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Reduce vulnerability in Biological Disasters: Social **Work Methods**

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Abstract

Biological disaster is not unsavoury in the contemporary world. The nipah virus and corona virus are worst affected biological disasters across the globe. The psychosocial support and care is one of the pertinent factors for reducing vulnerability in biological disasters. The current paper focuses on reducing vulnerability in biological disasters through different social work approaches. Social work practice helps to solve the social problems or issues through different social work methods, each method has different tactics to solve the individual, family and community related problems. The social work methods are practically used in every type of disaster management and it enhances the social wellbeing and resilience to each and every individual. In biological disaster phase, social work practice is associated with health profession and jointly works together for reducing the vulnerability situations. The psychosocial wellbeing of every individual in the community is the main focus of social work profession. The current paper concludes that the social work practice helps in reducing the vulnerability in biological disasters and to enhance resilience and wellbeing among individuals in community.

Keywords: Biological disaster, vulnerability, social work methods.

Introduction

Biological disaster is an infectious bacterium in to a flock of prone people living in a routine apt to the banquet of the infection. The typical epidemic binges locally and death despondent constantly increases widely across the globe (NDMA, 2008). The history shows that there were several transmittable agents are responsible for catastrophic outbreaks, epidemic and pandemics in biological disasters. Biological disasters are one of the major issues in the existing world and it can be natural, accidental & intentional in nature (Khabbaz et al., 2015; Narayanan et al., 2018). The key classification of biological agents by Centers for Disease Control and Prevention in to three is A, B & C. The pathogens are highest biological agents for destroy the nation or globe.

The category A has high mortality rate; category B has moderate morbidity rate and low mortality rate and category C has high mortality and morbidity rate. The Nipah virus is one of the agent viruses in the category C and it has an easy production and dissemination, and major health impact (CDC, 2017).

In the last decades there were several biological disasters occurs across the world. The Nipah Virus is one of the worst pandemic in the globe and first case in 1998 in the state of Perak, West Malaysia (Ang, Lim, & Wang, 2018). The growth period in humans reached from 4 days to 2 months and with fever, headache, dizziness, vomiting, reduced level of consciousness, prominent signs of brainstem dysfunction (Goh et al., 2000).

Currently, the corona virus is one of the pandemic biological disasters across the world. The first corona virus case in Saudi Arabia in June 2012 and spread over many countries across the world (Mailles et al., 2013). The another outbreak of Corona Virus was in 31st December, 2019 at Wuhan City, China (Lu, Stratton, & Tang, 2020). The clinical features of COVID-19 are varied, ranging from asymptomatic state to acute respiratory distress syndrome and multi organ dysfunction. The common clinical features include fever, cough, sore throat, headache, fatigue, headache, myalgia and breathlessness (Singhal, 2020).

The pharmacological treatment is the primary method that reducing vulnerability in the biological disasters. Apartment from the pharmacological treatment there is a need of psychosocial support and care in the biological disasters. The social work practice is more over focus on psychosocial aspects especially in the health sector.

Social work is a profession closely connected with health profession for the initial stage of its development. The social work professionals working in public health and other health fields are made approaches for health impact across the world (Ruth & Marshall, 2017). The social work is always influence the public health and social work practice is one of the major factors in public health issues. Public health and social work emerged in the early twentieth century and a progressive era of health and social well-being. After 1950s, the both sector had collaborations on issues such as child health, epidemic response and venereal diseases control (Ruth, Sisco, & Marshall, 2013).

Social work profession advocates for sustainable development and protection from hazards or risk within the community (Maripe, 2018). Therefore the social work practice in biological disasters is essentials for reducing vulnerability, promote sustainable development and preparedness. The current paper is focused on reduce vulnerability in biological disasters through different social work methods.

Social Work Methods for reduce the vulnerability in Biological Disasters

Social work is a profession with helping people for develop capacities to help themselves. It is a profession that precedes knowledge from other disciplines to monitor its practice. The social work methods are primary and secondary methods. The primary methods are social case work, social group work & community organization, and the methods directly facilitate with clients. The secondary methods are social action, social welfare administration & social work research, and it supports the primary methods (Chukwu, 2017).

The each social work methods is discussed in below for reduce the vulnerability in biological disasters.

Social Case work is the first and hoariest method of social work practice. This method focused on the individual issues and development in the society. It is a distinctive method of problem solving that helps an individual and support individual to alter to their environment in sustaining mode (Chukwu, 2017). The case work method is an essential approach to tackle the individuals who face biological disasters. The psychosocial issues such as anxiety, worry, loneliness, fear may occur to individual during or post biological disaster period. Therefore for individual therapy/counselling need to focus for reduce the vulnerability of an individual.

Social Group work is a method that two or more individuals in the therapeutic process. The social relationships, large social activities, enriching interpersonal relationship, satisfying peer relationships, collective decision making concerning to the group life (Uranta & Ogbanga, 2017). The social group work is not that much effective that social case work during biological disaster. The social distancing, isolation, avoid public gathering are one of the major factors that help to overcome the biological disaster. Therefore social group work has some limitations to reduce the vulnerability in biological disasters. However online group work with various groups, online group chatting, online conferences/workshops/seminars, online family interactions help to solve the individual difficulties and group empowerment, and this kind of group approaches will help to reduce the psychosocial vulnerability in biological disasters.

Community Organisation is a social work method and practice for community development. The community services through government or non-governmental organizations or community based organizations in different level by various sectors.

Community-Based Disaster Management (CBDM) is involved to reduce disaster risk and guided by principles of subsidiarity, economies of scale, equity, heterogeneity, and public accountability. The stages of CBDM are disaster/vulnerability risk assessment, risk reduction planning, early warning systems, post-disaster relief, and participatory monitoring and evaluation (Bhagat, 2016).

Community-Based Disaster Preparedness (CBDP) is a form of capacity building in local-level and promotes vulnerability reduction and disaster management strategies. The strategies of CBDP are power of knowledge and capacity of local community resources and implement CBDP through community involvement (Allen, 2006).

In any disaster community organisation methods need to implement in the community. Therefore the community organizer role is importance in catastrophic events. The role of community organizer in biological disasters is to provide proper awareness, safety plans, need based support and collaborative work with health professionals.

Social Action is a secondary method of social work used for mobilizing masses in order to bring about structural changes in the social system or to prevent adverse changes. It is an organised effort to change or improve social and economic institutions. Social action is action taken with account taken of the past, present or future actions, behaviour, and attitudes of others. Disaster relief involves in social action broad range of participants, which often results in a disjunction between actual disaster needs and the perception of appropriate strategies in relief provision. There were no support and care during biological disaster, people can mobilize to attain their needs.

Social welfare administration is roots of social welfare and administration as a device for reaching welfare. Social welfare is an organized system of social services and institutions designed to aid individuals and groups to attain satisfying standards of life and health (Chukwu, 2017). The social welfare administration had a major contribution during biological disasters. The poor people and vulnerable groups in the community during biological disasters needs aid service.

Social Work Research is a secondary method in social work for search new knowledge from social issues, psychosocial issues, and socio-political-economic issues in society. It is a systematic and scientific study of social difficulties with the impartial of generating awareness for development and booming out social work problems (Chukwu, 2017). Disaster research in social work focus on disaster relief, create resources and welfare service to vulnerable people. Social workers role in disaster research is to proficiency in ecological approaches, prevention, stress and coping, and promoting change in micro and macro systems (Zakour, 1997). In Biological disaster also the social work research had more importance to assess the social conditions, family environment, psychosocial impact, livelihood, socio-economic conditions etc. Therefore social work research had a vital importance in the public health issues.

The each social work methods has a vital role in biological disaster and a multidisciplinary work need to be reduce the vulnerability in the community.

The social work practice followed the theories related to any issues or problems. Some of the theories related to catastrophic events are stress theory, resilience theory and Ivor Browne crisis theory (Maripe, 2018). These theories aid to practice different social work methods during any disasters. A study explore that the psychosocial perspectives of Nipah virus and its impact in Kerala. The study found that the impact is in individual, family & community level, and discourse psychosocial aspects of Nipah virus to reduce vulnerability by enhancing better coping and resilience of individual, family and community (Lithin, Harikrishnan, Jayakumar, & Sekar, 2019). A study on psychological effects of the coronavirus disease-2019 pandemic mentioned that the socio-economic and psychological issues affected in the lockdown and quarantines. Therefore the actions need to focus through telecounselling, virtual connecting & help groups, encouraging meditation, conducting research on psychological consequences, and developing and utilising suitable interventions (Sood, 2020). However in individual, family & community level, the social work methods can apply and it helps to overcome the catastrophic or pandemic events.

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