

Cholera in Yemen: The Role of Nurses in Curbing the Challenge

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Abstract

This article seeks to address the debilitating challenge of cholera in Yemen and the space of nurses in curbing the burden. Cholera in an infectious disease that easily spreads in unhygienic conditions though ingestion of human waste-contaminated food stuffs. The developing nations are at steeper slope of falling the eruption of cholera and Yemen is already overburdened. In 2017 alone, over 2000 deaths were reported in Yemen despite the governmental, non-governmental and intergovernmental collaborative efforts to improve health burdens and meet the Standard Development Goals of 2030. The outbreak of cholera in Yemen is common due to the persistent conflicts and political violence that disrupts the healthcare service delivery. Nurses and midwives are thus left at the center of the play to operate by the nursing care theories and models to improve the situation despite the challenges that thwarted the efforts of other healthcare providers.

Keywords: Cholera; Nursing; Healthcare; Children

Introduction

Cholera is a diarrheal infectious disease caused by gram-negative bacteria, *Vibrio cholera* which is often present in unhygienic environments such as sewage-contaminated water. Infection is often characterized by watery diarrhea, described as the 'rice water stool' which quickly dehydrates the body leading organ failures [1]. Yemen is one of the countries that are heavily affected by cholera and over 800,000 were reported within six months in 2017 [2]. "Save the Children" has expressed fear that this number is likely to double if the conditions surrounding the spread are not urgently tackled [3]. The unstable socio-political condition in Yemen makes it easy for cholera to spread without the prompt intervention [2].

World Health Organization reported that over 6 million citizens of Yemen do not access clean water and proper sanitation in 2016. As such, intervention schemes by the various international bodies such as the WHO, the World Bank among others are discouraged. Nurses and midwives are equally left in wobbling condition and trapped in quagmire. Nevertheless, nursing and midwifery are the only health agents that are left at the center of the play to propagate the intervention. They must thus abide by the nursing care models such as the environmental theory of Florence Nightingale and the Jean Watson care model among others are examined in this article.

Cholera Outbreak in Yemen

Yemen has been at the top of the list of countries that suffer the worst effect of cholera. Many researchers including Lyon have linked the rapid upsurge to the political, nutritional and economic states in the country [2]. Malnutrition has been mentioned by World Health Organization as one of the leading propagators of cholera in the region. There are over 400,000 children who suffer from malnutrition in Yemen [4]. Poor dietary conditions and inadequate access to health services are directly caused by the political violence, unattended healthcare facilities, and frequent displacements in the region. Insecurity created by the civil war together with the internal displacement has created difficult conditions for the disease victims to seek medical attention.

The World Health Organization reported the statistical account of the cholera outbreak in Yemen which revealed a death toll of 2,160 between January 2016 and August 2017 [3]. Such figures translate to a fatality rate of 0.35% in the first wave and 0.34% fatality rates in the

second wave. The report further indicates that 96% of the governorates and 90% of the districts are under the attack of cholera. The figures are likely to increase due to the presence of several factors that hinder effective delivery of medical supplies as well as the labor forces. The government of Yemen is affected by the violence and is thus unable to give attention to the medical supplies and the basic medical services [5]. Qadri et al. report that the health workers are unpaid and healthcare services delivery has rapidly fallen since 2015 [6].

The Previous Intervention Schemes

Alongside the Yemeni government, other non-governmental organizations as well as the intergovernmental organizations have made steps towards providing solutions to cholera in several countries worldwide. World Health Organization formulated the six lines of action to attain the integrated health standards [3]. Beside the strategic plans, WHO also scheduled for the mechanisms of strengthening nursing and midwifery in the Eastern Mediterranean Region [7]. Taylor et al. also highlight some interventions based on the Water Sanitation and Hygiene (WASH) [8]. Other organizations like Save the Children, International Committee of the Red Cross (ICRC), Médecins Sans Frontières (MSF) and World Bank have also made significant contributions by providing the medical supplies, financial resources and even manpower in the previous years.

The World Health Organization has intensively worked in an integrated manner with other organizations like UNICEF to set up schemes in line with the Standard Development Goals of 2030. Between 2016 and 2017, the World Health Organization directed its efforts to fight malnutrition in Yemen as a way of reducing the burden of cholera by building therapeutic centers equipped with the self-saving kits. It has also collaborated with UNICEF in establishing 3000 bends

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in the cholera treatment clinics, purchased the medical materials and provided the salary to the health workers. The Yemen Humanitarian Pooled Fund, World Bank, the King Salman Relief Center have also given financial support to WHO.

Organization for Economic Cooperation and Development (OECD), through the German organization, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) has also scheduled for clean water and sanitation and proper education. Clean water and sanitation form the basis of fighting water-borne diseases an education is a long-term measure of empowering the health workforce. On the other hand, Save the Children has concentrated on the advocacy approach to liberate the rapidly rising cases of infection in the region [3]. Through the support from the World Bank and other philanthropic organizations, Save the Children have made success in providing nutritional kits and other medical supplies. Despite the concerted efforts by many agents, the challenge has persistently remained and nurses are left at the center of the subject.

Challenges to Better Health

Lamadah et al. indicate that nurses face myriad of challenges in their routine duties [9]. These challenges seem to be across the globe, however; the nurse in the East Mediterranean regions are in a more chaotic environment due to the civil conflicts. Yemen is a typical nation that is already adversely affected by war and conflicts. As a result, her citizens are left with very little options for proper healthcare services. Due to war and domestic violence, the government has channeled the national funds to security measures and the remuneration for the nurses and other health workers is left under neglect. The World Health Organization reported that nurses had not been paid for 10 months [3].

Moreover, nurses and the health workers get exposed to the insecure environments as they try to offer services to the victims of the conflict. They end up breathing in the same toxic gases that used in warfare. Despite the continuous efforts made by the Regional Committee for the Eastern Mediterranean to create a unified and standards of operation for the nurses, little has been successful due to this the disparity in operational environments [10]. Saudi Arabia, for instance, has been heavily affected by the acute shortage of nurses [11]. Even the well-developed nations like the US are already predicted to suffer the same challenge by 2010 [12]. In a way, the denominator remains the same; challenges faced by nurses spread universally across the globe.

The cultural beliefs and view on nurses have also contributed negatively towards their work. Apart from the feminine view, nurses are also viewed as subordinate staff to the medical field and this could also result in the low enrollment, thus the low manpower challenge. Although the WHO expert committee already addressed this as early as in 1983, the shortage has persistently remained [10]. This directly leads to the large workload and distress. Further, the input from the government and the responsible regulatory bodies has not been fruitful too. According to the report by Haele et al. the International Council of Nurses (ICN) and the Advanced Practice Nursing Network (APNN) have not succeeded in reinforcing the standard regulatory programs [13].

Role of Nurses in Alleviating the Cholera Burden in Yemen

Several nursing care theories have been modeled to reinforce the operation of nurses and midwives for their safety and effective patients' outcome [14]. Among the commonly known theories include Florence Nightingale's environmental theory, Jean Watson theory of human care, the core, care and cure of Lydia Hall, and Adaptation Model of

Sister Calista Roy of 1976 among others. Such theories provide the guideline to nurses to follow and operate with an instinctive desire to improve the health of patients in any environment. Indeed, the case in Yemen poses a complex challenges to the RNs to an extent that the national regulatory bodies may seem to be incapable of intervening for better solutions. In such situation, Hirschman et al. advocate for the heartfelt healthcare service delivery among the nurses and midwives [14].

Under the close guidelines of the nursing care models and the refashioned regulatory programs, the nurses have a chance to propose better interventions for the current challenges. Nurses must thus accept to sacrifice in order to meet the health demands of the Yemeni cholera patients. Nevertheless, Webair et al. express that there is a need for the nursing regulatory bodies to seek for the governmental support through the Ministry of Health and other national agencies [15]. In this regard, collaborative efforts would be effective. For example, in the case of Yemen, whereas Save the Children focused on the provision of the nutritional kits to reduce cholera attack, the government would focus on the sustainability part of the project. The Ministry of Health could use the results from such initiative to further research on the same area [16].

The Nursing and midwifery bodies need to set up standards for their operations as a way of boosting the number of students' enrollment for the nursing coursework. Nelson et al. stress on the significance of involving the community members in the Public Health Care decision making [17]. The collaborative responsibility among the community members, nurses' leaders, and the government bodies could hold a solution towards the nurses' plight [9]. Nonetheless, the nursing care models are critically significant in strengthening nurses' service deliveries.

Florence Nightingale's Environmental Theory

Florence Nightingale's environmental theory has been widely utilized in several healthcare systems as an emergence of Florence's intuitive ideas [18]. This theory defined regards nursing as "the art of using the environment of the patient to assist him in his recovery". In a reflective way, Nightingale looked at nursing as a practice that is constituted "to unmake what God had made disease to be, viz., a reparative process." [19]. In this regard, the Yemeni nurses need to focus on the theorized healing power of the environment; light, proper diet, silence, cleanliness, warmth and clean air in order to improve the condition of the named patients [20].

Nightingale further explicates that that man is a constitutional body that is made up of the psychological, biological, social and spiritual parts [21]. She denotes that human beings are well defined in relationship with their environment and so, everything around an individual is considered to play a role in their health. As such, the absence of comfort and the ability to use every power that nurses have can be used to describe what health is. Despite the current challenges faced by nurses such an inability to reach patients, Nightingale's theory asserts for the provision of proper environment conditions for healing the patients who are within reach.

Despite the failure of the government to provide proper work condition for the nurse, the nurse in Yemen and from international communities should still empower themselves using the theoretical models and frameworks as guidelines and motivation to improve patients' health. Nevertheless, nursing is a "divine calling" that require sacrifice and submission to the tasks.

Jean Watson's Theory of Human Caring

Jen Watson's theory empowers nurses and midwives to serve with

love and kindness, authentically and with sacrificial dedications [22]. Watson was concerned with the manner in which nurses provide care to their patient and how this care manifests in promoting and restoring the health of patients as reiterated by Wyne [23]. This theory centrally builds upon the art of providing passionate care. It regards care to be more important than medical cure and relies upon seven main assumptions around health promotion.

There are four main concepts around this theory; health, nursing, human beings, environment/ society. The theorist regards the society as a source of moral guidelines to proper care practices. Values such as kindness and love are basic components of passionate care and they descend from the society [22]. The RNs who operate within Yemen need to understand that their role in providing medication to the cholera patients in the region does not strictly sit on the drugs but also the social care. In this regard, the nurses need to look at the cholera patients as the centrally integrated self that is to be nurtured, understood, loved and cared for. Watson also considered human health as the “absence of illness and the presence of the efforts that lead to the absence of illness” [23]. As such, the Watson’s theory encourages Yemen nurses to dispense integrated healthcare services to Cholera patients under the proper ethical guidelines and philosophical arguments that bind human interactions.

The Crescent of Care Model

Lovering describes a three-dimensional care model for the nurses in the Arabic nations. This model gives a prescription for care for the Arab Muslim patients in a culturally specific manner [24]. The professional nursing care is built around the cultural values, spiritual values, and professional values. It requires the nurse to uphold professional values that are defined by the spiritual, psychological, clinical, interpersonal and cultural care [25].

According to Mardiyono et al. Muslims caregivers have the spiritual obligation to care for their health and thus they have the right to the basic health care services [26]. Patients have the right to all the activities that improve their health conditions such as exercise, hygiene and healthy diets. Therefore, the Yemen nurses in collaboration with the Ministry of Health have the obligation to discern the unhygienic conditions and poor access to the health services is a violation of patients’ rights. Arab communities value the cultural virtues and they link them to the wellbeing of the family members. For instance, the belief about the evil eye is widely accepted among the Islam and the Quran also supports this idea (Quran 113:1–5). Therefore, nurses are expected to provide better health care services as they adhere to the crescent of care models.

Conclusion

The statistical records about cholera across the globe continue to create worries in the healthcare departments. Yemen has already registered 2, 156 deaths in 2017 and Haiti reported 815, 000 cases of children infection between 2010 and 2017. Due to inadequate access to clean water, poor sanitation, and civil war, the number of the case in Yemen have peaked past the containment capacity of the government and local health workers. Accordingly, the international organizations like the World Health Organization, Save the Children, International Committee of the Red Cross (ICRC), and Médecins Sans Frontières have chipped in to deliver support to the victims through their body of nurses. However, the solution is not yet attained due to the interruption from the conflict that has made the number of nurses and other health workers to fall. Nurses carry the burden to deliver the urgent medical care to the cholera victims and the government intervention is thus

critically needed to create a favorable environment for nursing care. Nevertheless, the nurses are strengthened to provide the necessary care to the cholera victims since nursing is a career that requires sacrifice and a heartfelt demonstration of love and care.

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