



The role of religious leaders on the impact of climate change on health

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Abstract. Religious leaders play an important role in increasing religious awareness of the environmental crisis and its solutions. Climate change is the biggest threat to human life, causing direct and indirect impacts on health. Therefore, religious teachings can be used to protect the environment by emphasizing the role and responsibility of humans on the earth and influencing religious people to maintain the balance of the earth for the survival of the next generation. To determine the role and activities of religious leaders on the impact of climate change on health. We conducted a literature review of the English literature published between 2019 and 2021 using Clinical Key, Scopus, Science Direct, and ProQuest. PRISMA 2009 checklist guideline was used and also appraised using the Critical Appraisal Skills Program. Results: 381 articles were identified from databases. After reviewing titles and abstracts to ensure the articles related to the subject met the selection criteria, only 7 articles met all requirements and were included in the review. Data suggests that the roles of religious leaders are: teaching the importance of environmental education and cooperating with non-governmental organizations to promote ecosystem maintenance, providing advice to the congregation to always preserve the marine ecosystem. The impact of climate change on health makes us aware that the challenge of humanity is our actions that have a negative impact on health. Religious leaders have an important role in collaborating, educating and inviting people to realize the importance of maintaining the health of the planet.

Keyword: role of religious leaders, health, climate change

1. Introduction

Climate change has occurred all over the world significantly with worse effects due to human activities. According to scientists, global warming is mostly caused by human anthropogenic activities, such as coal mining, oil and excessive tree cutting, resulting in increased carbon dioxide emissions into the air. Climate change is also labelled as “the greatest global public health threat of the 21st century”. Climate change, especially annual changes in weather such as the rainy season, can increase the prevalence of severe infectious diseases. Although these concerns have been addressed, There are still numerous health consequences of climate change in Africa's underdeveloped countries [1].

In 2018, Nigeria experienced catastrophic flooding that affected 12 states and 327,000 people and 150,000 hectares of farmland across the state [2]. Scientists on the Intergovernmental Panel on Climate Change (IPCC) platform, however, warned that more severe repercussions on towns, particularly those in Lagos, which has a population of 7–14 million people, might collapse altogether into the ocean [3]. The impacts of climate change vary from one to another country and affect almost all aspects of life,



such as agriculture, health and sanitation, livelihoods, energy, infrastructure, human settlements, and housing. Meanwhile, climate change-related damage kills and destroys homes, public buildings, roads, bridges, public utilities, crops, livestock, and agriculture. Various studies have been carried out to increase human awareness to better protect the environment with the involvement of religious leaders, which in turn overcome the impact of climate change, including health problems.

Many studies related to this issue have been carried out to determine awareness about climate change among state leaders and what they have done in dealing with climate change through pro-environmental behavior or actions. Previous research, involving the Ministry of Environment, farmers, and others, have focused more on increasing community and stakeholder awareness or knowledge of climate change [4], and insurance. There is only one known study focusing on religious leaders[5] despite religious leaders have a big role in decision making in a country and have great trust from their followers or congregations. Based on this context, this study was conducted to determine the role of religious leaders and religious activities in climate change prevention and its impact on health.

2. Method

This research is a literature review of the published from 2019 to 2021 using Clinical Key, Scopus, Science Direct, and Proquest. PRISMA 2009 checklist guideline was used and also appraised using the Critical Appraisal Skills Program (CASP). The flow diagram of the literature search from the databases as present in Figure 1.

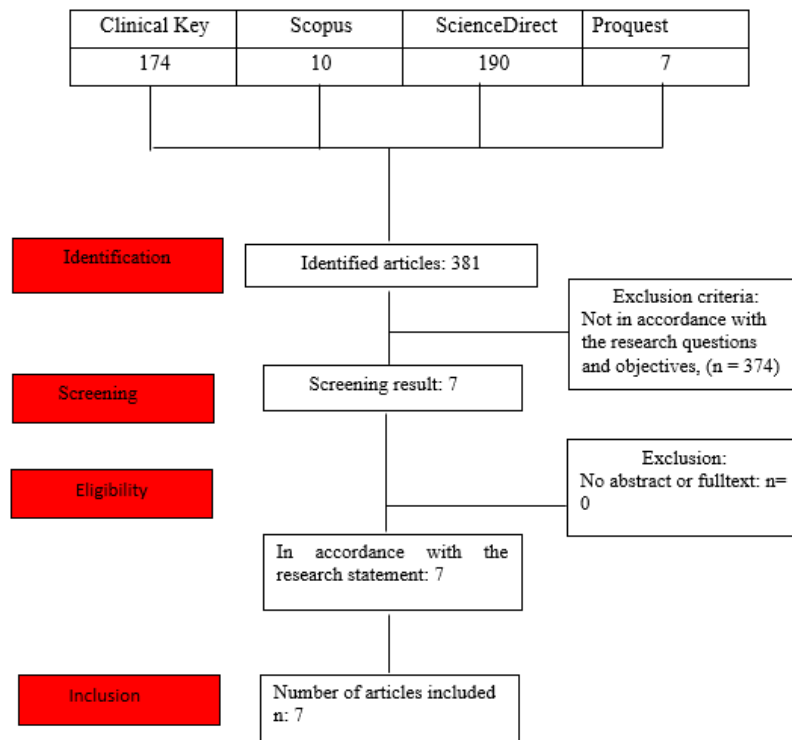


Figure 1. Sintesis grid

3. Results and discussion

3.1. Human activities that have an impact on climate change

According to previous research, several studies on human activities on environmental changes. Every human action that involves nature will have an impact on climate change. Climate change has two causes, namely artificial and natural causes. The artificial cause is that when humans decide to cut down trees along the forest. Deforestation can thus result in erosion. Also, humans who throw garbage carelessly can cause floods due to garbage blockage [6].



3.2. The effects of climate change on health

Previous studies showed that climate change might cause disease problems. Climate change is regarded as the most serious threat to human health by public health, medical, and health-care groups around the world [7]. Temperature-related mortality and illnesses, air quality impacts, mental health consequences, extreme weather events, water-related diseases, and conflict are all direct and indirect health repercussions of climate change. Additional challenges include food security, hunger, and food security, particularly in the face of floods and droughts.

Rising temperatures induce an increase in ground-level ozone, which causes breathing problems, worsens asthma, and leads to new instances of asthma, emphysema, chronic bronchitis, and pneumonia. Ozone can also harm the heart, producing arrhythmias and heart attacks and increasing the percentage of babies born prematurely [8]. Pollen and other aeroallergens are more prevalent in excessive heat. Asthma is caused by higher amounts of aeroallergens and affects about 300 million people [9]. Heat stress can make working circumstances intolerable while also increasing the risk of cardiovascular, respiratory, and renal disorders. Children, pregnant women, the elderly, and socially underprivileged groups are among the vulnerable populations, all of which are more vulnerable to climate-sensitive health repercussions.

Climate change lengthens the transmission season and broadens the geographic range of diseases such as yellow fever, malaria, chikungunya, Lyme disease, West Nile virus, and dengue fever. Climate change has also been linked to negative consequences on emotional, spiritual, and mental health. They can include trauma, fear, fatalism, and the death of loved ones, as well as employment, social support, identity, and a sense of control [10]. Global warming has increased carbon dioxide levels, which can lead to an increase in allergy production. Higher ambient pollen concentrations and an extended pollen season cause asthma episodes and allergic responses. Higher temperatures and rainfall degrade indoor air quality and promote mold and mildew growth, exacerbating asthma and other lung problems [11].

3.3. Religious leaders' role in climate change and health

Several studies have suggested that religious leaders play an important role in coping with climate change. This study looks at the role of church leaders in combating climate change in Nigeria, focusing on the Catholic, Anglican, and Pentecostal churches. Semi-structured face-to-face interviews with 30 church leaders from the identified faiths were used in this study (such as 10 church leaders from each denomination). These participants are from five Nigerian states and five geopolitical zones [6].

The declaration made at the Vatican involved all important elements of the Vatican, but religious leaders played an important role in implementing this workshop. At the same time, the workshops address how climate change would influence human populations. Extreme heat and expanding deserted land, the spread of vector-borne diseases, more weather-related disasters, jeopardized food systems, and climate-related migration and societal instability are among the grim forecasts. However, according to a recent study presented at the workshop, within three decades, the number of people exposed to deadly heat, droughts, floods, and fires could rise from millions to several billion, nearly a third of the world's population, affecting both the rich and the poor, as well as the young. The previous goal of this declaration was to address problems that occurred in previous decades [12].

Sufism, according to Polat [13], is more than just spirituality. It examines a specific aspect of life and the world academically, psychologically, and actively. It describes the individual's relationship with God, as well as the human-nature relationship. In the midst of the systematic ecological destruction caused by modern humans' avarice and reckless use of technology, Sufism must be developed into a more systematic environmental spirituality [14]. Eco-pesantren lessons, for example, can assess the engagement of teachings in environmental protection. Recycling is the overarching notion and concept of the eco-pesantren plan. Eco-Islamic boarding schools create and manage santri (students), mosques, and kyai's dwellings using a sustainable approach. Eco-pesantren refers to understanding about Islamic boarding schools and the natural environment [15]. In such a precarious situation, religious organizations and religious leaders all over the world, along with governments, non-governmental organizations, and various international environmental research committees, have recognized their role



and responsibility in establishing justice for the earth, future generations, and all creation. The environmental catastrophe is a natural imbalance caused by human exploitative conduct.

The monks perceived mounting debt as a source of further societal unrest, troubles, and conflicts. Deforestation outside the village continues to erode and destroy natural resources. Watersheds and biodiversity are threatened by deforestation, which reduces vital resources for settlements and forests. Soil erodes in the absence of trees, sending chemicals from fertilizers and pesticides into streams. Annual flooding is becoming more common, alternating with more severe droughts throughout the dry season. The difficulties of farming in the mountains is exacerbated by environmental issues. The foundation of the problem, according to environmental monks, is people's greed, wrath, and delusions throughout society. As a result, they began exploring for ways to assist people in escaping the forest and the ensuing social and environmental devastation. They look to Buddhist teachings and practices to persuade farmers to improve their behavior [16].

3.4. Religious activities as efforts to prevent climate change on health

A study of two predominantly Christian (Catholic and Protestant) fishing communities in Mexico found that, while fishermen claim that God created the fish, they also argue that humans should care for them. Human actions affect their quantity, and God wants to respect fisheries law. Thus, religion can assess the attitude of respect and responsibility towards the government and the resources themselves [17]. A study by Begumetal [18] suggested that Islamic values promote an educational environment and provide guidance for ecological behavior and natural resource conservation. Meanwhile, Islamic beliefs aid in the development of environmentally conscious conduct. Students with high levels of Islamic values were shown to have more ecologically friendly lives than students with low levels of Islamic values.

4. Conclusions

The influence of climate change on health makes us aware that our behaviors that have a detrimental impact on health pose a challenge to humanity. Religious leaders have a pivotal role in collaborating, educating and inviting people to realize the importance of maintaining the health of the planet. In addition, climate change have a negative influence on human health.

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