SPORTS-ANAMNESIS PROFILE OF DEAF ELITE ATHLETES IN CROATIA

Ana Vuljanić¹, Dragana Tišma², Srna Jenko Miholić³

¹Association of Sports Recreation and Kinesitherapy, Zagreb, Croatia
²Association of Sports Recreation and Kinesitherapy, Zagreb & Zagreb Health School, Zagreb, Croatia
³Faculty of teacher education, University of Zagreb, Croatia

Abstract

The aim of this research was to determine, for the first time, sports and medical history profile of top elite deaf athletes in the Republic of Croatia, also to collect information about the athlete’s hearing status, sports initiation, competitive status, and preferences for coaches and integrated or segregated competitions. The study was conducted on a sample of 31 top deaf athletes from seven sports. For the purpose of this investigation a questionnaire was used (Kurkova, Valkova & Scheetz, 2011). During competitions on national level all respondents participated with normal hearing peers’ athletes what does an important role to their integration into the hearing community. Results of this study indicate deaf athletes desire for greater opportunities to participate in the chosen sport, so are mostly forced to integrate into a standard system of sport. The findings confirm positive parent’s role in supporting and developing the child’s desire to participate in sports. Period of sports initiation of top Croatian deaf athletes, is on average, at the start of attending higher grades of elementary school, so it is necessary to promote greater importance, as well as to inform parents, health professionals and educational institutions about the possibilities for including children with hearing loss in both regular and in deaf sport system at the early age.

Key words: integrated competition, separate competitions, hearing status, sports initiation

Introduction

The term deaf athlete refers to an athlete with hearing impairment, that is to say a deaf, hard of hearing and an athlete who has a cochlear implant. The only restriction is related to meeting the criterion of minimum damage of 55 dB on a better ear, the average speech frequencies of 500, 1000 and 2000 Hz, in order to have the right to participate in the international elite competitions for deaf athletes, where it is forbidden to use a hearing aid or external part of the cochlear implant during the competition (ICSD, 2016).

The international elite competitions for deaf athletes includes major sports events such as the Deaflympics, previously called World Games for the Deaf, World Deaf Championships and Continental Deaf Championships (European and other championships) in Olympic and non-Olympic sports.

A review of current professional and scientific literature with the aim of describing the participation of top deaf athletes revealed the lack of research in Croatia. Also the are limited number of this type of studies in other countries, too. Stewart, Robinson & McCarthy 1991 did the research on 21 deaf athletes who participated in the World Games for the Deaf in New Zealand Christchurch in 1989. Research was conducted with the aim to describe the bio-demographic characteristics and socialization processes that led to the initiation of these athletes in the sport of deaf. Another study on the 53 top European deaf athletes gave an insight into the factors that influence their participation in sports (Kurkova, et al., 2011).

Above mentioned research papers gave fundamental basis for the caring out this research which aim was to establish, for the first time, sports and medical history profile of elite deaf athletes in Croatia, and to collect information about the athlete’s hearing status, sports initiation, competitive status, preferences for coaches and integrated/segregated competitions.

Methods

The research sample included a total of 31 athletes (20 male athletes and 11 female athletes) from seven sports altogether (athletics, bowling, chess, curling, handball, shooting and table tennis). The average respondents chronological age was 34.5, ranging from 16-77 years. This study involved athletes who meet the following four criteria: (1) a minimum of bilateral hearing loss of 55 dB for the better ear (the average speech frequencies of 500, 1000 and 2000 Hz), (2) a member of the Croatian Deaf Sports Association, (3) an active member of the Croatian national team nominated for participation in the elite international competitions, and (4) medal won or achieved significant result at elite international competitions in the last two years from the time of conducting the survey. The total population of deaf athletes is 53 athletes from eight sports (athletics, bowling, chess, curling, handball, shooting, skiing and table tennis), what means 58.5% of the entire population of Croatian top deaf athletes were included in this study.
For the purpose of this research, a questionnaire was used to investigate participation of top deaf athletes in the sport (Kurkova, et al., 2011), which includes several structured units. Analysis of this survey included few survey scopes: athlete’s hearing status, the use of hearing aids and communication, as and history of participation in sports competitions.

The study was conducted with the approval of the Croatian Deaf Sports Association, who also made initial selection of its members, who met the criteria for participation.

Results

Research results for athletes hearing status (Figure 1) show that the largest share of athletes were born deaf or became deaf during their first two years of life (67.7%) and majority of them (51.6%) has a deep hearing loss or hearing loss greater than 90%.

Most of the elite deaf athletes using a hearing aid (80.6%) as shown in Figure 2, where ten of them uses one hearing aid, nine two hearing aids, while six has built a cochlear implant. More than half of surveyed deaf athletes combines the use of sign language, spoken speech, speech and lip reading and written text (61.3%), respectively as primary communication mode are using total communication (Figure 2).

Results for parental involvement in the sport within elite Croatian deaf athletes reveals 45.1% of parents have not participated in any sports, elite nor at the recreational level as seen in Figure 3. In most cases, deaf athletes involved in sport by themselves (54.7%) or were encouraged by parents (32.3%). Almost half of them (47.1%) was driven to the sport by their parents of whom at least one parent participated in sport (54.9%).

Croatian elite deaf athletes in average got involved in an organized sport activities system in age of 10.5 (range 6-27 years), and in age 18.6, in average (range 7-40 years), they got involved in their current sport where they have elite athlete status.
Most of them have trainers or coaches (58.1%), where mostly one is a normal hearing person as shown in Figure 4. Most deaf athletes don’t have a preference towards a particular type of trainers (67.7%) whether trainer is the hearing or deaf person. As an ideal coaching features athletes frequently mentioned their expertise, understanding and care for the athlete, awareness and knowledge how to communicate with deaf person and certain qualities and values as sacrifice, dedication, integrity, perseverance and motivation.

![Figure 4: Graphic presence of a trainer and desirable type of a trainer](image)

All surveyed deaf athletes participated in the mainstream competition system with normal hearing athletes in Croatia. 51.6% of them reported how preference for a separate competition system it is not important to them, respectively they don’t have preference either towards integrated nor to separate competition system as shown in Figure 5. Nine respondents would like a separate type of competition where they would compete with only deaf athletes, because they believe all athletes there have same fair conditions (55.6) and better communication with other participants during the competition (44.4%).

![Figure 5: Graphic preference for a separate competition system](image)

**Discussion**

When we talk about elite Croatian deaf athletes, among most of them, hearing impairment results from birth or developed in the first two years of life. Given the high frequency of hearing aids use, most deaf athletes rely on the ability to communicate through the use of total communication. The above is highlighted by the fact that deaf athletes who use sign language also rely on their ability to communicate through spoken speech, speech and lip reading, and finger spelling, which is consistent with previous studies (Scheetz, 2004; Kurkova, et al., 2011).

The primary communication mode is associated with the degree of hearing loss, timely diagnosis, quality of rehabilitation, the type of school and socio-cultural environment of education (Kurkova, 2001; Scheetz, 2004). It is assumed that these factors have an impact on the preferences of deaf athletes for the type of competition they would get involved in and on their sense of understanding and interest which hearing community shows for the forms of communication among deaf people (Kurkova, et al., 2011). During sports events there seem to be a common misunderstanding about the communication needs of deaf people (Kurkova, 2005), and one of the causes may be that a deaf person often does not inform hearing society of his/her communication problems and consequently remains in isolation. For example, when a deaf person needs somebody to repeat some information, the hearing person can experience this request as a lack of understanding or a lack of attention (Martin & Bat-Chava, 2003).

The results of this study confirm the positive role of parents in supporting and developing the child’s desire to participate in sports. Children with sports active parents are six times more likely to show similar active life style than children with sedentary parents. Parents’ attitudes to kinesiological activity strongly influence physical activity habits in their own children, and the same was confirmed for children with hearing impairment (Kurkova & Sigmund, 2010; Ellis, Lieberman & Dummer, 2014).
It is believed that the deaf person owns feeling of comfort in the hearing community may later affect the preference for participation in an integrated or separate sports system, but also in the choice of the trainer or the coach (Kurkova, et al., 2011). In this study, the majority of deaf athletes, who have trainer, actually have hearing trainer and one seems to be a crucial factor in helping deaf athletes for integration into the mainstream sport system. Croatian elite deaf athletes suggested how auditory status of trainers is not important to them, as it is their professional competence, understanding and concern which they show for the athlete, as well as, the awareness and knowledge of how to communicate with them.

One of the reasons why all of the respondents are competing in the regular system of competition with hearing competitors may be because there are not enough domestic sport competitions for only deaf athletes. Integration of deaf athletes in the system of training and mainstream competition with normal hearing athletes helps them to raise their quality of training and preparation for national and international competitions of deaf, but also allows them to evaluate their current achievements with others throughout the season. Several athletes have indicated its preference to a separate system of competition, what could be consequence of previous negative socialization, and it is also in accordance with the above research (Kurkova et al., 2011). They believe conditions are better in a segregated system of competition regard to communication, and fair conditions for all. As long as deaf athletes are not limited by their physical disabilities, as long as vestibular system is not damaged, they have option to choose competition system as they prefer. Although deaf athletes had rather compete with athletes similar to themselves because of socialization and communication options, they still appreciate opportunity to participate in mainstream competitions what gives them possibility of their sports performance evaluation, promotion and wider recognition of deaf athletes.

Conclusion

This research was conducted with the aim of creating a sports anamnestic profile of elite Croatian deaf athletes. All deaf athlete respondents participate in national regular system competitions, what does an important role in their integration into the hearing community. The integration of deaf athletes helps them to raise the quality of training and prepare themselves for the upcoming national and international events of the deaf, but also allows them to evaluate current achievements with others throughout the season.

The results of this study confirm parent’s positive role in supporting and developing child’s desire to participate in sports. However, as the majority of respondents’ have involved individually in the sport, and in average time of their sport initiation have begun while attending higher grades of elementary school, it is needed greater promotion of the importance for including the children with hearing impairment in physical activity and sport from earliest age.

References