Critical Review:

Behavioural Intervention for Pill Swallowing: Children and Adolescents with Medical Diagnoses

Alisha Vaz
M.CI.Sc. (SLP) Candidate
University of Western Ontario: School of Communication Sciences and Disorders

This critical review examines whether behavioural intervention is an effective method for teaching children and adolescents with medical conditions to swallow oral medication (pill form). Eight studies, four single subject research designs and five case studies, were reviewed. Overall, research provides a suggestive level of evidence for the use of behavioural techniques in teaching children and adolescents to swallow pills. Methodological limitations and clinical implications for Speech-Language Pathologists are discussed.

Introduction

Difficulty swallowing oral medication in pill form is often reported in young children and adolescents. One third of adolescents (Hansen, Tulinius, & Hansen, 2008) and over half of children between the ages of 6 and 11 have reported difficulties with pill swallowing (Meltzer, Welch, & Ostrom, 2006). These difficulties exist and persist for a variety of reasons, including,

(e.g., apple sauce or ice cream) was inconvenient due to the loss of food via chronic vomiting.

Training involved the use of ice in graded subtasks and trial swallows of the prescribed medication. Verbal cues were used to help the patient relax. Results reported that the patient was able to swallow the largest chunk of ice and the prescribed medication on day two of training. At an eighth month follow-up the patient was able to not only maintain the skill, but was able to swallow larger sized capsules.

Strengths of this case study include face validity and information regarding maintenance. However, the case study is limited in its design, leaving out key qualitative components such as the author's philosophical stance, systematic analysis of data, possible triangulation, and

reviewed patient charts to gather data on medication adherence and subsequent health benefits (viral load suppression and CD4 T-cell% improvements). Appropriate analysis, which included the Mantel-Haenzel ²

Conclusion

The research evaluated in this critical review provides a suggestive level of evidence for the use of behavioural intervention for pill swallowing difficulties, indicating a need for further research.

Clinical Implications

First and foremost, the behavioural interventions discussed substantiate the role of Speech-Language Pathologists in treating pill-swallowing difficulties. Secondly, the suggestive level of evidence provided by these studies offers variations of protocols that are replicable and can be easily integrated into practice. It is therefore left to the clinician to design the most appropriate intervention based on each individual client. Finally, clinicians should consider the effect of language, age and motivation when designing therapy for children and adolescents.

Future Recommendations

Ongoing examination of the efficacy of behaviourally based interventions and the roles of language, age, and motivation in pill-swallowing training are highly recommended, specifically through the use of randomized controlled trials, larger sample sizes, and systematic evaluation of data. Future research is needed to delineate which therapeutic techniques and session designs are best suited for children versus adolescents.

References

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