

Prevalence of Voice Disorders in Cheerleaders

A Literature Review

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Abstract

There is a higher prevalence of voice disorders in cheerleaders in comparison to their peers. Consistent strain of the vocal folds over time has led to the concern of vocal abuse in young cheerleaders. Long term effects of vocal abuse include structural effects to the vocal folds. If these structural effects occur, cheerleaders may experience distorted vocal quality, pitch, volume, and resonance in addition to pain and irritability. The purpose of this poster is to bring awareness to the prevalence of voice disorders in cheerleaders. The importance of implementing a vocal hygiene program is also discussed. Supplemental tools to implement a vocal hygiene program are provided. This poster will also provide collaborative methods with other professionals. Vocal abuse is one of many ways a person can cause a voice disorder. Too much shouting and talking is just one way a person can abuse their voice. Considering cheerleading involves leading the crowd by yelling, cheerleaders are at a high risk of vocal abuse. There are approximately 3 million cheerleaders in the United States alone. Because cheerleading is such a popular activity, vocal hygiene programs need to be implemented into everyday practice. If they are not implemented, an epidemic of voice disorders could become present in our society. Implementing preventative measures will decrease the case load of speech-language pathologists in the future. The success of implementing a vocal hygiene program into cheerleading teams will be dependent on the collaboration and consistency of support staff including; athletic directors, athletic trainers, coaches, athletes, and parents.

Learner Outcomes

At the culmination of this session, participants will be able to:

1. Identify the prevalence of voice disorders withing cheerleading.
2. Recognize the benefits of implementing a vocal hygiene regimen within a cheerleading squad.
3. Apply skilled therapeutic techniques to help cheerleaders practice vocal hygiene.

Introduction

- Cheerleading** is a widely recognized activity around the world with over 70 countries participating. In the United States alone, there are around 4 million partakers from elementary to college levels (Morgan, 2017).
- Voice Disorders** are noted by deviations in a persons vocal quality, pitch or loudness (Aronson & Bless, 2009; Boone et al., 2010; Lee et al., 2004).
- One major cause of voice disorders is vocal abuse and misuse.
- Cheerleading is identified as an activity that creates a high risk of vocal abuse and misuse (Andrews et. Al, 1983).

- With the growing numbers of cheerleaders on the rise, concerns of vocal disorders also increase.
- Voice Disorders fall under the scope of practice of Speech Pathologists, making it the SLPs responsibility to create and implement a vocal hygiene program for cheerleaders.

Rationale for Implementing a Vocal Hygiene Program

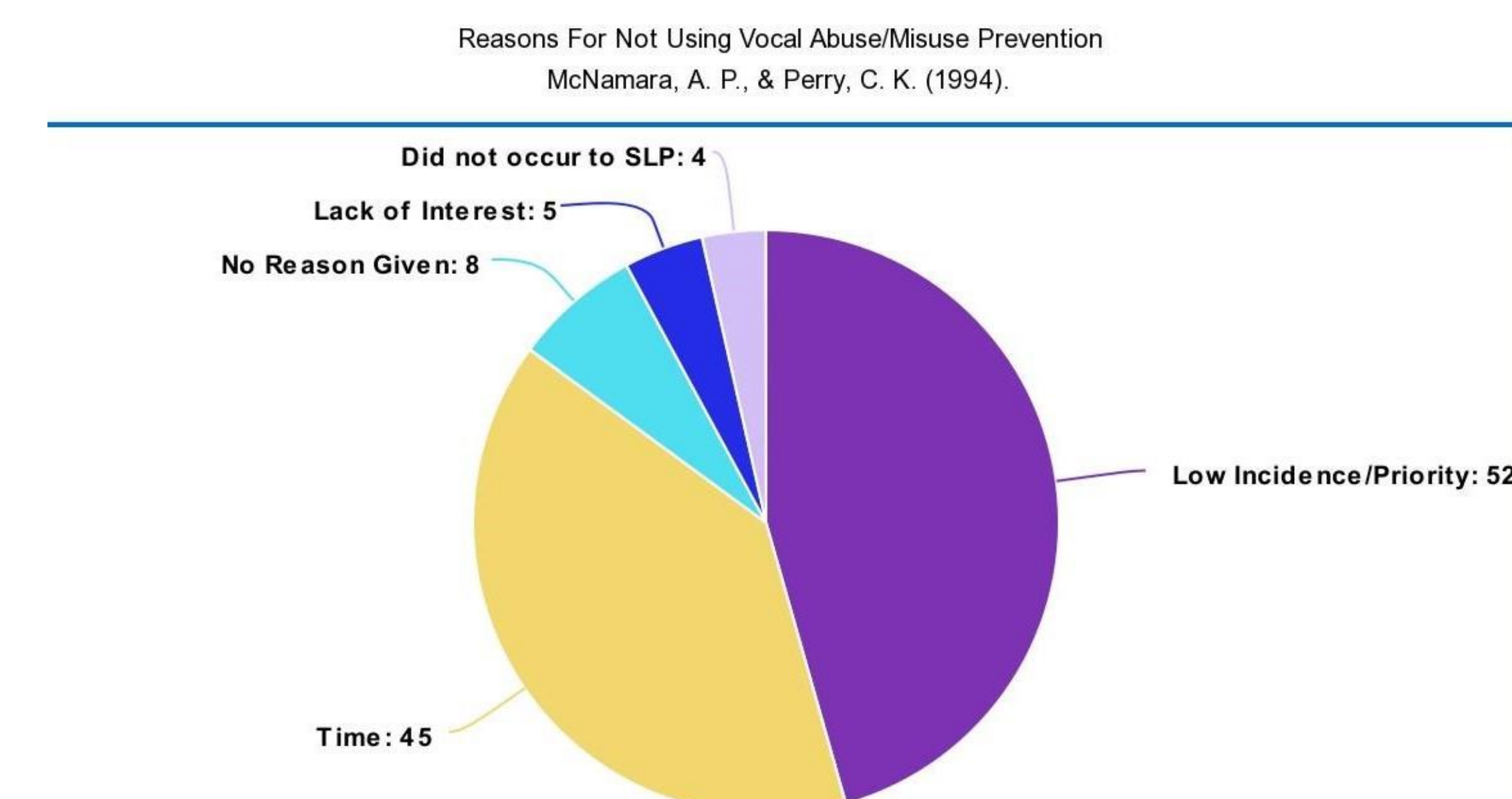
- Up to 86% of cheerleaders have reported deviations with their voices. These deviations include a range of abnormalities from mild dysphonia to aphonia. (Reich et. al, 1986).
- Studies have also shown that cheerleaders are more likely to develop a voice disorder than their peers (Andrews et. Al, 1983).
- There is a positive correlation between the incidence of voice problems and years of participation in cheerleading (Andrews et. al, 1983).
- Implementation of a vocal hygiene program has been found to be beneficial across modalities.
- Cheerleaders reported in the post test a significant improvement in their vocal quality once a vocal hygiene program was implemented into their cheerleading warm-up (Aaron et. al, 1991).
- Another study revealed that an overall lack of vocal hygiene education is linked to chronic and acute voice issues in professionals (Vermeulen et. al, 2022).

Prevention Strategies

- Preventing vocal abuse is possible in cheerleading. Practicing good vocal hygiene is pivotal in ensuring that cheerleaders prevent vocal abuse.
- Warm up voice by humming and gradually getting louder.
- When your voice is weakening, avoid overusing it. Try clapping to make noise instead.
- Rest your voice when possible. Use breaks to rest your vocal cords by limiting talking.
- Limit leisure talking to avoid vocal overuse on game days.
- Drink water to stay hydrated.
- If you notice a raspy or hoarse voice, completely rest your voice.

Limitations of Implementing Vocal Hygiene Programs in Schools

- Although many speech-language pathologists are aware of the risk pf vocal abuse that cheerleaders face, there is little to no evidence that vocal hygiene programs are being implemented in school-sponsored cheerleading teams. McNamara and Perry conducted a survey to better understand the frequency of vocal hygiene programs implemented into high school sports.
- 90% of SLPs stated that they do not offer vocal abuse/misuse prevention instruction to teachers or coaches.
- The rationale for this statement included but is not limited to:
1. Low prevalence or priority
 2. Time restraints
 3. No Reason Given
 4. Lack of Interest
 5. Did not occur to the Speech-Language Pathologist.



Conclusion

Although cheerleaders are at high-risk for developing voice disorders related to vocal misuse and abuse, there is a lack of implementation of vocal hygiene programs within cheerleading teams, specifically at the school level. School speech-language pathologists should take responsibility for creating training for coaches, athletic directors, and other support staff in order to properly educate and implement vocal hygiene protocols.

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