Ebola Research Proposal

Name of Student

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Background Information

The Ebola outbreak that originated in West Africa has been recorded as the biggest in history. An epidemic that started with isolated cases in the West African countries, Nigeria, and Senegal, has sent a wave of panic, as fears of it crossing the borders scale by the day. The Ebola outbreak was accompanied by the outbreak of another similar virus in October 2014, the Marburg Virus in Uganda. An individual tested positive for the Marburg Virus Disease in Mpigi District, Kampala. The case was followed by 146 separate reports alluding to the killer virus. The Marburg hemorrhagic fever, however, has a lower mortality rate of 25%. The Ebola hemorrhagic fever, named after the Ebola River in Zaire, was first reported in 1976. Sudan and Zaire were the first to experience this killer virus with over 284 people infected and a mortality rate of 53% (Ebola-Sudan). Ebola-Zaire (EBOZ) had the highest mortality rate, 88%, as compared to the other strings of the Ebola hemorrhagic fever. Several outbreaks have been witnessed across West and Central Africa throughout the years. Ebola Cote d'Ivoire (EB-CI) emerged in 1994 after a nurse performing a necropsy on a chimpanzee accidentally infected herself. Other occurrences were witnessed in Reston, Virginia, and Mindanao in the Philippines, just to mention a few of the incidents outside Africa.

The mortality rates in the last two of the five known strings of Ebola range from 50 to 80 percent. These are Ebola-Reston and Ebola-Bundibugyo. The 2014 Ebola epidemic has seen two separate Ebola incidents outside Africa. The first is a single laboratory-confirmed case in Spain. The second consists of a total of four laboratory confirmed cases in the United States. Containment of the Ebola virus has remained a top priority to the governments and to the global health institutions throughout the outbreak. Despite these collaborative efforts, the Centres for Disease Control (CDC) recorded over 13,000 cases in total with over 7,000

laboratory confirmed ones and over 4,000 deaths. The crossing of borders of the Ebola virus, and potentially the Marburg virus, presents the possibilities of the two becoming fully fledged global epidemics with unspeakable consequences. These earth-shattering statistics raise the question whether the current containment methods and procedure are effective. In addition, one may wonder whether there is a need for the governments to employ different strategies and mechanisms in the push for the cessation of the Ebola and Marburg outbreaks. This study is aimed at evaluating the containment efforts and at analyzing them in a bid to propose better methods for preventing further spread of the Ebola and Marburg viruses.

Hypothesis

Hypothesis: The collaborative efforts of governments and health organisations to contain the Ebola virus and Marburg viruses need to be restructured.

Null Hypothesis: The collaborative efforts of governments and health organisations to contain the Ebola and Marburg viruses need not be restructured.

Method

Research Design

The nature of the experiment calls for a non-experimental approach, as opposed to an experimental or quasi-experimental approach. The nature of the proposed research does not provide for division of the sample group and establishing a control section of the sample group. The samples selected will be the ones used to evaluate the effectiveness of the containment methods and strategies. The methods of study to be employed are correlation and case studies. Proving the cause-and-effect relationships to these design strategies will also be a part of the research. The main aim of this is to establish why the efforts are effective or why they are wanting, depending on the findings of the research.

Data Collection and Analysis

The proposed research is both qualitative and quantitative. The qualitative aspect involves analysis of the specific methods employed in containment, as well as the benefits and the weaknesses of each method. In so doing, possible solutions to the flaws witnessed in the containment method and efforts can, hence, be proposed. For instance, the analysis of the performance of the United Nations Mission for Ebola Emergency Response (UNMEER) and the funds allocated to it is a necessary procedure. Whether the goals set when establishing UNMEER have been met, and whether restructuring the organisation is necessary are some of the issues that should be addressed. Other containment strategies that need to undergo qualitative analysis include the United Nations Ebola Response Plan, the World Health Organisation (WHO) Ebola Response Roadmap, and the WHO Community Care Campaign. Qualitative analysis of these efforts by global health organisations complemented by those of the individual governments will eventually lead to the relevant proposals to bolster these containment efforts. Each containment strategy/effort should be critically analysed. The result of the analysis should then be recorded and appropriate recommendations have to be made. The qualitative analysis should not be limited only to the efforts from the international community, but should also focus on the effort of the individual governments as well.

Containment of the Ebola virus and other disease outbreaks should also factor in the roles the public should play. A well informed public also results in better containment efforts. This is where the quantitative aspect of the proposed research comes in. The quantitative research will be used to gauge the public's awareness level on the Ebola virus. Surveys are to be conducted locally in terms of questionnaires and interviews as means of collecting the necessary data. The interview questions, as well as those on the questionnaire, should be aimed at gauging an individual's knowledge about the transmission methods and symptoms of the Ebola virus. In addition, individuals that are sampled should be provided with the questions that enable them to provide an opinion about the current containment efforts. The

research should also incorporate online surveys in order to broaden the sample population. Data from the relevant pre-existing surveys should also be included in the quantitative analysis. This data, as well as the qualitative analysis described previously, will form a base for the analysis and critique of the government efforts.

Conclusion

The weight of the Ebola virus outbreak is cemented by statistics, which indicate a high mortality rate. In addition, the fact that the virus is now crossing borders (the United Nations and Spain) should be a huge cause for alarm. A look at history reveals slackness and reluctance in the involvement of the international community. The 2014 outbreak has, however, seen a change in the approach to the Ebola virus outbreak, mainly because it is the largest in history and poses a global threat. Concerns have been raised about the effectiveness of, for instance, the organizations formed under the UN and the WHO to deal with the crisis. Critics have also pointed out at the ignorance of the public on even the most basic information about the virus. This includes signs and symptoms, as well as means of transmission. These factors called for an extensive research into the efforts that are dedicated in handling the virus. These need to be analyzed and suggestions have to be made, so as to handle the Ebola outbreak in a better way and to avoid future epidemics.

References

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