

USING THE CAT TOOL IN COPD MANAGEMENT

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Picot Question

Does the implementation of a COPD protocol (Intervention) to educate nursing staff in the Long-Term Care facility vs. no implementation of protocol (Compare) decrease COPD exacerbation rates (Outcome) among the geriatric population aged 65 years and older for a period of 30-60 days.

Introduction to Problem

- Control and management of exacerbation rates among COPD patients has been a major challenge to many healthcare providers
- COPD is one of the leading causes of death in the United States where it affects over 16 million citizens.
- The growing population is aging, putting them at a risk for increased difficulty in breathing, dyspnea, tachypnea, shortness of breath, particularly during activities, wheezing, chest tightness, change in volume and color of sputum and fever.
- The contemporary literature advocates for various management protocols in the management of COPD among the elderly
- Utilizing the management protocols proper has a direct impact of reducing the exacerbation rates.

Significance to the Problem

- COPD is the number one cause of medical hospitalizations among the elderly in the USA.
- In 2013, 1 billion dollars was used in management of COPD patients
- Due to the worldwide impacts of COPD among the aging population, it is imperative to implement a consistent and effective educational tool to reduce exacerbation rates.

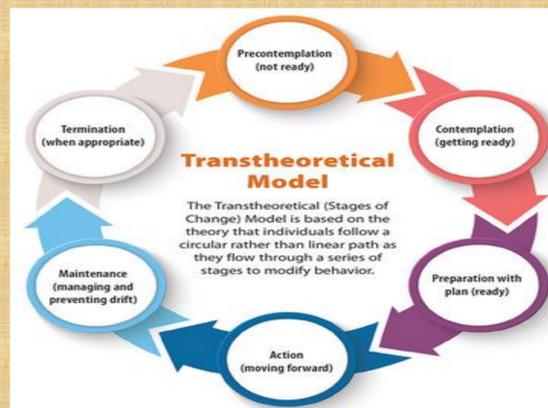
Methodology

- The exacerbation rates for patients aged 65 years and above analyzed in which the major indicators were increased dyspnea, increased cough and change in sputum .
- 15 Participants recruited, informed consent given to the participants for the pre-test, educational intervention and post-test. A 30 minutes presentation given on COPD management protocol.
- The utilization of the CAT tool was then used to assess COPD symptoms.
- The data on exacerbation rates, Pre-test, post tests and educational intervention were collected.
- Collected data by principal investigator entered into IBM©SPSS® Statistics by statistician.

Optum Rx home delivery/leave-behind distributed (post card was left)

Theoretical Framework

- Trans-theoretical Model



How is your COPD? Take the COPD Assessment Test™ (CAT)

This questionnaire will help you and your healthcare professional measure the impact COPD (Chronic Obstructive Pulmonary Disease) is having on your breathing and daily life. Your answers and test score can be used by you and your healthcare professional to help improve the management of your COPD and get the greatest benefit from treatment. For each item below, place a mark (X) in the box that best describes you currently. Be sure to only select one response for each question.

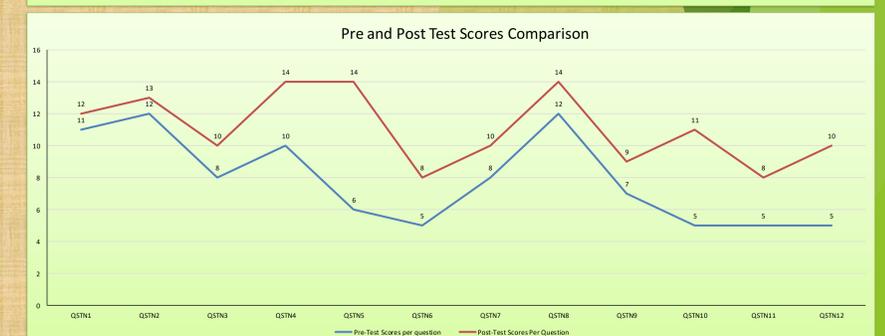
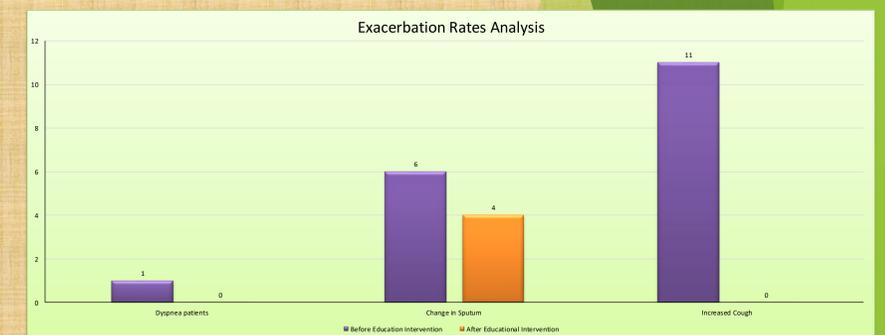
Example: I am very happy 0 1 2 3 4 5 I am very sad

I never cough	0 1 2 3 4 5	I cough all the time	SCORE
I have no phlegm (mucus) in my chest at all	0 1 2 3 4 5	My chest is completely full of phlegm (mucus)	
My chest does not feel tight at all	0 1 2 3 4 5	My chest feels very tight	
When I walk up a hill or one flight of stairs I am not breathless	0 1 2 3 4 5	When I walk up a hill or one flight of stairs I am very breathless	
I am not limited doing any activities at home	0 1 2 3 4 5	I am very limited doing activities at home	
I am confident handling my home despite my lung condition	0 1 2 3 4 5	I am not at all confident handling my home because of my lung condition	
I sleep soundly	0 1 2 3 4 5	I don't sleep soundly because of my lung condition	
I have lots of energy	0 1 2 3 4 5	I have no energy at all	

TOTAL SCORE

Results

- Paired t-test showed that it is statistically significant that the educational intervention has increased the knowledge base of the participants about COPD management by 2.733% per nurse and 6.83% per question which has seen the exacerbation rates reduce considerably
- Interpretation of the exacerbation rates analysis data demonstrated the educational intervention had a statistically significant impact on decreasing the exacerbation rates among the COPD patients .
- The intervention had a statistically significant association with the change in dyspnea cases from 1 to 0, change in sputum from 6 to 4 and increased cough from 11 to 0.



Conclusion

A considerable decrease in the exacerbation rates in COPD patients can be attained through the inception of an educational intervention that saw the knowledge base of the nurses increase on the COPD management.