## Critical appraisal of living with chronic obstructive pulmonary nursing essay



This assignment will critically appraise an article from Fraser et al (2006) on "living with chronic obstructive pulmonary disease: insiders' perspective". The appraisal will discuss if the research followed the steps within the research process. This will include the sample size and research design, ethical issues, the data collection methods, and analysis. The appraisal will discuss limitations within the study, the researcher's findings and it will finally discuss the implications that this study has on nursing practice. The nature of this study is to gain an understanding of how severe chronic obstructive pulmonary disease (COPD) affects the lives and experiences of the older adult, noting what works for the participant and what is needed as stated by the participants. The study looked at people with severe COPD living at home. The author's main interest in this study was to try and understand COPD from the patient's perspective, identifying the differences with this chronic illness from other chronic illnesses.

COPD is described by Brashers et al (2006) as obstruction of the airways that worsens with expiration. The author states it as a burden within society.

Tinker, While (2006) suggest that COPD is an umbrella term for chronic asthma, chronic bronchitis and emphysema. Although the researcher states that this is the 5th cause of mortality worldwide it has now become the 4th according to the World Health Organisation (2004).

The authors of this research article are all qualified to conduct this research according to the (UK Clinical Research Collaboration 2007) they suggest that nurses should combine clinical and academic work to become the most knowledgeable researchers. The researchers within this publication have a great knowledge between them to contribute in the research of chronic https://assignbuster.com/critical-appraisal-of-living-with-chronic-obstructive-pulmonary-nursing-essay/

obstructive pulmonary disease. The researchers are registered nurses:

Fraser is a critical care nurse specialist in pulmonary nursing, Kee has a PhD and Minick is an associate professor therefore it would appear that all three authors have credible qualifications.

The abstract's purpose according to Parahoo (2006) is to summarise the paper's contents and convey the main points to readers, so that after reading the abstract the reader will decide if they are interested in the article. This is clearly identified within this publication with the aim of the study, back group to the COPD; methodology used within this study, for example hermeneutic phenomenological, the findings with in this study and a clear conclusion.

The methodology used within this study was a qualitative approach using the hermeneutic phenomenological study. Cohen, et al (2000) suggests that Hermeneutic means how people interpret their lives' where as phenomenological is the study of their experience. This is a study of 10 people aged 59 – 86 who are living with COPD and are participating in a pulmonary rehabilitation program/ case management program. The nature of this methodology was appropriate for this study as the researchers were looking holistically at the person living with this disease (Cohen, et al 2000).

The author conducted a literature review reviewing the work on quality of life issues in this disease. (Robinson 2005, Barnett 2005,) Although most of the literature used was valid, a few articles were out of date and the author could have researched articles within the 10 year time limit. It was noted what was previously known about COPD before this article, and what the

authors have added to make their article different from other publications.

The literature was evidenced based and backed the author's interpretation of the COPD and how the person with the disease contributes to their self management of the disease.

The researcher gained ethical approval from the ethical committees e.g. sponsoring university and hospital institutional review board. Ethical committees are set out to protect participants and to protect the researcher (Griffiths 2006). Participants in this study are all vulnerable, due to their illness. It is also common practice to seek permission from the consultant in charge of the participant's health care although this was not mentioned within this article. Consent was given by the participants but the authors did not state what form of consent was specified, whether this was written or verbal. According to the Ethical Principles, (Ryan et al 2008) states that informed consent should be sought when conducting research prior to participation. The participants were informed about the nature of the research by telephone. Ethical constraints states that participants cannot be coerced into a study and that they can withdraw from the study at anytime (Royal College of Nursing 2006). Pseudonyms were used to protect the participant's anonymity/ identity in line with confidentiality policies (The Nursing Midwifery Council 2008). Interview transcripts and tapes were not identifiable in line with The Data Protection Act (1998). When the study is complete it is common practice to erase all tape recordings (Data Protection Act 1998) Rigour and Beneficence are maintained throughout this study as the National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (1979) state that no harm should come to humans that participate in research studies.

A qualitative research approach was adopted. Qualitative research encompasses a variety of approaches. This study used the hermeneutic phenomenological approach, concentrating on how individuals interpret the complex situations in which they find themselves in. The aim is to develop an understanding of how people with very severe COPD live their lives with this disease at home. A non-probability purposive sample approach was undertaken. The sample size was of 10 people with very severe COPD Gold (2003) criteria. This was relevant to a qualitative study as qualitative studies look at the quality of the research (Parahoo 2006). The researcher's were interested in rich data; by using a small sample size this gave them the chance to obtain rich data (Blackler et al 2004). Fraser is a pulmonary nurse; she would know her study sample and would have chosen this study for that reason. To avoid bias Fraser would have to employ bracketing around the results from the participants (Yam 2004). This would ensure rigour and trustworthiness was maintained (Moule, Goodman 2009). The participants were people with severe stages of COPD and between the ages of 59 - 86. This excluded anyone out with this age group; they also excluded the cognitive impaired, terminally ill people living with COPD, non English speaking, people who are not part of a pulmonary rehabilitation/ case management program and people living in other parts of America. The authors used the correct method as McBrien (2008) states that when conducting a nursing qualitative study small studies samples are appropriate. Another method that could have been adopted for this research

could be Giorgi's phenomenological as stated by EK & Ternestedt (2008) that small scale studies may use this method to look at the experiences of the participants living with COPD.

The researchers collected their data by means of a semi-structured interview technique, using open questions. Miller (2005) suggests that open questions enable the participant to give a more informed discussion of their experiences. The instrumental tool used within this research interview was stated as table 1'interview items'. The interviews were conducted within the participant's homes or in the pulmonary rehabilitation centre. The advantages of doing the interviews within the participant's homes may be that the participant will feel more comfortable within their own surroundings (McDonald 2009), this might lead to the participant not having any dyspnoea while the interview is being carried out. The disadvantages of conducting the interview within the participant's homes may be that friends or relatives may appear and take over answering the questions for the participant. There may also be white noise making the interview harder to tape record. The advantages of doing the interview at the pulmonary rehabilitation centre may be that the interview would not get disturbed, if the participant became unwell there would be medical professionals to assist, and that there would be no white noise, making tape recording easier (Lanoe 2002). The disadvantages are that the participant may not feel well enough to travel to the pulmonary rehabilitation centre, or they feel the interview is formal in nature; this may make the participant uncomfortable/ anxious about attending the interview. After the interviews the participant's should check that what they have answered was in fact what they meant to say. This will

then be transcribed verbatim. It is common practice to lock all data collected in a safe storage unit. Tape recordings and transcribes will be destroyed when all information has been analysed to maintain rigour. (Data protection Act 1998. De Witt & Ploeg 2006). After collecting the data the next step is to analyse the data.

The authors used Colaizzi (1978) seven stage processes to analyse the data, this helped to code the information gathered and helped the author collate all information gathered and put it into three categories. Colaizzi (1978) is a seminal piece of literature which was appropriate within this study as it highlights the credibility, dependability and conformability used within qualitative studies. Two independent researchers looked over the transcripts, they discussed issues, and an agreement was made which was appropriate to the outcome, this helped to set the themes. Two participants were also asked to peruse the findings of the 10 participants (member checking) and it was agreed that what was reported was what the researchers had actually stated. Rigour was maintained as stated by Lincoln and Guba's (1985) quidelines for establishing trustworthiness.

The study put the findings of the interviews into three descriptive categories.

These categories include "Know What Works", "Hanging On... Barely" and "Losing Control-Gaining Control".

"Know What Works", The participants discussed what techniques and practices they know works for them when they have an episode of dyspnoea for e. g. deep breathing exercises, pursed lip breathing, taking their inhalers or nebulisers or increasing their oxygen. The participants also discussed

within this category what doesn't work for them which included interference by others. Whereas "Hanging On... Barely" the participants encouraged interference by others although they felt uncomfortable about asking for help. They also talked about quality of life issues due to their severe COPD. " Losing Control- Gaining Control". Participants acknowledged what they could do when they had dyspnoea and their coping strategies, doing small tasks over a longer time period than previously done before they had this illness. The author presented their findings by using narrative and verbatim quotes and discussed their study limitations which included the small sample size. Although qualitative studies do not look at how many participants is included it is the rich data that is more important (Fossey et al 2002, Ezzy 2002). Other limitations reported were that all participants were involved in a case management and/or pulmonary rehabilitation programme, Bianco, Williams[ 2002] agree that patients are more aware of how to control their breathing and are educated on how use the right technique for administering their inhalers/nebulisers when attending a pulmonary rehabilitation program.

Implementing research into clinical practice needs to be evidence based. Some considerations when utilising research findings to clinical practice are, are findings transferable, if so then this research can be utilised. Miller (2005) suggests that there are four main methods: protocols, guidelines, standards and audits. When a research article has identified improvements to the health care/ health needs of the patient group, they can become protocols. Protocols are updated regularly with new evidence based research. Guidelines for example Scottish Intercollegiate Guidelines Network (SIGN), National Institute for Clinical Excellence (NICE) and Quality

Improvement Scotland (QIS) state how research can be used safely within practice. Standards within settings are set. This is a statement on what should be delivered. When changes have been made through the research findings an audit is required to monitor the changes (Dawes et al 2005). The NMC (2008) concur that nurses should use the best evidence based and most up to date information and that this should be maintained throughout their nursing career. Educating the nurse/ multidisciplinary team member on how to construct changes within their practice will build confidence and staff members will become confident within their practice, which can aid them to support other staff members. The research findings within this article may be put into place by changing attitudes. This may be accomplished by educating nursing staff, relatives and carers so they know when the patient is capable of managing their symptoms of their COPD independently, when they need some assistance, and when they need complete intervention. The nurse should educate the patient on how to use breathing techniques, nebulizers / inhalants correctly, teaching them to take small steps, for example, walking to the toilet and getting wheeled back to their bedside. This helps the patient remain in charge of their health care for a longer period.

In conclusion living with chronic obstructive pulmonary disease is challenging to that person, their relatives, carers and nursing staff. Making others aware of the procedure in line with the themes stated, can help this person maintain independence for longer. The individual is aware when they need help and when they need to deal with their illness themselves. By doing research this has given insight into the COPD insiders' perspective. Following the research procedure makes the data more trustworthy and educates the

reader by using evidence based practice which is important within the nursing profession.