

Review Paper

Self-sacrifice in Nursing During the COVID-19 Pandemic: Concept Analysis With the Rogers Approach



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ABSTRACT

Background: Sacrifice is a fundamental professional value in nursing, which became particularly prominent during the pandemic of COVID-19 pandemic. This study investigated the idea of self-sacrifice in nursing during this period, employing Rodgers's evolutionary model as the analytical framework.

Materials and Methods: The Rodgers' concept analysis method was applied. Relevant literature was searched in CINAHL, MEDLINE, Web of Science, SCOPUS, PubMed, Magiran, IranMedex, and SID databases using keywords related to self-sacrifice in nursing. Seventeen related articles were selected for analysis.

Results: Self-sacrifice was a defining feature of nursing during COVID-19, involving prioritizing patient care over personal well-being despite severe risks. Internal factors influencing self-sacrifice included personal commitment, stress reduction, and professional excellence. External factors encompassed societal expectations, media influence, and the high-risk nursing environment during the pandemic. While self-sacrifice strengthened professional identity and personal growth, it also resulted in adverse effects, including work attendance despite illness (presenteeism), emotional and physical exhaustion (burnout), reduced patient safety, and a greater likelihood of leaving the profession.

Conclusion: Although self-sacrifice is an integral part of nursing, its adverse effects must be mitigated by promoting self-care and improving working conditions to ensure sustainable commitment among nurses.

Keywords:

Altruism, Nursing, COVID-19, Pandemics

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Introduction

The concept of self-sacrifice in nursing is widely discussed in nursing literature across the globe, and the general public often knows nursing with this character; the sacrificial angel is the image that people draw from this profession [1]. The turning point of sacrifice in nursing in the world was during disasters and wars. In Iran, the imposed war was a manifestation of the sacrifice of nurses, who volunteered to help the wounded in the battle scenes without material expectations. The altruism and dedication of nurses, as the largest group of healthcare providers in crisis situations, have been regarded as a source of honor and inspiration for others [2]. Severe injury and martyrdom followed the care of patients with chemical contamination, and helping the wounded on the front line and under enemy fire were examples of their selfless activities [3].

The outbreak of COVID-19, which was first identified in China in late 2019, spread across the globe, impacting every nation and leading to a significant loss of lives worldwide [4]. During this pandemic, medical staff were at the forefront of fighting this disease, and nurses, who make up approximately 60% of the global healthcare workforce, faced the greatest challenges related to this disease [5, 6]. They were instrumental in the public health efforts to address this crisis [7]. This pandemic was a manifestation of the peak of sacrifice [8], demonstrating that sacrifice is not exclusive to the nurses of decades past; just as during the chemical bombings when nurses gave their masks to the fighters, these individuals, aware that masks do not provide 100% protection, made close contact with contagious patients during the COVID-19 outbreak. A meta-synthesis study conducted during the COVID-19 outbreak revealed that the sacrifice and selflessness of nurses are key themes [7].

During the pandemic, the daily work conditions of nursing professionals, such as inappropriate working situations, poor working conditions, excessive burdens, a serious pace, long hours, physical and mental exhaustion, job stress, interpersonal conflicts, and professional devaluation, increased. The elimination of holidays and vacations, prolonged separation from family due to the fear of transmission, knowingly endangering their health and the health of their families, and receiving insufficient salaries were additional challenges brought about by the COVID-19 pandemic [9]. Despite the high rates of infections, hospitalizations, and deaths among healthcare workers, nurses, and nursing students volunteered to combat COVID-19. They assumed new roles, assisting

in administrative tasks and various hospital departments, caring for outpatients through telemedicine, translating COVID-19 materials into English, raising public awareness, and helping to prepare personal protective equipment [10]. Most of the nurses, despite the physical and mental consequences, continued the self-sacrificing behavior and submitted to unsafe working conditions [1, 11]. Both national and international studies showed that healthcare workers had a higher prevalence of being infected with COVID-19 than the general public [11-13]. In addition, a cross-sectional study recorded 19,518 COVID-19-related nurse deaths in America, marking the highest number of fatalities [14]. The nursing profession means self-sacrifice and commitment to provide nursing care, which enriches the profession [15]. Although selflessness is essential to the nursing profession, this characteristic is not seen in nurses and is relatively observed in nurses in disaster or calm conditions. The statistics regarding departures from the workplace due to work pressures, insufficient salaries, and physical and mental injuries underscore this fact [16, 17]. Also, a study in selected hospitals in Tehran reported high rates of nurse migration and a negative and significant correlation between migration and job satisfaction [18].

A pre-pandemic study on healthcare self-sacrifice revealed that nurses were reluctant to meet patients' ethical demands [19]. However, during the early COVID-19 pandemic, nurses made sacrifices to prioritize patients' needs over their own, despite challenging conditions [20].

In this regard, another study during COVID-19 showed that some nursing students (30.7%) became more interested in nursing after seeing the efforts of nurses. The sacrifice and martyrdom of the nurses further strengthened the motivation of these students. However, in the same study, a number of students (9.3%) concluded that nursing is too dangerous for them to stay in this profession [4].

Nurses' performance in various situations is shaped by values, culture, religion, and social and historical contexts [21]. Understanding these altruistic behaviors is crucial, as nurses' willingness to deliver healthcare during disasters is vital for maintaining an acceptable standard of care [22].

In this regard, several questions are raised. How can one nurse choose self-sacrifice while another does not, despite knowing the harm she may suffer? How does sacrifice fulfill a human need [1]? How do self-sacrifice and self-care interact in nursing? To what extent should

nurses demonstrate sacrifice? Should the culture of sacrifice in nursing be maintained and developed? To answer these questions, understanding the concept of sacrifice in nursing can be helpful.

Few studies have explored the concept of sacrifice in nursing. This study aimed to analyze self-sacrifice and its characteristics, antecedents, and consequences within the nursing profession, particularly during the COVID-19 outbreak, using Rogers' concept analysis approach.

Materials and Methods

This research analyzed the concept of self-sacrifice in the nursing profession during the COVID-19 outbreak, following Rogers' evolutionary theory. The aim was to elucidate this idea, explore its common applications, and identify its characteristics to support future development and evolution [23].

In this approach, the concept analysis process is carried out during six stages (Table 1). According to Rogers, these six steps can be performed simultaneously, and there is no requirement for the order and sequence of these steps. The study process is completely rotational, non-linear, and flexible. Rogers employs an inductive approach, centering the study on the collection and analysis of raw data. It also investigates concepts within the social, cultural, and specific contexts of each profession [23, 24].

In the first step, researchers determine and identify the concept of interest in their research. In this study, the idea of self-sacrifice in nursing was chosen because it has always been an attribute of nursing in the world. Throughout nursing history, particularly during wars and disasters, the heroism and sacrifice of nurses have been emphasized. Today, amid the COVID-19 pandemic, their contributions are more visible than ever. In this regard, the researchers of this study decided to gain more knowledge by analyzing this concept and discovering what led to its formation and growth, as well as its consequences.

After determining the concept, the next step is to determine the territory and scope of the studied literature. First, to identify what is referred to as self-sacrifice in nursing in the articles, an internet search was conducted using Latin databases such as CINAHL, MEDLINE, Web of Science, SCOPUS, PubMed, and Persian databases including Magiran, Iran Medex, and SID, along with the medical dictionary Oxford. This search employed Latin keywords such as pandemics, outbreaks,

sacrifice, sacrifice in nursing, devotion, self-sacrifice, self-devotion, and nurses, along with their meanings in Persian databases, without any time limit until 2021 in both Farsi and Latin languages.

Inclusion criteria included studies examining nurses during the COVID-19 outbreak that explored self-sacrifice in nursing, including qualitative, quantitative, or mixed-method studies, review articles, and case reports or case series, as well as articles published in English or Persian. Articles that did not contain full text and focused on healthcare workers other than nurses, as well as abstracts of conference proceedings, book chapters, and dissertations, were excluded if they did not directly relate to self-sacrifice in nursing. Table 2 presents an example of a search strategy.

A total of 2,587 Persian and English articles were found, of which 17 articles were selected and included in the study based on the inclusion and exclusion criteria. (Figure 1).

In Rogers's approach, thematic analysis was suggested as a method of analysis [23]. In this way, the texts were carefully read several times and through immersion in the texts, an attempt was made to extract key points and tags to provide clear descriptions of each aspect of the concept (attributes, antecedents, consequence, and related concepts).

Results

This study identified the concepts, antecedents, attributes, and consequences of sacrifice in nursing by reviewing relevant articles (Table 3).

In this part, four classes were first extracted: Attributes (5 codes), antecedents (9 codes), consequences (14 codes), and related concepts (3 codes).

Attributes of sacrifice, related concepts, and surrogate terms

Defining the characteristics of a concept is a crucial initial step in concept analysis, as it ensures a precise understanding of its meaning [24]. According to the Oxford Dictionary, self-sacrifice refers to 'the act of relinquishing one's own interests or desires in order to assist others or achieve a greater objective' [25]. Within the nursing profession, self-sacrifice is considered an inherent attribute, encompassing aspects, such as providing assistance willingly, without expectation, even when facing personal challenges [26]. It is also recognized as

Table 1. Rogers' concept analysis stages

Stage	Description
1	Defining the desired concept.
2	Selecting the appropriate scope (set and sample) for data collection.
3	Collecting data related to the concept's characteristics, considering contextual changes, such as social, cultural, interdisciplinary, and temporal factors (antecedents and consequences).
4	Analyzing data based on the concept's characteristics.
5	Providing an illustrative example, if necessary.
6	Determining the hypotheses and implications for the concept's further development.

Health in
Emergencies and Disasters Quarterly

a core professional value in nursing [27]. In this context, self-sacrifice extends beyond routine duties, involving additional commitments and adherence to ethical and professional standards that go beyond formal workplace requirements [28].

Self-sacrifice is also regarded as a fundamental norm within the nursing culture, gradually becoming an ingrained and enduring aspect of the profession over time [1]. According to Rogers, related concepts share certain connections and dependencies with the core concept but do not encompass all of its defining attributes [24].

In connection with the concept of self-sacrifice, the surrogate terms are self-sacrifice and sacrifice [1]. Sacrifice in nursing means going beyond limited duties and accepting personal risk [9]. The concept of altruism is also closely related to the idea of sacrifice. However, the difference is that altruism lacks some characteristics of self-sacrifice [26]. When a person responds to someone's requests without any expectations, he/she is engaging in altruism. However, this is not self-sacrifice because the help was provided in response to that person's request. Sacrifice has different dimensions, with the sacrifice of

property and life, or self-sacrifice, being the most valuable form. A person who spends their precious life and sacrifices themselves for others embodies this form of sacrifice. Thus, sacrifice stands in contrast to selflessness, selfishness, self-interest, and self-care [29].

Sacrifice is divided into physical and mental forms. In physical sacrifice, basic needs are often ignored. In this regard, a person considers self-care during shifts as a luxury function and considers it difficult to achieve. In the psychology of self-sacrifice, a person contributes to the patient's pain and suffering, and it occurs due to a heavy workload and disturbances in the process of interactions with his/her relatives [30].

An ethnographic study by Juergens on nurses' self-sacrifice found that the highest form of this phenomenon involved overcoming internal conflicts [1]. Examples of such sacrifice include returning to work during vacations due to staff shortages, taking on night shifts, working overtime, and continuing to work despite illness [31].

Table 2. Search strategy

Database	Search Strategy
PubMed	("Pandemics" OR "outbreaks") AND ("sacrifice" OR "devotion" OR "self-sacrifice" OR "self-devotion") AND ("nurses" OR "sacrifice in the nurse")
SCOPUS	(TITLE-ABS-KEY ("pandemics" OR "outbreaks")) AND (TITLE-ABS-KEY ("sacrifice" OR "devotion" OR "self-sacrifice" OR "self-devotion")) AND (TITLE-ABS-KEY ("nurses" OR "sacrifice in the nurse"))
Web of Science	TS=("pandemics" OR "outbreaks") AND TS=("sacrifice" OR "devotion" OR "self-sacrifice" OR "self-devotion") AND TS=("nurses" OR "sacrifice in the nurse")
CINHAL	((("Pandemics" OR "outbreaks") AND ("sacrifice" OR "devotion" OR "self-sacrifice" OR "self-devotion") AND ("nurses" OR "sacrifice in the nurse"))

Health in
Emergencies and Disasters Quarterly

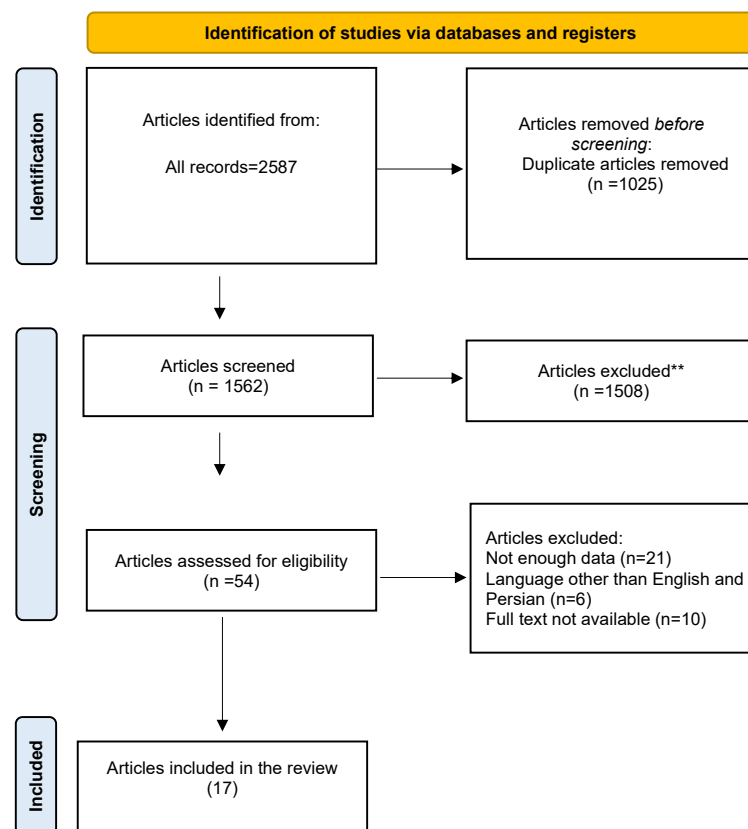


Figure 1. Flow diagram of the study selection process guided by PRISMA

Antecedents of the sacrifice

Antecedents are the prerequisites of the concept and have an effect on its occurrence [23]. Some studies have investigated why self-sacrifice in nursing has become a culture, what motivates nurses to self-sacrifice while they endure this hardship, and the general factors contributing to the formation of this concept, which is divided into two categories: internal and external factors [1].

Internal factors

At the peak of Maslow's hierarchy of needs lies self-actualization, which is deeply connected to the pursuit of knowledge and comprehension. Maslow emphasizes the inherent human drive to seek understanding, grow intellectually, and ultimately achieve self-actualization and a sense of purpose. Jurgens also considers the selfless behavior of nurses to be a result of the desire to reach a deeper meaning. When patients need care, personal needs become less of a priority. In this regard, a close relationship with God strengthens the motivation for sacrifice in nurses [1].

Furthermore, Jenaro et al. identified job satisfaction, enhancement of work-life quality, reduction of social dysfunction, and alleviation of patient care-related stress as key factors influencing sacrifice in nursing [32]. Additionally, sacrifice appears to stem from a deep sense of personal responsibility toward both patients and the workplace [30]. During an unspoken "expectation", nurses consider themselves obliged to respond to the patient's needs, which is sometimes outside of their defined duties [33]. Nurses accept selfless work in high-risk conditions and consider it a job necessity [6]. They are driven by an emotion called love in nursing [34]. This concept is more visible in experienced people [32].

External factors

In addition to personal and internal issues, some external factors are also influential in the formation of selflessness in nursing. Exposing people to altruistic behaviors leads to impressionability. Humans are influenced by the environment [26]. Social expectations play a crucial role in embedding the culture of sacrifice within nursing. Society often perceives nurses as selfless caregivers. According to the literature, the prevailing belief is that an "ideal nurse" prioritizes patients above all else [40, 44].

Table 3. Summary of the studies on sacrifice in nursing

Row	Title	Author(s), Year of Publication	Study Type	Finding(s)
1	Nurses exhibit increased duty and dedication to patient care during pandemics and epidemics	Haghgoshayie et al. 2020 [6]	Systematic review	Three main topics were identified: 1) Supportive nursing teams delivering quality care, which includes a sense of duty and dedication to patient care alongside professional collegiality; 2) Recognition of the physical and emotional impact, encompassing concerns for personal and family safety, as well as fears and psychological issues in crisis; and 3) The responsiveness of organized systems, which includes protection and safety, effective knowledge communication, and organizational preparedness, such as adequate leadership, staffing, and policy.
2	Impact of a self-sacrificing nursing culture on recruitment and retention	Ciezar-Andersen et al. 2021 [30]	Qualitative study	Participants identified self-sacrifice in nursing as stemming from the stereotypical “ideal nurse” image, which contributes to job dissatisfaction, presenteeism, and burnout. Younger nurses showed less inclination to self-sacrifice, feeling unsupported by the management and senior staff, which led to dissatisfaction and thoughts of leaving their positions.
3	The Vitruvian nurse and burnout: New materialist perspectives on unattainable ideals	Smith et al. 2024 [35]	Review	We propose an ethical code that emphasizes the clear communication of reprioritization and adapting care quality in a changing environment. This empowers nurses to have more agency in advocating for patients. It includes conveying limited capacities and responsibilities while promoting self-care for staff alongside addressing patients’ medical and personal needs.
4	The discourse of “nurse as hero” during the COVID-19 pandemic	Mohammed et al. [36] 2021	Content analysis	The three key elements of hero discourse are: 1) Nurses as a “necessary sacrifice” - depicted as selfless moral exemplars working on the front lines without sufficient protective gear or resources; 2) Nurses as “model citizens” - portrayed as compliant and diligent individuals in contrast to those who ignore or oppose COVID-19 public health measures; 3) Heroism as the recognition and reward for nurses.
5	Self-care vs self-sacrifice in medical-surgical nursing	Juergens et al. 2018 [1]	Systematic review	The findings highlight self-sacrificial tendencies and self-care adaptations in the medical-surgical nursing culture. Several themes emerged, revealing complex self-care behaviors. The data raised further questions and indicated a need for additional research. This study aimed to foster cultural self-awareness and promote internal change by assessing both positive attributes and challenges within the culture.
6	Nurses’ experiences of self-sacrifice and martyrdom during the 1980-1988 war.	Firouzkouhi et al. 2015 [2]	Oral history research	Themes reflecting the experiences of nurses included the establishment of their roles as paramedics in war, their sacrifices in treatment units, collaboration with medical team members in critical tasks, injuries and martyrdom during active duty, varying working conditions while caring for chemical injury victims, dedication to these patients, and innovative efforts to assist the wounded on the battlefield.
7	The professional identity of nursing students and their intent to exit the nursing profession during the COVID-19 pandemic	Nie et al. 2021 [37]	A cross-sectional, descriptive survey	Of the participants, 14(9.3%) who intended to leave the nursing profession scored lower in professional identity compared to those who planned to stay. Those who felt the COVID-19 pandemic had made them “more passionate about clinical nursing work” had the highest scores, while those who thought the pandemic had “no effect” scored next. The lowest scores came from those who viewed clinical nursing as “too dangerous.” Factors influencing professional identity included COVID-19 knowledge scores, perceived effectiveness of preventive measures, the number of cases seen on the survey day, and daily time spent on COVID-19 events.
8	We are not heroes: The other side of the hero narrative during the COVID-19 pandemic.	Halberg et al. 2021 [9]	Qualitative	The nursing staff rejected the hero narrative, illustrating how it promotes predefined traits, such as invincibility, self-sacrifice, and a willingness to take risks, while transcending duties and embodying an unlimited identity. Labeling individuals as heroes stifles crucial conversations about rights and boundaries.

Row	Title	Author(s), Year of Publication	Study Type	Finding(s)
9	The experiences of intensive care nurses regarding altruism and sacrifice during the COVID-19 pandemic	Slettmyr et al. 2023 [6]	Phenomenological	Despite fear, anguish, and exhaustion, the nurses adapted to the chaotic situation, shouldering the moral responsibility to meet the needs of patients and the healthcare system due to their competence. Confronted with ethical challenges, they felt overwhelmed by helplessness and inadequacy, as their hard work still fell short of providing dignified and quality care.
10	Self-sacrifice by the medical community during the pandemic	Einollahi 2021 [29]	Review	Healthcare personnel, those white-clad angels who sacrificed their comforts in an unequal battle during the war, exemplify a selfless generation. The similarities between the holy defense era and the fight against COVID-19 highlight the dedication of the medical staff and nurses. Studying these two periods can provide a roadmap for the country's future in terms of both human and scientific capital.
11	The ambiguity of altruism in nursing	Slettmyr et al. 2019 [38]	Qualitative	Acts of altruism generated feelings of ambivalence and uncertainty, arising from a deep awareness of the needs of 'the other', yet accompanied by a reluctance to assume absolute responsibility for them.
12	Nurses: Frontline heroes of the COVID-19 pandemic and their self-transcendence	Aydin et al. 2022 [39]	Descriptive phenomenological	Research has shown that factors, such as the enhancement of nursing roles and skills, a sense of pride in oneself and the team, a deeper appreciation for the value of life, and the perception of being a hero due to the responsibilities undertaken during the pandemic foster nurses' self-transcendence, ultimately promoting their physical and mental well-being.
13	Young people's views on the nursing profession	Glerean et al. 2017 [40]	Integrative literature review	Young individuals perceived nursing as a profession characterized by challenging working conditions, demanding shift schedules, and limited autonomy. They primarily viewed nursing as a caregiving role focused on assisting patients, often considering it subordinate to the work of doctors. There was little awareness of the educational requirements or potential career advancements within the field, and nursing was generally regarded as having a low societal status. Nurses were seen as hardworking, compassionate individuals but were not widely recognized for their intellectual capabilities. Influencing factors shaping these perceptions included family, friends, media portrayals, significant role models, and personal experiences.
14	The nursing profession: Public image, self-perception, and professional identity	Hoeve et al. 2014 [41]	Review	The reviewed studies indicate that the public perception of nursing is heterogeneous and inconsistent. This image is, in part, shaped by the nurses themselves, influenced by their limited visibility and absence from public discourse. Nurses develop their self-concept and professional identity based on societal perceptions, workplace conditions, professional values, educational background, and deeply rooted social and cultural traditions.
15	Nurse well-being, workplace conditions, presenteeism, and patient safety	Rainbow et al. 2020 [42]	Cross-sectional design	Addressing presenteeism related to occupational stress could be particularly significant for this cohort, providing more comprehensive insights into the factors that impair nurses' performance and potentially compromise patient safety.
16	Experiences of nurses delivering altruistic care to COVID-19 patients	Khanjarian et al. 2021 [43]	Phenomenological study	Nurses' lived experiences during the COVID-19 pandemic encompassed various emotional and professional dimensions. These included a sense of apprehension, characterized by initial disorientation and the internal conflict regarding whether to continue or discontinue their professional duties. Their intellectual resilience was manifested in attributes, such as forbearance, altruism, and spiritual development. Furthermore, human transcendence emerged through an intensified commitment to the profession, societal recognition, and an enhanced appreciation of nursing's intrinsic value.

Ciezar-Andersen et al. found that the primary driver of nurses' altruistic behavior is the perceived pressure to embody the image of the 'ideal nurse. From the perspective of patients, nurses who work selflessly are more accepted and appreciated [30].

The perception of the "ideal nurse" significantly shapes how nurses see themselves and their profession [44]. They are expected to promote health and well-being for their patients while simultaneously neglecting their own needs. In terms of social expectations, sacrifice is an integral part of this profession. Because of this expectation, nurses ignore self-care, pay attention to their basic needs, and try to meet all the needs of patients [30]. Nurses construct their professional identities based on cultural norms and potentially through the transmission of verbal information and stereotypes [1].

A stereotype is a cognitive representation or conceptualization of a group formed by associating specific characteristics and emotions with its members [45]. Nursing stereotypes have exerted a significant influence on the perceived expectations of nurses [1]. The mass media has played a crucial role in transmitting and amplifying these stereotypes. The media have portrayed nurses as heroic, altruistic individuals with a strong moral compass [4]. During the COVID-19 crisis, the selfless image of nurses was depicted in various media outlets as a means of expressing gratitude. In response to this media portrayal, nurses may feel compelled to engage in more altruistic activities, as they perceive that society expects such behavior from them. Indeed, nurses derive their self-concept and professional identity from their public image, work environment, work values, and sociocultural norms [41]. An additional consideration pertains to religious communities. In societies with strong religious influences, the culture of sacrifice in nursing is more deeply ingrained. This phenomenon can be attributed to the presence of numerous religious texts and narratives that encourage such behavior [29].

Consequences of the sacrifice

Consequences are defined as the outcomes that result from the occurrence of a phenomenon. In this study, the consequences of sacrifice are categorized into two distinct groups: positive and negative outcomes.

Positive consequences

The concept of self-sacrifice in nursing can be instrumental in shaping nurses' professional identity as they integrate into the culture of their field [46]. Professional

identity encompasses a set of attitudes, values, knowledge, beliefs, and skills that are collectively shared within a professional community [47]. Nurses experience a sense of importance, passion, inspiration, pride, and challenge through self-sacrifice and intense involvement in their jobs. The self-sacrificing nurse achieves self-actualization and a deeper understanding of meaning and finds a sense of being close to God [1].

Self-sacrifice is a moral effort to reach perfection, which cultivates the human spirit. Thus, in some texts, martyrdom is the result of the peak of sacrifice in nursing [48]. Jurgens states that the nurse's martyrdom is a personal sacrifice for a professional cause that is harmful [1].

In many societies, especially religious societies, including Iran, martyrdom is the highest human position and is considered an honor. Achieving martyrdom is a motivation for many nurses in acute and high-risk situations and is an incentive to choose and enter the nursing field, which was shown in a study during the COVID-19 crisis [4].

Negative consequences

A manifestation of self-sacrifice in nurses is presentism, which means working when sick or injured. Nurses have the highest attendance statistics during illness compared to other workers [42]. The lack of nursing staff and the emergence of guilt when leaving shifts during disease, which originates from the nurse's own conscience and the presence of a high sense of responsibility toward patients, or in some cases due to the pressures and behavior of those in charge, lead to the phenomenon of presentism [30].

Presentism, meaning attending work while sick or injured, poses risks not only to the nurse's health and well-being but also leads to a higher likelihood of errors, a decline in care quality, and overall compromises patient safety [31, 49].

Nurses who practice self-sacrifice seek their intrinsic worth and strive toward achieving a higher, transcendent sense of self. However, it can be seen that in order to reach the intrinsic value, they forget themselves and choose self-sacrifice as a main way to reach this goal and become vulnerable [33].

In some cases, self-sacrificing nurses in working shifts separate the "concept of self" from their role [50]. They are alienated from themselves and use self-deception in an effort to achieve what is good in their minds [51].

Nurses often prioritize their duty to care for patients over their own well-being and that of their families. While they devote themselves fully to caring for others, their own self-care tends to be rushed and minimal, leading to a form of neglect toward their personal needs [1]. In the workplace, they may become disconnected from themselves, disregarding their physiological requirements and ultimately experiencing inadequate self-care. This pattern can significantly heighten physical and emotional exhaustion in the nursing profession and may be a key factor in the deterioration of nurses' self-care practices [52].

The characteristics of psychological sacrifice reported by nurses are closely linked to an increased risk of emotional exhaustion and burnout [53]. Emotional exhaustion, resentment, guilt, and emotional suppression are key aspects of job burnout, which can lead to consequences, such as dissatisfaction with the profession and a desire to leave nursing in search of a less stressful career [54].

Another issue is that the stereotypical image of the "ideal nurse, i.e. self-sacrificing nurse" that has prevailed in nursing until today may not be suitable for today's generation. Ciezar-Andersen emphasizes that nurses should no longer be subtly influenced by the stereotypes of sacrifice and selflessness, as the notion of the "ideal nurse" can sometimes deter young individuals from entering the profession and impact recruitment [30]. Similarly, Rainbow points out that younger nurses tend to be less inclined toward self-sacrifice compared to their older counterparts, particularly regarding workplace attendance [55]. This issue leads to the emergence of resistance and conflicts with senior managers with history and the growth of a high rate of horizontal violence in nursing [30]. Self-sacrificing nurses have done more than their duties and do not seek their material and moral rights in hospitals; thus, these rights are denied [33]. Sometimes, excessive humility in interactions with medical colleagues may unintentionally diminish nurses' authority [56].

Giving an example for the concept

Providing an example offers a practical illustration of the concept, helping to identify its essential characteristics within the given context. This process enhances clarity, transparency, and the effective application of the concept [24].

For instance, a 33-year-old nurse (M.G.) working in the general ICU of a hospital in Tehran voluntarily (antecedents) requested a transfer to the COVID ward during the pandemic. Motivated by a sense of responsibility and a commitment to patient care (attributes), she chose to work in the overcrowded ward, demonstrating the core features of the studied concept. She was pregnant, and after some time, she was infected with COVID-19, and the disease progressed; she was admitted to the COVID-19 ICU department and finally achieved martyrdom when she was seven months pregnant. Her premature baby was also admitted to the NICU and was mechanically ventilated. This disease was transmitted to his wife, and he was also hospitalized (consequences) [57].

Interpretation and implications of the concept analysis

In the final stage of the evolutionary concept analysis, Rogers outlines the assumptions and implications of the analysis, providing a foundation for the further development of the concept. This stage provides an opportunity to explore the practical applications of the findings derived from the analysis process [23].

The definition of selflessness in nursing that the researchers of this study obtained includes: "Sacrifice in nursing is a professional value and means doing things outside of duty and giving up personal interests to help others; it manifests in both physical and psychological forms. External and internal factors play a role in the formation of this phenomenon. Self-sacrifice brings the nurse to the peak of perfection and self-fulfillment, but if it is accompanied by a lack of self-care [58], it can lead to severe physical and mental injuries and be detrimental to the nursing profession.

The definition presented here does not mean accepting a single definition of sacrifice, but the concepts are influenced and changed in different times and place conditions. The definition of self-sacrifice given in this study pushes researchers to pay more attention to this phenomenon, which leads them to conduct more research in different cultures and places.

Discussion

This research was carried out to explore and examine the notion of sacrifice within the field of nursing. The findings showed that the concept of sacrifice in nursing is deeply embedded within the profession's cultural and ethical framework. The results align with previ-

ous research indicating that sacrifice is a core value in healthcare professions, particularly in nursing, where the interplay between professional obligations and personal values often leads to acts of selflessness [59]. This study illuminated the intricate dimensions of sacrifice, its antecedents, attributes, related concepts, and consequences. It demonstrated that sacrifice is not merely a personal choice but a phenomenon influenced by societal norms, professional expectations, and individual values.

The external influencing factors also included social expectations, the role of the media, the culture of societies, and the nature of the nursing work environment. This phenomenon had positive consequences, including helping to form the identity of the profession, self-fulfillment and bringing the person to human excellence, and giving the high status of martyrdom. The negative consequences associated with the phenomenon of self-sacrifice include presentism, impaired patient safety, lack of self-care, job burnout, and the desire to leave the service. Such findings resonate with studies highlighting that excessive self-sacrifice can lead to professional fatigue, emotional exhaustion, and even moral distress [60].

Looking at the history of nursing in the world, the love of sacrifice is an inseparable part of nursing, and it cannot be separated from this profession. If the nurses have paid a lot of money for their sacrifice, the costs and injuries suffered are not a reason to eliminate this phenomenon. This concept aligns with Watson's theory of human caring, which emphasizes the spiritual and emotional dimensions of nursing, highlighting self-transcendence in pursuit of a greater purpose [59]. Sacrifice is constant in nursing and cannot be separated from this profession. The primary nature of working with people and trying to save human lives involves sacrifice, whether one likes it or not, because humans naturally have a desire for excellence. Historical accounts, such as Florence Nightingale's leadership during the Crimean War, clearly show that sacrifice has been celebrated as a virtue in nursing [61]. Pask argues that nurses who perceive their intrinsic worth as a sacrifice for the well-being of their patients—at the expense of their own identity—recognize the potential harm in this perspective. However, the capacity for such self-transcendence remains a fundamental element of the nursing profession and should be reinforced through nursing education [33]. This emphasizes the importance of balancing altruism with self-care, a theme supported by Nightingale's philosophy of health as a holistic practice [61].

A critical point is that the capacity to recognize the inherent value of nurses should be strengthened. This issue

is essential for professional self-development. Nurses should strive for conscious self-reflection with the guidance and support of others, allowing them to reassess their values rather than resorting to self-deception. Empowering nurses to practice self-compassion can enhance their ability to care for others without compromising their well-being [62].

Efforts should be made to improve nurses' self-care behaviors. Nurses should be able to protect themselves and their patients. Research indicates that practicing self-care helps nurses preserve their well-being and succeed in their profession, even when facing work-related challenges. Resilience training and mindfulness-based stress reduction have proven effective in improving nurses' mental health and reducing burnout [63]. When problems in the work environment threaten a person's passion for their work, a self-care process involving reflection and introspection, along with empowering the individual to utilize personal and professional resources, enables nurses to adapt to and cope with the situation [11, 64].

It is important to recognize that nursing students represent the future of the healthcare workforce. Consequently, their commitment to the profession has been a central focus of extensive research on a global scale. They observe the consequences of sacrifice in this profession, and in some cases, they are less willing to sacrifice. The definition of an ideal nurse, i.e. a selfless nurse, may not resonate with the younger generation. As the global shortage of nurses continues to increase, the management system can no longer "expect" self-sacrifice but must take measures to retain and attract young individuals [30]. Integrating the principles of self-care and health-promoting behaviors into nursing curricula can play a vital role in preparing future nurses for the demands of their profession [65]. In addition, creating new approaches and plans to reduce the harmful effects of the nursing work environment, rather than accepting self-sacrifice and subsequent job burnout as norms, can assist in this direction [66].

Conclusion

Maintaining a culture of self-sacrifice in nursing is vital for nurturing excellence among nurses, acknowledging their intrinsic worth, and fostering their professional growth, especially during times of crises and conflicts. It is crucial to mitigate the adverse effects by promoting self-care practices and enhancing the work environment.

Clinical practice tips for military communities:

- The turning point of sacrifice in nursing is in wars and crises due to the high volume of victims and the need for humanitarian aid.
- Maintaining and reinforcing the culture of self-sacrifice among military nurses, particularly among younger personnel, is essential for sustaining their commitment and resilience in the profession.
- Commanders can prevent adverse consequences in this field by strengthening self-care behaviors along with the selfless performance of military nurses and creating a suitable working environment.

Study limitations

One limitation of this study is the restricted selection of articles in Persian and English, which may have led to the omission of valuable research published in other languages. To further develop and clarify this concept, it is suggested that a deeper understanding of this concept be created by conducting qualitative studies and interviews with people with experience in this field, especially during the current pandemic. Further investigation of generational differences in attitudes toward altruism in nursing is warranted, as it may inform future recruitment and retention strategies. An additional limitation of this study is the absence of a formal quality assessment of the included studies, as it was not conducted as a systematic review. While this approach facilitated a broader exploration of the concept, subsequent research employing systematic review methodologies could enhance the reliability and validity of the findings.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of [Baqiyatallah University of Medical Sciences](#), Tehran, Iran (Code: IR.BMSU.REC.1400.169).

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Authors' contributions

All authors contributed equally to the conception and design of the study, data collection and analysis, interpretation of the results and drafting of the manuscript. Each author approved the final version of the manuscript for submission.

Conflict of interest

The authors declared no conflict of interest.

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