

Living with Chronic Obstructive Pulmonary Disease and Being Followed Up Through Telemedicine – A Phenomenological Approach

Tina Lien BARKEN^a, Elin THYGESEN^b and Ulrika SÖDERHAMN^c

^aUniversity of Agder, Faculty of Health and Sport Sciences, Center for eHealth and Health Care Technology Grimstad, Norway

^bUniversity of Agder, Faculty of Health and Sport Sciences, Center for eHealth and Health Care Technology Kristiansand, Norway

^cUniversity of Agder, Faculty of Health and Sport Sciences, Grimstad, Norway

Abstract. Chronic obstructive pulmonary disease (COPD) provides substantially reduced health related quality of life (HQoL). Telemonitoring on COPD patients appears to have a positive effect on improving HQoL. This study has a phenomenological approach, and ten informants, who were followed-up between 1 and 3 months in their own homes through telemonitoring of COPD symptoms, narrated their lived experiences of HQoL. The results show that the informants experienced safety and increased knowledge through the digital dialog (telemedicine) with expertise nurses, which indirectly improved their HQoL, and in term lead to increased mastery and control in managing their disease. Several studies show an increased HQoL, but the benefits are still limited and there is a need for further research.

Keywords. COPD patient, telemedicine, health related quality of life, phenomenology

1. Introduction

Chronic obstructive pulmonary disease (COPD) is a serious, progressive, chronic disease, which provides substantially reduced quality of life [1]. To have had increased dyspnea [2] and exacerbations [2,3] have been found to impair health related quality of life (HQoL) in COPD patients. These results show that in order to improve HQoL, effective management of exacerbations are needed [2,3].

Telemonitoring in COPD patients appears to have a positive effect in improving HQoL [4]. The aim of the study is to describe the lived experiences of HQoL among a group of COPD patients who were included in a telemedical intervention after a hospital stay.

2. Methods

The study has a phenomenological research approach, and is based on narratives of lived experiences of HQoL among patients with COPD that have been included in a

telemedical intervention between one and three months. Ten informants were interviewed, and the interviews consisted of two open questions that would enhance the informants to narrate their own lived experience.

The data were analyzed through a descriptive phenomenological research method designed by Giorgi [5]. The results are based on an analysis of five out of ten interviews. The research design is approved by the Norwegian Social Science Data Services (project number: 41146).

3. Results

The results from the analysis showed that the informants' experienced increased knowledge and safety concerning their chronic disease through digital dialog and monitoring (telemedicine) by nurses with expertise on COPD. Improved knowledge gave patient increased mastery and control over their disease. Furthermore, the digital dialog affected their health related quality of life indirectly; as the patient experienced personal presence from their nurses, direct clinical information followed by confirmation and treatment in the comforts of their own homes.

4. Discussion

For patients with COPD, safety is a distinct experience which all of the participants acknowledged. This experience had a positive impact on HQoL, and affected the life of each informant in managing the disease. Several studies show an increased HQoL when patients with COPD are monitored through telemedicine, however, the benefits are still limited and there is a need of further research in order to test telemedicine solutions on a larger scale.

5. Acknowledgments

We want to acknowledge the University of Agder, United4Health, the eHealth center and the Ugland-foundation for the opportunity to conduct this research.

References

- [1] WHO. Chronic respiratory disease. COPD management. Retrieved from: <http://www.who.int/respiratory/copd/management/en/>
- [2] L. Lirong L. Yingxiang Y. Ting. Z. Hong. L. Jie. W. Chen. Determinants of health-related quality of lifeworsening in patients with chronic obstructive pulmonary disease at one year. *Chinese Medical Journal*, 2014; 127: 4-10.
- [3] C.T. Solem. S. X. Sun. L. Sudharshan. C. Macahilig. M. Katyal. X.Gao. Exacerbation-related impairment of quality of life and work productivity in severe and very severe chronic obstructive pulmonary disease. *International Journal of COPD*, 2013; 8: 641-652.
- [4] J. Cruz. D. Brooks. A. Marques. Home telemonitoring effectiveness in COPD: a systematic review. *The International Journal of Clinical Practice*, 2014, doi: 10.1111/ijcp.12345
- [5] A. Giorgi. *The Descriptive Phenomenological Method in Psychology: A Modified Husserlian Approach*. Pittsburgh (PA); Duquesne University Press: 2009.