

UCLA

UCLA Previously Published Works

Title

Ethical Decision-making of Health Professionals Caring for People Living with HIV/AIDS in Hunan, China: A Qualitative Study

Permalink

<https://escholarship.org/uc/item/3s94b0vb>

Authors

Lu, Xiaoxiao
Huang, Hangyu
Khoshnood, Kaveh
[et al.](#)

Publication Date

2022

DOI

10.1177/00469580221127789

Peer reviewed

Ethical Decision-making of Health Professionals Caring for People Living with HIV/AIDS in Hunan, China: A Qualitative Study

INQUIRY: The Journal of Health Care Organization, Provision, and Financing
Volume 59: 1–9
© The Author(s) 2022
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/00469580221127789
journals.sagepub.com/home/inq



Xiaoxiao Lu, BS¹ , Hangyu Huang, MS¹*, Kaveh Khoshnood, PhD², Deborah Koniak-Griffin, PhD³, Honghong Wang, PhD¹, and Min Yang, PhD¹

Abstract

Numerous ethical issues surged the moment acquired immunodeficiency syndrome (AIDS) was discovered. As advocates of people living with HIV/AIDS (PLWHA), health professionals encounter many ethical dilemmas in clinical practice. However, it remains unclear how health professionals solve these issues. The descriptive qualitative research was conducted through semi-structured interviews with 22 health professionals from May to August 2018. Three themes emerged from data analyses of the interviews: (1) real ethical dilemma experienced by health professionals, (2) factors influencing ethical judgment, (3) ethical motivations. About two-thirds of participants failed to recall ethical dilemmas experienced in their clinical practice. Emotions, gender, occupation, and difficulty balancing different roles may influence the ethical judgments of health professionals. In the ethical decision-making (EDM) process, most participants took other people's interests into consideration and conformed to law and professional codes of conduct. However, the fear of medical disputes (conflicts with families and others) was experienced by many participants, influencing their ethical behaviors.

Keywords

ethics, ethical decision-making, health professional, HIV, qualitative descriptive study

What do we already know about this topic?

As advocates of PLWHA, health professionals encounter many ethical dilemmas in clinical practice.

How does your research contribute to the field?

In the field of AIDS care, ethical issues are common, but have not received sufficient attention. Most health professionals solved ethical issues by blindly conforming to relevant laws and regulations, and lacked clinical ethical thinking. This research presents new knowledge about the factors and the motivations in the process of theoretical decision-making of health professionals, and will serve as a reference for future training in targeted clinical ethical decision-making.

What are your research's implications toward theory, practice, or policy?

We should focus on increasing physician-nurse communication, stressing the importance of the role of health professionals, specifying the responsibilities of this population, promoting medical ethical education for HIV/AIDS-related professionals (ie, fostering their clinical ethical thinking and encouraging its application to clinical practice), and sounding governmental laws.

Introduction

Acquired immunodeficiency syndrome (AIDS) is a severe immunological disorder caused by the human immunodeficiency virus (HIV). Although the HIV infection rate has been reduced since its peak in 1997, the global population of people living with HIV/AIDS (PLWHA) is still huge and was as

many as 37.9 million in 2018 according to the data from the official website of the Joint United Nations Program on HIV/AIDS (UNAIDS). Due to its large population, China's PLWHA must not be overlooked. According to a 2018 report from China's Center for Disease Control (CDC), about 841 478 people were living with HIV in September 2018,¹ bringing medical as well as ethical challenges to AIDS care in China.



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

Ethical challenges in AIDS care arise for several reasons. First, some high-risk behaviors associated with HIV infection, like prostitution and drug abuse, resulting in discrimination and stigma toward PLWHA. In developing countries, studies have been done to explore healthcare workers' HIV-related stigma and discrimination and the results showed that healthcare providers showed high levels of stigma and discrimination against PLWHA.^{2,3} Second, the increasing life expectancy of PLWHA who receive appropriate treatment increases the possibility of health professionals experiencing a variety of ethical challenges and dilemmas over time.⁴

As a result, numerous ethical issues are present in AIDS care. It is reported that HIV service providers encountered ethical challenges with regard to patients' autonomy, beneficence, justice, and non-maleficence in the US.⁵ Ghanaian scholars also noticed an overt and covert violation of patient confidentiality by healthcare workers in HIV clinics.⁶ In the same vein, Kaposy et al⁷ has determined some prominently discussed ethical issues are occurring in HIV clinics, such as conflicts between client autonomy and public health priorities. They developed some norms and procedures to manage those issues. For example, in the case of potential conflict that arise out of "treatment as prevention" efforts (Treatment as soon as possible for those newly diagnosed patients can reduce their viral load which will also reduce the possibility that the diagnosed person will transmit HIV to others, but the patient has the autonomy to accept or refuse treatment. Pushing treatment as prevention on a patient in the interests of public health could thus violate the clients' informed consent), health care providers defer toward accepting the clients' informed decision making.⁷ But for nondisclosure, the law has different explanations based on patients' viral load and their risk behaviors, health care providers manage difficulties by counseling, documentation, and the protection of confidentiality whenever possible.⁷

In China, there are some laws and regulations to guide clinical practice in AIDS care, such as "Regulations of the Prevention and Cure of AIDS," "Administrative measures for notification of AIDS test positivity (trial version), but there are inconsistencies in some content (ie, inconsistency in the scope of the subject of personal information notification) and ambiguous expression (ie, there is no specific regulation on the subject of managing personal information) which limits health providers to solve their ethical dilemmas.⁸ To evaluate

the ability to solve ethical issues, ethical decision-making (EDM) competence has drawn considerable attention. EDM refers to a logical process aimed at making a rational and responsible choice about an ethical issue through systematic reasoning, while EDM competence is defined as the ability to choose the optimal alternative in an ethical dilemma based on EDM.⁹ According to Rest's Four Components model,¹⁰ ethical behaviors result from 4 reciprocal determinants: ethical sensitivity, ethical judgment, ethical motivation, and ethical character. Insufficient EDM competence can not only result in undesired outcomes, but also trap the decision-makers into ethical conflicts.¹¹

The EDM competence of various health professionals has attracted researchers' attention worldwide. For instance, Bužgová and Sikorová¹² have determined that nursing students had a low level of such competence. Although EDM competence has been assessed among a variety of health care providers, including dentists,¹³ physicians and nurses,¹⁴ health professionals in AIDS care rarely receive such attention. Kaposy et al⁷ briefly outlined how Canadian health care providers and clients in HIV care manage different ethical issues, but without further exploration of why they behaved so.

Chinese scholars have explored the ethical sensitivity of Chinese health professionals caring for PLWHA in Hunan province, and found that the majority of the participants could recognize the ethical issues that might happen in their line of work.¹⁵ Few publications have reported how they manage their ethical dilemmas in their clinical practice. There were some studies to discuss EDM of some special groups such as nurses working in emergency department or nursing students, but only reported their overall level of EDM and the influencing factors, no further exploration of their ethical behaviors and the reasons of their behaviors.^{16,17} Furthermore, medical ethics education in China is still in an early stage.¹⁸ The shortcomings of ethics curricula include limited course hours and topics, small faculty teams,¹⁸ outdated information and dull teaching methods.¹⁹ Under these circumstances, it is necessary to probe the EDM and ethical behavior of health professionals caring for PLWHA.

The present study aims to identify how health professionals (in this study, referring to physicians and nurses who provide AIDS care in China) solve ethical issues in HIV/AIDS clinical practice. Furthermore, this study summarizes the characteristics of the health professionals' ethical decision-making and

¹Xiang Ya Nursing School of Central South University, Changsha, Hunan, China

²Yale University, New Haven, CT, USA

³University of California in Los Angeles (UCLA), Los Angeles, CA, USA

*These authors contributed equally to this work.

Received 18 March 2022; revised 31 August 2022; revised manuscript accepted 2 September 2022

Corresponding Author:

Min Yang, Xiang Ya Nursing School of Central South University, 172 Tongzipo Road, Changsha, Hunan 410013, China.

Email: yangminzhu@csu.edu.cn

discusses strategies to promote ethical behaviors and improve the quality of AIDS health care.

Method

Design

To develop an in-depth understanding of the EDM process of health professionals, we conducted a qualitative, descriptive study by one-on-one, face-to-face interviews.

Settings and Participants Sample

This study was conducted from May until August of 2018 in hospitals designated by the Hunan Center of Disease Control (CDC) as HIV/AIDS care facilities. We purposely selected 5 facilities that serve the majority of PLWHA in Hunan.

Participants were recruited by purposive sampling-recruitment. Sample size was determined by data saturation,²⁰ although data saturation origins in grounded theory, it is also applicable to many other qualitative research methods. Sampling and data collection continued until no more new information was generated.²⁰ To ensure the data saturation was reached, 3 more interviews were conducted with no new themes emerging before recruitment ceased.²¹ Finally, this study involved 27 health professionals as participants. The inclusion criteria were as follows: (1) employed as a licensed physician or nurse; (2) provider of direct care for PLWHA; and (3) willing to participate in the study. Nurses and physicians engaged in research or management of services for PLWHA were excluded. We recruited at least 2 participants from each hospital.

Measures

The semi-structured interview was guided by Rest's model on the development of ethical behavior: ethical issue—ethical judgment—ethical motivation—ethical decision—ethical behavior. Five self-compiled reality-based ethical dilemmas (scenarios) were given to the interviewees to explore their EDM. The 5 scenarios were compiled based on consultation with 2 experienced health professionals (1 doctor and 1 nurse) in AIDS care, and the dilemmas were revised in accordance with clinical practice after 5 pilot interviews (see Appendix). Starting with the question, "Can you tell me some ethical dilemmas experienced in your daily work?," the interview proceeded according to the Rest's model. After reading the scenario, the participants would be asked "What did you do about the dilemma? How do you judge your behaviors ethically? Could you tell me the motivations for your behaviors?"

Data Collection Procedures

This study is a minimal risk study, and we got permission from Institutional Review Board (IRB) to waive the written

informed consent, but the process of informed consent was not waived. Before recording, we asked the interviewees to read the information sheet (including the purpose of the study, the process of the study, the rights and interests of the interviewees, confidentiality guarantee, their freedom of participation or not, etc.), and then asked the participants about their willingness to participate and started the interview after obtaining their verbal consent. Interviews were conducted in Mandarin (the required language in working environments in China). The interviews were audio recorded, and the gestures and facial expressions of the participants were synchronously noted down. When the participant's response deviated too far from the main purpose, the interviewer guided him/her back by asking about his/her consideration about how alternative actions serve ethical or unethical values. Additional visits to some participants with equivocal responses were made to give them opportunities to clarify their meanings and ensure content accuracy.

Analysis

Data were analyzed immediately after the interview. The audio recordings and notes were transcribed verbatim in Mandarin by 2 researchers of the team. The numbered transcripts were anonymous to ensure interviewee's confidentiality and were analyzed by thematic analysis method.²² The process of thematic analysis can be outlined in 5 steps: compiling, disassembling, reassembling, interpreting, and concluding.²² After data immersion, 2 researchers respectively coded the transcripts to identify the main themes with NVIVO11.0 software. When discrepancies in coding and generalizing occurred, the research team and 2 invited experts in qualitative research met to discuss and find agreement. Lastly, the senior researcher of the team reviewed the audio-recordings and transcripts to ensure the themes were representative and finalized the themes.

Results

In total, 27 health professionals were recruited, but 5 out of 27 asked to withdraw from interviews halfway. The AIDS-related working experience of the remaining 22 participants ranged from 0.5 to 14 years (Mean=6.61, SD=3.91), and the duration of interview ranged from 14 to 66 minutes (Mean=24.62, SD=12.48). Among the 22 participants, 5 were physicians while 17 were nurses. Coincidentally, all the physicians were male, and nurses were female. The AIDS-related working experience of the physician participants ranged from 2.5 to 12 years (Mean=6.40, SD=3.63) and their interview duration ranged from 16 to 66 minutes (Mean=35.06, SD=18.79). The AIDS-related working experience of the nurse participants ranged from 0.5 to 14 years (Mean=6.68, SD=4.12) and their interview duration ranged from 14 to 35 minutes (Mean=21.55, SD=8.50).

The average interview duration of physicians (male) was longer than that of nurses (females) ($t=2.345$, $P=.029$).

Three themes were identified: (1) real ethical dilemmas experienced by health professionals; (2) factors influencing ethical judgment: emotion, gender, occupation and difficulty in balancing different roles; (3) ethical motivations: to protect their own interests, to safeguard others' interests, to obey regulations and professional conduct of codes.

Real Ethical Dilemmas Experienced by Health Professionals

Seven out of 22 participants described the ethical dilemmas they encountered in clinical practice. The most frequently faced ethical dilemma described was about the contradiction between the patient's right to keep confidentiality and relatives' right to know the truth. One participant expressed:

It's a special disease, so patients usually hold the infection status back from their relatives. So many relatives will come and ask us about the patients' disease and question why it takes so long to recover. We really feel embarrassed about these questions. . . . Because keeping patient's confidentiality may be detrimental to public prevention, while disclosing the patient's condition indicates disrespect for the patient. (Participant 23, nurse)

Factors Influencing Ethical Judgment

Emotion. The phenomenon that individual emotion overrode professional ethics appeared among several interviewees. For example, when given a scenario about encountering a friend dating a patient living with HIV (Dilemma 1, Appendix), 2 participants said:

I will tell my friend about the patient's condition immediately (with an embarrassing laugh) and restrain their intimacy with each other. Being friends is allowed, but sexual relationship is banned. After all, I don't want my friends to get infected. (Participant 18, nurse)

This is indeed the patient's privacy. We know it because we are health care professionals, and this identity cannot be set aside for sure. If (she were my friend), I would have both the position of a health care provider and a friend, and I would have reminded both of them accordingly. The reminder will not be obvious, but it will be slightly implied. (Participant 19, nurse)

Moreover, emotion played a key role in ethical judgment in some situations. For example, some participants demonstrated an unwillingness or preference to distribute limited medical resources to some specific people living with HIV (Dilemma 2, Appendix) because of individual attitudes toward those patients. One participant stated:

I sympathize with the children infected with HIV via mother-fetus transmission because they have no choice. Drug addicts

really repel me for their immorality. . . . I'd rather distribute the bed to the teenager because he's younger and there's hope and significance in treating him. And I'm completely unwilling to distribute it to the drug addict because he deserves what he gets. (Participant 2, doctor)

Occupation and gender. Due to the complete overlap between the participant gender and occupation (where all males were doctors and all females were nurses), it is difficult to distinguish the influence of occupation from gender. In the interviews, physicians (male) make ethical judgment from the perspective of ethical principles, whereas nurses (female) from the perspective of emotion. For instance, considering the dilemma in which relatives require physicians/nurses to conceal the patient's critical condition from the patient (Dilemma 4, Appendix), physicians took the patient's right into consideration while nurses paid attention to the patient's feelings. The distinction was demonstrated below:

We hope not to conceal the patient from his/her condition. Life should be held by the patient's own hand; if we discuss therapies with his/her relatives, his/her life will be controlled by others. (Participant 27, doctor)

We put patients' feelings first. For example, for some patients without knowing their real conditions, they have hope for their outcomes, if we tell them the truth, they may be so stressed which might speed up their death. (Participant 16, nurse)

Furthermore, some nurses demonstrated a preference for shifting the ethical-decision making responsibility to doctors. They attributed this behavior to the traditional impressions of nurses (nurses just follow doctors' instructions) in China. One nurse said:

We will turn to doctors when facing any difficulties in decision-making. Because patients always think we nurses just obey the doctor's advice to give injection or urge them to pay fees. They trust doctors more. (Participant 5, nurse)

Difficulty in balancing different roles. Health professionals are not only advocates for their patients but also guardians of public health. Meanwhile, they are also individuals. These roles will inevitably conflict with one another in clinical practice, increasing the difficulty of making ethical decisions. When confronting ethical dilemmas, they have to strike the right balance. For example, interviewees were asked what to do about the following scenario (Dilemma 1, Appendix), "You have suggested that a patient in your ward disclose himself/herself to his/her relatives and partners, but you often come across the patient hanging out with different young girls/boys, and they look intimate. One day you encounter the patient dating a girl/boy again. What will you do?" One participant said:

It's illegal for HIV-positive people to deliberately spread disease. So if I come across that kind of patient hanging out with a girl, I

will privately remind him of his duty to prevent HIV transmission and the prevention methods. Because if you talk with the patient publicly, you will break the regulation of patient confidentiality according to the professional codes of conduct. We health professionals aren't supposed to judge patients, but are responsible to inform him of his responsibility to protect others from infection. (Participant 25, nurse)

Although two-thirds of participants struggled to find a balance among those roles, some of them unintentionally violated ethical principles. For example, a nurse thought that she obeyed the rule as long as she kept the patient's HIV-infection status confidential. When being asked what to do if she was encountering one of her friends dating an HIV-positive patient (Dilemma 1, Appendix), she said:

It violates professional codes of conduct if I disclose the patient's infection. However, if it's my friend who hangs out with the patient, I will advise her to keep away from him by sharing or tampering some of the patient's private information. For example, (I may) deceive her by identifying another contagious disease like tuberculosis (that her partner has). (Participant 23, nurse)

Ethical Motivations

To protect health professionals' interests. In the interviews, a few participants showed concern about their own interests in the EDM process. The rationale for this motivation was to protect themselves from medical conflicts. This could be implied from their answers to different scenarios.

When presented with the dilemma about what to do when visitors ask questions about the patient's diagnosis, 1 participant stated:

(I'd like) To protect the patient's privacy. And it's also to protect ourselves. Out of the mouth comes evil. (Participant 16, nurse)

When asked about what to do if a dying patient's relatives required all the health professionals to conceal the patient's terminal condition from the patient even if the patient looks optimistic, (Dilemma 4, Appendix), several participants pointed out the irrationality of ignoring patients' autonomy, but they chose to keep secrets from patients to avoid medical conflicts (the ownership of a dying patient's autonomy is a common cause of medical conflicts in China; according to Chinese tradition, the caregiver's voice should be mainly taken into consideration). They said:

It's absolutely improper for the doctor to conceal information from the patient. He has the right to know his condition. However, we did defer to the relatives' request to keep the secret from the patient (with a forced smile). But anyway, the treatment will still be as usual. (Participant 24, doctor; Participant 27, doctor)

Also worth noting, for this scenario, 1 participant said:

It's unnecessary to tell the patient his/her condition if their relatives demand that it be concealed. Because if the patient knows his/her condition, he/she will be too depressed to cooperate with us. (Participant 10, nurse)

To safeguard others' interests. This ethical motivation was frequently expressed by the interviewees. They took other people into consideration in the EDM process. For example, when presented with a scenario in which the caregiver for an end-of-life patient living with HIV insists on the use of ineffective treatment (Dilemma 5, Appendix), participants' considerations were:

Treatment for a terminal patient is necessary. While the treatment may be futile for him/her, it can comfort his/her family. (Participant 20, nurse; Participant 26, nurse)

To obey regulations or professional conduct of codes. Rule-guided motivation was widely mentioned in the interviews. Participants with rule-guided motivation gave priority to professional codes of conduct or regulations in the EDM process. For instance, when asked what to do if beds are limited (Dilemma 2, Appendix), 1 participant said:

I'll distribute the limited beds according to the urgency of the case or the order of arrival. (Participant 5, nurse) (Essentially this is triage, which is part of the responsibility of many health professionals)

When asked what to do if visitors wonder the patients' diagnosis (Dilemma 4, Appendix), 1 participant expressed:

I won't tell any visitors the patient's condition. Regulations on AIDS Prevention and Treatment stipulate that all units and individuals should never disclose patients' disease. (Participant 3, doctor)

Discussion

The findings demonstrated some characteristics of the EDM process for health professionals in AIDS care in China, such as obedience to the rules, emotion, gender, and occupational differences in ethical judgment. Moreover, several noteworthy phenomena were observed, like health professionals vacillating between personal and professional roles; health professionals concealing the truth from patients; and the effect of fear of medical dispute on ethical behavior.

Obedience to the Rules

According to the results, only several professionals narrated ethical dilemmas they had experienced. However, Chinese

scholars Huang et al have investigated the same population and found that the majority of professionals can sensitively perceive when presented ethical issues.¹⁵ The discrepancy between the 2 studies may result from a lack of individual ethical reasoning among the professionals. Huang et al's¹⁵ study found that many Chinese professionals solved ethical issues by simply conforming to relevant laws and regulations, rather than based on ethical reasoning. Therefore, health professionals may forget ethical dilemma experiences soon after they occur because they handled the problem easily without any confusion. However, as the survival rate of PLWHA improves, new ethical issues related to HIV/AIDS will inevitably arise. It is important for health professionals to make ethical decisions based on correct ethical reasoning in order to maintain a harmonious doctor/nurse-patient relationship. Improvement in ethics education is conducive to the development of ethical reasoning skills.

Emotion, Gender, and Occupation Difference in Ethical Judgment

When we finished all the interviews, we found an interesting phenomenon that the doctors were all male and the nurses were all female. The reason for this might be interpreted from 2 aspects. Firstly, in clinics, there are fewer physicians than nurses,²³ besides providing direct service to patients, they are also involved in some other affairs like teaching, research or administration. It is very difficult for them to ensure the smooth conduct of interviews. Of the 27 participants we recruited, 5 physicians withdrew from interviews halfway. And women are not apt to pour out one's inner thought, especially when it comes value, morality, etc., 3 of the 5 physicians with incomplete interviews were female. Secondly, in China, male nurses only accounted for 2.9% among 4.7 million people registered as nurses in 2020,²³ which is much smaller compared with developed countries.²⁴ Meanwhile, male nurses might have some advantages over female nurses, such as physical advantages, so Chinese male nurses mostly work in high-intensity and high-risk departments such as the emergency room, operating theater and intensive care unit rath.^{24,25} Therefore, all the nurses were female in this study.

Similar with Guzak's²⁶ study, we found that emotion played a key role in ethical judgment. Some professionals had an emotional tendency, but would still obey regulations and professional conduct of codes. They prompted in a more euphemistic way, and tried not to expose the patient's privacy. However, it is undeniable that several professionals in the interviews did report that they would like to put individual emotions above professional ethics, but we didn't know if they behaved like this, more observation should be considered in the future. The emotional reaction in the study also indicates that medical staff are not well prepared ethically in China and more efficient training in ethic should be recommended in the future.

Our results revealed that doctors (males) made ethical judgment based on laws and regulations, while nurses (females) by care. In line with our results, Friesdorf et al²⁷ have also discovered that males engage more in cognitive processing while females prefer an ethics of care in their ethical reasoning processes. However, whether gender differences in ethical judgment exist is still open to debate; research suggests different methods of data collection and types of dilemmas can lead to conflicting results.²⁸ Rigorous study designs are suggested to obtain more cogent evidence.

Occupational differences in ethical judgment might be interpreted from 2 aspects. Firstly, the responsibilities associated with participants' occupations differ: nurses are supposed to pay attention to care, while physicians are responsible for curing.²⁹ Secondly, interactions between physicians and nurses have been stratified, usually characterized by medical dominance and nursing subordination in some countries,^{30,31} including China where a hierarchical pattern of physician-nurse based on traditional hierarchies might still exist.³² Indeed, in China, doctors are the dominant decision-makers in clinical practice, whereas nurses mainly function under physician orders.³² Therefore, some nurses might be indifferent in EDM or be unwilling to express their concerns about EDM. Furthermore, nurses in this study showed a preference to pass ethical decisions on to doctors; consequently, they might be less experienced in ethical decision-making. These findings highlight the need to underscore the importance of nurses' role in ethical decision making in nursing ethics education. Likewise, increased physician-nurse communication is suggested in order to promote multidisciplinary cooperation and enhance the quality of healthcare in AIDS care.

Vacillating Between Personal and Professional Roles

In this study, many professionals were vacillating between different roles the in EDM process, and professional role was subordinate to other roles for several participants. These findings may imply some deficiencies in medical ethics education. Rest has claimed that the role 1 takes in an ethical issue could influence how people identify moral problems, influencing ethical behaviors.³³ There is no doubt that medical ethics is based on the role of health professionals. Without determined role-taking and specified responsibilities, professionals are less likely to be ethically behave in clinical practice. Therefore, it may be helpful to stress the importance of the role of health professional and specify the responsibilities of this population.

Concealing the Truth from Patients

In compliance with the principle of autonomy, patients should be informed with information regarding the illness

situation and have the right to make choices independently.³⁴ In our study, to avoid medical disputes, some participants followed the families' decisions and chose to conceal the truth from patients. The reasons for this situation may include 2 aspects. On one hand, in mainland China, although health care providers acknowledge that the patients' autonomy should be respected, the decision-making power of family always occurs prior to the patient's personal power.³⁵ Diagnosis and prognosis disclosure without family consent may cause overreaction from the patient and resentment from the family, and even conflict between physicians and families may occur.³⁵ Therefore, health care providers have to inform the family of the results first. On the other hand, respecting for autonomy requires consistency with the principles of beneficence and non-maleficence because truth-telling may result in withdrawal from treatment, but concealing the truth may hinder the patients to have a reasonable arrangement for their end stage of life.³⁴ Consequently, what cannot be overlooked during the decision-making process is the patients' autonomy, while carefully balancing the principles of beneficence and non-maleficence. Furthermore, more research needs to be done to further investigate the preferences of PLWHA and their family members on truth-telling of their illness situation.

Effects of the Fear of Medical Dispute on Ethical Behavior

Several participants implemented a sub-optimal ethical behavior due to the fear of medical dispute. Medical disputes do exist, but may be exaggerated by the mass media in China.³⁶ Consequently, the fear of medical disputes arose among health professionals,³⁷ motivating them to avoid conflicts rather than make ethically sound decisions. Legal literacy enables health professionals to defend themselves against medical dispute but it was widely lacking among health professionals while patients had a strong grasp of health law,⁸ exacerbating health professionals' fear. Therefore, not only should the mass media more responsibly cover news regarding medical conflicts, but medical educators and hospital administrators should also promote health-care providers' legal literacy in order to reduce their fear of medical disputes. Besides, effective communication with patients is a good way to avoid medical conflicts.

Limitation

This study gave an outlook of EDM experience among health professionals and shed a new light on promoting ethical behavior in AIDS care. However, there are several limitations. First, this study was conducted in Hunan province, so the results cannot be easily generalized to the rest of the country. Separately, due to the same ratio of female to male and nurses to doctors, the influence of gender and occupation on ethical decision making could not be distinguished.

Conclusion

Overall, the majority of participants failed to recall ethical dilemmas experienced in clinical practice. Emotions, gender, occupation, and difficulty balancing different roles may influence ethical judgment of health professionals. In the EDM process, most health professionals took other people's interests into consideration and conformed to law and professional codes of conduct. However, the tendency that some health professionals had to vacillate between professional and personal roles implied some limitations of medical ethics education. There is an urgent need to promote medical ethics education for health professionals in China.

Appendix

Dilemma 1: Encounter a Patient's Date

You have suggested that a patient in your ward disclose himself/herself to his/her relatives and partners but you often come across the patient hanging out with different young girls/boys, and they look intimate. One day you encounter the patient dating a girl/boy again. What would you do? And what if the girl/boy is one of your friends? How do you judge your behaviors ethically? Could you tell me the motivations for your behaviors?

Dilemma 2: Source Distribution

One day, 3 clients in serious condition come to your ward to register at the same time. However, there is only 1 bed available in the ward. Background data on the individual clients reveal the following: (a) a middle-school student infected with HIV through blood transfusion, (b) a middle-age female infected with HIV via her husband, and (c) a young man who is an injection drug abuser. Who would you distribute the limited bed to? How do you judge your behavior ethically? Could you tell me the motivations for your behavior?

Dilemma 3: The Patient's Confidentiality

A visitor claiming to be a relative of a patient come to the ward. He/she ask you about the diagnosis of the patient. What would you do? How do you judge your behavior ethically? Could you tell me the motivations for your behavior?

Dilemma 4: The Requirement to Conceal

A patient is dying, his/her relatives require all the health professionals to conceal his terminal condition from the patient even if the patient looks optimistic. What would you do? How do you judge your behavior ethically? Could you tell me the motivations for your behavior?

Dilemma 5: The Requirement to Treat

A patient is terminally ill. Although the treatment is ineffective, his relatives still insist on the treatment. Do you agree

with the relative's decision? How do you judge your behavior ethically? Could you tell me the motivations for your behavior?

Acknowledgments

The authors would like to thank all informants who participated in this study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was supported by the Fundamental Research Funds for the Central Universities of Central South University (Grant number: 2018zzts882) and the Fogarty grant of NIH (Grant number: D43TW009579).

Ethics Approval Statement

This study was approved by the Institutional Review Board of behavioral and nursing research at the School of Nursing of Central South University (Ethics code: 2017040).

Contributorship Statement

Xiaoxiao Lu and Hangyu Huang contributed equally to this manuscript.

ORCID iD

Xiaoxiao Lu  <https://orcid.org/0000-0001-6855-9298>

References

- National Center for AIDS/STD. Update on the AIDS/STD epidemic in China the third quarter of 2018. *Chin J AIDS & STD*. 2018;24(11):1075.
- Kabbash IA, Abo Ali EA, Elgendy MM, et al. HIV/AIDS-related stigma and discrimination among health care workers at Tanta University Hospitals, Egypt. *Environ Sci Pollut Res*. 2018;25(31):30755-30762.
- Dong X, Yang J, Peng L, et al. HIV-related stigma and discrimination amongst healthcare providers in Guangzhou, China. *BMC Public Health*. 2018;18:738.
- Wandeler G, Johnson LF, Egger M. Trends in life expectancy of HIV-positive adults on antiretroviral therapy across the globe: comparisons with general population. *Curr Opin HIV AIDS*. 2016;11(5):492-500.
- Sabone MB, Dintle Mogobe K, Matshediso E, et al. A qualitative description of service providers' experiences of ethical issues in HIV care. *Nurs Ethics*. 2018;26(5):1540-1553.
- Dapaah JM, Senah KA. HIV/AIDS clients, privacy and confidentiality; the case of two health centres in the Ashanti Region of Ghana. *BMC Med Ethics*. 2016;17:41.
- Kapossy C, Greenspan NR, Marshall Z, Allison J, Marshall S, Kitson C. Clinical ethics issues in HIV care in Canada: an institutional ethnographic study. *BMC Med Ethics*. 2017;18:9.
- Wang X. Research on the legal protection of HIV personal information - An analysis based on Chinese legal texts. *J Yunnan Univ (Law Ed)*. 2013;26(5):44-51.
- Kulju K, Stolt M, Suhonen R, Leino-Kilpi H. Ethical competence: a concept analysis. *Nurs Ethics*. 2016;23(4):401-412.
- Rest JR. Research on moral development: implications for training counseling psychologists. *Couns Psychol*. 1984;12(3):19-29.
- Sari D, Baysal E, Celik GG, Eser I. Ethical decision making levels of nursing students. *Pak J Med Sci*. 2018;34(3):724-729.
- Bužgová R, Sikorová L. Moral judgment competence of nursing students in the Czech Republic. *Nurse Educ Today*. 2013;33(10):1201-1206.
- İlgüy M, İlgüy D, Oktay İ. Ethical decision making in dental education: a preliminary study. *BMC Med Ethics*. 2015;16:52.
- Petersson M, Hedström M, Höglund AT. Ethical competence in DNR decisions –a qualitative study of Swedish physicians and nurses working in hematology and oncology care. *BMC Med Ethics*. 2018;19(1):63.
- Huang H, Ding Y, Wang H, Khoshnood K, Yang M. The ethical sensitivity of health care professionals who care for patients living with HIV infection in Hunan, China: a qualitative study. *J Assoc Nurses AIDS Care*. 2017;29(2):266-274.
- Du J, Huang S, Lu Q, Ma L, Lai K, Li K. Influence of empathy and professional values on ethical decision-making of emergency nurses: a cross sectional study. *Int Emerg Nurs*. 2022;63:101186.
- Chen Q, Su X, Liu S, Miao K, Fang H. The relationship between moral sensitivity and professional values and ethical decision-making in nursing students. *Nurse Educ Today*. 2021;105:105056.
- Wang H, Wang X. Medical Ethics Education in China. In: ten-Have HAMJ (ed.) *Bioethics Education in a Global Perspective: Challenges in Global Bioethics*. Springer; 2015:pp.81-92.
- Qian Y, Han Q, Yuan W, Fan C (eds.). *J Int Med Res*. 2018;46(9):3507-3517.
- Dworkin SL. Sample Size Policy for qualitative studies using in-depth interviews. *Arch Sex Behav*. 2012;41(6):1319-1320.
- Francis JJ, Johnston M, Robertson C, et al. What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychol Health*. 2010;25(10):1229-1245.
- Castleberry A, Nolen A. Thematic analysis of qualitative research data: is it as easy as it sounds? *Curr Pharm Teach Learn*. 2018;10(6):807-815.
- National Health Commission of China. *China Health Yearly Statistics 2021*. Peking Union Medical College Press; 2021.
- Zhang H, Tu J. The working experiences of male nurses in China: Implications for male nurse recruitment and retention. *J Nurs Manag*. 2020;28(2):441-449.
- Zou Y, Wang H, Chen Y, Xie H, Chen Y, Wang G. Factors influencing quality of life and work of male nurses in Hainan Province: logistic regression analysis. *Am J Transl Res*. 2022;14(4):2367-2375.
- Guzak JR. Affect in ethical decision making: mood matters. *Ethics Behav*. 2015;25:386-399.
- Friesdorf R, Conway P, Gawronski B. Gender differences in responses to moral dilemmas: a process dissociation analysis. *Pers Soc Psychol Bull*. 2015;41(5):696-713.

28. Baez S, Flichtentrei D, Prats M, et al. Men, women. . .who cares? A population-based study on sex differences and gender roles in empathy and moral cognition. *PLoS One*. 2017;12(6):e0179336.
29. Jecker NS, Self DJ. Separating care and cure: an analysis of historical and contemporary images of nursing and medicine. *J Med Philos*. 1991;16(3):285-306.
30. Hou Y, Timmins F, Zhou Q, Wang J. A cross-sectional exploration of emergency department nurses' moral distress, ethical climate and nursing practice environment. *Int Emerg Nurs*. 2021;55:100972.
31. Karanikola MN, Albarran JW, Drigo E, et al. Moral distress, autonomy and nurse-physician collaboration among intensive care unit nurses in Italy. *J Nurs Manage*. 2014;22(4):472-484.
32. Tong F, Lu Z, Xie L. Study on the difference of physicians and nurses management and their relationship in China. *Chin Hosp Manage*. 2018;38(4):30-33.
33. Thoma SJ, Rest JR, Davison ML. Describing and testing a moderator of the moral judgment and action relationship. *J Pers Soc Psychol*. 1991;61(4):659-669.
34. Zhang Z, Min X. The ethical dilemma of truth-telling in health-care in China. *J Bioeth Inq*. 2020;17(3):337-344.
35. Luo C, Lei L, Yu Y, Luo Y. The perceptions of patients, families, doctors, and nurses regarding malignant bone tumor disclosure in China: a qualitative study. *J Transcult Nurs*. 2021;32(6):740-748.
36. Chen S. Study on Media Coverage of Medical Dispute from the Perspective of News Ethics. Master degree. <http://kns.cnki.net/KCMS/detail/detail.aspx?FileName=1018115610.nh&DbName=CMFD2018>.
37. Nie J-B, Cheng Y, Zou X, et al. The vicious circle of patient-physician mistrust in China: health professionals' perspectives, institutional conflict of interest, and building trust through medical professionalism. *Dev World Bioeth*. 2018;18(1):26-36.