

Beneficence in chronic kidney disease patients undergoing haemodialysis therapy: A concept analysis

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Beneficence in chronic kidney disease patients undergoing haemodialysis therapy: A concept analysis

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Abstract

Background: Beneficence is a very important ethical principle in the nursing process that relates to compassion, kindness, and charity, especially with regard to actions taken to benefit patients. But there is no consensus about its meaning.

Purpose: To analyze the concept of beneficence in patients with chronic kidney disease who undergo hemodialysis.

Method: Concept analysis is supported by studies on the benefits of using online databases like Pubmed, Science Direct, and Google Scholar. "Beneficence," "Chronic Kidney Disease" and "Hemodialysis" were the key search terms and the timeframe publications from 1999 to 2023.

Results: Identifying concepts and attributes of beneficence with empirical references are professional responsibility, patient welfare and interests, promoting health, engaging medical knowledge and maximizing benefits. From antecedents chronic kidney disease, gradual decline in kidney function, end-stage kidney disease, kidney replacement therapy, haemodialysis, benefits of therapy, side effects of therapy. Then we get consequences including quality of life of hemodialysis patients, optimizing therapy, end of life quality, negative emotions due to therapy.

Conclusion: The conclusions of the concept analysis gave a functional definition of the advantages of haemodialysis. To measure beneficence in dialysis patients, the Beneficence Satisfaction Scale can be used, to determine hemodialysis adequacy was URR, Kt/V, and UKM. To determine the quality of life using SF 36, and finally to measure quality end of life using SPELE to assess health workers perception and QODD of patients and families.

Keywords: Beneficence; Chronic Kidney Disease; Ethics; Hemodialysis; Nursing.

INTRODUCTION

Chronic kidney disease is a general term for a condition in which the kidneys are permanently damaged, with implications for the health of the individual, in a large number of heterogeneous disorders. The initial decline in kidney function is symptomatic and clinical manifestations in children. When a disease occurs, failure may occur at an earlier stage. Definitions As a result, measures related to function are included in kidney disease, e.g. GFR and

measurements of damage, such as proteinuria, anatomic damaged GFR and measure of deterioration, like proteinuria or anatomical abnormalities (Shafi & Coresh, 2018).

When providing care for people with kidney failure, there are several different ethical challenges. For example, many patients with chronic kidney disease have to choose whether to start or stop dialysis treatment. Dialysis may have many advantages, such

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as the ability to prolong life, but it also comes with significant drawbacks, such as being extremely time- and activity-restrictive. Complex value judgments are needed to balance these advantages and disadvantages for the various stages of the disease. Additional ethical problems could arise from differences in the referral standards for kidney transplants or from financial conflicts of interest that might impair the effective interprofessional management of patients with chronic kidney disease (Kahrass, Strech, & Mertz, 2016).

Beneficence in chronic kidney disease patients needs to be examined. From Latin 'bene facere', meaning "to do good," the word beneficence is derived (Shetgovekar, 2018). In medicine, beneficence is a fundamental ethical principle (Nandifa, Jena, & Joewana, 2020). Providing benefits to patients means promoting and protecting the welfare of patients, to prioritize the interests of patients (Bester, 2020). The term "beneficence" describes the obligation of professionals to enhance their patients' wellbeing (Singh & Ivory, 2015).

A basic research ethics principle was determined to be gratitude, which is based on the belief that researchers are committed to evaluating whether their research will have any influence and developing strategies for reducing risks and maximizing benefits (Pieper & Thomson, 2016). With a strong implication that it is morally required to treat others kindly. Every professional has a fundamental moral responsibility to act morally (Kinsinger, 2009). Beneficence is one of the fundamental ethics honored in medical practice. To act kindly towards another person is to act in that person's favor (Rogers, 1999). The principle does not just require the prevention of harm, but also patients' benefit and improvement in their quality of life (Varkey, 2020). In the meantime, however, no agreement has been reached to define a beneficence that is unambiguous and specific, not least because there hasn't been any agreement at all on an evaluation tool for assessing health of someone in their present condition.

The concept of Beneficence remains unclear, given the lack of agreement on its definition. Beneficence has been studied extensively, but the precise definition of beneficence that is used in research and practice to treat patients with chronic kidney disease who receive haemodialysis does not yet exist.

RESEARCH METHOD

To achieve this goal a systematic approach examines the concept, with a view to improving its understanding. The process of selecting a concept, which is carried out in eight steps: Finding applications, defining the important characteristics of this concept to identify model cases, identifying relevant cases, border cases and opposing cases, determining its origins and implications as well.

as Defining empirical reference. This is an approach to clarify the situation, the meaning of the terms used so that the writer and reader can interact, understand the terms in the context in which they are used. With the help of beneficence literature from the internet databases PUBmed, Science Direct, ProQuest and Google Scholar, an analysis of this concept has been carried out. Keywords of interest were "beneficence" and "chronic kidney disease", "Hemodialysis articles" published between 1999 and 2023 were now included in the search time period.

RESEARCH RESULTS

Select a concept: The chronic kidney disease patient was diagnosed with stage 5 CKD by a nephrologist and required routine hemodialysis twice a week according to standard hemodialysis prescription. Hemodialysis prescription is a dialysis dose that includes Dialysis Time, Quick Blood or blood flow velocity, Ultrafiltration goal or fluid withdrawal target and heparinization dose (Daugirdas, Depner, Inrig, Mehrotra, Rocco, Suri, & Brereton, 2015). Quality of life patient with hemodialysis will be improved by a proper hemodialysis prescription, which will lead to an adequate hemodialysis process (Bieber, 2018). Dialysis adequacy should be a focus to be maintained and constantly improved to be effective in improving life quality of patient with hemodialysis. After being on regular hemodialysis for several years patients often become familiar with their hemodialysis care and treatment. Some patients who have undergone routine hemodialysis become familiar with hemodialysis patterns and actions, so that during the hemodialysis process they do not use the nephrologist's prescription but want hemodialysis according to their own wishes. Patients do not want to follow the nephrologist's prescription for several reasons, including not being able to hemodialysis for more than 4 hours, not being able to withstand high QB, and feeling that the fluid withdrawal target is

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has gained 2 kg of weight. Today's weight before hemodialysis is 58 kg, yesterday's weight after hemodialysis is 56 kg. The patient has a history of recurrent kidney stones since 10 years so that the patient has chronic kidney disease. Physical examination showed BP 120/80 mmHg, anemic conjunctiva, no lower extremity edema. Lab examination showed, Hb: 10.7 gr/dl, Creatinine: 13.97 mg/dl, Ureum: 122 mg/dl. The patient received a hemodialysis prescription from a hemodialysis nephrologist with a Dialysis Time of 5 hours, Quick Blood 200 ml/hour, Ultrafiltration Goal: 2000-2500 ml, standard heparin.

Mr. C.'s hemodialysis treatment was prepared by the nurse. The nurse confirmed the prescription to Mr.

C after priming, providing vascular access, and configuring the equipment in accordance with the nephrologist's instructions. Then hemodialysis was administered to Mr. C. Mr. C. Then Mr. C. agreed to hemodialysis with the prescription. The patient said that he often goes to the nephrologist and follows all his recommendations. The patient said that he regulates his drinking pattern so that his weight gain is controlled and he does not experience hypervolemia. Additionally, the patient claimed that by following the doctor's rules and instructions for hemodialysis, he felt better physically and was able to continue with his regular activities, such as going to work even when his scheduled hemodialysis sessions weren't in session.

**Identify antecedents and consequences:
Antecedence Concept Consequences:**

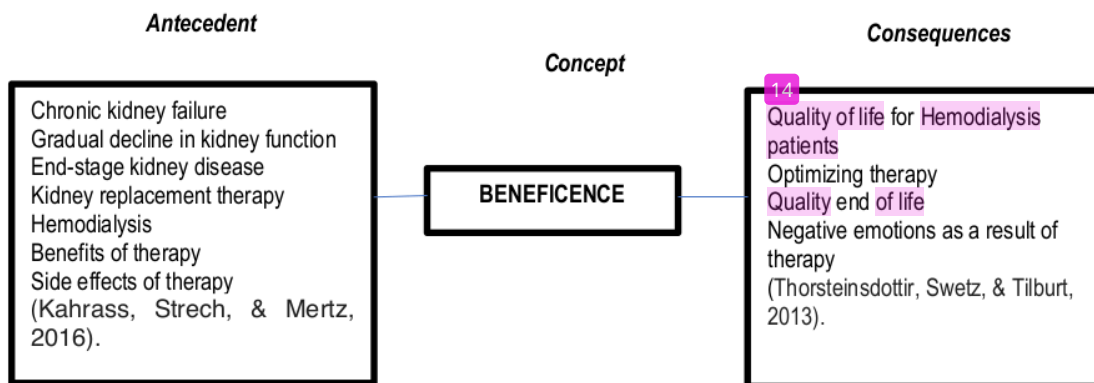


Figure 1: Overview of antecedents, attributes and consequences of beneficence in chronic kidney disease patient undergoing haemodialysis therapy

Define empirical referents: The outcomes of identifying the concepts and attributes of beneficence, the empirical referents are: professional responsibility, patient welfare and interests, promoting health, engaging medical knowledge and maximizing benefits.

DISCUSSION

After gathering reference empirical data, Brief Beneficence Satisfaction Scale (BBSS), is an instrument with four items, will be used to assess the beneficence for patients with chronic kidney disease

receiving haemodialysis therapy. In 2015, Martela and Ryan made it. (Şahin & Uz Baş, 2023). With 1 being the least true and 7 being the most true, the 10-item rating scale consist of a 7-point Likert scale. In order to assess convergent validity, the Brief Beneficence Satisfaction Scale (BBSS) and other criteria-related variables were correlated. The fact that it significantly and positively correlated with friendliness, empathy, social purpose, vitality, selfesteem, and sense wellbeing provided evidence for its beneficence (Martela & Ryan, 2016).

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In addition, three additional instruments are used to evaluate empirical reference beneficence 16 patients with chronic kidney disease. The first is the SF 36, a quality of life measurement tool widely used around the globe (Lins & Carvalho, 2016). 3 is tool evaluates eight health-related criteria: physical functioning, role limitations caused by physical health, physical pain, general perception of health, vitality, social functioning, role limitations caused by emotional problems, and mental health. SF-36 Short form Health Status Questionnaire indicates significant and consistent limitation in self perceived physical activity (Koufaki & Mercer, 2009). The result of this evaluation is a scale score. SF-36 has a score of 0 to 11 with 100 being the highest skor. The eight SF-36 quality of life domains can be further divided into two 15 ups.: physical quality of life, which includes physical functioning, pain, and general health, and emotional quality of life, which includes energy, social function, and limitation of role because of emotions and wellness.

Second, namely adequacy, can be measured using the urea indicator. Urea has been used as a reliable indicator of toxic substances to determine dialysis adequacy (Bieber, 2018). During hemodialysis, factors like membrane porosity, membrane surface area, blood flow, dialysate flow, and countercurrent flow can increase urea clearance (Yeun, & Depner, 2010). Calculating the uremic toxic clearance obtained from blood samples is typically used to determine whether dialysis is adequate. URR, Kt/V, and UKM are the formulas used to determine the uremic toxic clearance. Third, chronic kidney disease patients must undergo HD for the rest of their lives (Kächele, Bettac, Hofmann, Herrmann, Brandt, Schröppel, & Schulte-Kemna, 2023). Fear, pain, suffering and neglect from family may be experienced by patients (White & Fitzpatrick, 2006). Patients become non-compliant with their treatment as a result and decide to stop HD. To ensure that patients have a high-quality end of life, it is crucial for health professionals to be able to explain prognosis and care in communication (Thorste 9 dottir et al., 2013). Before a patient receives end of life care, it is important for patient to 13 et the advice of medical professionals. Further, SPELE (Staff Perception of End of Life Experience) survey can be used to determine how people view medical professionals. The 63 SPELE items are meant to gauge how well-

versed healthcare professionals are in topics like environment, symptoms, end of life communication, and dying quality (Kupeli, Candy, Tamura-Rose, Schofield, Webber, Hicks, & Aspden, 2019). Even though it is acknowledged to be challenging, providing excellent end of life service is essential to guaranteeing quality and patient safety. Examining end of life cares from a variety of perspectives may inform clinical practice of staff, patients, or a patient's family. Choosing a plan and resource allocation strategy (Saunders, Glass, Seaman, Gullick, Andrew, 8 kinson, & Davray, 2021). Additionally, the QODD (Quality of Dying and Death) 6 can be used to evaluate the patient's quality of death (Soest-Poortvliet, van der Steen, Zimmerman, Cohen, Reed, Achterberg, Ribbe, & de Vet, 2013). QODD contains 31 items include primary treatment, death, and death preparation (Kupeli et al., 2019). This instrument has been translated into many languages and used in many parts of the world. Assessing QODD in Indonesia may be difficult due to the Indonesian culture of not wanting to discuss death. End-of-life care can still be improved by using SPELE to evaluate health workers' perceptions and increasing their knowledge of end-of-life care. The final factor influencing how EOL is handled, expressed, and interpreted is cultural practices and norms. Knowing the characteristics the difference in EOL services across countries can help identify area of intervention in each country to improve service levels (Gerritsen, Koopmans, Hofhuis, Curtis, Jensen, Zijlstra, & Spronk, 2017).

CONCLUSION

The conclusion of the concept analysis provides a functional definition of the benefits of hemodialysis for chronic kidney disease patients, namely individual perceptions of professional responsibility, patient welfare and interests, improving health, involving medical knowledge, and maximizing benefits. The BBSS will be used as an appropriate tool to measure the concept of generosity. The four items form the one-factor Brief Benefit Satisfaction Scale (BBSS), which has only one factor. The rating scale consists of a 7-point Likert scale, one of which represents the least correct answer and the remaining seven represent the most accurate answer. The fact that it correlates significantly and positively with agreeableness, empathy, social purpose, vitality, self-esteem, and sensory well-being provides evidence of

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its benefits. Another tool that will be used to measure the concept of benefit for chronic kidney disease patients receiving hemodialysis is SF 36, which measures quality of life. The formula used to calculate uremic toxic clearance to determine the adequacy of hemodialysis is URR, Kt/V, and UKM. The final SPELE to assess the perception of health workers, QODD is aimed at patients and families to prepare for the end of life of quality chronic kidney patients.

REFERENCES

- Abdolahimi, M., Ghiyasvandian, S., Zakerimoghadam, M., & Ebadi, A. (2017). Therapeutic communication in nursing students: A Walker & Avant concept analysis. *Electronic physician*, 9(8), 4968.
- Bester, J. C. (2020). Beneficence, interests, and wellbeing in medicine: what it means to provide benefit to patients. *The American Journal of Bioethics*, 20(3), 53-62.
- Bieber, S. D. (2018). Hemodialysis Adequacy. In *Chronic Kidney Disease, Dialysis, and Transplantation: A Companion to Brenner and Rector's The Kidney*. Retrieved from: <https://doi.org/10.1016/B978-0-323-52978-5.00024-0>
- Cheraghi, R., Valizadeh, L., Zamanzadeh, V., Hassankhani, H., & Jafarzadeh, A. (2023). Clarification of ethical principle of the beneficence in nursing care: an integrative review. *BMC nursing*, 22(1), 89.
- Daugirdas, J. T., Depner, T. A., Inrig, J., Mehrotra, R., Rocco, M. V., Suri, R. S., & Brereton, L. (2015). KDOQI clinical practice guideline for hemodialysis adequacy: 2015 update. *American Journal of Kidney Diseases*, 66(5), 884-930.
- Gerritsen, R. T., Koopmans, M., Hofhuis, J. G., Curtis, J. R., Jensen, H. I., Zijlstra, J. G., & Spronk, P. E. (2017). Comparing quality of dying and death perceived by family members and nurses for patients dying in US and Dutch ICUs. *Chest*, 151(2), 298-307.
- Kächele, M., Bettac, L., Hofmann, C., Herrmann, H., Brandt, A., Schröppel, B., & Schulte-Kemna, L. (2023). Feasibility analysis of ultrasound-guided placement of tunneled hemodialysis catheters. *Kidney International Reports*, 8(10), 2001-2007.
- Kahrass, H., Strech, D., & Mertz, M. (2016). The full spectrum of clinical ethical issues in kidney failure. Findings of a systematic qualitative review. *PLoS one*, 11(3), e0149357.
- Kinsinger, F. S. (2009). Beneficence and the professional's moral imperative. *Journal of Chiropractic Humanities*, 16(1), 44-46.
- Kupeli, N., Candy, B., Tamura-Rose, G., Schofield, G., Webber, N., Hicks, S. E., & Aspden, T. (2019). Tools measuring quality of death, dying, and care, completed after death: systematic review of psychometric properties. *The Patient-Patient-Centered Outcomes Research*, 12, 183-197.
- Lins, L., & Carvalho, F. M. (2016). SF-36 total score as a single measure of health-related quality of life: Scoping review. *SAGE open medicine*, 4, 2050312116671725.
- Martela, F., & Ryan, R. M. (2016). The benefits of benevolence: Basic psychological needs, beneficence, and the enhancement of well-being. *Journal of personality*, 84(6), 750-764.
- Nandifa, V. N. P., Jena, Y., & Joewana, S. (2020). Beneficence is the highest moral imperative of a doctor dealing with the poor quality of patient autonomy. *Jurnal Pendidikan Kedokteran Indonesia: The Indonesian Journal of Medical Education*, 9(1), 44-51.
- Pieper, I., & Thomson, C. J. (2016). Beneficence as a principle in human research. *Monash bioethics review*, 34, 117-135.
- Rogers, W. A. (1999). Beneficence in general practice: an empirical investigation. *Journal of Medical Ethics*, 25(5), 388-393.

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- Şahin, S., & Uz Baş, A. (2023). Testing the validity of the brief beneficence satisfaction scale in Turkish context. *Current Psychology*, 42(13), 10786-10791.
- Saunders, R., Glass, C., Seaman, K., Gullick, K., Andrew, J., Wilkinson, A., & Davray, A. (2021). Clinical staff perceptions on the quality of end-of-life care in an Australian acute private hospital: a cross-sectional survey. *Australian Health Review*, 45(6), 771-777.
- Shafi, T., & Coresh, J. (2010). Chronic kidney disease. *Chronic kidney disease, dialysis, and transplantation*, 3-21.
- Shetgovekar, S. (2018). The Ethic of Beneficence: A Critical Overview. Retrieved from: The Ethic of Beneficence: A Critical Overview » The International Journal of Indian Psychology (ijip.in).
- Singh, B. K., & Michael, E. (2015). Bayesian calibration of simulation models for supporting management of the elimination of the macroparasitic disease, lymphatic filariasis. *Parasites & vectors*, 8, 1-26.
- Soest-Poortvliet, V. M. C., van der Steen, J. T., Zimmerman, S., Cohen, L. W., Reed, D., Achterberg, W. P., Ribbe, M. W., & de Vet, H. C. W. (2013). Selecting the Best Instruments to Measure Quality of End-of-Life Care and Quality of Dying in Long Term Care. *Journal of the American Medical Directors Association*, 14(3), 179-186.
- Thorsteinsdottir, B., Swetz, K. M., & Tilburt, J. C. (2013). Dialysis in the frail elderly—a current ethical problem, an impending ethical crisis. *Journal of general internal medicine*, 28, 1511-1516.
- Varkey, B. (2021). Principles of clinical ethics and their application to practice. *Medical Principles and Practice*, 30(1), 17-28.
- White, Y., & Fitzpatrick, G. (2006). Dialysis: prolonging life or prolonging dying? Ethical, legal and professional considerations for end of life decision making. *EDTNA-ERCA Journal*, 32(2), 99-103.
- Yeun, J. Y., & Depner, T. A. (2010). Principles of hemodialysis. In *Chronic Kidney Disease, Dialysis, and Transplantation* (pp. 277-302). WB Saunders.

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