

Outcome Measures for the New Hampshire Special Olympics Healthy Hearing Program

Introduction

The Special Olympics Healthy Hearing mission is to address the hearing healthcare needs for intellectually disabled athletes. An intellectual disability can be caused by congenital disorders of the brain, damages to the cerebrum, and, in one-third of the cases, unknown factors (Neumann, et al., 2006). This is accomplished by providing screening services for the athletes. The Healthy Hearing programs have expanded nationally and internationally however there is limited information about whether follow-up occurs for those athletes who do not pass the hearing screening protocol.

The purpose of this project is to determine the success of the New Hampshire Healthy Hearing program by examining the rate of follow-up for athletes who are referred for services and to determine the standard of care which is received. Specifically, this research will determine:

1. whether athletes who were referred for follow-up actually received these services
2. what factors may have prevented follow-up care
3. whether the follow-up proved to be a favorable experience.

Methodology

Participants

The subjects of this study were Special Olympic athletes from the 2007 New Hampshire Summer games.

- ❖ total number of athletes screened at the Healthy Hearing event was 80.
- ❖ 32 referred for further evaluation (14 female, 18 male).

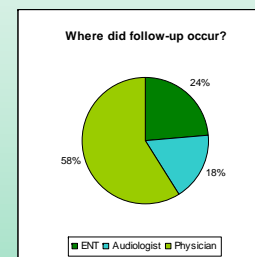
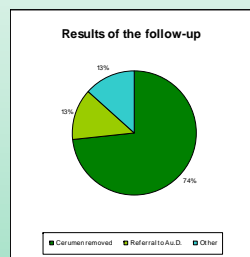
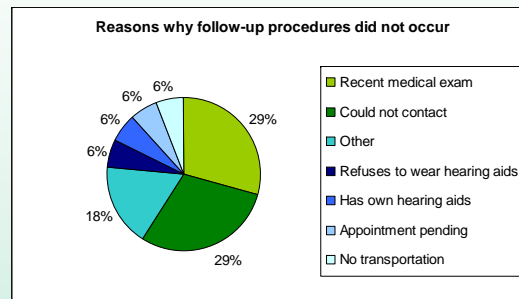
These 32 individuals were included in this investigation after a hearing evaluation on the day of the event indicated the need to be referred for follow-up consultation.

Procedures

The data utilized in this study was obtained at the University of New Hampshire as part of the annual summer games. At the end of the screening, each athlete received a summary sheet which included recommendations for follow-up and a letter explaining the research goals of this study. Following this event, the following steps were taken:

- ❖ Contact information for each referred athlete referred was obtained from the New Hampshire Special Olympics database.
- ❖ Guardians were contacted by phone within six weeks of the Healthy Hearing event.
- ❖ A short survey was completed to determine actions taken about follow-up procedures. The survey was designed to obtain more specific information about follow-up.
- ❖ If the guardian was unaware of the screening results that were obtained at the Healthy Hearing event, a copy was mailed to them and arrangements were made for a later contact.
- ❖ If the athlete had a scheduled audiology appointment, the researcher asked permission to accompany the athlete and their guardian or family to the follow-up appointment. The purpose of this was to have an additional observation of professional interaction

Results



Discussion

Based on survey results, the guardians chose not to pursue follow-up because athletes appeared to "hear well."

Research has been conducted to assess the guardian's awareness of hearing loss. In a study done by Lowe, researchers asked the guardians, prior to giving the hearing evaluation, if they suspected any degree of hearing loss in their son or daughter.

- ❖ 52% responded "no" to this question and of that group; 43% were diagnosed with a hearing loss.

Another example can be seen in the study by Meuwese.

- ❖ Out of 1,215 people, 34.9% presented with a hearing loss.
- ❖ In this percentage, 47.6% had not known there was a hearing loss previously.

These are excellent indicators of the lack of awareness that exists regarding hearing healthcare for people with intellectual disabilities.

For the athletes that received follow-up, cerumen impaction was the most common diagnosis. In a study done by Neumann, cerumen impaction occurred in 28% of adults with intellectual disability as opposed to the 2-6% affected in the normal population.

Regarding professional interactions, this study found them to be positive overall. However, the amount of experience and knowledge with this particular population contributes to a more favorable experience for the athlete.

Conclusion

This study found that the majority of guardians were unaware of the Healthy Hearing screening program and this was the cause of the low rate of follow-up.

For the athletes that went for follow-up, 73.3% had cerumen removed, resulting in improved hearing.

Recommendations

- ❖ Sharing the results of the hearing screening by direct mailing of the referrals or follow-up by telephone may be beneficial.
- ❖ Increasing the guardians' awareness of the prevalence of hearing loss in people with intellectual disabilities.
- ❖ Special Olympics could also launch an awareness campaign to educate people about the importance of regular cerumen removal.
- ❖ Special Olympics could offer continuing education for professionals on appropriate interactions with this population as well as health issues to be aware of.
- ❖ Provide proper treatment at a young age, specifically for stenotic ear canals, so that secondary consequences become obsolete.

References

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