Caring for Vulnerable Populations during a Pandemic: Literature Review

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Abstract

Vulnerable populations account for a substantial proportion of the United States population. The current COVID-19 pandemic has highlighted the elderly and those with underlying health issues as having the highest risk of mortality. This literature review utilizes a matrix approach to explore the challenges to providing care for the vulnerable elderly, those with underlying health issues, with disabilities, with low income or homelessness, and those with mental health concerns in these extreme times. Appropriate care for vulnerable populations in times of crisis requires focus and planning in critical areas. This article discusses the critical areas of communications and trust, policies and planning, resource allocation, and physical or digital provision of care. Care must be built around the anticipated needs of vulnerable populations and adapted to evolving conditions to minimize morbidity and mortality. There is a need for further investigation and development of effective telehealth systems to address barriers and increase inclusion of vulnerable populations. Effective provision of healthcare to vulnerable populations, such as the elderly, may prevent the need for resource-intensive critical care by maintaining health.

Key Words: COVID-19, vulnerable populations, pandemic, crisis, elderly

Introduction - Literature Review

The threats on vulnerable populations are never more apparent than during a time of crisis, such as a pandemic. During a pandemic, members of our vulnerable population can face enhanced challenges and more complex barriers than they normally encounter. These trials can be so great that they may lead to health deterioration or death. In order to care for those that are vulnerable in these times of crisis, focused efforts are required in three critical areas to prevent health deterioration and to save lives: communication and trust, planning and policy, and administration of care.

Vulnerable populations account for a substantial proportion of the United States population (Hutchins et al., 2009, p. 246). The current pandemic of COVID-19 has highlighted the elderly and those with underlying health issues as having

the highest risk of mortality (Center of Disease Control [CDC], 2020). This literature review will explore the challenges to providing care for the vulnerable among the elderly, those with underlying health issues, those with disabilities, those with low income or homelessness, and those with mental health concerns in these extreme times. The reasoning for the additional identifiers of disability, income scarcity/homelessness, and mental illness in the literature review is that these overlapping populations represent the most vulnerable individuals likely to require outside interventions in order to avoid significant morbidity and mortality. Upon highlighting the vulnerable populations and some of their challenges, this literature review will demonstrate critical elements to caring for the vulnerable populations during a pandemic.

Vulnerable Population

Elderly: The elderly face many challenges including but not limited to immobility, transportation limitations, daily care needs, medication access and assistance, food insecurity, assistance with underlying conditions, financial insecurity and accessing financial assistance, access to information, and cognitive reasoning. These difficulties can make access to daily needs such as food, sanitation, medication, healthcare, financial needs, and access to shelter more difficult during a time when resources are limited, restricted, or removed. The already vulnerable nature of the elderly due to these difficulties can lead to an outsized need for care and resources during a pandemic. These concerns are then met with the obstacle of the elderly being a "main target group of most of the policies of social distancing due to their high risk of presenting complications from COVID-19" (Mesa Vieria et al., 2020, p. 40).

Underlying Health Conditions and/or Disabled: Those with underlying health conditions and/or disabilities are at greater risk of death and deterioration of health due to the extreme impact that the SARS-CoV-2 virus can have on an already weakened health condition. The additional need for healthcare access and assistance with activities of daily living can lead to exposure to the virus (Campbell et al., 2009, p. S295). In addition to the

hardship of being disabled, the occurrence of care being diverted due to possible limited resources poses a significant risk to health and life (U.S. Department of Health and Human Services, 2020).

The United States was in the midst of an opioid epidemic resulting in a national public health crisis pre-COVID pandemic. Chronic pain management and the illicit use of opioids in older adults living alone presents heightened risks of both interrupting care and precipitating withdrawal and increasing underlying risks for abuse during a pandemic. Isolation during a pandemic has the potential to increase the use of opioids as a result of deteriorating mental health. Further investigation to the effects is warranted.

Low Income and Homeless: Those of low income have the challenge of living in areas consisting of more crowded spaces and more likely dependence on shared transportation. Those of low income may be less likely to have an occupation that allows the option to work from home or may not have resources such as computer and internet to work from home. They may also be reluctant to work from home due to financial concerns or risk of losing their job (Bouye et al., 2009, p. S209). Critical resources like masks, gloves, cleaners, and soap may not be an easily afforded expense. Resources the poor may utilize for assistance may be restricted or lost (Hutchins et al., 2009, p. S245). The homeless population may have additional challenges in obtaining healthcare. "A proportion of homeless persons have chronic physical and mental disorders. These persons can be more overlooked once healthcare services are allocated almost exclusively to fighting the COVID-19 pandemic" (Mesa Viera et al., 2020, p.40). All of these concerns impact the individual's ability to protect themselves and limit exposure.

Mental Health: Those that suffer with mental illness may experience a worsening of symptoms exacerbated by measures to decrease viral transmission such as self-isolation (Mesa Vieria et al., 2020). Changes in routine, decrease in available outpatient resources, and feeling overwhelmed by new information may also impact mental health. Stressors from a pandemic may worsen psychiatric illness (Li, 2020, p. 624). These challenges can cause heightened anxiety, fear, and

depression that worsens underlying mental illness and/or lead to noncompliance with treatment or infection prevention measures.

Literature Review Criteria

Approach: A matrix was developed and articles were sorted into the categories of elderly, underlying condition/disabled, low income/homeless, mental health, and caring solutions for vulnerable populations. Caring solutions that focused on a particular vulnerable population was noted above the information in the column of the matrix. Information relevant to these topics from articles were placed under the designated column to demonstrate the article relevance to the literature review.

Inclusion/ Exclusion Criteria: For the literature review, the Cumulated Index to Nursing and Allied Health Literature (CINAHL) was utilized using the keywords of "COVID-19", "pandemic", "caring", "education", "vulnerable population", "elderly", "older adult", "low income", "homeless", "poor", "disabled", "underlying conditions", and "mental health". Articles utilized were peer reviewed and addressed pandemics including influenza and COVID-19 in the last 11 years. Articles addressing communication and trust, politics and planning, and care but did not address the vulnerable populations were excluded from the literature review. Seven articles were utilized for the literature review.

Caring for Vulnerable Population

Communication and Trust: Effective communication and trust is at the heart of providing care to the vulnerable population. These issues focus on understanding their current and anticipated needs, their concerns and fears, and their understanding and compliance in illness prevention and treatment. Without successful communication, trust can be difficult to achieve and/or maintain. Trust can also vary and decrease over time during a pandemic (Vaughan & Tinker, 2009, p. S326). "To maintain trust, public health officials will need to justify the timing of action or inaction through appropriate communications and to explain any errors in previous or early communications" (Vaughan & Tinker, 2009, p. S326).

Communication and education strategies should be planned, implemented, and evaluated to include community resources and participants (Bouye et al., 2009, p. S290). Communication and education must also be adapted for the various vulnerable populations to be efficient and effective. "Alternative, accessible communications need to be developed for people with disabilities, particularly populations with deafness or hearing loss, low literate individuals, people with cognitive limitations, and other hard to reach populations" (Campbell et al., 2009, p. S296). The inability to provide timely education and communication hinders the safety and health of vulnerable populations.

Policies and Planning: Although communication and trust is essential, it will not be effective if planning is inadequate. "Good communication practices will not substitute for bad planning, uniformed policies, or misconceptions about vulnerable population" (Vaughan & Tinker, 2009, p. S324). Policies and planning should provide the access to resources and care needed for the vulnerable population while addressing challenges and minimizing barriers and restrictions.

Strategic planning for pandemics should involve those from the vulnerable population. These plans should be developed through partnership with the community in which the vulnerable population lives (Bouye et al., 2009, p. S291). In addition to the community, those with underlying conditions/disabilities or elderly need to be an essential part in developing policies and plans for pandemic preparedness (Campbell et al., 2009, p. S299).

Planning will also need to be specified for the needs of a variety of disabilities and degrees of disability. Also, timing and advance planning is needed to prevent interruption in care and resources for those disabled (Campbell et al., 2009, pp. S295-S297). "Most jurisdictions significantly underestimate the amount of advance planning and coordination that is required to effectively address the integration and accommodation of individuals with disabilities" (Campbell et al., 2009, p. S295). The development of these policies should involve the vulnerable population, such as the elderly.

Oversight of ethical issues and concerns should be initiated and maintained during a pandemic.

Resource Allocation: In many areas hardest hit early in the COVID-19 pandemic, the need for resources far outstripped supplies. Clinicians were facing ethical dilemmas not often encountered in the healthcare systems of developed nations. The typical western approach of triaging the most resources to the sickest patients was challenged by a more philosophical utilitarian approach of considering how to allocate resources to achieve the greatest good. When faced with the decision of which of the numerous patients in desperate need of a single available ventilator, for instance, many clinicians have reported adopting a utilitarian approach of assessing which patient is most likely to survive and maintain quality and quantity of life (Yahya & Khawaja, 2020). This topic of the most ethical course of action in such cases is undergoing current active debate. Some proposed ethical algorithms adopting a utilitarianism approach (Savulescu et al., 2020) use age, disability, comorbidities, and determinations of social worth as elements to determine resource allocation. Such algorithms are likely to magnify injustices suffered by vulnerable populations (Reid, 2020). Given the realities of implicit bias and its effects on patient care, advocacy for populations most often disadvantaged by bias, including vulnerable populations, should be present in the discussion to ensure disadvantages and injustice suffered by vulnerable populations are not compounded in situations where a utilitarian approach is utilized as the primary model.

Providing Care: Effective care can best be provided with thorough preparation, quick response to barriers, and an adequate allocation of resources to carry out plans of care. It is important to identify vulnerable populations early and to quickly initiate care plans in order to allocate sufficient resources to assist those in need without loss of time in care. It is essential to be proactive in identifying those needing additional assistance, providing more care and checking in, and assessing the availability of resources for emergencies. Barriers preventing this could increase risk of illness or deterioration of health (Campbell et al., 2009, p. S296).

Recommended practices to reduce pandemic spread can exacerbate some conditions and may decrease needed resources for others in the vulnerable population. For instance, social distancing can cause worsening of conditions among the elderly. "Social isolation is one of the most important contributors to all-cause mortality in older adults" (Finset et. al., 2020, p. 875). Maintaining social distancing in shelters for the homeless can limit capacity, thus leading to a greater need of more shelters during a pandemic. Those who live in senior living facilities, nursing homes or long-term care facilities are also vulnerable (Vergara et al., 2020). Vergara et al. (2020) emphasizes the importance of explaining why a telehealth visit is being used versus in office visit. Telehealth may be a foreign concept to many older adults. Older adults need to be educated about the history of telehealth, the benefits of telehealth, and be assured of the quality care being delivered remotely.

Telehealth and telemedicine is being utilized to provide remote care and eliminate unnecessary exposure to the virus. As noted by Quin et al. (2018), older adults want to live independently for as long as they can. However, the elderly may not have access to resources such as a phone and/or computer or have an understanding of how to receive telehealth or telemedicine services. It is essential to identify these populations prior to a pandemic and make accommodations to provide continuity of care and limit exposure to the virus. In addition to minimizing exposure to the virus, potential benefits of telehealth for older adults may reduce the burden of cost and travel.

Those suffering from mental illness, may have additional resource challenges due to resistance, noncompliance, and possible instability in living conditions. Additional challenges also exist for those providing mental health care in inpatient facilities. Due to the structural challenges of inpatient facilities and restriction of certain resources to reduce the risk for harm to self or others, care for the vulnerable population of mental health patients can present unique challenges (Li, 2020, p. 624). Limited ability to comprehend directions due to psychiatric illness or cognitive impairment may represent a barrier to following

typical pandemic protocols such as hand washing (Li, 2020, p. 624). With hospitals restricting access in response to COVID-19, group and family therapy becomes limited and can impact psychiatric patient treatment course (Li, 2020, p. 625). These challenges must be met by the team of healthcare professionals and clinical leaders through effective communication in providing the best care and safety for their patients.

Conclusion: The vulnerable population consists of the elderly, those with underlying conditions/disabilities, those of low-income or homeless, and those that have mental health concerns. All of these individuals can face daily challenges that are exacerbated during a pandemic. It is essential that the vulnerable populations are provided effective and accessible communication, timely actions to build and maintain trust, and policies and plans that are ethically sound. Additionally, plans must be adapted to the needs of the vulnerable population to allow for seamless integration without interruption of care or essential resources. More studies are indicated to assess older adults living alone with chronic conditions (i.e., congestive heart failure, diabetes, depression, pain). Telehealth and tele-monitoring has the potential to adequately assess health maintenance, illness progression and deterioration in overall well-being (Hulya et al., 2018). Care must be built around the anticipated needs of the vulnerable population and adapted to evolving conditions to minimize morbidity and mortality.

By implementing and advocating for these actions, vulnerable populations are provided a better opportunity to face the challenges of a pandemic and may prevent the need for resource-intensive critical care by maintaining health. "Only when the nation is prepared to protect those who are most vulnerable will we be assured that we have in place an effective and efficient preparedness and response system- and that will endure to combat future pandemics and other public health emergencies" (Hutchins et al., 2009, p. 246).

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