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Reducing health disparities in providing care services in the intensive care unit: a critical ethnographic study

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Abstract

Objective The intensive care unit, with its structural complexity and the exposure of critically ill patients to various disparities, presents a significant setting for health disparities. This critical ethnographic study sought to uncover cultural knowledge and ethical practices for reducing health disparities in providing care services within the intensive care unit. The focus was on understanding how ethical considerations and cultural competence can address and mitigate these disparities effectively.

Methods This critical ethnographic study was conducted in 2022–2023 at intensive care units in western Iran. Three interrelated phases were used to collect and analyze the data. More than 300 h of observation were done during the first phase. A horizon analysis was carried out in the next phase. To further enhance the dataset, 18 informants participated in semi-structured interviews and informal conversations. Following that, the analysis procedure was conducted to identify a culture of health disparities and factors that reduce it, as it had been in the prior stage. Trustworthiness data collection methods were implemented to ensure the validity and reliability of the study.

Findings Two key themes emerged from the study: (A) Improved cultural competence, which encompassed empathy towards patients and their families, effective communication, prioritization of continuous learning, appropriate knowledge and awareness, sensitivity to cultural and religious beliefs, staff attitude and personality, and the delivery of customized care tailored to each patient's needs. (B) Supporting role and compensating for disparities involved recommendations for upholding ethical standards, compensatory actions, maintaining professional behavior despite external factors, addressing gaps and deficiencies, and actively defending and supporting patients.

Conclusion The findings indicate that staff with high cultural competence can ethically mitigate health disparities through their supportive roles. Managers and health policymakers should create barriers to health disparity by improving staff cultural competence and knowledge about health disparities.

Keywords Critical ethnography, Cultural competence, Health disparities, Intensive care unit

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Introduction

Health disparities, defined by Healthy People 2030 as differences in health linked to social, economic, and environmental disadvantage, affect groups facing systemic obstacles to health [1]. These disparities, influenced by age, socioeconomic status, race/ethnicity, and gender, negatively impact affected groups [2, 3]. An ethnographic study in France found that the speed of care in emergency departments was directly related to patients' social status [4]. In the U.S., Norton et al. reported higher odds of chronic kidney failure in Black patients compared to White patients [5]. Del Valle et al. found that race, marital status, and employment status were linked to better pancreatic cancer outcomes [6]. In Iran, Abouei et al. identified factors such as age, education, marital status, and household economy as crucial in accessing healthcare services [7], and a qualitative study revealed that Afghan mothers who lost their children received inadequate maternal and neonatal care [8]. Ageism also contributes to health disparities in the intensive care unit (ICU) settings [9]. The results of another study showed that there are health disparities in ICU admissions for patients with schizophrenia compared to other patients [10].

Disparities in healthcare significantly influence patient outcomes, particularly in critical care settings like the ICU, which is known for higher mortality rates and acuity [11, 12].

Literature highlights evident health disparities among critically ill patients, affecting access to and receipt of appropriate ICU services [13–15]. Studies indicate disparities in ICU, encompassing variations in admission rates, diagnoses, treatment options, care practices, and communication, all impacting health outcomes [10, 16, 17]. Socially, ethnically, or culturally distinct groups also face disparities in ICU care [10, 17]. Cultural factors, often overlooked, are crucial in understanding the unequal distribution of health and illness. The socioeconomic, cultural, and political context shapes social structures and influences health distribution and well-being opportunities [18, 19].

The recommendations in the studies that have been done to reduce health disparities have mainly focused on improving education, cost, and access [20, 21]. Some studies also mentioned enhanced cultural competence and education about minorities [22, 23]. Another study mentioned that the strategies to reduce health disparities must be intersectoral and multidisciplinary, including all health system sectors [24].

Health disparities based on socioeconomic position, race/ethnicity, gender, neighborhood deprivation, and other social disparity axes are pronounced. Improving health equity and mitigating these disparities is considered public health's "holy grail" [25]. Health disparities predominantly affect marginalized groups, significantly impacting their health outcomes [26]. Critical patients, unable to voice their experiences of injustice or disparities they encounter, are often considered part of these marginalized groups. This lack of a voice motivated us to conduct this study. This study is part of a broader investigation with the overarching goal of uncovering the culture of health disparities in the ICU [27]. This study aims to provide insights into social structures, power dynamics, and cultural beliefs, contributing valuable knowledge for policy changes and interventions to reduce disparities in ICU. Since health disparities are a systemic and multilevel issue, evidence-based actions are needed to reduce them [28]. To reinforce those elements in future interventions, this ethnographic study focuses on the contexts and conditions that could help mitigate health disparities. This critical ethnographic study utilizes Carspecken's method (1996) [29] to delve into the intricacies of health disparities within ICU services. The article delineates prevailing cultural insights as a cornerstone for mitigating health disparities.

Methods

Design

The study employed an ethnographic approach to explore factors influencing individuals' experiences with the healthcare system and uncover power dynamics contributing to health disparities in ICUs [30]. Using the critical ethnography method, the research focused on revealing power imbalances and oppressive structures that hinder patient-centered care. By analyzing culture through power, privilege, and authority, the study aimed to expose unjust systems and identify whose voices are amplified or silenced [31].

The Carspecken approach, a key method in critical ethnography, was used to highlight how social disparity and structures are perpetuated through routine practices. Carspecken's method views critical ethnography as a form of social activism aiming to uncover hidden systems of dominance and ideologies [29]. This approach also guides data collection and analysis to contribute to social change and address systemic disparities.

Study setting

The research took place in the ICUs of Shohadaye Ashayer Hospital, a 300-bed teaching, referral, and trauma center with six specialized ICUs. One nurse is assigned to every 2–3 patients in these units. Most of the patient population consists of trauma and surgical cases, with a smaller proportion of internal medicine cases. Most patients are local residents from various parts of the province, and due to the hospital's public status and affordable services, it primarily caters to individuals from lower socioeconomic backgrounds.

A distinctive cultural landscape characterizes Lorestan. Although urbanization has gradually shaped aspects of its modern lifestyle, clan-based relationships remain deeply rooted and dominate social structures. The province has numerous clans, each with a distinct cultural identity, fostering considerable cultural diversity. This diversity, coupled with cultural biases, plays a pivotal role in perpetuating healthcare disparities across the region. Previous studies have highlighted significant health disparities in Lorestan, underscoring how cultural factors influence access to and quality healthcare services [32–34]. These unique dynamics make Lorestan an essential setting for exploring health disparities.

Informants

The study utilized purposeful sampling to select informants and continued until data saturation. The informants encompassed individuals who formed and influenced the cultural milieu of the study setting. The study involved 18 informants with a mean age of 39.5 years (SD = 8.95). Among the informants who were employees, the mean work experience was 13.20 years (SD = 6.94), while patients and their families had a mean ICU stay of 14 days (SD = 3.30). The gender distribution consisted of ten females and eight males. Informants held various roles: nine were nurses, one was a head nurse, two were family members of patients, one was a patient, one was an attendant, one was a physician, one was a psychologist, and two were anesthesia specialists. Regarding marital status, 13 informants were married, and five were single. Regarding educational background, two informants had education below a bachelor's degree, 14 held bachelor's or master's degrees, and two had doctorate-level education or higher.

Data collection and analysis

The study was carried out from August 2022 to September 2023. Carspecken's critical ethnography comprises three preliminary stages and five main stages. In the preliminary stages, a comprehensive set of research questions was developed to understand the health disparity culture in ICUs and specify situations for obtaining answers. To minimize biases, the researcher recorded their value orientations in reflective journals [29].

The main stages involved collecting primary records through monological data and observing interactions related to health disparities. Monological data were generated over 300 h of presence and observation in the study setting. The preliminary reconstructive analysis included low-level coding, initial meaning reconstruction, and pragmatic horizon analysis to reveal cultural themes and systemic factors [29].

Dialogical data generation involved conversations with informants to democratize research and challenge previous data. The dialogic data were generated through semi-structured interviews and informal conversations [29]. The interview protocol was tailored for each informant; however, a general interview guide was employed to ensure consistency across interviews (Supplementary File 1). Questions like "*Do you recall that day (referring to an event)?*" were asked at the beginning of the interviews. "*Could you provide further details about that incident?*" Or "*How do you spend a working day*?" Six individuals declined to participate or dropped out due to their heavy workloads and unwillingness to allocate time for interviews. The duration of the conversations ranged from 30 to 60 minutes. The data analysis of this stage was done like the previous stage. However, only the first three stages were implemented to adhere to Carspecken's recommendation for novice researchers, omitting steps four and five [29].

Trustworthiness

The researcher consistently reflected on personal factors, such as history and biases, recognizing their potential impact on the study. Carspecken advocated for a triangulation approach involving interviews, observations, and documents to enhance rigor [29]. Lincoln and Guba's validation methods (1994), including credibility, conformability, dependability, and transferability, were all taken into account to verify the validity and reliability of the study [35]. Measures included a flexible observation schedule and memo writing.

The first author, originally from Lorestan and a nursing researcher, was deeply involved in the research setting, actively collecting data and conducting the initial analysis. The team held weekly peer review sessions to ensure a comprehensive and accurate interpretation of the findings. The research team included another researcher from Lorestan who specialized in qualitative nursing research and three researchers from outside Lorestan: two experts in qualitative nursing research and one anthropologist.

Tone and body language were considered in monological and dialogical stages, with immediate recording of observations and conversations. All interviews were recorded and transcribed. An audit trail was maintained, and decisions on data collection were transparent. The researcher's extended presence as an observer-participant and informant reviews ensured cultural sensitivity and accurate interpretations. Findings were summarized descriptively and shared with some informants for validation. We followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines to maintain thorough and transparent reporting throughout the study [36] (Supplementary File 2).

Findings

This critical ethnographic study revealed two themes and 13 sub-themes (Table 1). The findings indicate themes related to reducing health disparity in the ICU. The findings are explained, and selected quotes from the observation or interview phases are presented in *italics* below.

Improved cultural competence

The research findings identified improved cultural competence as a key factor in preventing and reducing health disparity.

Empathy towards the patient and their family

Empathizing with patients or their families enabled staff to imagine themselves in their position, leading them to refrain from acting unilaterally and even attempt to serve patients or their families beyond their duties. Understanding the situation of the patient and family, sympathizing with them, demonstrating benevolent and compassionate behaviors, and even attempting to solve problems were among its manifestations. One patient with a gender disorder shared a positive experience with a nurse during an interview with a psychologist informant, stating, *"She was very kind and treated me well. She even became a friend of mine and offered his number, saying you can call me if you have any problems."* During one of my observation rounds, *"a nurse explained the patient's clinical condition to the patient's mother. Suddenly, the mother began to cry uncontrollably. As the nurse continued explaining, she gently held the mother's arm and, while speaking, started to cry as well. The patient's mother rested her head on the nurse's shoulder."*

Effective communication

One of the characteristics of ICUs is the challenge of communicating with patients, often due to decreased consciousness levels or the presence of a tracheal tube, rendering verbal communication impossible. Furthermore, restricted access to patients' families limits communication opportunities. Compounded by heavy workloads, communication often falls lower on the staff's list of priorities, and in some cases, communication may not occur at all. However, some staff make concerted efforts to overcome these obstacles. For instance, one staff faced difficulty communicating with patients and their families due to the language barrier, particularly with those who spoke Laki, a language common in Western Iran. She tried to understand Laki and communicate with patients and their families. Additionally, staff members in the field are observed making efforts to communicate with unconscious or intubated patients. A nurse shared an experience demonstrating such efforts, stating: *"There was a patient whose head movements puzzled me initially. Despite my initial frustration, I reminded myself to be patient and attentive. I began asking simple questions, 'Are you thirsty? Are you hungry? Are you hot? Are you cold? Are you in pain?' The patient responded by shaking their head, indicating they were experiencing shortness of breath. Upon further examination, I discovered an airway issue and reassured the patient while addressing the problem. Eventually, the patient was able to rest comfortably."*

Table 1 Themes and subthemes related to reducing health disparities in the ICU

Themes	Sub themes
Improved cultural competence	Empathy towards the patient and their family
	Effective communication
	Importance of prioritizing learning
	Appropriate knowledge and awareness
	Sensitivity
	Attention to religious beliefs and opinions
	Staff's attitude and personality
	Customized service delivery for each patient
Supporting role and compensating disparities	Recommendation for maintaining ethics
	Compensatory actions
	The lack of influence of side issues on professional behavior
	Defects coverage
	Defending and Supporting

Importance of prioritizing learning

Some staff prioritized learning about the patient's culture, language, and social background, recognizing the importance of providing better quality services based on the patient's cultural context. It was frequently observed that staff, during their personal time, engaged in discussions about the meanings of local words or terms and familiarized themselves with the local clans and geography.

"One of the nurses, a young girl, came back to the station from the patient's side and asked one of her colleagues, 'What does "Azhashki" mean?' A hospital attendant on the other side chuckled and said it meant 'yawning.' The nurse also started laughing and said, 'How interesting! I had never heard it before.' Then the nurse continued, 'The patient keeps asking me: Is it okay if I Azhashki a lot? He asked several times, but I couldn't understand. I told him I don't understand what you're saying! Then he kept opening and closing his mouth, and I would say to him, 'Why are you opening your mouth?' Then he opened his mouth again. Now I understand he wanted me to know that he meant yawning. Immediately, She went over to her patient's bedside and said, '"It's okay if you Azhashki a lot."'.

Appropriate knowledge and awareness

The knowledge and awareness of staff regarding the right to equality, the existence of diverse needs in patients, the

varied reactions of patients to these needs, the importance of prioritizing all patients, efforts to communicate in the patient's language, and understanding the cultural context were behavioral characteristics that enhanced the staffs' cultural competence. One informant shared their experiences during an interview: *"When I was a student, I learned that patients' reactions to pain differ due to their backgrounds. I understood that some situations are more challenging for certain patients than others. Consequently, I don't blame them."*

During one of my observation rounds, *"a conscious patient who had undergone surgery expressed the desire to perform their prayers. One of the staff members said, "I'm not sure how to assist in this situation," and then went to the unit's library to consult a book on religious rulings for patient care."*

Sensitivity

Sensitivity to non-discrimination and the provision of individualized care for each patient, as well as a heightened awareness of understanding patients and a commitment to continuous learning, indicate staff possessing enhanced cultural competence. This, in turn, contributes to the reduction of health disparities. One informant expressed this commitment: *"When I don't provide effective treatment, it weighs on my conscience. Overall, I am sensitive to the feeling created in the patient."*

Attention to religious beliefs and opinions

Some staff members respected patients' religious beliefs and opinions by accommodating their religious practices. This included facilitating prayer preparations, playing the sound of the Quran, and placing blessed clothes over patients' heads as entrusted by their families. Small Qurans were also observed above the heads or in closets above the beds of some patients, as requested by their families and placed by the staff.

A nurse, while administering a blood sugar check to a multiple trauma patient with low consciousness, softly uttered "Bismillah" before inserting the needle into the patient's hand in the presence of the patient's father. During an interview with the nurse, he explained his practice: *"I always say 'Bismillah' before invasive procedures. When the patient's family is nearby, I say it a little louder, not to draw attention to myself, but because families often seek reassurance during times of crisis. By offering this, they find solace. Since they typically turn to God for comfort, I believe saying this aloud helps to calm them."*

Staff's attitude and personality

The staff's personality, attitude, and feelings sometimes promote health equality. For instance, staff with calmness, compassion, and a strong sense of responsibility play a more effective role in this field. During an interview, one of the physicians emphasized the significance of responsibility, stating: *"You see, a sense of responsibility is crucial. Once, the oxygen center malfunctioned, and we were relying on capsules. When the capsules ran out and the facility staff was unavailable, a patient experienced hypoxia. Then, I witnessed a young nurse go and push an oxygen capsule, bring it, take a wrench to close the hose, and promptly connect it to the patient's hose. It was a demonstration of someone who truly felt responsible."*

Customized service delivery for each patient

The value, belief, and law in the ICU were to provide tailored services for each patient, although this only sometimes happened in action. However, there were times when staff assessed the patient's condition and allocated their time and energy among them based on the patient's clinical needs. They also paid attention to patient backgrounds such as place of residence, distance, financial conditions, and cultural background to provide personalized care to each patient. Below is a note from the field related to a patient's family who had traveled from a distant location to visit their patient and intended to return to their hometown quickly: *"The patient was from the Bakhtiari tribe and had been transferred from Aligoudarz County to Khorramabad. The patient's companions were two men, one dressed in traditional Bakhtiari attire. One of the staff allowed both companions to enter the ward together. While briefing the companions about the ward rules, the staff said: 'Since you have traveled from afar and are in a hurry, I have allowed both of you to enter together and visit your patient.'"*.

Supporting role and compensating disparities

One of the findings of this research, in response to the inquiry about factors mitigating health disparities in the ICU, was the perception of a supportive and compensatory role aimed at addressing the disparities faced by patients or their families.

Recommendation for maintaining ethics

The recommendation to uphold ethics was another aspect that compensated for disparities. Staff sometimes advised them to consider ethical perspectives to persuade their colleagues to avoid engaging in unequal behavior. The role of instructors in educating students in this field was evident. One informant stated: *"Look, during my internship, I performed a non-sterile procedure, which we know is scientifically incorrect and not up for debate. However, the instructors justified my actions by emphasizing ethical considerations. For instance, he explained that if the patient were to develop an infection, it could lead to complications and numerous other issues, for which I would be held responsible. He stressed the importance of approaching these matters from a moral standpoint."*

During one of my observations, *"I saw a nurse and a hospital attendant change positioning a patient. Instead of lifting the patient, they dragged them across the bed. Another observing nurse told them, "Don't drag the patient on the bed; it will cause bedsores, and it's unethical."*

Compensatory actions

Sometimes, the staff noticed discrimination or disparity against patients or their families and attempted to address it by providing better, higher-quality care or taking soothing actions. In one instance, a child patient with congenital physical abnormalities was in the inpatient ward, and the staff abruptly ejected the patient's mother from the ward in a harsh manner. The continuation of the field notes reads: *"As I gazed into the patient's eyes, I observed tears, indicating that the child had a deeper understanding of the situation than I had initially assumed. The nurse remained silent for a few moments, seemingly moved by the patient's condition and desiring to make amends. Subsequently, the nurse instructed the hospital attendants to bring the bed-bath equipment. Once the equipment was brought, they proceeded to wash the patient's head and body with the assistance of the hospital attendants. During this process, the nurse affectionately caressed the patient."*

The lack of influence of side issues on professional behavior

Another manifestation of compensation and support against disparity was the lack of influence of side issues on professional behavior. The staff did not let the bad behavior of patients or their families affect the quality and manner of service delivery. They were not swayed by gifts from families to discriminate between patients and also disregarded the pressures imposed by the hospital to cut costs. They maintained their commitment to perform their duties correctly and professionally. One informant shared: *"We were instructed by the hospital to reuse each tube multiple times for tracheal suction or to use fewer gloves, but I do not heed these directives as I refuse to compromise the safety of my patients."*

During one of my observation rounds, *"a family member of a patient, upset by the patient's condition, angrily yelled at the physician, saying, "You're responsible for this, it's your fault!" Despite the outburst, the physician remained calm, quietly walked past the family member, and proceeded to assess and perform the daily check-up on the patient from the same family."*

Defects coverage

Sometimes, the staff endeavored to address existing shortcomings. For instance, one nurse who identified patient bill errors made significant efforts to rectify the issue. Additionally, a patient facing societal stigma due to gender disorder found love and acceptance from certain staff members. Another instance involved a young patient with a facial deformity, whom a nurse approached by looking into their eyes and ignoring the defect, expressing, *"I wish my eyes were like yours."* Furthermore, despite a patient's poor hygiene and unpleasant body odor, which deterred most staff from getting too close, one member of the staff meticulously washed various parts of the patient's body with a gas.

Defending and supporting

Another important role of the staff in this context was to serve as advocates and defenders of the rights of patients and their families. Among the observed instances in the field were interventions to prevent verbal and physical violence in patients, counteract ridicule and stigmatization of patients with gender identity disorder, thwart derogatory remarks aimed at ethnic minorities, advocate for a homeless patient to receive necessary treatment, safeguard patient confidentiality, and address breaches of privacy when patient information was leaked.

"One of the staff members made a negative comment about the patients with gender ambiguity, stating that they are not good people and are filthy. Another staff member bit his lip angrily and responded, 'No, what are you talking about? These are unfortunate people, and they are not guilty. You have no right to speak about them like that.'".

Discussion

The findings of this critical ethnographic study showed that improved cultural competence and the supportive and compensatory role of health disparities among staff can reduce health disparities in the ICU.

The results of our previous cross-sectional study conducted in this setting revealed that nurses' cultural competence levels were moderate. So, cultural competence training was suggested to be integrated into ICU practices [37]. However, the current study identifies multiple dimensions of cultural competence that can serve as a basis for improving cultural competence skills and cultivating a more profound understanding of cultural competence within ICUs. These dimensions provide valuable insights for devising effective strategies to enhance cultural competence in ICU settings and can be effective in developing this concept.

In ICUs, where tailored approaches are crucial for individuals with unique health needs [38], cultural competence plays an essential role. It is crucial in delivering effective and culturally responsive healthcare services, reducing health disparities, addressing racism in healthcare, and enhancing patient safety, satisfaction, and health outcomes [39]. Failure to address cultural differences may lead to health disparities, impeding equitable

access to healthcare and exacerbating health outcomes among diverse cultural groups. Therefore, integrating cultural competence into critical care delivery is vital for promoting inclusivity and striving for health equity [37, 38]. Therefore, several studies have underscored the importance of incorporating cultural competence and addressing health disparities into the educational curricula of health science students [40, 41].

Our research findings indicate that staff who demonstrate empathy toward patients or their families are crucial in reducing health disparities. Furthermore, our previous study revealed that ICU nurses exhibited a high level of empathy, a predictor of cultural competence [37]. Beverley et al. have recommended fostering empathy, rather than maintaining judgmental attitudes toward all patients, should be the preferred approach to patient engagement to improve health disparities [42].

The findings of this study indicate that certain staff prioritize acknowledging patients' religious beliefs and opinions, a matter of significant importance given the societal and religious context in Iran. Additionally, another notable finding underscores the significance of acquiring knowledge about the cultural, linguistic, and social aspects of the community under study. In a related qualitative study, it was observed that while nurses tended to emphasize biological factors and patients' medical conditions, they exhibited respect for patients' cultural and religious practices and expressed a willingness to learn about culturally sensitive nursing care practices, indicating an interest in bridging cultural gaps in healthcare delivery [43].

Another finding of the current study showed that the role of support and compensation of disparities effectively reduces health disparities. According to Carspecken, it is imperative to identify the systematic roots of oppression [29, 44]. Among the various types of oppression, systematic oppression stands out, characterized by the enduring subordination, humiliation, and domination of certain social groups. This subjugation stems from their socially constructed lower position in society, contrasted with the socially constructed higher position of the oppressing groups [45]. This finding demonstrates that while the root causes of oppression and disparity may be systemic, the actions of individual staff can effectively disrupt the structure of systemic oppression and disparities.

The theory of social injustice carries significant implications, chiefly the acknowledgment of moral and political responsibility to eradicate the sources of human injustice and prevent the proliferation of its detrimental consequences [46]. This study's findings demonstrated that the staff has a growing awareness of their moral obligation to address, confront, and rectify disparities. Despite facing external pressures, they remain steadfast in their commitment to tackle this issue. These actions align with the implications for social theory [46].

The study's findings indicated that staff advocate for adherence to ethical principles to address disparities, highlighting how ethical compliance can deter health disparities. Similarly, an ethnographic study in Spain focused on implementing culturally competent transplant care and its implications for reducing health disparities. The study identified several facilitators for implementation, such as stakeholders' emphasis on moral imperatives, personal motivations, and perceptions of educational needs. Conversely, barriers included immorality and a lack of knowledge about disparities [47]. Consequently, fostering the development of personal and professional ethics among staff can play a pivotal role in addressing and mitigating health disparities.

Other studies have indicated that certain factors enhance patient-centered care capacity, such as improved communication strategies and heightened awareness [48]. Interpersonal respect is also a key factor that could reduce health disparities [49]. These findings also corroborate the current study's findings and underscore the importance of enhancing the delivery of tailored services for each patient while upholding their dignity and respect.

Another significant finding from our research underscores the importance of offering defense and support to prevent the occurrence of disparity in healthcare. Defending patients or their families serves as the final barrier against health disparities. However, it is crucial to implement necessary measures across all levels to actively reduce health disparities. The findings of a qualitative study highlighted that health professionals frequently prefer minimal interventions for homeless patients. Nevertheless, there were instances where some staff advocated for homeless patients to receive the services they needed [50]. These findings emphasize the importance of defense and support to prevent the occurrence of disparity in addressing the healthcare needs of vulnerable populations.

The findings of this study hold the potential for informing policymakers and managers and facilitating the design and implementation of more effective strategies and programs aimed at cultivating staff with high cultural competence. Furthermore, the study underscores the importance of developing a culturally contextualized program tailored to the specific cultural landscape of Iran to enhance staff cultural competence. Additionally, Marsha's suggestion of involving staff in leadership roles in community events and expanding educational opportunities to deepen their understanding of health disparity principles is echoed and supported by our study's findings [51].

Based on recommendations for engaging families in ICU care [52], future studies should examine the impact

of this engagement on reducing health disparities in these settings.

Limitations

As with many ethnographic studies, this research faced limitations inherent to the methodology. One major challenge was the potential for observer bias, where the researcher's presence could influence participant behavior or result in a subjective interpretation of the data. Additionally, prolonged engagement in the field may lead to over-familiarity with informants, making it difficult to maintain an objective stance. To mitigate these limitations, strategies such as reflexive journaling and maintaining a critical distance during observations were employed to ensure the credibility and trustworthiness of the data.

Ethical issues in ethnographic studies may arise from the researcher immersing themselves in the informants' world rather than inviting them into the researcher's world. The informant observation technique, conducted in natural settings over extended periods, may limit the initial information provided to informants or officials to preserve the integrity of the research. Moreover, close relationships between the researcher and some informants may generate ethical obligations. Additionally, detailed descriptions of informants and their activities in ethnographic reports could lead to their identification by those familiar with the study's context [53]. Efforts were made in this study to navigate and mitigate these ethical considerations.

Conclusion

The research findings underscore the ethical responsibility of staff with high cultural competence in reducing disparities through their supportive actions. To ethically address health disparities, it is recommended that healthcare managers and policymakers prioritize enhancing staff's cultural competence and deepening their understanding of health disparities. This ethical approach can effectively create barriers to health disparity and promote more equitable healthcare delivery.

Abbreviations

ICU Intensive Care Unit

Supplementary Information

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Supplementary Material 1

Supplementary Material 2

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Author contributions

S.Y., M.S., M.Gh., A.F.M., and S.M.S.M. contributed to the conceptualization, methodology, investigation, data analysis, and writing the original and revised draft . Also, S.Y. was done data curation, and S.M. supervised the project. All authors reviewed the manuscript.

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Data availability

The datasets generated and analyzed in this study are not publicly available because they contain individual informants. However, they are available from the corresponding author upon reasonable request.

Declarations

Consent for publication

Not Applicable.

Competing interests

The authors declare no competing interests.

Ethical considerations

This study was conducted in accordance with the Declaration of Helsinki and received approval from the Ethics Committee of Semnan University of Medical Sciences, Semnan, Iran (IR.SEMUMS.REC.1401.075). Ethical guidelines for the study included minimizing harm, respecting autonomy, maintaining privacy, and ensuring reciprocity. The study was unpaid, anonymous, and entirely volunteer. Each informant gave informed consent after being told of the study's goals. To guarantee voluntariness, informants could leave at any time without losing their benefits. Anonymity was ensured by not gathering any personally identifiable information.

Clinical trial number

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