

China's Successful Recruitment of Healthcare Professionals to the Worst-hit City: A Lesson Learn

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Abstract

Background

The outbreak of the coronavirus disease 2019 (COVID-19) in Wuhan has led Chinese health authorities to recruiting medical doctors and nurses from the least affected areas to provide care to the infected patients in Wuhan. The current study is part of a larger study where we took further steps to explain some plausible reasons for the experiences.

Methods

We used Interpretative Phenomenological Analysis (IPA) to understand the subjective experiences as well as the reasons for these experiences amongst the medical doctors and nurses who had travelled from the least affected part of China to render help during Wuhan's outbreak. Using purposive and snowball sampling, healthcare professionals were recruited from three major hospitals in Jiangsu province. Basing on the participants' choice of venue, semi-structured interviews were conducted from 1st September to 14th November 2020 in face-to-face contexts.

Results

Ten nurses and four doctors provided their informed consent for the study. The primary superordinate theme recounted how the social identity and individual's needs were challenged by the individual's professional ethics.

Conclusions

COVID-19 not only presents significant risks to the health of healthcare professionals, it further challenges their emotional and psychosocial wellbeing. Care should be taken in allocating support and help, with careful deployment of professional values and beliefs, so that any human resources as precious as medical doctors and nurses can be protected.

Introduction

The 2019 novel coronavirus as abbreviated 2019-nCoV was first discovered in China in the year 2019. This coronavirus disease 2019 has sent a wave of shock to the entire globe except the Antarctica; that by early 2020, many parts of the world had begun to experience major political, scientific and public health challenges. Lockdown and borders closing for international and national travelling despite of a fast-approaching financial recession were unavoidable strategies for many. Still, the responses by different countries varied. Between January 2020 and February 2020, when the world's death toll for COVID-19 was rising sharply, discussions by the British Medical Association focused on the balance between personal protective equipment supply and medical services availability. At the same time, concerted efforts by the Royal Nursing College in the United Kingdom were around building reasons for nurses from providing patient care.[1] The ongoing discussions regarding nurses' remuneration was intensified during the pandemic period.[2] At that point in time, the health authorities in China were occupied with a very different agenda; they were busy recruiting their very first batch of medical doctors and nurses from the less infectious regions to combat the virus in the worst-affected city at Wuhan, Hubei.[3] During the recruitment, China has already reported an estimate of 3,000 health care workers infected by the disease.[4] By February 2020, the confirmed cases of infection amongst the healthcare professionals have risen to 14, 1716 with 6 deaths.[5] In Hubei where the first case of COVID was detected, the city was not only experiencing the highest

infectious rate, but also, a high death rate. Logical sense would lead to one conclusion that China would fail in its recruitment plan. However, against the odds, China successfully recruited their very first batch of 42 000 healthcare professionals, comprising medical doctors and nurses to Wuhan Hubei.[3] A research which was originally conducted to explore the experiences of the healthcare professionals has expanded to gain better insight to the unexpected responses of these healthcare professionals to the recruitment drive.

Studies revealed the high prevalence of depression and anxiety among nurses during the outbreak of COVID-19.[3, 5–10] These negative emotional states were attributed to a whole host of negative experiences, included but not limiting to 'not knowing about the disease', 'inadequate personal protective equipment' and 'low self-efficacy as a healthcare professional'. [10–14] In some cases, workload and family member relationship during the pandemic were also found to have caused depression and anxiety during this pandemic.[5, 6, 14–16] Amongst all possible reasons, the fear of contracting COVID-19 during the course of providing care to patients with COVID-19 was also unanimously reported in studies which specifically explored the experiences of healthcare professionals who rendered care to COVID victims. Certainly, the fear of contracting the virus was found to have a significant impact on nurses' mental health.[17–20] Such findings were perhaps not surprising, because COVID-19 infections amongst healthcare professionals have been estimated at greater than 150 000 in Europe alone, with over 620 deaths.[5] China also saw over 19 000 infections amongst their healthcare care professionals with close to 400 deaths. Healthcare professional's fear of contracting COVID was certainly legitimised by a study in Australia which concluded that healthcare workers were 2.76 times more likely to contract COVID-19 regardless of area of work. [21] This might explain why there was no difference in the prevalence of depression between nurses who worked in high-risk COVID-19 wards from those working in low-risk COVID-19 wards.[5] In the context of these known fears and negative emotions amongst the healthcare professionals, as part of a larger study, the current study was conducted to explore the plausible reasons for China's successful recruitment of healthcare professionals from the least infected area to the highly infectious Wuhan. The aim was to gain insight to the decisions by these volunteers.

Methods

Interpretative Phenomenological Analysis (IPA) was used to provide the theoretical framework for the current study. The fact that IPA places central importance on the individual meaning ascribed to salient experiences,[22] it is the optimal research methodology to explore the subjective experience of the healthcare professionals from a very low infectious area in China, who have responded to the invitation by the Chinese National Health Commissioner to render care to the victims at the highly infectious Wuhan. Yangzhou in Jiangsu province was selected for this study because it has zero reported cases during the recruitment by the Chinese Health Authorities. Using purposive and snowball sampling, healthcare professionals were invited to help establish reasons for healthcare professionals, for making the move to Wuhan when they could remain 'safe' at low-risk regions. Letter of invitation explaining the purpose of the study and contact details of the second and third researchers were sent out to all major hospitals in Yangzhou where the recruits were employed.

Basing on the participants' choice of venues, semi-structured interviews in a face-to-face context were conducted from 1st September 2020 to 14th November 2020. Interviews were conducted in Chinese and audio-recorded. The transcripts were generated in verbatim of the participants' spoken Chinese language and translated into English. The transcripts were translated back to Chinese for participation validation. To ensure credibility and confirmability, the forward and backward translation processes were repeated; this process established two interims of translation completion, at which participant validation was conducted. Participant validation discontinued and IPA

commenced when the researchers were confident that the actual meanings by all participants were preserved in the translation.

Ethical Approval

Ethical review was obtained from the Nursing School at Yangzhou University (Code YZUHL2020002). Permission to conduct the study was obtained from the hospitals and informed consents were obtained from the participants. Participants were informed they could terminate the interview at any time should they feel distressed. A de-briefing sheet, which detailed a list of Support Services was provided for each participant.

Results

Four medical doctors and ten nurses provide informed consent and participated in the study. Participants ranged in the age from 28 to 41 years, were from the 'First People's Hospital', 'Subei Hospital' and 'Yangzhou Hospital of Traditional Chinese Medicine' (Table). Of the fourteen participants, only three were single. Other than one nurse who lived alone, the rest were residing with families and all have dependents at home. All participants received their formal education in China; this included their main stream education, and their under graduate and post graduate professional degree programmes. All had more than five years of experience as healthcare professionals.

All participants reported feeling fearful at some point regarding their volunteered professional services at Wuhan. While some were just worrying about being infected and suffered from insomnia the night before they left for Wuhan:

"I didn't sleep well the night before I left" (N2)

The fear of not being able to return to their families ran through some of the participants' mind. Many had spoken to their next of kin as if it was the last time, they would be speaking with them.

"...I was afraid when I went, I told my husband the code of my pay card" (N1)

"...in case I get infected, tell me something ..." (MD1)

Despite the fear of infection and possible death from this trip, all of them had persisted and had fulfilled their agreement to render care and support at Wuhan. No one had given up half way and all had completed the mission before returning to Yangzhou on the original agreed set date.

The accounts of the participants explained reasons for the various dilemmatic feelings of the individuals at different stages of their voluntary work at Wuhan. These are categorized into three primary superordinate themes by which the participants recounted as their 'trusting the Chinese health authorities', 'Justifying personal actions and decisions' and 'Negotiating and Reclaiming identities'. We will now discuss these findings in details.

Theme 1 -Trusting the Chinese health authorities

We named the first theme cluster within the first category "Practical aspects of stressors linking to home - would be well manage by the Local Chinese Authorities". The belief amongst the 14 participants that 'health authorities are managing everything effectively' conveys the importance of the individuals' trust they place in the Chinese authorities, and more importantly, their expectations, plans and feelings as they prepared for their Journey to Wuhan.

They could also readily trust the authorities because in her perspective, the authorities were seriously concerned about her health status; during her stay at Wuhan, Gowns, masks alcohol were abundantly available for use, and there was good mentorship to boost her morale. In addition, she was extremely pleased to have received abundant good quality food and prophylactic Chinese medication, which to her was special treatment

"... the traditional Chinese medicine given by the Yangzhou Hospital of traditional Chinese Medicine... Jiangsu provincial government also gives us thymosin injection to enhance immunity. One injection of thymosin costs more than 300 yuan, we have two injections a week." (N1)

"There was no heater blanket in Wuhan. And then our hospital sent the it to us, because it's freezing cold in Wuhan." (N9)

"The supplies of us were brought over by Jiangsu Province." (MD2)

The second theme cluster identified was "Practical aspects of stressors linking to work: lack of PPE, fear of infection - evidently was well manage by the National Chinese Health Authorities". Physicians and nurses are well protected in Wuhan are well protected by the Wuhan government, by taking precautions, maintaining social distance, providing adequate protective materials.

"Generally, two people wash hands together, far away from each other." (N1)

"... we had to lined up outside the door and waiting to get off work one after another, we were separated by 1 meter when we were in line." (N8)

The third theme cluster identified was" Good physical health maintained and preserved by the National Chinese Health Authorities". Each participant thanked the authorities for the guarantee of their physical health, not only in terms of life, but more importantly, for the humanistic care provided to them.

"I was really grateful that all of the treatment costs and the food were borne by our country. " (N8)

"The leader of the medical team also gave us personalized rest for the special period, for example, he would arrange me to have a rest if I feel uncomfortable when I experienced menstruation, he cared a lot about us." (N10)

Theme 2 -Justifying personal actions and decisions

The second category of themes consisted two clusters:" Social support and benefits to families of volunteers" and "Professional recognition and development"

Participants emphasize the subjective experience as family roles who could entrust the health authorities with any help and support, including children's education, parents' health, and family financial welfare support.

"The government delivered some daily necessities, such as food. For my family, the government gave 2000 yuan. When I was in Wuhan, there was government subsidy, ... It is remitted to my bank card." (N3)

The Women's Federation, social organizations cared a lot to my family and some training institutions for children which provided discounts to us. (MD3)

Both physicians and nurses have felt their professional value in supporting COVID-19 treatment in Wuhan. They gave play to their own value and put their knowledge and skills into practice. They think it's a recognition that they

have the opportunity to go to Wuhan to support the COVID-19 outbreak.

"I feel that the professional of nursing can really help people and the knowledge of our professional can also be used very useful." (N5)

"Nursing is a hard job for itself, but it gives me a sense of value." (N10)

"Everyone got rewards according to personal performance." (MD2)

Theme 3 -Negotiating and Reclaiming identities

The first cluster identified was "Conceptualisation and externalisation of social role - Accepting imperfections in social role". Participants mentioned that as social roles, they had some family responsibilities that they didn't fulfil before they went to Wuhan. Feeling the support of their family members, they rushed to the front without hesitation.

"It didn't have a big impact because I had been studying outside for years. My daughter was raised by my parents, and my husband also supported me to go to Wuhan". (N1)

"My husband was in charge of my child's daily life when I was at Wuhan." (N8)

" when I was in Wuhan, my mother-in-law had taken my place." (N9)

The second cluster identified was "Conceptualisation and internalisation of professional role – highlighting professional obligations". From each participant' interview, they all stated their love for their profession as health care workers. They all consider it their professional responsibility to go to the front line to support the treatment of COVID-19 patients.

"What motivates me to go is the love of my profession." (N1)

"I think there is no reason for me to flinch, because I am a nurse and I suppose to face it. This is the spirit and the moral of the profession." (N2)

"I never thought that I might get some honour or some benefits for my career in the future, neither did I think that I would get anything in return when I came back." (N10)

The third cluster identified was "Conceptualisation and internalisation of social identity as a Chinese National". The decision of Chinese health care workers to go to Wuhan was influenced by Chinese culture. In the face of disasters and epidemics, Chinese health care workers have chosen to sacrifice their own interests to protect the interests of others and the country.

"I think as a health care worker, when the country needs you, you have to abandon your family and personal interests desperately." (N3)

"We twisted ourselves into a rope and moving to a better direction." (MD2)

Discussion

This study aimed to achieve a better insight to China's successful recruitment for a better preparation in similar health crisis on a scale as large as the current pandemic.

Despite the geographical differences, in this secular world where personal safety and personal interests were increasingly the focus of life, logically personal safety would be a priority for any nurses and doctors, more so during this pandemic. For to preserve in combating, who were persistent in their upholding of their professional ethics, to have added burdens to their existing worries that were not only work-related but also, those which were directly linked to them being home sick.

This study provided us with a better insight to the professional ethics of nurses and doctors. It has help us understand better the decisions to join in the task force in a place where others would have wanted stay away. Instead, they have volunteered their time and effort to be there regardless of the risks.

Participants' accounts have also provided a good insight to the healthcare professional ethics, as their stable and strong pillar of support for the noble work which they volunteered so willingly and readily.

Just slightly more than a decade ago, when the concept of professional values was still relatively new in China, Pang et al. had already discovered seven professional values amongst the Chinese nurses, namely, altruism, caring, trustworthiness, dignity, responsibility for the development of the profession, autonomy, and justice.[23] These values were consistent with the Code of Ethics for Nurses by the International Council of Nurses (ICN) and the Code of Ethics for Nurses by the Chinese Nursing Association (CNA).[23] Presumably, nursing problem solving approaches and actions in China were guided by a set of values which were upheld by the nursing profession in the West. As for the medical doctors in China, their professional values are embedded in the Chinese medical ethics tradition.[23] Using the Chinese language, the emphases in the ethics were 'jing' in medical skills and 'Cheng' in relating to patient. Using direct translation, 'jing' simply meant refinement and 'Cheng' meant sincerity. However, 'jing' is much more than refinement but 'acumen' and 'Cheng' is much more than 'sincerity' but 'honesty', 'transparency' and to a large extent, a good promise between the doctor and his patient; that was the doctor 's capability in fulfilling what he agreed (with his patient) with regards to his medical strategic plans.[23] These two cardinal values which set the notion of the highest quality medical care with a strong sense of faithfulness in protecting the patients are expected of every medical doctor.

Despite the slight differences in how the professional ethics are inculcated in the two healthcare professions, individuals who were enrolled onto any undergraduate programmes to pursue medicine or nursing were unavoidably, subject to a mandatory course on Mao ZeDong ideas. Every undergraduate student, included those from, nursing and medicine were exposed to the ethical mandate which was promulgated by Mao Zedong in 1941. "Rescue the dying, heal the wounded, and serve the people wholeheartedly", were the few critical principles within the ethical mandate that was instilled in each and every nursing and medical student, right at the start of their pursuit as a healthcare professional in a Chinese higher education institution. The current study focuses on the usefulness of these ideas during the recent pandemic, in the hope to provide a plausible explanation to the success of the recruitment drive for healthcare professionals to the worst-hit city at Hubei during the pandemic.

The emotional state of feeling depressed and anxious and the negative experiences were separate entities, which of course may well have co-existed during this pandemic. It is important to know that the negative experiences from the pandemic may have preceded the development of the negative emotional states, they may well have developed as a consequence of healthcare professional feeling anxious and depressed even before they volunteered. It was therefore important to treat the two entities in the exploring of the development of the experiences of medical doctors and nurses who volunteered themselves to render care in Wuhan during its highly infectious period.

Conclusions

This study provided us with a better insight to the reasons for the various dilemmatic feelings of the volunteers for the work at Wuhan. It has also gleaned better understanding of the healthcare professional ethics, as a stable and strong pillar of support for their persistence.

Declarations

Ethical approval and consent to participate: This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Yangzhou University (No. YZUHL2020002). Informed consent was obtained from all individual participants included in the study.

Consent to publication: Patients signed informed consent regarding publishing their data.

Availability of data and material: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest statement: None

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Tables

Table: Characteristics of participants

Healthcare professionals (HCP)	Age	Gender	Marital status	Family profile (year)	Years as a HCP	Professional Title/Role	Specialities	Hours work per week (Average)
MD1	41	Male	Married	Mother (68) Wife (40) Child 1 (13) Child 2 (3)	17	Deputy Medical Director	Accident and Emergency	≥72 (28 in Wuhan)
MD2	40	Male	Married	Wife (40) Child1(12) Child2(3)	17	Deputy Medical Director	Respiratory Department	40 (32 in Wuhan)
MD3	38	Male	Married	Mother (61) Father (60) Wife (32) Child (5)	14	medium-grade professional title	Internal medicine, and critical care	≈48 (16 in Wuhan)
MD4	32	Female	Married	Mother (60) Mother-in-law (63) Husband (37) Child (2)	6	medium-grade professional title	Respiratory Department	≈42 (12-18 in Wuhan)
N1	33	Female	Married	Father (56) Mother (56) husband (37) Child 1 (7) Pregnant with second (when was her LMP)	12	Nurse-in-Charge	General surgery	40 (16 in Wuhan)
N2	32	Female	Single	Mother (64)	8	Senior Nurse	Intensive Care	40

								(16 in Wuhan)
N3	39	Female	Married	Mother-in-law (62) Husband (41) Child 1 (12)	17	Nurse-in-Charge <hr/> Nurse-in-Charge	Infection Control: 15 years Traditional Chinese medicine: 2 years	50 (16 in Wuhan)
N4	35	Female	Married	Husband (35) Child1(10) Child2(3)	12	Nurse-in-Charge	Respiratory Department	40 (16 in Wuhan)
N5	35	Female	Married	Mother (59) Husband (36) Child (12)	15	Nurse-in-Charge	Respiratory Department	40 (20 in Wuhan)
N6	28	Female	Single	Father (51) Mother (50)	6	Senior Nurse	Traditional Chinese medicine	40 (16 in Wuhan)
N7	29	Female	Single	Live alone	7	Senior Nurse	Emergency and intensive nursing	48 18 in Wuhan
N8	40	Female	Married	Husband (42) Child (13)	18	Head Nurse	Neurosurgery	50 (16 in Wuhan)
N9	38	Female	Married	Husband (42) Child (11)	18	Nurse-in-Charge	Surgical nursing	40 (16 in Wuhan)
N10	30	Female	Married	Husband (30) Child (3)	7	Nurse-in-Charge	Neurosurgery	45 (16 in Wuhan)

MD: Medical doctor N: Nurse