Attitudes towards Integration of HIV Infected Children into Schools in Croatia: not so Favorable and not so Simple

To the Editor: Using a newly developed scale, Maček and Matković (1) reported general positive attitudes of parents, teachers, and pupils in Croatia towards the integration of HIV-infected children into schools. However, the current status and experience with integration of HIV-infected children into primary schools do not support such a conclusion. At the moment, there are two HIV-infected children, whose identity is known the parents of other children attending primary school. One of them is in the class with only two other children. The other child was enrolled in the first grade only after intensive counseling and education of parents, whose children at that time could be the classmates of the HIV-infected child. The education of parents, frustrating and at times very emotional, lasted for about 6 months. Hundred and eighty parents with pre-school children were invited, 121 of whom responded and underwent at least one educational session. Finally, in September 2004, a class of 9 children, including the HIV infected-child was formed, and this was considered a success (2). In addition, there have also been instances, not known to the public, when teachers in pre-school settings refused to enroll HIV-infected children in regular preparatory classes for primary school. These events took place during 2002, 2003, and 2004. Although Maček and Matković did not state when their study took place, they hypothesized that the media coverage might have shaped a more positive attitude (1). This view is rather simplistic, since there was intensive media coverage when the children where in Kaštela, but when they moved to Kutina, the same problem appeared. On the contrary, Starčević (2) reports that the absence of media coverage has helped the integration process.

So, why is there a discrepancy between the findings of the study and the reality that HIV-infected children face? It is possible that re-

sponses to the questions do not reflect what responders would do in a real life situation. However, we would also like to address several other issues concerning the study design, analysis, reporting, and data interpretation. The sample was relatively small and the authors' conclusions were based on an average score (on a Likert scale form 1 to 5) and the scores of 3.1 (parents' attitude), 3.4 (pupils' attitude), and 3.5 (teachers' attitude) were interpreted as "generally good." However, when the Likert scale is averaged, it is assumed that the interval between the answers is the same. But how do we know that the distance between undecided (3 point) and agree (4 points) is the same as between undecided and disagree (2 points)? Is a score around 3 really a favorable score? Does it mean that most people were undecided or does it mean that the group was evenly divided, with half of them agreeing and half disagreeing? Perhaps testing the hypothesis: "Are more than 50% of people in favor of integration?" would have been more meaningful. Also, reporting the percentage of subjects, who for example, had a median attitude score of 4 points and higher would have given a different picture. The comparison of the 3 major subgroups (parents, teachers, pupils) on the attitude scale is also debatable, since the subjects were not given the same questionnaire. In summary, the presented data offer little evidence that positive attitudes towards school integration are truly prevalent among parents in Croatia, so the results of this study should be interpreted with caution.

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1 Maček M, Matković V. Attitudes of school environment towards integration of HIV-positive pupils into regular classes and knowledge about HIV/AIDS: cross-sectional study. Croat Med J. 2005;46:320-5.

2 Starčević M. Ela and Nina in Kutina [in Croatian]. Hrvatski časopis za javno zdravstvo. Available at: *http://www. hcjz.hr/clanak.php?id=12452*. Accessed: April 19, 2005.

Authors' Reply: Our research, as a student work, was performed in March 2003 as a reaction to an event that took place in 2002 when an HIV positive pupil, whose identity was known to the public, had difficulties in integration to a regular class.

Drs Begovac and Starčević question the interpretation of our results because the applied scales slightly differed for parents, teachers, and pupils. They also question the average scores acquired by a Likert type scale, ie, interpretation of ordinal data on an interval level.

The issue of the difference between the scales applied to teachers, parents, and pupils was addressed in the Discussion section of our article. It is true that, because of different target populations, we employed somewhat different questionnaires. This is a potential weakness of the study, as discussed in the article. However, some of the items had evidently the same meaning (e.g. "I wouldn't like that my child goes to (the same) class with an HIV positive pupil." for the parents' scale; "I wouldn't like that an HIV positive pupil goes into my class." for the pupils' scale; and "I wouldn't like to have an HIV positive pupil in my class." for the teachers' scale) and we used them as the basis for choosing other items, selected for the analysis only those that loaded on the same factor as the items with parallel meaning.

The total scores were formed as a linear combination of ordinal scores. Taking into account that principal component analysis supported the grouping of the items around supposed latent variables, it is acceptable to treat this linear

combination as a single score, on an interval level. This is a well established practice in working with Likert-type attitude scales (1).

The question regarding the distribution of scores on items, demands attention. Closer investigation of our data shows a U-like distribution of answers. More than half of all obtained answers were either "strongly agree" (37%) or "strongly disagree" (21%), whereas the rest of the answers were equally distributed between "agree" (15%), "undecided" (17%), and "disagree" (10%). This is a common distribution in attitude surveys when sensitive issues, such as AIDS, are investigated (2). These results suggest that the opposition towards integration of HIV positive pupils stemmed from a (small) portion of the surveyed population and then spread to reach broader proportions. Drs Begovac and Starčević state that the integration of HIV positive children was possible only after a long and frustrating education of parents. Maybe parents, and public, should be educated in advance to prevent the spreading of fear. We believe that our results argue for such a possibility because most of our participants were, at least at a cognitive level, in favor of the integration of HIV positive pupils.

It is common knowledge in psychology that reported intention to behave in a certain way may not occur in a real life situation. An example is LaPierre's "Couple Study" from 1934, discussed in reference 2. On the other hand, positive attitudes shown by a large portion of the participants from our study could be a fertile soil for planting knowledge and tolerance before sad events, such as those that provoked our study, even take place.

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1 DeVellis RF. Scale development: theory and applications. Thousand Oaks (CA): Sage Publications; 2003.
2 Hewstone M, Strobe W. editors. Introduction to social psychology: a European perspective. 3rd ed. London: Blackwell; 2001.