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#### **Prevalence of blood brotherhood among high school students in Erzurum and the effect of peer-led education on this practice**

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**Background & Aim:** Blood brotherhood (BB) rituals are one of several types of alliances or ties that bind people together in a way analogous to, but distinct from, kinship bonds. There is a growing concern regarding dangerous blood-borne diseases including hepatitis B virus (HBV), human immunodeficiency virus (HIV), and hepatitis C virus (HCV). Although all three of these viruses are blood-borne and share common routes of transmission, the epidemiology of each virus differs based on the virus and the circumstances of exposure. This study aimed to assess the prevalence of blood brotherhood (BB) in Erzurum, Turkey and to observe the effect of education interventions on this risky cultural behavior.

**Methods:** This study was designed as a cross-sectional intervention, based on minor interventions through a peer-led awareness campaign regarding the transfer of blood-borne diseases through BB rites. This study was conducted from February through May 2007 at 29 high schools in Erzurum. Categorical variables were expressed as frequencies and percentages. Chi square test and McNemar's test were performed for bivariate comparisons. P-values lower than 0.05 was considered statistically significant.

**Results:** The study population was 53.8% (n=1,522) males and 46.2% (n=1,307) females. The proportion of the students who have participated in BB rituals was 24.1% (n=558). There was a statistically significant link between BB and a history of having Hepatitis B Virus (HBV) infection, family history of HBV and male gender ( $p < 0.05$ ). After the structured peer-led education the intention to participate in BB rituals decreased from 30.0% to 20.6% ( $p < 0.001$ ).

**Conclusion:** The prevention of BB rituals, which can result in the transfer of blood-borne diseases, requires urgent public awareness campaigns led by healthcare professionals.