Analyzing the Role of Nursing in Responding to Global Health Crises

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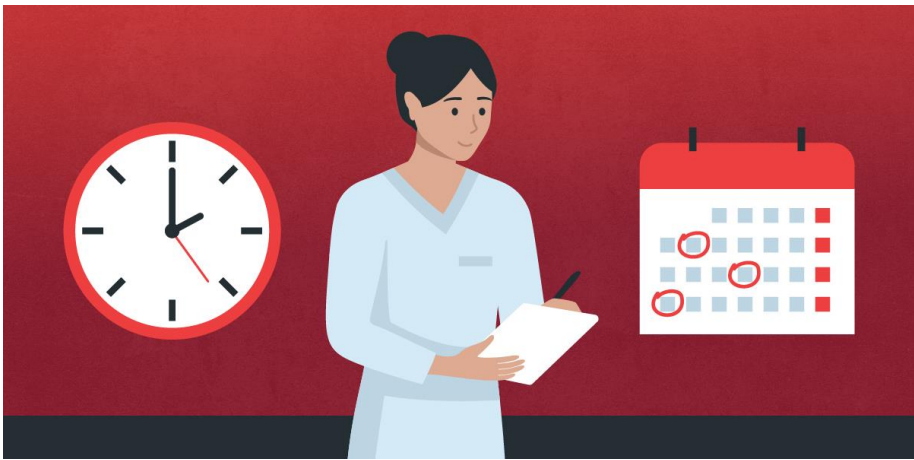4. Nursing Specialist, Al-Otbeya Phc

ABSTRACT

This section intends to thoroughly analyze and explore the specific contributions and challenges encountered by nursing professionals when it comes to effectively responding to global health crises. In doing so, it will delve into the various aspects that make the job of nursing professionals crucial in such situations, as well as the complexities and obstacles they are confronted with. By studying the multifaceted nature of their role and the demanding circumstances they endure, a comprehensive understanding of the pivotal role played by nursing professionals in global health crises will be achieved. This section will also highlight the need for adequate training, support, and resources for nursing professionals in order to enhance their capacity to respond efficiently and effectively in these critical situations.

KEYWORDS: nursing, health crisis.

1. Introduction

With the dawn of the new millennium, a health crisis based on poverty, insufficient clean water and food supplies, the spread of infectious diseases, and environmental degradation is compounding the disparities between poor and rich nations. The international community has responded to these global health disparities with calls for poor rich debt relief, and the development of an international Global Fund to Fight AIDS, Tuberculosis, and Malaria and a World Health Organization Commission on Macro Economics and Health. Research has mounted over the past three decades showing that crises have differential impacts upon its victims, and natural disasters and war in developing countries have received special attention in terms of formulating policy and aid for prevention and recuperation. Recent events like the attacks on September 11th, 2001, the US-led war in Iraq, and political instability within the US are likely to impact global health far into the future, and thus merit examination of the trajectory of the impact and viable strategies for mitigation. It is within this context that the role of nursing in responding to these

global health crises will be elucidated. In response to the global health disparities, the International Council of Nurses put forth a position statement articulating nursing's obligations and areas of action and advocating a participatory role for nurses in the development, implementation, and evaluation of intersectoral strategies and projects. The statement is based on the assumption that human health is a product of living conditions and the root causes of conditions detrimental to health must be addressed, and that through participatory action and the development of viable solutions nurses can help to realize a better health for all people. This position reflects the growing attention being paid in academic circles and among aid and development organizations to the role of social, economic, and political determinants in health and health equity, and action and intersectoral and participatory strategies are widely recognized as being essential. A recent publication of the Commission on Social Determinants of Health clearly articulates the health disparities and determinants and urgent need for action for global health equity and pledges to point the way for strategies that will alleviate health disparities and advance 21st-century global health. These are the types of nurses being called to action, and an understanding of the determinants, disparities, effective strategies, and areas of action is essential. (Rosa et al.2022)

1.1. Background

Nursing work is basically related to the care and well-being of the patients. Because the concept of old age is more prone to degenerative diseases, nurses should provide services to elderly patients on the pattern of a complex chronic care. In addition to providing physical care, old age is the provision of education and counseling to maintain the health of servile up to the peak. This is always connected with the change in working patterns for nurses from acute care to chronic care. The various roles and the development of the nursing profession are closely related to the achievement of health. It is necessary for a nurse to be active in designing the policy of health, health system, and other health services. This is the provision based on some research showing that the health problems of elderly people indicate that nurses not only provide care but provide quality care with lower cost. (King et al.2021)

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After the Second World War, the national economy and healthcare system were rebuilt into society. This was the time when the geriatric population started to increase. The effect of this increase was the awareness in government policy to give more attention and allocation to health funding. This was caused by the demand for health services for elderly people whose health problems became more complex. This is an opportunity for a nurse to advocate health on a national scope. With the current dynamic policy in health and economic conditions, it is necessary to analyze how the nurse's role should be to respond to this condition. (Holman, 2020)
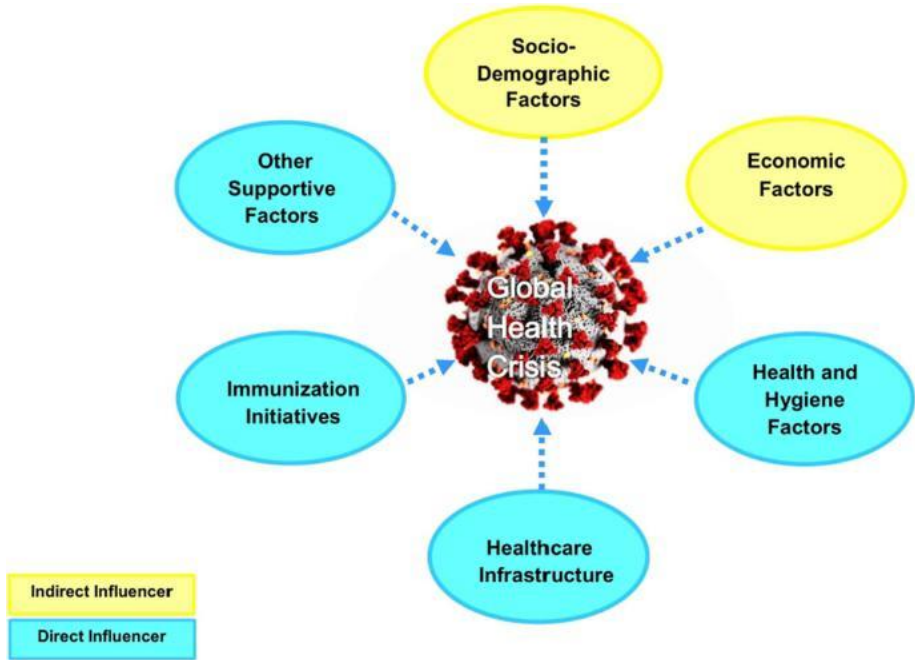
1.2. Purpose of the Study

This qualitative study aims to analyze the roles of Indonesian nurses during natural disasters, both in the emergency and reconstruction phases. The focus is on their roles in relation to the roles stated by the International Council of Nursing (ICN). The ICN states that the roles of nurses in disaster management are: first, as protectors, and second, as responders. These roles are reflected in the attitudes of Indonesian nurses when providing health services during the emergency and reconstruction phases. As protectors, nurses are expected to ensure the well-being of the victims and prevent further deterioration of their condition. As responders, they are expected to provide quick responses and effective solutions to health problems. Based on the background of Indonesia's frequent natural disasters and the ICN's statement, it is implied that there is compatibility between the roles that nurses should perform and the roles they are already performing. However, compatibility does not necessarily mean similarity. Therefore, it is interesting to examine the extent to which the roles performed by Indonesian nurses align with the roles stated by the ICN. This study also aims to provide suggestions for creating alignment between the two. This research is part of the second author's (TP) dissertation, with RSDK as the primary investigator of this study. (Holdo, 2021)

2. Global Health Crises

The World Health Organization (WHO) provides the following definition of globalization, and the information contained in this topic is taken from the WHO website: "Globalization has its positive effects on people. The global interweaving in areas of technology, information, and knowledge, and greater interdependence and the intensification of trade have improved the material conditions of human life in various parts of the world. Economic and social progress has brought people better standards of health and quality of life in numerous ways. In the context of health and healthcare, it is the task of public health to see how these benefits can be extended to all people." However, it can also have negative impacts, including the spread of dangerous ideas and technologies detrimental to the health of humankind, and degradation to the environment, which can threaten the health of current and future generations. In recent years, there has been growing awareness of these negative impacts and the need to protect and promote global public health. This awareness has been brought into sharp focus by a succession of crises that have affected global health, from the 1997-1998 financial crisis to the recent SARS epidemic and the ongoing threat of pandemic influenza. The crises have underlined the vulnerability of a globalized world to health threats emerging in both developed and developing

countries. They have also raised questions about the capacity of the global community to detect, assess, communicate, and respond to such events, and to effectively coordinate action to control their outcomes. These issues are now critical considerations for anyone studying or engaged in the practice of global health. (Tambo et al.2021)

2.1. Definition and Types

During the last 10 years, there has been increasing literature surrounding the topic of global health. However, the global health community has yet to agree upon a common definition. There are many aspects of global health, including public health, infectious diseases, mental health, health systems, environmental issues, poverty, violence and injury. Global health is a multidisciplinary field with its own concerns and goals. The lack of a solid, widely accepted definition stems from the relatively recent attention towards global health. However, some of the definitions provided within the literature share commonalities that can help us to understand global health today. Sidel and Cassell defined global health in 2005. They argued that global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Koh distinguishes global health from international health by its focus on health improvement within resource-constrained settings. He says that global health is the area of study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health integrates and coordinates clinical care, public health, and community-based prevention, allowing all to benefit. Koh emphasizes that global health is not solely the study of poor countries and their problems, but an integrated study of health issues, with a priority for those found in

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resource-poor settings. Although there is not one standard definition for what global health is, we can see common themes among these definitions. Global health involves a concern for the issues that transcend national boundaries, a focus on improving health and equality for all people, an emphasis on addressing global health problems in underprivileged or marginalized populations, and a multidisciplinary approach. (Health Organization, 2021)

2.2. Impact on Population Health

The nature of the crisis determines the potential effects on the state of health in the affected area. This is because it determines the threat of morbidity and mortality, and the means for effective intervention. A sudden and severe onset of a health problem with the potential to cause widespread death and morbidity is known as a public health emergency. It is usually a situation that poses a high risk to a large number of people, within and across state borders. Public health emergencies can be caused by a range of events such as infectious disease outbreaks, chemical or radiation spills, natural disasters, and adverse effects of developmental or health policy processes. These have the potential to disrupt populations and cause health-related suffering, so while they are not global health crises per se, they can have far-reaching effects beyond national borders. The global health crises referred to in this essay are events that are serious, unusual, or unexpected that require immediate action. These events may be prospectively or retrospectively identified, they may arise from a known or unknown cause, and they have the potential to affect the health of the world. Events that fulfill these criteria are numerous and varied with vastly differing effects on population health. They include the ongoing effects of war and complex humanitarian emergencies, the impact of natural or man-made disasters, the rise in incidence of transnational infectious and chronic diseases, and the global implications of changes in health and environmental regulation. (Zhu2023)

2.3. Challenges and Opportunities

Unforeseen global health crises place huge demands on all health professionals, including the nursing workforce. Historically, the response of nurses to such events at local, national, and international levels has been high but their involvement in terms of policy and high-level decision making has been minimal. The SARS outbreak in 2003 revealed some of the strengths and weaknesses of the involvement of nursing in global health. In the case of Canada, there was much evidence to show that the infection of over 400 health workers, the death of 44 people, and the infection of two WHO experts was due to a lack of clear public health policy and standardized infection control practices. In the post-SARS era, much work has been done to prepare the nursing workforce for future pandemics. For example, in 2008 the RCN published the findings of a report into the UK nursing response to SARS it had conducted to inform its preparation for and response to any future health crises. It found that public health knowledge among UK nurses was poor and that the absence of clear advice on the management of suspected cases of serious infectious illness led to confusion and concern amongst the workforce. The report made a number of recommendations including a call for greater education of the nursing workforce on public health and infection control measures and the formulation of clear guidance with advice for nurses and midwives on the management of cases of

infectious disease. Steps such as these have the potential to greatly increase nursing involvement in the governance and policy of global health. On a more positive note, health crises provide many opportunities for nurse leaders and researchers to contribute to the improvement of population health on a global scale. In recent decades, there has been a dramatic increase in the number of nurses appointed to senior government positions around the world and into non-governmental organizations with the King's College London 'Policy Surveillance and Nurse Leaders Global Health' database now listing nurses in health leadership positions in 75 countries. In a presentation to the WHO Executive Board on the global nursing workforce in 2018, ICN Chief Executive Officer Howard Catton stated that with a 27 million strong workforce, nurses have the power to be a force for change in providing health for all people worldwide. The ICN has also established a number of committees on health policy, regulation, and advanced practice where nurses have been able to contribute to the planning and decision making at local and global levels. (Wakefield et al., 2021)

3. The Role of Nursing in Global Health Crises

In a research article by O'Boyle, on the nurses' response to international disasters, it stated that there are two roles for international disaster response: traditional and rapid response. The traditional response happens after the disaster has occurred, where a great assessment is necessary. Japan Red Cross College of Nursing has experiences with international disaster aid in certain countries and regions where war and conflict with no clear battle lines had caused internal strife and people were injured or became refugees due to the situation. While rapid response is to provide care for refugees and internally displaced persons (IDPs) and to ensure health for the people to prevent further health impacts on the affected population. The benefit of the two responses can greatly serve aid in regions and countries stricken by disaster. (Li & Wang, 2022)

In a global health crisis situation, nurses face different responsibilities and challenges with their respective roles. Their actions would depend on how to respond to the situation, whether it would be locally, nationally, or even internationally. In an article by Olegario and McNaught, they cited the comparison of nursing roles in the management of infectious diseases in developed and developing countries. Developed countries will most likely focus on controlling the infectious disease, the treatment, and lessening the impact of the disease. While in developing countries, where health resources are limited, the focus is on preventing the problem from worsening and reaching a global standard level of care to create a better outcome in the future for public health. (Xie et al.2020)

3.1. Nursing as Frontline Responders

Situational awareness was a key factor in the ability of the nurses to provide safe and effective care. This involved recognizing that their existing knowledge and expertise might not always be applicable. They engaged in anticipatory learning, seeking information and remaining vigilant often in settings in which the situation was constantly changing. Risk perception was also central to their decisions and actions. They had to determine the level of risk to themselves and others and often engage in ethical reasoning when there were disparities between what was best for those

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affected and what would best protect the interests of the public. (Kozasa et al.2020)

Nurses have been to the fore in responding to recent global health crises such as Severe Acute Respiratory Syndrome (SARS), pandemic influenza, and natural disasters. A situated cognition framework is used to explore the ways of knowing involved as nurses provided care in unfamiliar, unpredictable, and sometimes hazardous circumstances. The research involved interviews with nurses from Canada, Hong Kong, and the United States who provided direct care to affected individuals or communities. (Parreira et al.2021)

3.2. Leadership and Coordination

In the context of global health, leadership and coordination are usually associated with the activities of international organizations, government agencies, and large-scale funders. However, this can be seen as a limiting perspective, with assumptions that leadership is about taking charge, and coordination about fitting the pieces together in a pre-determined plan. In contrast to this, the work of Zwarenstein, Bryant, and the late Williams (2004) in their evaluation of the Cochrane Effective Practice and Organisation of Care Group suggests that leadership in implementation is about the ability to convince others to change course, and coordination the transformation of disparate activities so that the parts are better understood as a whole. They propose that there are three different types of knowledge to action (the endeavor to reduce the gap between what is known and what is done), and the second and third are particularly relevant to nursing leadership and coordination in response to a global health crisis. This is an iterative process, and cannot be bounded within a simplistic model or a list of tasks. This poses challenges in evaluation and the generation of evidence on best practice, an issue that they return to later. Ongoing these ideas are echoed in the global health literature, with Leffers and Mitchell (2011) stating that "As key members of the health workforce, the potential for nurses to promote greater health worldwide is considerable, and has yet to be realized". This includes their potential to influence development and aid agendas to ensure that they adequately address health needs. This is all represented and explored through activities around the recent Ebola outbreak with many global health commentators agreeing that the global response was a failure, and that this reflected failures of leadership and coordination both in affected countries and at the international level. These provide rich ground for case studies on nursing in global health crises. (Campbell et al.2020)

3.3. Advocacy and Policy Influence

On the critical care of Ebola patients in Texas through the lens of the resources theory hypothesis, Texas faced a global spotlight as the location of the first case of cross-contamination of the Ebola virus in a healthcare setting in the non-endemic area of the Western African Outbreak. According to the resources theory hypothesis, nurses are the most important resource in changing patient outcomes of any healthcare situation. In order to keep the public safe when faced with the care of an infectious disease, nurses must feel safe within their working environment, be provided with the appropriate safe patient handling equipment, have proper education and training, access to an abundant supply of resources, and the opportunity for additional resource training. This theory can be used to help explain

the course of events at Texas Health Presbyterian Hospital when faced with the care of Mr. Duncan, along with grossly typify the deviance of the current ICP and CDC behavior-based precautions recommendations from the standard of practice of hospitals worldwide and nursing as frontline responders to infectious diseases. It is imperative to note that the four empowered nurses involved in the care of Mr. Duncan, all survivors of Ebola, were the participants of this study. (Anton et al., 2021)

Desired changes are achieved:

4. Nursing Education and Preparedness

Public health approaches to population-based health issues are also important for nursing education. Many global health issues are embodied in the determinants of health for specific populations and implications for each global health concern can be in diverse settings and populations. Public health education for nurses at both basic and advanced levels is the key to developing the global health nursing workforce. Nurses in advanced practice and public health nursing require education that enables application of evidence-based practice in complex and resource-constrained settings, policy development, leadership, and interdisciplinary collaboration for population-based health improvements. (Dichter et al.2022)

Health worker migration, also known as the global nurse brain drain, is a leading issue in the global health workforce and the subject of much nursing research. It affects all countries sending or receiving migrant health workers and is a significant part of the globalization of patient care. (Asan & Choudhury, 2021)

Lifelong learning, continuing education, and professional development are also key points of entry for nurses to gain education about global health issues relevant to their practice settings. Global health issues need to be integrated into the continuing education requirements for relicensure of nurses in the United States and similar requirements in other countries. (Jeffries, 2022)

Creating a curriculum that addresses global health issues needs to occur in many contexts. Basic professional education for registered nurses, at the baccalaureate level and higher, is where the largest segment of the nursing workforce gains knowledge, skills, and a foundation in global health necessary for practice across all settings and roles. Associate degree nurses, nursing diploma graduates, and licensed practical/vocational nurses also need education specific to the global health concerns relevant to their patient population and practice settings. (Dalky et al.2020)

Curriculum development is vital to producing a well-prepared nursing workforce positioned to confront global health issues. Changes in disease patterns, advances in medical technologies, an increasingly diverse patient population, and the globalization of patient care necessitate a competent nursing workforce prepared with contemporary knowledge, skills, and public health perspectives. Integrating global health issues into the nursing curriculum is essential preparation for increasingly complex practice in a global society. (Weigl et al., 2020)

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4.1. Curriculum Development

The second step in preparing the nursing workforce is to identify and prioritize new curricular content and learning objectives. This content may be new or existing. The identification of behaviorally specific learning objectives is critical to guiding curriculum and ensuring that the content is taught and tested. These objectives should be identified for use in a variety of educational programs including basic and advanced nursing education, as well as continuing education. Learning objectives identified to improve the nursing workforce's ability to work in an epidemic or disaster situation should be relevant to the experiences nurses may encounter, and the client care responsibilities expected of them. These objectives should be incorporated into nursing education at schools of nursing and learning organizations, by nurse educators and applied to the practice setting. (Zackoff et al.2020)

The International Nursing Consortium has recognized the importance of nursing education and has articulated six global competencies for preparing the nursing workforce for crisis. These competencies state that nurses should be able to function effectively in a crisis, work in interdisciplinary teams, manage client and client support resources, with an understanding of the cultural, social, and political issues that may impact the client and the support resources, give care when the information is uncertain with a focus on improving the information base, and be able to protect the health and safety of self and the support staff. Thus, preparing a nursing workforce to effectively respond in an epidemic or disaster situation first requires an assessment of current curricular content and the identification and prioritization of new competencies and learning objectives that are relevant to working in such an environment. (Bordelon et al.2020)

4.2. Simulation and Training

To engage in effective simulation, proper training of both students and faculty is essential. Over the past two years, the NLN has developed a new professional resource entitled Simulation Innovation Resource Center which encompasses the evidence-based simulation theory, practice, and methodology. This resource includes Sim educator training as well as independent learning strategies in order to prepare the nurse educator in facilitating effective simulation. Moreover, the NLN has a Simulation Leader Training Program that focuses on leadership for the individual facilitating simulation and integrating it into curriculum. These resources were all developed using the NLN/Jeffries Simulation Theory providing a comprehensive means for nurse educators to effectively integrate simulation into their curriculum. Additionally, the INACSL Nursing Simulation Standards have been revised and published as the INACSL Standards of Best Practice: Simulation. This resource has a multitude of standards and criteria for all levels of simulation ranging from the design of the learning experience to the evaluation of the learning. With these resources available, nurse educators can be properly trained in facilitating effective simulation to teach their students best practices and safely, decreasing the learning curve for educators new to simulation. While faculty training is a fundamental component of a successful simulation-based learning experience, student preparation is equally important. With the rapid adoption of simulation in nursing education, many students are being exposed to this type of learning for the first time. There are

varying levels of student readiness, ranging from comfort with the technology involved in high fidelity simulators to an understanding of the difference between the simulator as a learning tool and not a patient. Using the NLN/Jeffries Simulation Theory as a framework, a comprehensive curriculum can be developed to better prepare students for their simulation experiences. This theory emphasizes the importance of creating a conducive learning environment where simulation is embraced as a learning tool, not a performance-based evaluation. Implementation of simulation throughout a nursing program can assist in transitioning students from simple knowledge and comprehension of nursing fundamentals to complex application and problem-solving skills necessary for competent nursing practice. A qualitative study conducted by Decker et al. discussed the readiness for practice of new graduate nurses after having had baccalaureate education with a strong basis of theory and supported by clinical experiences including simulation. Results of this study have shown the potential for simulation in improving the preparedness of new nurses as they are introduced to the work environment. (Endsley, 2021)

4.3. Interdisciplinary Collaboration

The Interdisciplinary Collaboration section is centered around one of the heart of the profession competencies, teamwork. Nursing in global health is difficult to understand and even harder to implement. Keele has proposed that global health is best understood as an arena. This arena is where determinants of health - the things that affect health - are fought over. There are many countries, organizations, and individuals involved in attempting to sway the determinants of health in their favor. Nursing is one of the players in the arena on behalf of vulnerable populations. Few arenas are as stark as war, however, it is not difficult to find comparisons between the effect of health in war and health in areas of extreme poverty. This is where many global health initiatives are focused. In recent years, there has been an upsurge in nurses becoming involved with global health initiatives in war-torn countries and other areas of extreme poverty. This can be attributed to the, as Keele refers to it, "War and Want" mentality that has sparked an increased interest in global health by the general population of the Western world. In a qualitative study conducted by Mancuso and Udlis, nurses with vast experience in global health stressed the importance of interdisciplinary collaboration. This is the process of working together with people from different disciplines to solve a problem. Global health is the epitome of a situation that requires complex solutions to be derived from a combination of all the players involved. The interviewees in this study expressed that the benefit of having interdisciplinary skills prior to engaging in global health will allow nurses to provide the best ways of increasing health for diverse projects around the world. They go on to provide anecdotal evidence from their many experiences which served to reinforce the belief that effective global health initiatives require a team of interdisciplinary skills. An expanded view of interdisciplinary collaboration has been given by Ludwig and Gazelle. They have created a model and theory for nurses working with other disciplines and applied it to global health. (Brennan et al., 2020)

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5. Ethical Considerations in Nursing Response

The section analyzing the role of nursing in the global response has thoroughly covered the ethical considerations that nurses may face when responding to a global health crisis. It has been established that when a crisis occurs, whether it be on a local scale or international, there will always be a scarcity of resources. This means resources such as time, money, and staff, but more importantly, resources such as medical supplies and equipment. It is the allocation of these resources that supplies the first ethical dilemma nurses may face. A few papers have explored this topic and concluded that it was the "hardest thing I have ever done, both professionally and personally," and "we often asked each other how, in this day and age, is it possible to run out of such essential items?" This would suggest that for those nurses that have witnessed firsthand the lack of resources to adequately treat patients, there is a feeling of helplessness and despair. As a critical care nurse who has dealt with situations of trying to decide with limited resources how to help the most people, a primary consideration should be the greatest good for the greatest number of people. To do this (assuming there is more than one possible course of action), a nurse must weigh up the likely outcomes of each action and decide which option would bring about the best outcome for the patient. With the future in mind, it is better to educate and prepare nurses to make such decisions before they are actually faced with a situation during a crisis. This leads to what is perhaps the most neglected area of disaster preparedness, which is knowing what to do if it is not possible to provide the standard of care that is expected in normal circumstances. (Han & Roh, 2020)

5.1. Allocation of Scarce Resources

Effective protection strategies for nursing personnel may include limits on the types of care to be provided and the types of patients to whom care will be given. While such limits may be intended to shift nursing resources to safer forms of care, it must be carefully evaluated for its potential to create second class service for patients who are deemed 'non-essential'. Redeployment and/or recruitment of nursing personnel to meet public health needs often result in pulling nurses from their areas of expertise to unfamiliar roles. While some nurses may embrace the opportunity to contribute their expertise in another capacity, others may feel pressured to accept a role for which they feel ill-prepared. These scenarios require clear communication to the nurses involved and honest evaluation of the risks and benefits to the patients and nurses in question. (González-Gil et al.2021)

Decisions allocation nursing resources during global health crises are particularly ethically challenging. As witnessed by the SARS epidemic in Toronto, the relative absence of established ethics frameworks and analysis inhibited systematic and transparent decision-making about resource allocation. The result was ad hoc and potentially unfair decision-making about redeployment of nurses to 'essential' and 'non-essential' services. Most nations, while having committed to upholding the welfare of their citizens during a public health crisis, lack a clear framework for what should guide decision-making about allocation of scarce resources, be they human or material. Ethical guidance is critically needed. Global pandemics create unique demands because the infectious nature of the agent often leads to its spread among health care workers and renders large portions of the general population vulnerable

to infection. This in turn can lead to a shortage of both nursing personnel and material resources to deliver nursing care. (Tønnessen et al., 2020)

5.2. Ethical Dilemmas and Decision-making

Effective nursing roles and global health issues place tremendous pressure on nurses to make decisions which incorporate a variety of ethical considerations for the wellbeing of the potential individuals involved. These decisions often necessitate an intricate form of problem solving which must take account of conflicting priorities, scientific uncertainty, and potential risks. Indigenous and local knowledge is often overlooked when treating diseases in a community, and it is usually to the detriment of the patient. For example, a patient from a community which has its own culturally accepted ways of healing may be diagnosed with a disease which originates from outside influences. In treating this patient, the nurse must take into account the wishes of the patient, whether they be to continue his health practices at home and risk no treatment, or to be treated with the foreign medicines in the hope that they will cure the disease. In this situation, nurses must take a cognitive approach with the patient by explaining the potential risks and outcomes of all the options available. This process involves consideration of a large amount of complex information and promotes critical thinking, which will lead to an informed decision. Information-based decision making is a key point in nursing, requiring a careful evaluation of the evidence and the effects of one's choices, be it on the individual or the community. This concept can be related to a worldwide issue such as the vaccination program for the Ebola virus and its associated risk of releasing an unproven drug to the public. (Burton et al., 2021)

6. Case Studies: Nursing Response in Global Health Crises

The 2014-2016 Ebola outbreak in West Africa had a catastrophic effect on the region's population and health care system. As a result of the lack of early response from global and governmental health organizations, the outbreak quickly reached epidemic proportions. Nurses, remaining at the front lines of patient care, were the first to identify the need for a global response and worked with multiple organizations to pressure the World Health Organization (WHO) into action. Both the International Council of Nurses (ICN) and the Global Advisory Group of Nursing and Midwifery (GAGNM) issued statements on the dire need for nurses to have access to proper personal protective equipment and training, as well as the recognition of the high death toll and infection rate among health care workers. WHO and other global health organizations were largely hesitant to engage with the real needs of the affected countries in West Africa, and it was only through public and organizational pressure that efforts were scaled up to respond to this crisis. The humanitarian organization Doctors Without Borders set up the vast majority of Ebola treatment centers in affected countries and employed nurses to run the majority of these centers. Due to a lack of response from global health organizations and scarcity of clinical resources in comparison to the level of need, these nurses were often forced to innovate in the creation of new standards for infection control and medical treatment of Ebola or to do so out of the necessity of providing care in a standard treatment center. This learning was later shared with the wider global health

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community and was essential in the development of new best practices in Ebola-specific treatment and nursing care. (Sole et al., 2020)

6.1. Ebola Outbreak in West Africa

In 2014-2015, West Africa experienced its first massive outbreak of identified Ebola Virus Disease (EVD). Over this time, thousands of people sought to help, but few could make a considerable difference, and lots of those who did succumbed to this disease. From the extended arsenal of worldwide wellness organizations and teams, EVD success setting up did not emerge from a multinational government coalition or through the enforcement of worldwide regulation, but from the rapid action of a number of dedicated and largely national healthcare providers and civic groups. Ebola Virus was first identified in 1976, and it has caused periodic outbreaks within the African continent. Prior to 2014, EVD affected comparatively small numbers of people and was managed fairly quickly and effectively. Often, the disorder was controlled by native quarantine of the affected area by the populace themselves, with support and supervision by national healthcare professionals and international specialties teams. (Pollack et al.2021)

6.2. COVID-19 Pandemic

Covid-19, an infectious disease caused due to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first discovered in Wuhan, Hubei, China, at the end of 2019. This led to a serious widespread across nations, evolving into a public health emergency and then declared a pandemic by the World Health Organisation on the 11th of March 2020. Coronaviruses are usually zoonotic and can cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). The higher mortality rates of MERS (30%) and SARS (10%) compared to Covid-19 induction, demonstrate that health care has become more effective and advanced at treating diseases but more importantly preventing them. This is where nursing has played a vital role in the preventive treatment and management of diseases such as Covid-19. During this pandemic, many countries had employed national lockdowns requiring people to work from home and not participate in outdoor activities, obviously this was not applicable to the healthcare system as it had to be prepared to fight against the pandemic. Here is where the nursing workforce had to reassess how care and treatment was being administered and make necessary adjustments to meet patient and public health needs. The early data from March 2020, found that there was an infection rate among nurses significantly lower than that of the general public, this still however lead to a spread of the virus amongst healthcare facilities with varying mortality rates. This was mainly due to the lack of PPE and improper usage of PPE, the lack of knowledge and understanding of Covid-19 and its infectivity had placed nurses and colleagues at a higher risk. This led to changes in infection control management and health and safety within workplace policies as well as the nursing role regarding patient education of Covid-19 precautions and symptom analysis. With many research guidelines being created for Covid-19 changing daily, communication and teamwork amongst nurses and interdisciplinary healthcare teams gained greater importance to ensure that current information was being shared and executed correctly while

maintaining patient safety and best care practice. (Salameh et al., 2021)

7. Lessons Learned and Best Practices

In the wake of the most recent global health crisis, the need for qualified nurses to provide adept care is greater than ever before. There are numerous lessons to be learned and best practices to be followed in the area of nursing in global health, and they are best discovered through a true analysis of those who were involved. This article aims to identify the valuable lessons learned and the best practices in the area of nursing using the response to the SARS outbreak as a contemporary case study in global health. An effective mode of communication has been identified as a valuable lesson in the case of SARS, and a key element of best practice for nurses in preparation for future global health events. Emergency response plans were implemented in healthcare settings across Canada in response to the outbreak, and they aimed to coordinate a clear and timely flow of pertinent information to all stakeholders in the healthcare system. This allowed for the portioning off of essential services to the remainder of the community, and non-essential services to those who were suffering from SARS in attempts to contain the virus. Throughout the SARS outbreak, these plans were continually evolving as new information became available, and it became apparent that those staff with a direct involvement in caring for SARS patients required more specific information regarding how to best protect themselves and their families. A wealth of knowledge exists regarding the mental health concerns of patient populations affected by global health crises, but there is a relative dearth of information concerning the mental health of those who provide care in such events. An international, multi-site qualitative study was conducted to explore the personal and professional impact of providing care for those with SARS, and the results are highly relevant to current and future global health events. It was found that participants experienced a variety of mental health issues, and the presence and type of issues were highly influenced by the local severity of the SARS outbreak. Issues ranged from emotional responses to professional consequences upon it. Nunnelee and Barnard report an observable increase in anxiety and depression among healthcare workers who were responding to SARS, and this is clearly an issue that requires the development of best practices for future global events. Qualitative findings of another study by Maunder et al. strongly indicate that mental health support for nurses is a critical consideration in global health events response. This is an area where best practices have not been achieved and many lessons must be learned from past events. (Kongcheep et al.2022)

7.1. Effective Communication Strategies

The nursing community has a specialized language and set of knowledge unique to nursing. During a crisis situation, regular channels of communication may not be adequate for transferring nursing knowledge. Nurses must carefully consider their word choices as other words may be misunderstood in other languages. During SARS, verbal communication was considered best for relaying knowledge so interpreters could help to clarify terms. However, it was found that any type of communication that relies on memory is inadequate as the knowledge is lost when the conversation ends. It is recommended that any knowledge that is being conveyed

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be recorded in some form so it may be easily accessed later. Since SARS, technology has created many new and useful ways to communicate, however the best method is context specific. Email, teleconferencing, and smartphone applications have all been used successfully, but each requires a reliable infrastructure that may not be available in all areas of the world. This is a consistent theme for any type of communication in that it is vital to plan ahead to have effective communication in times of crisis. Any of these methods is a vast improvement on simply using verbal methods and it has been suggested that research should be done to compare their effectiveness for knowledge transfer. (Endsley, 2023)

7.2. Mental Health Support for Nurses

For example, the closure of schools to reduce disease transmission has significant implications for the ability of nurses with families to participate in the response. In some countries, nurses were redeployed to work in settings or roles with which they lacked experience, and this contributed to stress and anxiety. Capturing this knowledge and ensuring that it is used to develop strategies to protect both the safety and the mental health of nurses in similar situations in the future is an important aspect of nursing research in global health. Studies capturing the experiences of nurses and the effectiveness of various mental health support interventions in the context of their work in affected communities can generate evidence to guide policy and future practice. (Halcomb et al.2020)

While the nursing response to global health crises continues to be challenged, the knowledge gained and the strategies developed continue to be valuable resources for future responses. By capturing the experiences and lessons learned by nurses, their resilience and leadership in working with affected communities, and the ability of nursing care to support health and human security can be made visible. In the case of SARS, the impact on those providing care was extensively documented, but little has been done to use this knowledge to prepare a more effective response for the future. This includes learning from the experiences of nurses who were affected by quarantines, lost income, stigmatization, and having to make difficult decisions balancing their professional and family responsibilities. (Pratt et al., 2021)

7.3. International Collaboration and Knowledge Sharing

To achieve a higher level of collaboration and knowledge sharing, it is suggested that a standard protocol or template be developed for disease outbreak status reports. This would assist affected countries in providing essential information to WHO and thus faster facilitate targeted prevention of disease spread. In addition, web-based discussion forums could be established to enable healthcare workers in affected countries to discuss and share their experiences in dealing with specific SARS cases or scenarios. Such forums would also be useful in clarifying or interpreting new information or guidelines relayed from WHO. An example of collaborative knowledge sharing in SARS has been the efforts of the CDC in aiding WHO to produce guidelines for the prevention of SARS in countries with limited resources. This is an important area for future research in evaluating the effectiveness of the guidelines in different global socio-economic contexts. (Halcomb et al.2020)

Collaboration and sharing of knowledge in a global health crisis, such as SARS, is

imperative in preventing further spread of disease. In the case of SARS, the sharing of knowledge was slow between affected countries. In part, this was due to the newness of the disease and lack of understanding of the SARS-CoV virus. However, there were also reports of some countries under-reporting numbers of those affected and restricting the flow of information to the World Health Organization. This ultimately resulted in a larger global outbreak, affecting countries who had no cases of SARS. It is important to not lay blame on these countries, as their concerns were mostly for local containment of the disease. This occurred even in Toronto where some healthcare workers were advised not to admit that they worked at SARS-affected hospitals in fear of discrimination given the stigma of SARS being associated with certain ethnic groups. (Chapman et al.2020)

8. Conclusion

Global health crises require international collaboration and knowledge sharing as essential components in addressing them. International collaboration and knowledge sharing facilitate the exchange of best practices, research findings, and resources among countries, enabling a more coordinated and effective response to global health crises. This section will explore the various mechanisms and platforms through which international collaboration and knowledge sharing in nursing can be achieved. These mechanisms include conferences, workshops, online forums, and partnerships between healthcare organizations and academic institutions, fostering a global network of nursing professionals dedicated to responding to global health crises. They provide opportunities for nurses to learn from each other, share expertise, and develop innovative solutions to address the complex challenges of global health crises. Through these mechanisms, nurses can also establish professional relationships, build trust, and strengthen connections that can be leveraged during times of crisis for rapid knowledge exchange and collaborative problem-solving. By working together and pooling their knowledge and resources, nurses can effectively respond to global health crises and make a significant impact on improving health outcomes worldwide. (Sezgin et al., 2022)

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