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Original Article

Professional nurses' facilitation of self-care in intensive care units: A concept analysis

Mpho Chipu, Charlene Downing*

Department of Nursing, Faculty of Health Sciences, University of Johannesburg, Doornfontein Campus, Johannesburg, South Africa

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ABSTRACT

Objective: This article aims to provide an in-depth analysis of the concept of self-care in the intensive care unit and outline its defining attributes, antecedents, consequences and empirical referents.

Methods: The literature was searched electronically using databases such as CINAHL, Medline, Psych INFO, ERIC, ScienceDirect, Amed, EBSCO (Health Source: Nursing and Academic Edition), Sage, Ujoogle and Google Scholar. Articles from 2013 to 2020 were searched to target recent and up-to-date information about the definitions, attributes, antecedents and consequences of the concept of self-care. Walker and Avant's framework was utilised to analyse the concept of self-care.

Results: The results of the concept analysis identified seven attributes, namely process, activity, capability, autonomous choice, education, self-control and interaction. The seven identified antecedents are self-motivation, participation, commitment, resources, religious and cultural beliefs, social, spiritual and professional support, and the availability of time. The consequences are the maintenance of health and wellbeing, autonomy, increased self-esteem, disease prevention, empowerment, increased social support and the ability to cope with stress.

Conclusions: The result of the concept analysis was used to describe a model to facilitate professional nurses' self-care in the intensive care unit.

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What is known?

- Dorothea Orem's Self-Care Deficit Nursing Theory is known, and clarity is needed to facilitate the self-care of professional nurses in the intensive care unit.

What is new?

- A detailed definition to clarify the concept of self-care was presented. The model case, contrary case and borderline case were constructed to clarify the self-care concept.
- The tool "Exercise of self-care agency Scale" was applied to assist in assessing self-care agency.

1. Introduction

Dorothea Orem, a nursing theorist, pioneered the concept of self-care in the Self-Care Deficit Nursing Theory between 1959 and

2001. The concept is well defined as "the practices that the individuals initiate and perform to maintain their life, health and wellbeing" [1]. Despite the definitions presented by Orem and the World Health Organization, there is still a need to explore and further clarify misinterpretations of the meaning of 'self-care' in the nursing profession [1–3].

The concept of self-care is known as a process, a movement, a framework, a phenomenon, a theory and a model. This concept is also used in different perspectives, including many health disciplines, nursing practice, research and nursing education. Different definitions led to confusion, misinterpretations, and ambiguity amongst healthcare providers. This resulted in the meaning of self-care becoming ambiguous, not being prioritised and self-care activities not being practised by professional nurses. The concept of self-care was then regarded as being selfish and a luxury. This was evidenced by this concept's frequent use in clinical practice, yet it was often misinterpreted and misused by professional nurses. Several studies on the usability of the Theory of Self-care indicated

* Corresponding author.

E-mail address: charlened@uj.ac.za (C. Downing).

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that this concept is mostly being applied with various chronic medical conditions such as diabetes and cardiac conditions, to educate, emphasise and motivate both patients and their families about the importance of self-care. The professional nurses' focus was principally on promoting patients' health and preventing their diseases by reinforcing a healthy diet and exercise [4–6].

The findings of a study conducted by Leão et al. revealed that the concept of self-care was neglected by most healthcare professionals [7]. These findings indicated that the healthcare professionals dedicated most of their time to the wellbeing of other vulnerable people, while putting their self-care priorities second; especially those activities that rejuvenate and refresh them [8–10]. The results of this study led to the concept of professional nurses facilitating self-care in the intensive care unit (ICU) setting, to clarify the concept and encourage the practice of self-care activities.

Further clarification of the meaning of this concept is required to eliminate any ambiguities and encourage consistency in practising self-care activities while caring for critically ill patients. Self-care is an essential concept in Orem's Theory and also in the clinical nursing practice; as a result, facilitating this concept will promote professional nurses' compliance in practising self-care [1].

2. Background

The concept of self-care has commonalities and differences with other concepts such as self-regulation, self-management, self-monitoring and self-efficacy. This article serves to analyse the concept of self-care to provide a better understanding of the concept and to differentiate the concept from other related concepts. According to Polit and Beck, concept analysis refers to a systematic process whereby a concept is analysed to identify the boundaries, definitions and dimensionality for that concept. The defining attributes distinguish concepts from other similar concepts [11]. Concept analysis occurs in two phases, namely concept identification and definition, and classification of central and related concepts.

The concept of self-care has been neglected by most nursing professionals as they focused primarily on the Nurses Pledge of Service, which states that patient care is their first consideration. This has resulted in misinterpretations and misunderstanding of the concepts 'patient care' and 'self-care'. Some nursing professionals regard self-care as being selfish, and this results in stress, depression, feelings of worthlessness and feelings of helplessness [12]. Analysing the concept of self-care will thus enhance understanding of the concept, its use and the practice of self-care activities amongst nursing professionals.

Walker and Avant's method of concept analysis was used in this article to define the identified concept, identify the uses of the concept, identify attributes and related attributes, describe antecedents and consequences, construct a model case, contrary case, borderline and additional case [13].

3. Selection and aims of the concept analysis

The objective of the study was to define the central concept of professional nurses' facilitation of 'self-care' in the ICU and how it can be facilitated by professional nurses in the ICU.

4. Research method

4.1. Concept analysis method

Walker and Avant's method of concept analysis was used in investigating the concept of self-care in detail, along with its meanings and uses in order to differentiate this concept from other

concepts that may be similar but subtly different [13]. The modified method has eight steps, which include selecting the concept, determining the aims of analysis, identifying uses of the concept, determining the defining attributes, identifying the model case, identifying the additional cases, identifying antecedents and consequences, and defining empirical references.

4.2. Search strategies

A literature search was conducted, and only articles from 2013 to 2020 were searched and used in this article. The search strategy was employed to target the most recent and up-to-date information about the definitions, attributes, antecedents and consequences of the concept of self-care. The information also assisted the researcher in constructing the relevant model, contrary and borderline cases to outline recent misinterpretations related to the concept of self-care. The following terms were used to search the literature: 'self-care', 'self-management', 'self-compassion', 'self-efficacy' and 'self-monitoring'. The researcher used English articles and one French article, which was professionally translated into English. Google search, Google Scholar, Ujooole, open dissertations, and online electronic databases via EBSCO Host: CINAHL, MEDLINE, psych INFO, ERIC, Science direct, Amed, Health source: Nursing, and Sage covered disciplines related to nursing and medicine, were searched and applied to this article. Self-care articles for managing patients with chronic conditions, unpublished papers, titles and abstracts that were irrelevant and other unpublished papers were excluded. Thirty-nine articles were included in the analysis (Fig. 1).

5. Results

5.1. Identify uses of the concept

The concept of self-care is used mainly in nursing practice, in different disciplines in health, in nursing education and research. In South Africa, the self-care concept focusses primarily on patient nursing interventions, and there are no organisations, such as the American Nurses Association (ANA), which prioritise professional nurses' health and self-care [14]. The concept of self-care can be defined as a purposeful act that is often initiated and performed by an individual on their own to care for oneself without consulting a medical professional or receiving other assistance [15–17]. An individual chooses to practice self-care activities within a specified time frame. These activities are then incorporated to promote good health, maintain personal wellbeing and for continuing development throughout the individual's life. The ability to engage in self-care to meet the requirements for human functioning and development is known as self-care agency. Certain fundamental conditioning factors, such as gender, age and culture can affect the individual's self-care agency [1,3,18–20].

5.2. Related concepts

In the literature that was searched, the following terms were used interchangeably with the concept of self-care: self-management, self-compassion, self-efficacy, self-regulation and self-monitoring. Self-management is a subcategory of self-care which empowers the individual to take charge of their health and manage their own conditions in nursing. Self-management involves self-regulation skills, such as having the ability to manage lifestyle changes and maintain an appropriate level of nutrition, exercise and diet, and disease knowledge, while self-care focuses on daily activities performed by an individual [21,22]. There is also a distinction between self-care and self-compassion. Self-compassion is defined as having an attitude of kindness and consideration

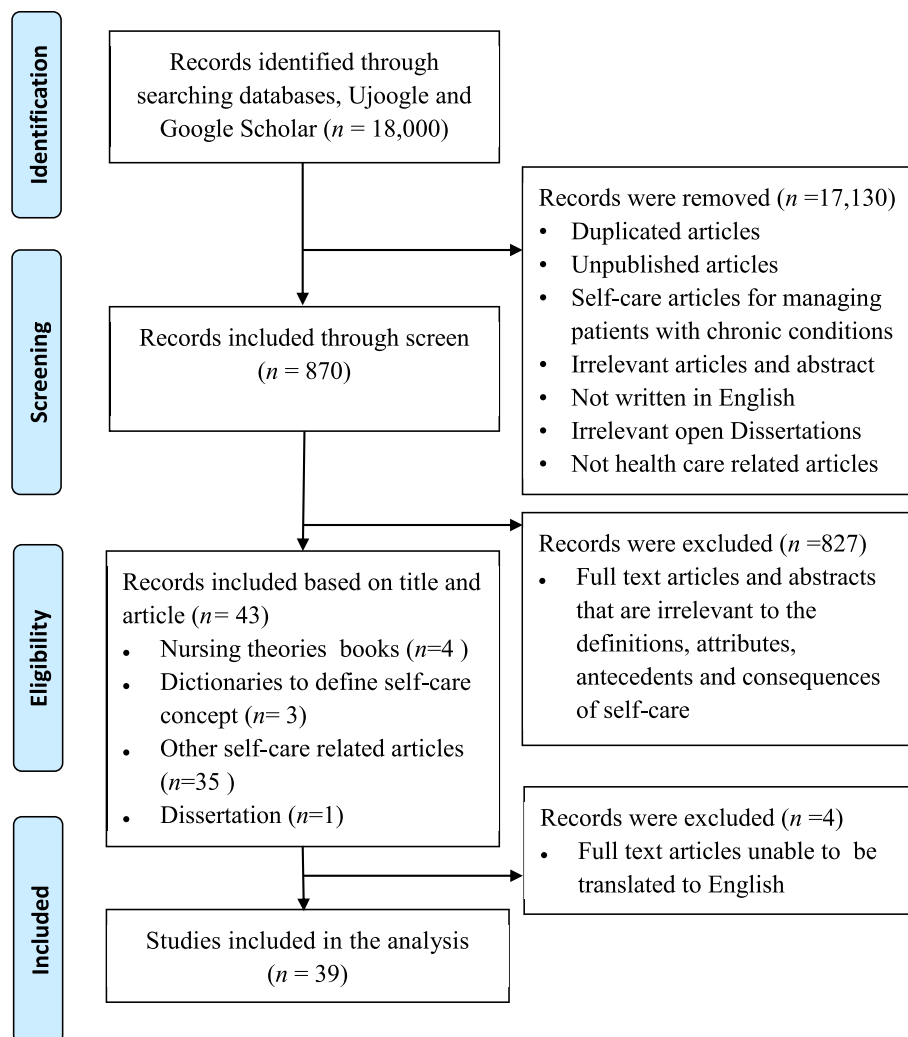


Fig. 1. Flow chart of the study selection process of the concept analysis.

about oneself and a mindful awareness directed towards oneself in situations of suffering. The elements of self-compassion include self-kindness, common humanity and mindfulness, while self-care is the actions of treating oneself with kindness and compassion. At times, individuals can go through the process of self-care without being compassionate to themselves, so self-compassion can be regarded as a moderating variable that strengthens self-care ability [23–26]. Self-efficacy refers to the belief in an individual's ability to organise and implement actions [27]. Self-regulation is the efforts made by individuals to control and modify their thoughts, emotions and behaviours according to requirements in order to achieve self-care goals without intervention from external sources. Self-care comprises of both self-regulatory activating and inhibiting components, and are the actions taken to exercise control over internal behaviour [28]. Self-monitoring is a component of self-care whereby an individual measures their vital signs and symptoms, self-adjusts their treatment and lifestyle as a result of self-awareness [29].

5.3. Attributes of self-care

Attributes are the characteristics that consistently appear when the concept of self-care is present or is being defined in the literature, and assist in clarifying that concept [13]. The following

attributes of self-care were identified through intense analyses of the subject literature: process, activity, capability, autonomous choice, education, self-control and interaction (Fig. 2). The first attribute of self-care is that it is a **process** of looking after one's self, characterised by long-lasting personal benefits such as physical, mental, emotional and spiritual wellbeing [8,15]. As an **activity**, self-care involves practising physical, emotional, spiritual, social and professional self-care activities. These activities are performed by individuals on their own behalf to preserve health and life. The activities are learned, situation driven, directed towards achieving specific goals, and performed by individuals. The activities are incorporated into our daily lives. As a **capability**, self-care is an action directed towards universal needs, goals, and health problems [5].

An **autonomous choice** is taken by an individual to maintain a quality life in a responsible manner [30,31]. It involves personal aspects such as interpersonal relationships, religion, leisure and family activities, and physical activities like healthy eating and preventative health consultation [19]. Self-care is an individual's choice to make and include the formulation of self-care goals. Self-care **education** is the essence of self-care as it leads to information and increased health literacy. Interacting with friends, family, and other members of the health team is vital in self-care and ensures collaborative self-care efficiency [32]. Self-care requires **self-**

Attributes	Antecedents	Consequences
<ul style="list-style-type: none"> • Process • Activity • Capability • Autonomous choice • Education • Self-control • Interaction 	<ul style="list-style-type: none"> • Self-motivation • Participation • Commitment • Resources • Religious and cultural beliefs • Social, spiritual and professional support • availability of time 	<ul style="list-style-type: none"> • Maintenance of health and wellbeing • Autonomy • Increased self-esteem • Disease prevention • Empowerment • Increased social support • Ability to cope with stress

Fig. 2. The attributes, antecedents and consequences of self-care.

control and discipline to achieve specified goals and to perform physical activities such as exercises. **Interacting** with family members, friends and other members of the health profession encourage social, spiritual and professional support.

5.4. Cases

The following section provides the model, borderline and contrary cases, according to Walker and Avant.

5.4.1. Constructing a model case

All the attributes identified of the concept 'facilitation of self-care' contributed to the construction of a model case. The model case represents practical examples of the identified attributes and is described next.

Sr Joy (pseudo name) is a professional nurse aged 47. She is ICU trained and works in a busy trauma unit in one of the largest hospitals in Gauteng Province (South Africa). Her duties entail shift leading and supervising other nursing staff to ensure quality patient care. She is also a single parent of two teenagers still attending school. She works 12-h shifts, alternating both days and nights from Monday to Sunday, and hardly has any time to spend with her family. She is obese, with a body mass index of 39, and her weight is 100 kg. She is always stressed and exhausted and has resorted to buying takeaway meals for herself and her family. At home, she is mostly occupied with her children's homework. At work, she has no time allocated to herself due to the busyness of the trauma unit. She even works overtime during her rest days due to a shortage of staff, and to augment her income for her children's school fees. A lack of managerial support, demands from relatives, shortage of staff, shortage of equipment, and caring for complicated patients aggravate her stress. She started feeling numbness in the left-hand side of her body, and on consultation, she was diagnosed with hypertension, which could complicate to stroke. Her blood pressure fluctuates and is elevated above the normal ranges. Amlodipine, an antihypertensive drug, was prescribed for her hypertension. The doctor advised her that attending to her self-care and changing her lifestyle behaviour can have a significant influence in reducing her stress and normalising her blood pressure; to the extent of stopping amlodipine doses.

Sr Joy decided to make an autonomous choice to take charge of her own life and to take care of herself by practising physical self-care activities such as walking, using the stairs, getting enough rest and sleep, and eating nutritious meals (**autonomous choice, self-control, activity**). She also started practising mindfulness and

attending self-care wellness programmes to become knowledgeable about a healthy lifestyle (**process**). Sr Joy learned mindfulness practices which she applies every day when she experiences stressful situations in the ICU. Her relaxation technique includes booking herself into a massage parlour to relax her body, mind and spirit. She enjoys going out with colleagues and taking her kids out for movies (**interaction**). On Sundays, she started attending church and joining the church choir. Her ability to take care of herself physically, mentally, emotionally and socially enabled her to cope with her supervisory and shift-leading tasks in the busy ICU. She was then able to gain a balance between work and home. She started losing weight and receiving compliments from colleagues about her appearance. This increased her confidence and self-esteem. Her commitment, self-control and participation in self-care resulted in her signs of weakness and numbness disappearing and, on consultation, her blood pressure was in normal ranges. The doctor decided to stop the antihypertensive medication and encouraged her to continue with the self-care activities.

5.4.2. Borderline case

A borderline case contains some, but not all, attributes of the concept being studied [13]. Mr Success is a 55-year-old professional nurse, working in a medical ward. He has developed diabetes mellitus and hypertension. His blood glucose levels require insulin injections on a daily basis, while his blood pressure requires dietary changes. He takes time off to attend to his clinic appointments, self-care educational programmes, and injects his insulin doses at the right times. The programmes teach him about controlling his nutrition, and he has reduced his sugar and salt intake as a result. He rarely exercises and does not attend church. On Saturdays, he goes out partying with his friends, drinks alcohol and consumes fatty and salty foods. This results in his sugar levels and blood pressure going up and becoming uncontrollable. On Mondays, he absents himself from work as he experiences dizzy spells and at times he gets admitted to hospital with increased sugar and blood pressure levels.

5.4.3. Contrary case

Sr Jane is a 35-year-old professional nurse working in a general ICU which admits ventilated patients diagnosed with HIV and confirmed Covid-19 cases. She is obese, drinks alcohol and takes drugs to relieve her fears and stress that she might contract infections from her patients. She abuses scheduled drugs such as morphine. She does not want to take her rest days as this interferes with her accessibility to drugs at work. She seldom interacts with

friends and other family members (**interaction, self-control**). She refuses to go for counselling, attend educational programmes (**education**) or Drug and Alcohol Anonymous Groups (**autonomous choice**). She does not engage in physical exercise and is continually buying fatty foods from restaurants (**process, activity**). She is now failing to perform her job as stated in her Scope of Practice (**capability**). She makes inexcusable errors when administering medication to patients, she is irritable and fights more often with colleagues and families. One patient had to be resuscitated after she gave an incorrect medication dose, and the staff and patients are complaining that she comes to work wearing dirty uniforms and smelling of alcohol. Other staff members are refusing to work on her shift due to the increased number of patient safety incidences.

5.5. Antecedents of self-care

Antecedents are the necessary skills required before the occurrence of an event and eight are highlighted in this article: self-motivation, participation, commitment, resources, religious and cultural beliefs, social, spiritual and professional support, and availability of time [13].

5.5.1. Self-motivation, participation and commitment

Self-motivation is the driving force within an individual to focus and accomplish self-care goals [33]. Self-motivation encourages **active participation** and involvement in practising self-care activities such as mindfulness, nutrition and exercise. It promotes individuals joining prayer meetings, family celebrations and organisations in the community. Professional nurses should be committed and be consistent in practising self-care activities. **Commitment** and consistency result in the long-term personal and professional benefits of self-care.

5.5.2. Mobilisation of the resources

The **mobilisation of the resources** encompasses mindfulness, mentoring, supervision, self-care education training, and life-skills training. Examples of mindfulness techniques are mindful eating and meditation. Life-skills training includes self-awareness, problem solving, and time management. The mobilisation of these resources benefits participants to gain an understanding of the effective self-care activities and become consistent in practising those activities [3,34].

5.5.3. Religious and cultural beliefs

Religious and cultural beliefs: In Islam, self-care is regarded as the first part of caring. It is taught in their belief system as a moral imperative for everyone in the Islamic community [5].

5.5.4. Social, spiritual and professional support

Interacting with family members, friends and colleagues provide social, spiritual and professional support needed during self-care. The practise of self-care is about engaging in meaningful and non-toxic relationships. Spiritual care activities enhance feelings of connectedness and may or may not be related to religion. **Teamwork and team-building activities** at the workplace are encouraged to increase team spirit. Social self-care activities define the relationships and interactions that are developed and maintained as personal and professional support systems. Specific activities, such as spending time with friends, a spouse and family, can be performed to strengthen these relationships. Socialising with friends was found to be both supportive and meaningful. **Spiritual self-care** support can be achieved by spending time in a spiritual community, spending time in nature, meditating, attending worship, praying and engaging in other spiritual practices [34–36].

5.5.5. Availability of time

The **availability of time** is crucial when planning self-care activities. Professional nurses are extremely busy in the ICU, and if they fail to manage their time, they will not have enough time to take care of themselves. This is particularly true of them taking break times and the time to interact with family members, friends and colleagues.

5.6. Consequences

Consequences are the outcomes of the manifestation of the concept [13]. The consequences of self-care can bring about the following benefits: maintenance of health and wellbeing, the ability to reach autonomy, increased self-esteem, disease prevention and empowerment, increased social support, and the ability to cope with stress. Interacting with family, friends and other health professionals results in increased social support. The individual practising self-care develops increased self-esteem and confidence [37]. There will also be disease prevention through controlling risk factors, the promotion of health, preserving wholeness of character and continuing personal and professional growth [8,15].

5.6.1. Maintenance of health and wellbeing

Practising self-care results in long-term personal and professional benefits such as maintaining health and wellbeing, improving physical, social, spiritual and mental wellbeing, gaining the ability to reach autonomy, increased self-esteem, disease prevention and empowerment, increased social support, and the ability to cope with stress. The maintenance of health and wellbeing relates to preventing disease occurrence with self-care and being physically, mentally, psychologically and spiritually healthy. Family involvement also plays a role in self-care in terms of increased social support.

5.6.2. Autonomy

Autonomy occurs when the professional nurse becomes independent and shows responsibility to self. The professional nurse takes charge of their own life by showing ownership of self-care activities. This, in turn, enables them to be empowered.

5.6.3. Increased self-esteem

The individual practising self-care develops increased self-esteem and confidence [30].

5.6.4. Disease prevention

Disease prevention will occur by controlling risk factors, promoting health, preserving wholeness of character, and continuing with personal and professional growth [8,15].

5.6.5. Increased social support, empowerment and ability to cope with stress

Family members can also participate in the scheduled self-care activities. Moreover, spending time with colleagues and participating in team-building increases team spirit. There will be peace in the workplace, increased job satisfaction and the ability to cope with stress.

5.7. Empirical referents

Empirical referents denote categories of the actual phenomenon that demonstrate the occurrence of a concept [13]. Concept analysis provides the foundation for further rigorous instruments of self-care, and the tool “Exercise of self-care agency Scale” can be used to measure self-care agency. The professional nurses’ capabilities to initiate and perform self-care is affected by the following

attributes: age, gender, their preference in activities, their choices in life, educational levels, self-control and interactions with other people. The methods that can be used to develop self-care capabilities include motivation, participation, commitment, the availability of resources, social, professional, and spiritual support, and religious beliefs. Attendance in self-care educational programmes, exercise programmes, and community events can also be used to measure the attributes of self-care [38].

5.8. Summary of the definition of the concept 'self-care'

The concept of 'self-care' is summarised as a process of practising activities to care for oneself to preserve one's own health without medical consultation. This process involves making an autonomous choice to improve one's health by interacting with other people and acquiring knowledge and skills through education to promote the physical, mental, emotional and spiritual being. Through self-care educational talks, a professional nurse can learn more about health, health risks and lifestyle choices, such as a healthy diet and regular exercise [39].

6. Recommendations to nursing research and nursing practice

The central concept of 'facilitation of self-care' contributes a lot to nursing practice, nursing education and nursing research. In nursing practice, the facilitation of self-care is significant as professional nurses experience stress, burnout and compassion fatigue when caring for critically ill patients. Defining the concept will assist the professional nurses in practising what they preach, and prioritising their physical, emotional, social and spiritual wellbeing while caring for critically ill patients. This concept is also significant in nursing education to ensure that students understand the concept while they are still studying. The students will be able to correlate their theory in clinical practice, and this will assist them in taking care of themselves while caring for critically ill patients. More research should be conducted to further interview professional nurses regarding a developed model after the identification of the central concept 'facilitation of self-care'. The research could be based on the benefits of implementing the model that has been developed.

7. Discussion

The findings of this article indicated the importance of clarifying the definition of self-care to avoid misinterpretations, ambiguity, and to encourage prioritisation in practising self-care. This article described the seven attributes of the concept of self-care, namely the process, activity, capability, autonomous choice, education, self-control and interaction. Seven antecedents were presented, including self-motivation, participation, commitment, resources, religious and cultural beliefs, social, spiritual and professional support, and the availability of time. The mentioned consequences include the maintenance of health and wellbeing, autonomy, increased self-esteem, disease prevention, empowerment, increased social support, and the ability to cope with stress.

The model, contrary and borderline cases provided relevant examples to clarify the concept of self-care as it relates to the identified attributes, antecedents and consequences. The consequences reinforced that the concept of self-care is important in nursing practice. Thus, registered nurses should focus on their own self-care before they teach and motivate their patients about the importance of this concept of self-care.

8. Conclusion

This article highlighted the definition of the concept of self-care in relation to its attributes, antecedents, consequences and empirical referents. Walker and Avant's framework, which includes eight steps, was applied in the article [13]. A model case, borderline, related and contrary case were described in the form of scenarios. The implications and recommendations to nursing practice were also presented.

CRedit authorship contribution statement

Mpho Chipu: Methodology, Data curation, Investigation, Validation, Writing-original draft, Writing-review and editing, Conceptualization. **Charlene Downing:** Conceptualisation, Methodology, Validation, Supervision, Writing-review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijnss.2020.08.002>.

Ethical considerations

Ethical clearance was approved by the Research Ethics Committee (REC-01-67-2017), the Higher Degree Research Committee (HDC-01-47-2017) at the University of Johannesburg at the Faculty of Health Sciences and Gauteng Department of Health (GP-2017RP30-306) and the CEO of the academic hospital.

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