 1 & 1 \\
Yes & 3119 (61.2) & 2.53 (1.97, 3.25) & 1.99 (1.60, 2.48) \\
\textbf{During the past 12 months, how often have you been so worried about something that you could not sleep at night? (Never vs. Rarely/Sometimes/Most of the time/Always).} & & & \\
No & 2486 (48.1) & 1 & 1 \\
Yes & 2681 (51.9) & 2.54 (2.0, 3.23) & 1.99 (1.65, 2.40) \\
\textbf{During the past 30 days, on how many days did you miss classes or school without permission?} & & & \\
0 Days & 3837 (76.6) & 1 & 1 \\
1 or more days & 1315 (23.4) & 1.74 (1.45, 2.1) & 1.56 (1.28, 1.90) \\
\textbf{During the past 12 months, did you ever seriously consider attempting suicide?} & & & \\
No & 4738 (92.8) & 1 & 1 \\
Yes & 375 (7.2) & 1.86 (1.27, 2.73) & 1.54 (1.10, 2.20) \\
\hline
\end{tabular}
\caption{Survey respondent’s demographic, and psychosocial description; and associations with bullying victimization in bivariate and multivariate analyses.}
\end{table}

\begin{footnotesize}
\begin{itemize}
\item[] *Unweighted frequencies
\item[] **Weighted percents
\item[] ***Confidence Intervals
\item[] §Odds Ratio
\item[] N/A- Factor not included in the final logistic regression model.
\end{itemize}
\end{footnotesize}
victimized students to seek help at school.

References

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