

The Activities of Daily Living in Those With a Tracheostomy

Miller, S., Blasiman, R. N., & Brady, C.
Kent State University Salem Campus

Abstract

In this quantitative study, we focus on the activities of daily living (ADL) of people with a tracheostomy. We aim to gain a better understanding of the factors for the ADL in people with a tracheostomy and identify concerns along with a tracheostomy. The two questions we will address in this research are, “What are the common concerns of ADL with people who have a tracheostomy?” and “What are the factors that affect the ADL of people with a tracheostomy?” Research collection is currently being collected through an online anonymous Qualtrics survey posted on Facebook pages that have been created as support for those with a tracheostomy (N = 55).

Introduction

This quantitative study gathered information on the effects of activities of daily living (ADL) in those with a tracheostomy. A tracheostomy is a surgical hole in the front of the neck into the windpipe to allow an opening to breathe (Mayo Clinic, 2021). Tracheostomies are often done when the airway is blocked or swollen (Mayo Clinic, 2021). As a result of a tracheostomy, ADL are compromised. ADL are categorized as routine tasks that healthy, independent individuals can perform independently (Edemekong, Bomgaars, Sukumaran, & Levy, 2020). ADL's include walking, eating, dressing oneself, personal hygiene, and toileting (Edemekong, et. al, 2020). With the results, I hope to educate the public on the effects people with tracheostomy's experience every day and what can be done to decrease the effect of ADL.

Method

- An online anonymous Qualtrics survey was used to gather quantitative data. The survey was posted to three separate Facebook groups deemed appropriate for the research as they are all support groups for those with a tracheostomy.
- The three Facebook groups were Tracheotomy, Tracheostomy Warriors Support Group, and Tracheostomy Support for Adults.
- The survey was made up of questions regarding ADL asking them to rank how they are affected by each activity using a Likert scale from Strongly Agree to Strongly Disagree.
- The results were analyzed using SPSS running an ANOVA and displaying the results using a scatterplot.

Results

Table 1:

Communication With Others						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.992	1	22.992	6.453	.014 ^a
	Residual	171.929	48	3.563		
	Total	194.920	49			

Table 2:

Others Understanding When They Try to Communicate						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.695	1	8.695	2.204	.144 ^a
	Residual	189.325	48	3.944		
	Total	198.020	49			

Table 3:

Difficulty Eating						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.828	1	22.828	6.418	.019 ^a
	Residual	167.172	47	3.557		
	Total	190.000	48			

Table 4:

Sleeping at Night						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.278	1	29.278	7.990	.007 ^a
	Residual	176.102	48	3.669		
	Total	205.380	49			

Figure 1:

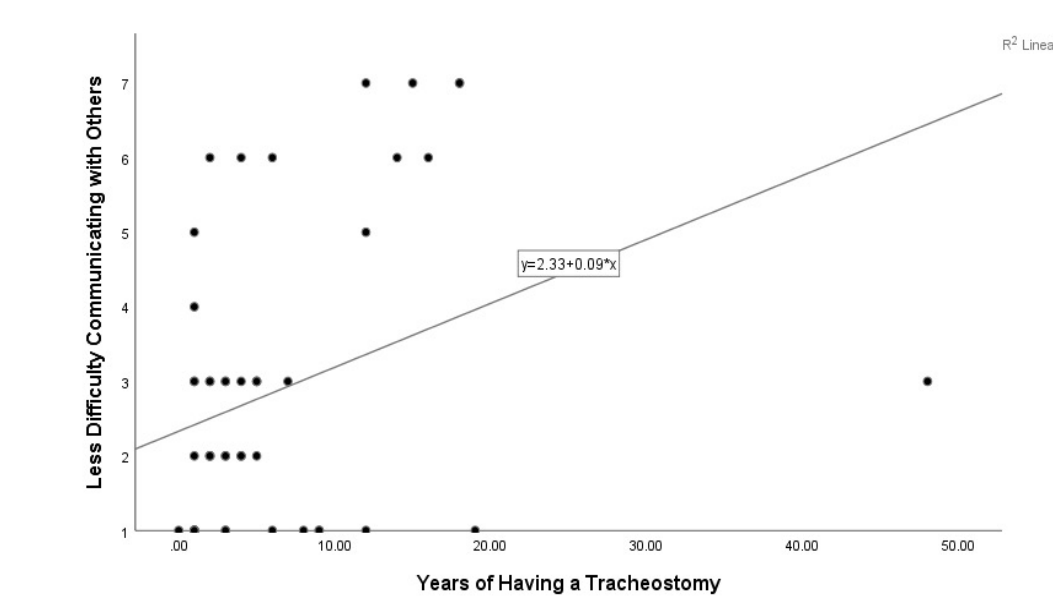


Figure 2:

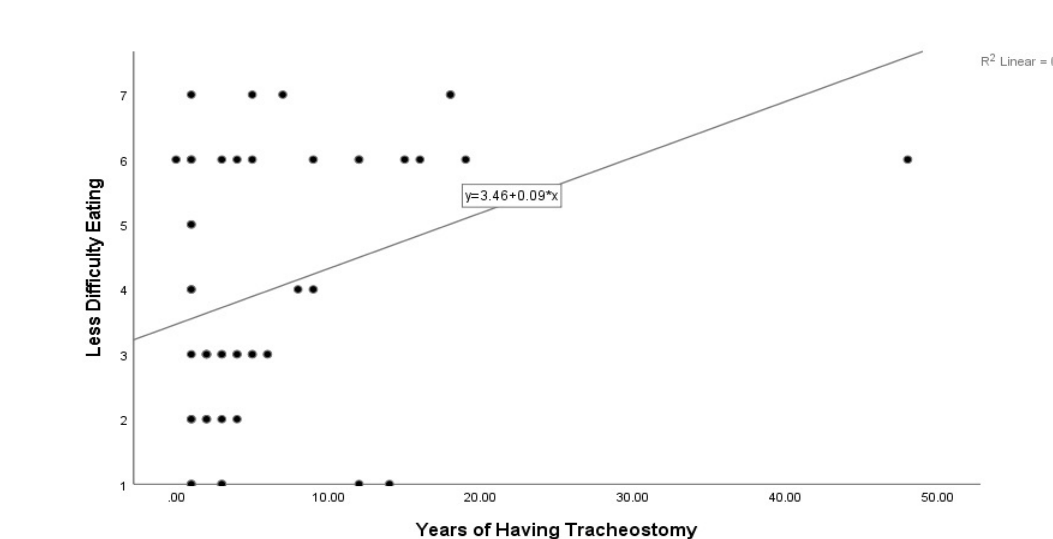
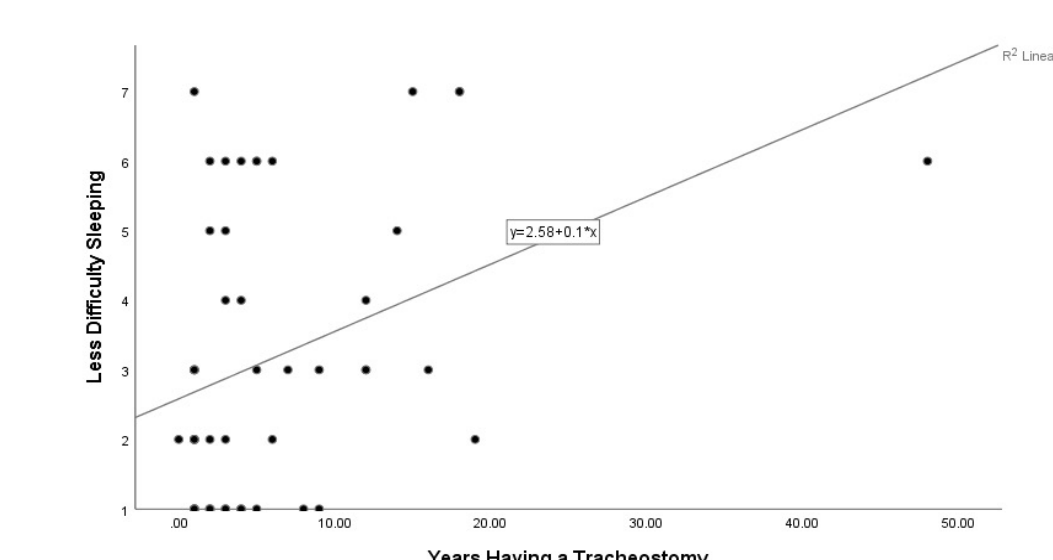


Figure 3:



- 55 participants answered the online survey; 10 male, 42 female, and 3 did not disclose their gender.
- The mean age of participants was 45 years old and the mean duration of how long they have had a tracheostomy was 6 years.
- The online anonymous Qualtrics survey showed significant results when asked about communication, eating, and sleeping. According to the survey, people with a tracheostomy have the most difficulty with communication, eating, and sleeping.
- Another significant finding was those with a tracheostomy also indicated it is harder for them to get a job.
- It is also important to point out that the amount of time someone has had a tracheostomy affects the answers to these questions as it shows people have become adapted to having a tracheostomy and have learned through their experiences.

Discussion

- Before beginning my research, I hypothesized that those with a tracheostomy would have the most impact on their ability to communicate and eat. Overall, my hypothesis was supported by my results as participants indicated communication and swallowing food are some of their biggest affect of having a tracheostomy. Due to a tracheostomy being a surgical incision into the airway, communication and swallowing food are often the main struggles those with a tracheostomy experience.
- Significant results were also found in the question asking participants if they can find a job while having a tracheostomy. If communication is one of the main affects of having a tracheostomy, it makes sense that also finding a job would be difficult.
- More patient teaching and education needs to be done before a tracheotomy is done or in an emergency situation, after it has been done. Most people who have a tracheostomy did not realize the affects the procedure would have on their ADL until they experienced the affects themselves. Support groups such as the Facebook groups used to collect results for this research are beneficial for those with a tracheostomy to talk to one another and give advice about their experiences and struggles.
- Limitations to this study were that there was only 55 participants who answered the survey, 80% being female.
- Future research suggestions include learning how to make communication better and easier for those with a tracheostomy as this is the main affect those with a tracheostomy often struggle with.

References

- Edemekong, P. F., Bomgaars, D. L., Sukumaran, S., & Levy, S. B. (2020). Activities of daily living. *NCBI*. <https://www.ncbi.nlm.nih.gov/books/NBK470404/>
- Mayo Clinic. (2021). Tracheostomy. <https://www.mayoclinic.org/tests-procedures/tracheostomy/about/pac-20384673>