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# Primary prevention of risk behaviour in pupils with hearing disorders <sup>3</sup>

**Abstract**: The article presents the results of research which was conducted in 2011, with the aim of contributing to the increase of effectiveness of primary prevention processes within some selected social pathological phenomena concerning pupils with hearing incapacity at schools for the aurally impaired.

**Key words**: hearing disorder, pupil with hearing disorder, primary prevention, cyberbullying, sexually transmitted diseases, drugs, criminal accountability.

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### Wczesna terapia zapobiegawcza u uczniów z zaburzeniami słuchu

**Abstrakt**: Artykuł przedstawia wyniki badań przeprowadzonych w roku 2011, których celem było zwiększenie efektywności terapii w zakresie wybranych patologicznych zachowań socjologicznych dotyczących uczniów szkół specjalnych, u których stwierdzono zaburzenia słuchu.

**Słowa kluczowe**: zaburzenia słuchu, uczniowie z zaburzeniami słuchu, wczesna terapia zapobiegawcza, cyberprzemoc, choroby przekazywane drogą płciową, narkotyki, odpowiedzialność karna.

### 1. Introduction

Lechta (2002, p. 52) refers to deaf children's symptomatic speech disorders as "a disruption of communication abilities accompanying other dominating handicaps, disorders or other medical conditions". Although some specialists do not agree with this statement, they highlight the fact that natural communication methods in case of these children are based

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on visual-motor systems. The majority of children with acute pre-lingual hearing disorder display problems in language communication.

The results of current research prove that "the problem of language development of deaf children is too difficult to be defined only as a choice between spoken and sign language" (Pabian, 2011, p. 13). Retardation of language development in the majority of deaf children is very apparent in comparison with normal development in hearing children. The reason is that children (with the exception of deaf children of deaf parents) miss the entire access to the language model. Because of auditory deficiency, they have limited access to spoken language and fail to internalise an appropriate model for adopting sign language from adults who make use of it (Pabian, 2011).

Retardation in language development adversely affects school results. Instead of acquisition of new information at school, the entire endeavour of deaf children is dedicated to the effort of making up for the retardation in order to develop comprehensive communication.

# 2. Risk of social pathological phenomena concerning children with hearing disorder

A hearing disorder considerably limits hard-of-hearing children's access to information, especially communicated in acoustic form, which frequently becomes entirely unavailable. Natural acquisition in everyday social situations is also limited. As far as children with pre-lingual disorder are concerned, they cannot primarily rely on receiving information in written form, because their linguistic incapacity, instigated by their inability to adopt language naturally, prevents them from understanding the sense of written text (Strnadová, 1998).

The population of children with hearing disorders is therefore increasingly endangered by the occurrence of social pathological phenomena, among other things, in comparison with their hearing counterparts. "This higher risk is rooted in the particularities of their emotional, educational and social relations" (Vymětal, 2000, p. 22). The fundamental factors mentioned above, which contribute to the fact that a child with a hearing disorder easily becomes a victim or culprit of not only crime, but also of an inability to receive appropriate education, especially adequate transmission of essential information about the risk itself.

Currently, in the face of an increase of virtually all forms of social pathological behaviour, primary prevention gains special importance. The implementation of primary prevention of risk behaviour is an important ingredient in the case of virtually all age groups affected by hearing disorders, where children constitute a very specific group.

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# 3. Presentation of research results aimed at primary prevention of children with hearing disorder

The project concerning the specific research based on the execution of the above-mentioned questions related to the primary prevention of risk behaviour of children and pupils with hearing disorders was implemented at the Department of Special Education, Faculty of Education of the University of Hradec Kralove. The aim of the project was to contribute to the increase in effectiveness of primary prevention processes of social pathological phenomena (risk behaviour), especially by means of investigation into the levels of understanding of some selected notions from the area of risk behaviour of pupils via quantitative questionnaire research. At the same time, the questionnaire for pedagogues, implementers of primary prevention, was distributed. Its aim was to learn about the way primary prevention of risk behaviour at school is ensured and about their presumptions of the level of their pupils' knowledge in some selected areas of risk behaviour.

The research focused on the mapping of knowledge in pupils from Years 7, 8 and 9 of secondary school and from training centres. The questionnaire consisted of 19 questions designed to investigate the levels of comprehension of some selected notions and to establish the level of orientation in the problems. Open questions of the type "What is...?" (cyberbullying/AIDS etc.) were typically used in the questionnaire. The last five questions were designed to reveal where and how many pupils procured information about social pathological phenomena, in which pupils were only supposed to make a guess of where and how much information they had gained.

The questionnaire was created in cooperation with two pedagogues working at schools for the aurally impaired, as well as with translators of sign language. The specificity of the questionnaire was rooted in the fact that problematic reading competencies of children with hearing disorders had been expected, but it turned out that the written form in the majority of communicated language proved to be the most appropriate.

After creating a certain structure of questions, the questionnaire was sent to some clients of SNN in the CR – Hradec Association of Deaf People. Five deaf people (communicating primarily in sign language) between the the age of 22 and 65 voluntarily joined this pre-research. Among respondents, there were also people who had worked or worked at the school for hearing disorders and two mothers of deaf children. We are aware of the fact that the targets are from different age groups, but in spite of this, their responses and commentaries helped us to see the overall conception of the questionnaire and whether it conformed with the needs of the target group and thus, whether it was applicable. Subsequently, modifications were instigated, especially concerning the questions where respondents had to guess to what extent they had gained

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information from individual sources. A marking system on a value axis of 0 to 100 proved to be efficient and was accordingly selected.

Also, in order to try out the questionnaire's usability, it was handed out to pupils of one school for the aurally impaired (age range from 15 to 23). On the basis of preliminary evaluation of their responses, it was proved that the questionnaire could be distributed in this form to other schools.

The questionnaire was therefore submitted in text form, with regard to the specific needs of pupils and students with hearing disorders, i.e. a version of a given question was translated into communication systems preferred by particular respondents.

As a whole, 14 elementary and secondary schools for pupils with hearing disorders all over the CR were addressed with the offer to participate in the project. Finally, six schools joined the project: schools of various types for the aurally impaired in České Budějovice, Brno, Praha-Holečkova, Praha-Výmolova and Valašské Meziříčí. The research was conducted in September and October 2011.

Pupils and students with hearing disorders between the ages of 13 to 24 responded to 118 questionnaires, which were then evaluated (two questionnaires were cancelled due to the irrelevance of data) and pedagogues responded to eight questionnaires (from four schools).

During the evaluation, the specificity in written expression of people with acute hearing disorder was taken into account. The respondents' answers in the selected areas illustrating how pupils and students with hearing disorders understand individual notions, are presented below. However, it is necessary to take into account the fact that the written form of spoken language does not constitute a primary communication system for the majority of respondents (67%), who predominantly prefer communication in sign language, spoken language being therefore their second/foreign language. A person who knows sign language and thus perceives its reflection in written expression participated in the evaluation process.

The findings reveal that pupils and students report relatively low levels of knowledge and comprehension of some selected notions in the area of risk behaviour. Their orientation in the notions is often very limited, schematic and based on stereotyped associations, which frequently remain in contrast with reality. Below, the evaluation of some key areas at which the research was aimed is presented.

Although cyberbullying belongs to the most current phenomena in the area of risk behaviour, the knowledge of this notion among pupils may not be classified as high (see: fig. 1). More than a half of the addressed respondents either do not know the notion, cannot explain it or interpret it wrongly. Only a third of pupils displayed a relatively accurate understanding.

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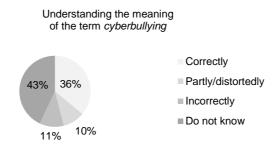


Figure 1. Understanding of the term cyberbullying

Respondents revealed a higher (though often very distorted) rate of understanding in the area of risk behaviour linked with sexuality (see: fig. 2). 45% of students are able to express comparatively accurately the core of the notion AIDS (a sexually transmitted disease; Acquired Immune Deficiency Syndrome), although in many cases not nearly so accurately. More than a third of pupils possess only perfunctory information about the disease (disease), a fifth of all the addressed do not know the notion or understand it incorrectly (virus, rash, etc.).

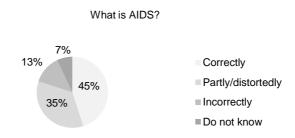


Figure 2. Understanding of the term AIDS

On the other hand, the majority (65%) of pupils possess knowledge about proper means of protection against sexually transmitted diseases (see: fig. 3). In their responses, there are references both to the use of contraceptives and to responsible sexual behaviour, such as faithfulness (condom; or prophylactic use of DUREX! or have just one steady partner. Condom or stay a virgin). Unfortunately, 13 % of the addressed pupils have very distorted ideas about the correct means of protection against sexually transmitted diseases (very often by classifying hormonal contra-

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ception as protection). The other 8% of students and pupils possess completely incorrect and insufficient knowledge (*Vaccination*).

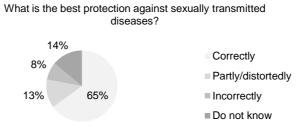


Figure 3. Knowledge of means of protection against sexually transmitted diseases

The situation is similar in knowledge about legislation. 53% of the addressed students managed to indicate correctly the age limit from which criminal law enables legal sexual intercourse. 8% do not know the exact age limit (15-18), although the correct answer is implicitly present. 36% give a totally wrong answer (it doesn't matter; from 16, 18). 3% are not aware of the existence of an age limit.

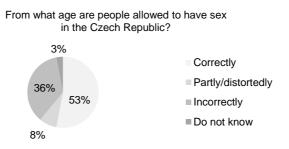


Figure 4. Knowledge about the age of consent related to sexual intercourse

Students are accurately informed about the legal age limit which enables them to buy alcoholic beverages. The total of 93% of pupils answered correctly (see: fig. 5).

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Figure 5. Knowledge about the legal age limit enabling purchase of alcoholic beverages in the Czech Republic

Another aim of the research was to learn about the rate of awareness of the age of criminal accountability. In this area, the respondents with hearing impairment have obviously bigger problems (see: fig. 6), as only 33% of them answered correctly. On the other hand, 52% of respondents answered wrongly (*never in court*) and 10% did not answer the question at all.



Figure 6. Knowledge about criminal accountability

Addictions belong to the most important phenomena in the area of social pathologies. The research unequivocally reveals that pupils with hearing impairment have problems identifying what is exactly included in the term *drugs* (see: fig. 7). 16% of pupils do not know it at all, of which 9% provided entirely irrelevant answers (e.g.: *a homeless person*, *a punk*, *a fire-fighter*). 14% of the addressed students were able to classify particular drugs, however, sometimes somewhat vaguely (*nose pills*) or conceptually inaccurately (*syringe*). The most frequently mentioned substance (70%)

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correct answers) was marijuana (also in other variants of its slang names).

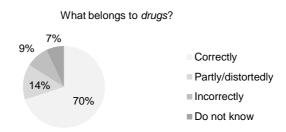


Figure 7. Understanding the content of the term drugs

The majority of the addressed pupils rather paradoxically feel that school provides them with enough information about social pathological phenomena. From figure 8, it is apparent that the answer to the question Do you think that school provides you with enough information about addiction, drugs, sex, violence etc.? was yes in the case of the majority of respondents.

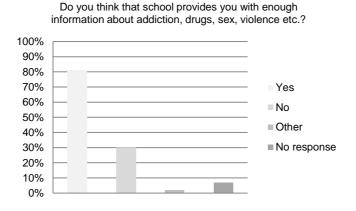


Figure 8. Opinion of pupils about the amount of information obtained at school

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From a preliminary evaluation of the research among pedagogues who implement primary prevention to pupils with hearing disorders (eight pedagogues from four schools), it appears that prevention is not optimal and does not correspond to the current requirements for the implementation of effective primary prevention programmes. The most frequently mentioned forms of prevention are occasional, one-off discussions and lectures related to such topics as bullying, drug addiction, addictive substances, sexual education, sects and religion or legal awareness. Schools often cooperate on these activities with other institutions, such as the police. However, these activities cannot be considered in any way as an effective tool of primary prevention corresponding to the current trends in this area.

Pedagogues from two schools also add particular themes that are discussed within ordinary lessons (Biology, Social Studies, IT) or within class meetings. Only one of the addressed schools also implements other activities within prevention, i.e. besides lectures, it organizes sports clubs, competitions and ski courses and participates in national sports games. This school cooperates with the Consulting Centre for Drugs and Other Addictions with regard to the area of preventive programmes.

Pedagogues' answers also reveal that in their professional experience they must overcome numerous obstacles during the incorporation of the issues related to the risk of social pathological phenomena in the classroom. For instance, there is insufficient time for the implementation of these topics or deficient cooperation with children (they consider it funny or they are ashamed and refuse to cooperate). However, limited verbal or sign vocabulary which leads to comprehension deficiencies in terms of individual notions and overall level of understanding of problems (pedagogues evaluate knowledge of sign vocabulary corresponding to social pathological phenomena among other pedagogues with an average mark of 2.8), constitutes the most pronounced hindrance, both on the part of pupils and pedagogues.

The research accordingly reveals that according to the pedagogues' evaluation, pupils possess inadequate knowledge in the area of bullying and addictions, both of which are discussed in detail at school. Our research demonstrates that pupils fail to achieve even 50% of success rate in these areas. In the other evaluated areas, the results are more positive, but still cannot be considered satisfactory.

### 4. Summary of results

As the results from the conducted research indicate, pupils and students with hearing disorders at selected schools display very low levels of knowledge and comprehension of the selected key terms in the area of risk behaviour. No respondent revealed an acceptable level of knowledge

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in the whole spectrum of key areas. We are aware of the fact that the conducted research alone is not sufficient for any complex evaluation of the phenomena. A comparison of our results with the results gained from a target group of hearing pupils and students at ordinary schools is also essential for adequate conclusions. This second part of the research is currently in progress.

It may be therefore confirmed not only by our findings that schools act as main mediators of information for pupils with hearing disorders. Pupils are subjectively convinced that school provides them with enough information about social pathological phenomena (see: fig. 8). The evaluation of the answers to where and how many pupils gain information about social pathological phenomena also provides similar findings. Pupils and students with hearing disorders retrieve the most information from the Internet and school. The average value of the acquired information about social pathological phenomena (according to the estimate of respondents themselves) is in both cases identical, i.e. approx. 57%, which corresponds to the middle category in verbal expression. Friends (48%) occupy the second place in their evaluation, then television (almost 46%) and family (41%), regrettably, with the lowest percentage.

It is necessary to work on the assumption that in the case of pupils with hearing disorders, school subjectively provides the majority of information in the given area. Langer (2002) states that "suggestibility" of people with hearing disorders who identify themselves more easily with any model, may be used in prevention procedures. This positive model is unequivocally represented by a pedagogue in a school environment.

It is necessary to always repeat and consolidate the acquired knowledge by the specificity of implementation of primary prevention in the area of social pathological phenomena regarding pupils and students with hearing disorders. It can be considered that the effectiveness and functionality of the whole primary prevention process may be considerably supported by the reinforcement of communication competencies of pedagogues at schools for hearing disorders.

It is necessary to take into account the fact that the trend in education of pupils and students with hearing disorders encompasses emphasis on support of their independence and equal employment in the majority society. However, if pupils are to find their use in our society, it is necessary to make them aware of real dangers and prepare them also for the reverse side of human society, which is permeated with a social pathological phenomena. The results of the research have proved that pupils with hearing disorders are for the time being insufficiently prepared and thus, systematic intervention is necessary within this area.

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