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# Satisfaction with the program of school bullying prevention and mental health promotion – Cross sectional study among primary school pupils in Mostar

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**Objective.** The aim of this study was to assess the frequency of experience in school bullying and family violence, satisfaction with the preventive-promotional program, knowledge about methods for opposing violence and attitudes toward the role of the family physician in bullying prevention. **Materials and methods.** The project was conducted by family physicians, nurses and sixth year medical students. The target group were 5th to 8th grade pupils of two primary schools randomly selected by computer. Basic information about the presence and types of bullying, the long-term consequences of violence and methods to oppose violent behavior was given as an interactive lecture to large groups of pupils. After the lecture, pupils received questionnaires about their experience of school violence, satisfaction with the program and their opinion about the role of the family physician in bullying prevention. **Results.** The results of the short term outcome evaluation of the program show that younger pupils evaluate the program better than older ones. Furthermore, we found that the frequency of experienced violence is not connected with satisfaction with the program. **Conclusion.** Most students have never experienced violence in schools and families, 5th and 6th grade students showed greater satisfaction with training, better knowledge of help in case of violence and a more positive attitude towards medical help. We found no significant differences in pupil's satisfaction with the program, knowledge about methods of opposing violence and attitudes towards the role of the family physician in bullying prevention, in relation to the frequency of experience of family violence and school violence.

**Key words**: Family medicine, Promotion, Prevention, School violence.

## Introduction

Bullying is defined as repeated, negative acts committed by one or more children against another child. It may be physical or verbal (hitting or kicking, teasing or taunting), or may involve indirect actions such as manipulation in friendships or intentional exclusion of other children from activities. One of its main characteristics is an imbalance in real or perceived power between the bully and the victim (1). Bullying is a highly prevalent phenomenon with harmful and long-lasting effects on victims and a negative impact on the school climate (2). Recent studies con-

ducted among primary school pupils in Western Herzegovina show that 16% of children in early adolescence experience at least one form of bullying almost every day (3).

This article describes a prevention-promotional program named „For a life without violence" carried out by family physicians. The project is designed to reduce the level of bullying and related antisocial behaviors in children attending two urban primary schools in Mostar (4). Our prior study showed that schools in Mostar have high rates of school violence, as reflected by a high level of trauma symptoms in bullied pupils (5). Our Department of Family Medicine plans to start an intensive evidence-based multidisciplinary intervention program, targeting younger primary school pupils and the families of pupils involved in bullying.

The aim of our program was to compare awareness and knowledge of violence, coping strategies, attitudes toward the role of family physicians in bullying prevention amongst children that were involved in bullying and those that were not.

## Materials and methods

According to the presence of school violence in primary schools and the high level of trauma symptoms in bullied pupils found in prior studies (4, 5), family physicians from the Department of Family Medicine organized the program in school violence prevention and mental health promotion (3).

The program was conducted in two primary schools in Mostar during April 2010 as a preventive and promotional project. The schools were selected as suitable. The program was organized by the Department of Family Medicine of the Medical Faculty, the University of Mostar in cooperation with the Health Care Center of Mostar.

The educators were family physicians, nurses of family medicine and 6$^{th}$ year medical students who have experience in lecturing. They had two days education about prevention and early recognition of domestic and school violence. The program was led by a team of experienced experts in this professional field. Participants in the program were pupils from the 5th to 8th grades of primary schools. The pupils were divided into groups of 5$^{th}$, 6$^{th}$, 7$^{th}$, and 8$^{th}$ grades. Each group heard an interactive lecture about types of violence, psychological distress in victims of violence, coping strategies and the role of teachers, family members and family physicians in resolving the problem of school bullying. Brochures with information about school violence and community violence solutions were given to pupils. Immediately after the lecture, all the pupils filled out anonymous questionnaires. The questions were related to demographics, the frequency of experiencing violence at school and home, the frequency of violent behavior, satisfaction with the program, knowledge about methods of opposing violence, and attitudes towards the role of family physicians in the early recognition and prevention of school bullying.

The questions about experience of violence contained answers given on a 3-point Likert scale, as follows: 1 – never, 2 – sometimes, 3 – almost every day. The questions about satisfaction, knowledge and attitudes contained answers given on a 5-point scale, as follows: 1) absolutely disagree 2) disagree 3) partially agree 4) agree 5) fully agree. The questionnaire was created by the project managers. The questions about school violence are based upon the revised Bully/Victim form created in 1994 by Olweus (6), developed in 2003, and validated in 2007 (7).

For the purpose of this study, we analyzed data from a total of 630 questionnaires collected in two suitable, selected schools. All pupils in the selected classes participated in the program. In fact, nobody refused participation. Overall 299 (48%) male and 327 (62%) female pupils participated in the study. There was approximately an equal percent-

age (25%) of pupils in years 5th, 6th, 7th, and 8th. For statistical analysis the pupils were grouped into a pre-pubertal group (5th and 6th class), and a pubertal group (7th and 8th class).

### *Ethics*

The study was approved by the Ethics Committee of the Medical Faculty of the University of Mostar and by the county Ministry of Education, Science, Culture and Sport. The authors of the questionnaire endorsed its usage, the school principals supported the investigation, and the examinees consented to participate with parental consent.

### *Statistics*

A computerized database was formed using Microsoft Excel (version 11th Microsoft Corporation, Redmond, WA, USA). Statistical analysis was performed with SPSS for Windows, version 13.0 (SPSS Inc., Chicago, Illinois, USA). Differences between groups in continuous variables were tested with the Mann-Whitney U test and Kruskal-Wallis test. For the analysis of nominal variables the $\chi 2$ test was used for trends. The differences between groups were accepted as statistically significant at $p<0.05$.

## Results

Out of the 626 pupils, 118 or 18.8% of the pupils were being bullied almost every day, 139 or 22.2% sometimes, but most of the pupils, 369 or 59%, had never been bullied at school ($\chi^2$ test=185.85; $p<0.001$). Most of the students had never experienced family violence (88.7%), 7.3% answered that they experienced family violence sometimes, while 4% students suffer from family violence almost every day ($\chi^2$ test=863.29; $p<0.001$).

Secondly, we asked pupils about their satisfaction with the preventive-promotional program. We found that younger pupils in 5th and 6th grades were more satisfied with the program, had better knowledge about methods of opposing violence and more positive attitudes towards the role of family physicians in bullying prevention than those in 7th and 8th grades (Table 1).

Based on an analysis of pupils according to the frequency of their experience school violence, we found no significant differences in satisfaction with the program, knowledge about methods for opposing violence and attitudes towards the role of family physicians in bullying prevention (Table 2).

There were no significant differences in the pupils' satisfaction with the program,

Table 1 Satisfaction of pupils with the program, knowledge about methods for opposing violence, and attitudes towards the role of family physicians in bullying prevention, according to grade

| Variable | Points on the scale (range 1-5) according to grade | | p |
|---|---|---|---|
| | 5th and 6th grade | 7th and 8th grade | |
| Pupils satisfaction with the program | 4.5 (1) | 4.0 (1) | <0.001 |
| Knowledge about methods for opposing violence | 4.5 (1) | 4.0 (1.5) | <0.001 |
| Attitudes towards the role of family physicians in bullying prevention | 4.3 (1.6) | 3.6 (1.6) | <0.001 |

Table 2 Satisfaction of pupils with the program, knowledge about methods for opposing violence, attitudes towards the role of family physicians in bullying prevention, according to experience of school violence

| Variable | Points on the scale (range 1-5) according to experience of school violence | | | p |
|---|---|---|---|---|
| | Never | Sometimes | Almost every day | |
| Pupils satisfaction with the program | 4.0 (3.5) | 4.5 (1) | 4.5 (1.5) | 0.218 |
| Knowledge about methods for opposing violence | 4.0 (2) | 4.5 (1) | 4.5 (1) | 0.369 |
| Attitudes towards the role of family physicians in bullying prevention | 3.3 (2) | 4.0 (1.6) | 3.6 (2) | 0.985 |

Table 3 Satisfaction of pupils with the program, knowledge about methods for opposing violence, attitudes towards the role of family physicians in bullying prevention, according to experience of family violence

| Variable | Points on the scale (range 1-5) according to experience of family violence | | | p |
|---|---|---|---|---|
| | Never | Sometimes | Almost every day | |
| Pupils satisfaction with the program | 4.0 (3.5) | 4.5 (1) | 4.5 (1.5) | 0.28 |
| Knowledge about methods for opposing violence | 4.0 (2) | 4.5 (1) | 4.5 (1) | 0.369 |
| Attitudes towards the role of family physicians in bullying prevention | 3.3 (2) | 4.0 (1.6) | 3.6 (2) | 0.985 |

knowledge about methods of opposing violence and attitudes towards the role of family physicians in bullying prevention in relation to the frequency of experience of family violence (Table 3).

## Discussion

In our study, 22.2% of pupils experienced violence rarely, but 18.8% experience it almost every day. There have been no systematic studies on school bullying in Bosnia and Herzegovina. A previous study conducted among West-Herzegovinian pupils found 14% of them reported bullying experiences, 4% assaulted their peers and 3% were bully/victims almost every day (3). More recent world-wide cross-sectional investigations show greater variability in the prevalence of bullying, ranging from 9%-54% (8-11).

Overall 4% of the investigated pupils experience home violence almost every day, 7.3% experience it sometimes, while 88.7% never suffer from home violence. Children, who are victims of domestic violence, accept violent behavior as an acceptable form of behavior in future life. Finkelshor emphasizes that children who suffer domestic violence are more frequently exposed to violence at school and in the community (12). These are very important data in planning and implementation of prevention programs.

Younger pupils in 5$^{th}$ and 6$^{th}$ grades were more satisfied with the preventive-promotional program than older pupils in 7$^{th}$ and 8$^{th}$ grades. Also they had significantly more knowledge about coping strategies and a more positive attitude towards the role of family physicians in bullying prevention. Results from a recent study suggest the more significantly positive impact of the Olweus anti-bullying prevention program on 7$^{th}$ grade females than 8$^{th}$ grade (8). A review of the effects of preventive school-based anti-bullying programs, also shows that the relative reduction in violent behavior was greater in elementary and high than in middle schools (13). This finding underlines the fact that health promotion and prevention are more effective in younger age groups than in groups of older students. Our results also show that a prevention-promotional program on a primary level affects bullied and non-bullied pupils equally (14, 15).

It is important to recognize that all young people need support and education (i.e., primary prevention efforts) about relationship issues, safety and conflict management. All pupils need the primary level, such as our program, but some pupils will need a secondary level of prevention and intervention or support services, to deal with the aggressive and violent behavior that is already being exhibited (6, 8, 16).

### *Limitations of the study*

The primary limitation of the study is that the sample of schools which participated in the study was not randomly selected. Actually, the schools were selected as suitable. The second limitation is the lack of long term evaluation of this health-educational program.

## Conclusion

Our results show that most students have never experienced violence in school and their families, students of 5th and 6th grade showed greater satisfaction with the training, better knowledge of help in case of violence and a more positive attitude towards medical help. We found no significant differences in pupils' satisfaction with the program, knowledge about methods of opposing violence and attitudes toward role of family physician in bullying prevention in relation to the frequency of experience of school violence or family violence.

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**Conflict of interest:** The authors declare that they have no conflict of interest.

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