

**Person-centered communication between healthcare professionals and COVID-19
infected older adults in acute care settings: Findings from Wuhan, China**

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Author Contributions

Juan Li is designed the study and the interview guide, collected and analyzed the data. She also wrote and revised the manuscript. Jing Wang designed the interview guide, collected data and performed the analysis. She also wrote and revised the manuscript. Kong Xiangjing collected data, participated in data analysis and contributed to manuscript revision. Tingting Gao collected data and participated in data analysis. Jing Chu and Jianming Liu designed the study, participated in data analysis discussions, and revised the manuscript. Bei Wu designed the study, participated in data analysis discussions, and contributed to the writing of the manuscript.

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Abstract

OBJECTIVES. The current study aims to explore person-centered communication between health care professionals and COVID-19 infected older patients in acute care settings.

METHODS. The current qualitative study explored the communication between professionals and COVID-19 infected older adults in the acute care setting through two rounds of interviews with physicians and nurses who provided direct care and treatment for COVID-19 infected older patients in Wuhan, China. We explored the possibilities and significance of facilitating effective communication despite multiple challenges in the pandemic. Conventional content analysis was adopted to analyze the rich data collected from our participants.

RESULTS. It is possible and necessary to initiate and sustain person-centered communication despite multiple challenges brought by the pandemic. The achievement of person-centered communication can play significant roles in addressing challenges, building mutual trust, improving quality of care and relationships, and promoting treatment adherence and patients' psychological wellbeing.

DISCUSSION. It is challenging for healthcare professionals to provide care for COVID-19 infected older adults, especially for those with cognitive and sensory impairment, in acute care settings. Facilitating person-centered communication is a significant strategy in responding to the pandemic crisis and a core element of person-centered care.

Key words: person-centered communication, COVID-19, older adults, acute care

Introduction

Older adults with chronic conditions are at higher risk of more serious coronavirus illnesses and death (Garnier- Crussard, Forestier, Gilbert, & Krolak- Salmon, 2020). They tend to have more apparent onset symptoms, longer course of disease, and are more vulnerable to negative emotions, stress, and depressive symptoms (Liu et al., 2020; Armitage & Nellums, 2020; Applegate & Ouslander, 2020). Therefore, it would be more challenging for healthcare professionals to provide care for COVID-19 infected older adults, especially for those with cognitive and sensory impairment, in acute care settings (Vahia et al., 2020). In particular, facilitating effective and person-centered communication with older adults with COVID-19 deserves a close attention. Person-centered communication can play significant roles in addressing challenges, building mutual trust, improving quality of care and relationships, and promoting treatment adherence and patients' psychological wellbeing (Williams et al., 2018). However, the impact of the COVID-19 brings additional challenges and barriers with regard to sustaining effective and person-centered communication. These issues include the quarantine, social distancing, the absence of family members' company, professionals' heavy workload, frequent shifts, seriousness and contagiousness of the disease, and the limited resources (Ayalon et al., 2018). So far, few studies have focused on the communication between older adults with COVID-19 and their healthcare professionals in acute settings. To address this knowledge gap, we conducted two rounds of interviews with physicians and nurses who traveled to Wuhan, China for medical support and provided direct care and treatment for infected older patients.

Methods

Participants and settings

Using a purposive sampling strategy, we recruited 8 physicians and 8 nurses who worked in a hospital in Wuhan from January to April, 2020. We took consideration of their years of practices and the units that they worked in before going to Wuhan during the purposive sampling. All the clinicians volunteered to travelled from the same region of China (Nanjing, Jiangsu Province, an economically-developed eastern city in China) to provide medical support in a hospital specifically devoted to COVID-infected patients in Wuhan during the pandemic. Tables 1 shows the healthcare professionals' characteristics (see Table 1). Healthcare professionals were eligible if they provided care for infected older adults for over 3 months. The concept of person-centered care was recently introduced to and advocated in care settings in China, particularly in developed areas of China. Health care providers understand the merits of person-centered care. However, it is far from a norm in care settings because limited workforce and low nurse-patient and physician-patient ratio made it challenging to apply person-centered care in health care provision. The nurse-physician ratio in the hospital in Wuhan is three times the ratio in other hospitals in China. In more developed areas of China (Eastern urban China) with better health care resources, the requirement for nurse-physician ratio is 1:1, nurse-to-bed ratio as of 0.6, and nurse-patient ratio being 2:5 in general. As opposed to the hospital devoted to COVID-19 infected patients described in our study, the nurse-physician ratio is 45:16, nurse-patient ratio is 2:3, and nurse-bed ratio is 1 and over. Written informed consent was obtained at the interviews. We have obtained IRB approval for the current study (HJEC-2020-LW-001).

Data collection

The samples in this study were adequate to reach data saturation as described in similar qualitative studies. We decided to conduct two rounds of interviews when designing the study so that we could have their timely feedbacks and their reflections afterwards. In fact, the second-round interview proved to be helpful for us to follow up with them on their person-centered communication. We collected data between April and May, 2020. Physicians and nurses were interviewed privately at the second interview. In the first round of interview (telephone interview), a semi-structured interview begins with the questions: “Can you describe your experiences of providing care for older adults with COVID-19 in Wuhan?”, “What are the challenges of caring for these patients?” followed by probes encouraging them to reflect on their experiences and feelings. At the second round of interview (in-person interview), we focused more specifically on their communication with older adults based on our analysis of the first round of interviews: “Can you describe your experiences of communicating with older patients?”, followed by probed such as: “What are the challenges in the communication”, “How do you perceive the challenges”, and “How do you deal with the challenges”. We also asked them to reflect on their experiences at the end of the interview. Recordings were transcribed verbatim and the study coordinator verified accuracy. Transcripts were then de-identified to assure their privacy. All the transcripts were uploaded into QSR NVivo 11.0 for data management, organizing, and analysis.

Data analysis

The coding team conducted data analysis using a conventional content analysis approach (Hsieh & Shannon, 2005). We adopted this method because the coding categories are derived directly from the text data, allowing exploratory interpretation of the rich data that we have collected. We used a two-cycle coding approach (Saldana, 2013). In the first-cycle coding, the team developed a codebook to reflect experiences and perspectives specific

to the communication. New codes were discussed among the coding team before being added to the codebook. We met to discuss and compare the coding decisions and any disagreements were resolved in the meetings. In the second-cycle coding, the coded text was arranged into categories and subcategories based on how they were related. During the data analysis, we used memos to clarify coding decisions (Sandelowski, 1995). We reread the original quotations whenever more context was needed. To further ensure rigor, we held frequent meetings of the coding team to discuss the coding and our use of codes.

Findings

Many participants reported that patients experienced negative emotions and depressive symptoms due to social distancing, the lack of direct support from family members, fear of death, the uncertainty of their prognosis, and concerns of being a burden to the family and society. They all mentioned the importance of having effective communications with older adults to better understand their needs, exchange information, provide comfort and support, and build reciprocal and trustful relationships. Many healthcare professionals did not realize that they initiated person-centered communication with older adults, but their care and pattern of communication were based on the needs and uniqueness of each older adult.

The healthcare professionals ensured that they understood older adults' medical history through record checking and detailed inquiry by using plain language. They also made sure that they had time to greet and interact with older adults during each of their shift to get familiar with the patients and build trust. They listened to and observed the patients so they could get to know their habits, characteristics, and preferences; therefore, they could develop a tailored care plan. One of the nurses told us that:

“I always ask myself if I were him, what would I do. I try my best to think from their perspectives. I talked to them during my shift whenever I have time, trying to get to

know them better so that I can tailor my care to their needs. For some older adults, you need to speak gently and calm them. For some other older adults, you need to sound very confident and assuring so that you can ease their anxiety a bit.”

Issues such as wearing layers of personal protective equipment (PPE), having older adults with sensory and/or cognitive impairment, and the challenges of understanding patients’ dialects added to the difficulty of communication. Healthcare professionals adopted strategies including repeating essential information, focusing on the important meaning of the information, using plain language, providing reminders to aid memory, speaking clearly with a higher volume, and providing printed information when possible. They also used observation, eye contact and body languages to obtain and exchange information. For example, some professionals shook hands with older adults or acknowledged their adherence whenever possible. One nurse mentioned that she tried to hand warm towels to the patients instead of cold wet wipes after meals based on their preferences. Some participants even learned daily words in Wuhan dialect to facilitate their communication with older adults who could not speak mandarin.

In order to build a trustworthy relationship with older adults, professionals took multiple approaches, including helping them contact their family members via phone, video chat, and/or instant messaging. For older adults who were unable to use mobile devices, professionals helped them contact their family members through the landline in the hospitals, and passed encouraging messages and daily necessities from their family members to older adults to maintain their connections during hospitalization. One of the nurses told us that:

“When we tried our best to tailor our ways of communication to the needs of older patients, even by just holding their hands when they needed it, it seems to calm them down. Once we built trust with them, they seemed to follow our instructions better. It

did not happen overnight or solve all the problems but having effective communication with older patients help all of us.”

Despite heavy workload, professionals took time to talk with older adults, informed them of their updated conditions, and explained check-up results to them to build their confidence and ease anxiety. Many professionals mentioned that they needed to be open-minded and avoid stereotypes on older adults before building trust with each other. One of the physicians stated that:

“One patient really impressed me. When I first saw him, he did not respond to us and looked impatient. My first reaction was that this is a stubborn older individual. Now I am ashamed that I made too quick a judgment before I even got to know him. It turned out that he tried to avoid us only because he was not wearing a face mask and was worried that he might infect us. Putting down the stereotypes and treating them with sincerity is the first step to an effective communication.”

When reflecting upon their experiences, many participants admitted that they did not have much communication with older patients in their daily work before they went to Wuhan for medical support. Although they had a heavy workload and faced risks of getting infected at work in Wuhan, the nurse-physician and nurse-bed ratios are higher than the ratio in other hospitals in China (three times and almost twice respectively); thus, they had more time and opportunities to communicate with older adults and provide more tailored care for them. They feel that using more time to communicate with older adults and get to know them did not slow down their work but contributed to better relationships, higher level of treatment adherence, and improved work efficiency. The coordination amongst physicians and nurses at each shift also played significant roles in ensuring the continuity of communication and care. One of the nurses told us that:

“We came from different units. Many of us did not know each other but we have the same goal that is to save life and taking care of COVID-19 infected patients. The shared goal brought us together. We created innovative ways to communicate with each other in layers of PPL and to support each other through the war against the pandemic.”

And one of the physicians said that:

There was no hierarchy there, we were all clinicians trying to save life and fight against COVID-19. We tried our best to find effective patterns of communication to make sure that collaborations go well within and across shifts.”

Discussion and Conclusions

The current study explored the communication between professionals and COVID-19 infected older adults in the acute care setting and the possibilities and significance of facilitating effective communication despite multiple challenges in the pandemic. Professionals have been initiating person-centered communication with older adults by continuously assessing and paying attention to their needs, preferences, habits, and conditions, increase mutual respect and understanding, and enhance information exchange. Facilitating person-centered communication is a significant strategy in responding to the pandemic crisis and a core element of person-centered care.

References

- Armitage, R., & Nellums, L. B. (2020). COVID-19 and the consequences of isolating the elderly. *The Lancet Public Health*, 5(5), e256. DOI: 10.1016/S2468-2667(20)30061-X
- Ayalon, L., Chasteen, A., Diehl, M., Levy, B., Neupert, S. D., Rothermund, K., ... & Wahl, H. W. (2020). Aging in times of the COVID-19 pandemic: Avoiding ageism and fostering intergenerational solidarity. *The Journals of Gerontology: Series B*. DOI: 10.1093/geronb/gbaa051
- Applegate, W. B., & Ouslander, J. G. (2020). COVID - 19 presents high risk to older persons. *Journal of the American Geriatrics Society*, 68(4), 681. DOI: 10.1111/jgs.16426
- Garnier - Crussard, A., Forestier, E., Gilbert, T., & Krolak - Salmon, P. (2020). Novel Coronavirus (COVID - 19) Epidemic: What Are the Risks for Older Patients?. *Journal of the American Geriatrics Society*. DOI: 10.1111/jgs.16407
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277-1288. DOI:10.1177/1049732305276687
- Liu, S., Yang, L., Zhang, C., Xiang, Y. T., Liu, Z., Hu, S., & Zhang, B. (2020). Online mental health services in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4), e17-e18. DOI: 10.1016/S2215-0366(20)30077-8
- Mazumder, H., Hossain, M. M., & Das, A. (2020). Geriatric care during public health emergencies: Lessons learned from novel Corona Virus Disease (COVID-19) pandemic. *Journal of Gerontological Social Work*, 1-2. DOI: 10.1080/01634372.2020.1746723

Saldaña, J. (2013). *The coding manual for qualitative researchers* [Kindle edition]. Retrieved from: Amazon. com.

Sandelowski, M. (1995). Qualitative analysis: What it is and how to begin. *Research in nursing & health*, 18(4), 371-375. DOI: 10.1002/nur.4770180411.

Vahia, I. V., Blazer, D. G., Smith, G. S., Karp, J. F., Steffens, D. C., Forester, B. P., ... & Reynolds, C. F. (2020). COVID-19, mental health and aging: A need for new knowledge to bridge science and service. *The American Journal of Geriatric Psychiatry*. DOI: 10.1016/j.jagp.2020.03.007

Williams, K. N., Perkhounkova, Y., Jao, Y. L., Bossen, A., Hein, M., Chung, S., ... & Turk, M. (2018). Person-centered communication for nursing home residents with dementia: four communication analysis methods. *Western journal of nursing research*, 40(7), 1012-1031. DOI: 10.1177/0193945917697226

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Table 1. Characteristics of health care professionals in the study

Number	Gender	Age	Education	Pre-COVID care practice	Years of practice
D1	Female	38	MD	Oncology	21
D2	Male	40	MD	Neurology	19
D3	Male	39	MD	ICU	20
D4	Male	46	MD	Neurology	26
D5	Male	37	MD	Internal medicine	15
D6	Female	34	MD	VIP unit	7
D7	Male	31	MD	Neurology	7
D8	Female	50	MD	Cardiology	28
N1	Female	32	BN	Orthopedics	12
N2	Female	40	BN	Neurology	15
N3	Female	37	BN	General surgery	15
N4	Female	25	BN	Gynaecology	3
N5	Female	41	Associate degree	Dermatology	24
N6	Female	31	BN	ICU	9
N7	Female	34	BN	Dermatology	11
N8	Female	35	BN	Neurology	11