

## **A Study to Assess the Knowledge Regarding Home Care Management of Selected Climate Change-Related Diseases among Nursing Students in Selected Nursing Colleges, Nellore**

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### **Abstract**

The project is to assess the knowledge regarding home care management of selected climate change-related diseases among nursing students in selected nursing colleges, Nellore. The primary objective of this research is to evaluate the physical and health issues linked to environmental changes among nursing students in chosen nursing colleges of Nellore. A primary quantitative data collection method has been used for this research. It has been found that there is a direct relationship in the middle of environmental changes and health issues, and nurses have a significant role in addressing those health-related issues. From the study, it has been concluded that nursing universities should incorporate health consequences and climate change within the nursing curriculum at all stages.

**Keywords:** Nurses, Climate-Change, Health Issues, Health-workers, Global-Warming

### **1. Introduction**

**“Climate change”** is one of the important complications regarding the worldwide health issues of the twenty-first century. India is exceptionally threatened by complexities of environmentally changes due to its specific geographic place, prevalent health agitations, and climate-sensitive subsistence. Health workers have an important role in recognizing environmental changes and its different health impacts. One incorporation of climate change is the progressively severe weather that causes death, and illness through air pollution, heat stress, as well as infectious disease. In order to attain to **“climate change”** adaptation and mitigation, using nurses in educating about climate change and its effect on health should be a priority. The nursing practices should include specific strategies to decrease health problems related to climate change through clinical care, patient assessment, policy making, and function with communities to reinforce resilience in **“Narayana Nursing Institution”** and **“ACSR Government Medical College, Nellore”**.

## 2. Literature Review

### Global Effect and Mechanism of climate changes on human health

Climate change mainly global warming might have extreme health outcomes for humans. Exposure to severe heat can guide to dehydration, heat stroke, respiratory, cerebrovascular, and cardiovascular disease (McKinnon *et al.* 2022). Specific kinds of populations are more threatens than others such s student's athletes, homeless people, and outdoor workers. These people tend to be more vulnerable to this heat as they spend maximum time outdoors. Older adults and low-income families might lack ingress to air conditioning which enhances their vulnerability to extreme heat. In addition to, pregnant women, young children, and older adults are less capable to manage their body temperature hence; they are more in danger of climate change. Large metropolitan cities such as Nellore have seen noticeable increases in diseases in people at the time of heat waves. Changes within the climate impact the air both outdoors and indoors, which leads to different respiratory issues such as asthma (Sambath *et al.* 2022). The health sectors such as "*Narayana Nursing Institution*" and "*ACSR Government Medical College, Nellore*" have a significant role in efficiently addressing the obstacles of environmental changes both in terms of controlling the unignorable health impacts of "*climate change*", also decreasing the emissions of the greenhouse from the "*health sectors*". Professionals of public health and hospitals are the first respondents to the adverse health impacts due to environmental changes.

### The perception and awareness of nurses toward mitigation of climate change related to human health issues

Nurses are crucial in recognizing environmental issues that impact health, and having an understanding and knowledge of the interconnection between health and climate change is significant for them. It is important for nurses as they can drive changes in health organizations to decrease emissions (Patel *et al.* 2022). It can be said that nurses have immense capability to make variances and strike for actions to identify climate change. It has been found that maximum nurses are aware of their duties in the action of climate change, yet the majority of them considered that mitigation of climate change is not a significant concern within the nursing profession. Nurses should show their function in alleviating climate change daily since they fight with health-related problems due to environmental changes within their profession and also in their personal lives (Ryan *et al.* 2020). Nurses also can generate policy alteration at the regional, local, global, and national levels by advocating clean energy and safeguarding natural sources.

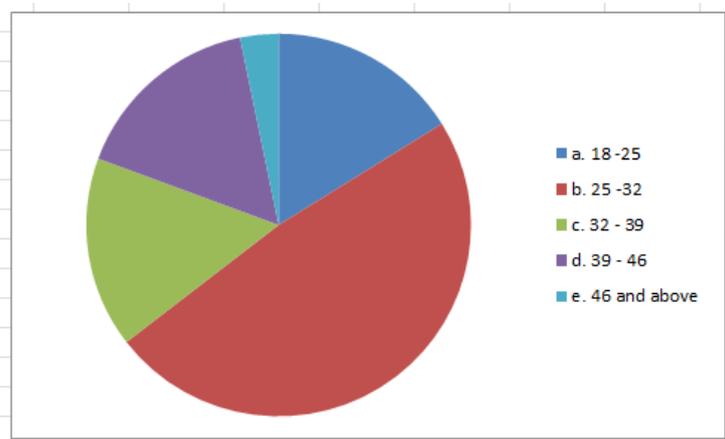
## 3. Methodology

Research methodology is a procedure to systematically clarify the research issues; it details the approach of researchers to make sure valid and reliable results. The primary quantitative data collection method has been used to study the data. The main reason to use this research approach it is focused, fast, relatable, and scientific (Sileyew, 2019). It depends on fewer variables and concrete numbers; it also assists to remove biases from the specific research. In

this reserach, a descriptive research design has been taken as it permits the researchers to analyze the distribution of more variables without any hypotheses (Mohajan, 2020). A survey has been conducted for completing the research, and in this survey, a total of 31 individuals had participated. This study has followed a deductive approach as it explains causal relationships in the middle of variables and concepts. At the time of conducting this research, no participants were forced to participate in the survey.

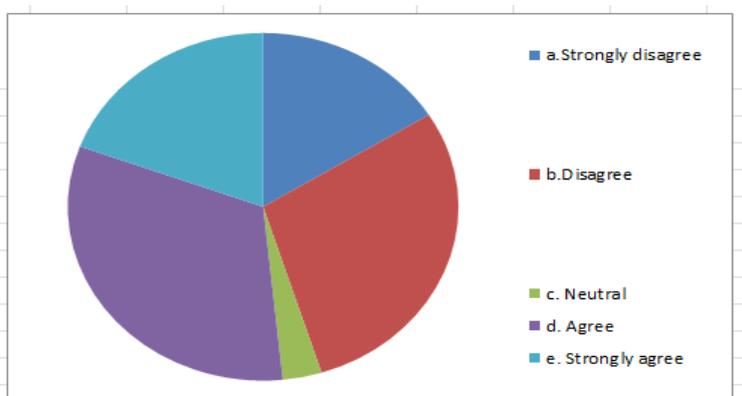
#### 4. Findings & Discussions

It has been found that the goals of “*United Nations Sustainable Development*” identify the urgent requirement for global action to control climate change as an emergency health catastrophe. Identifying sustainability and climate change will be a huge segment of future nursing perspectives.



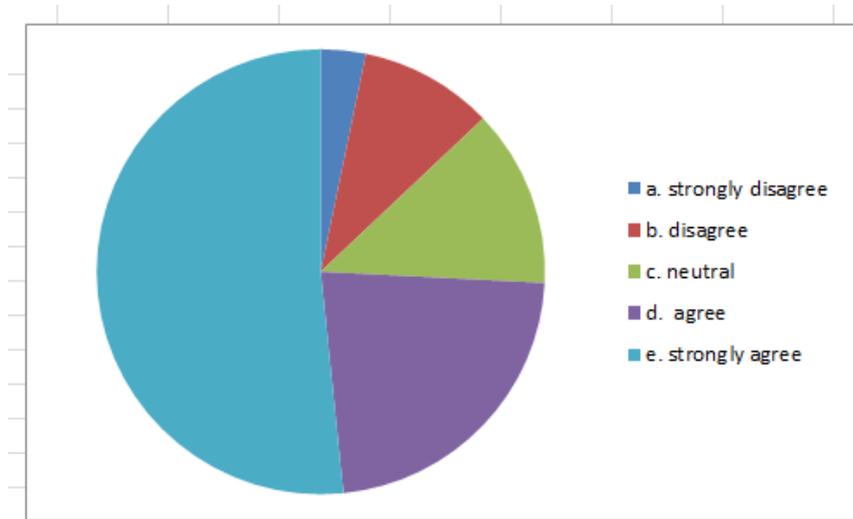
**Figure 1: Age of the participants**  
(Source: MS-Excel)

The participants' age in this research was between 18 years and above, and they are mainly from the health sector. The maximum number of participants was aged between 25 to 32 years.



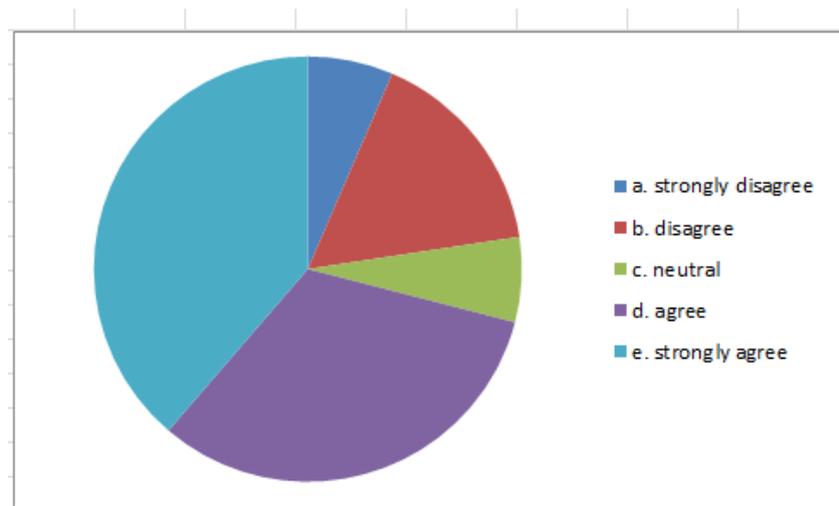
**Figure 2: Nurses have a crucial role in recognizing the health-related issues due to climate change**  
(Source: MS-Excel)

In the above data set, it has been asked to the participants that nurses have a crucial role in identifying health-related issues due to climate change. A maximum number of participants agreed with that statement, they stated that nurses are important to recognize the problems of health that happened due to the climatic change.



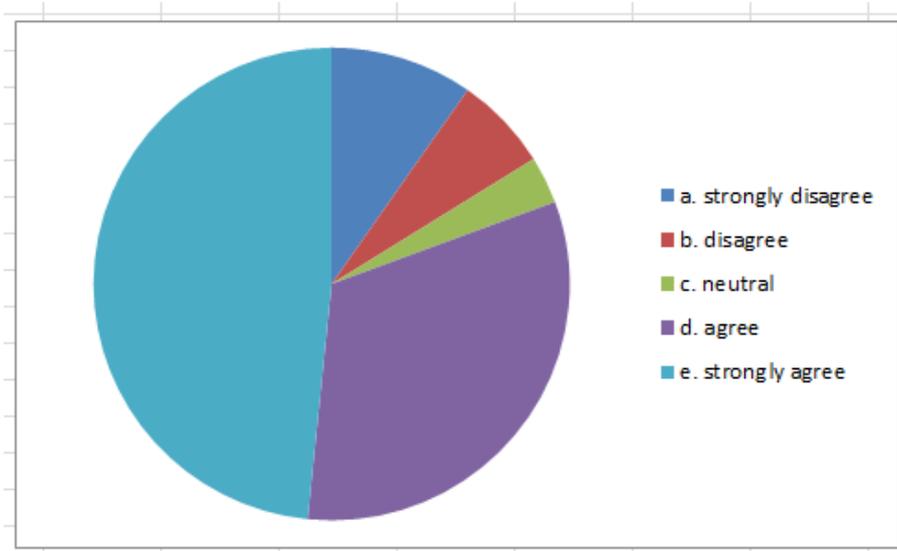
**Figure 3: There are different adverse impacts on health due to climate change**  
(Source: MS-Excel)

In the above figure, the participants had been asked that there are different adverse impacts on health due to climate change. The majority of participants had strongly agreed with the statement.



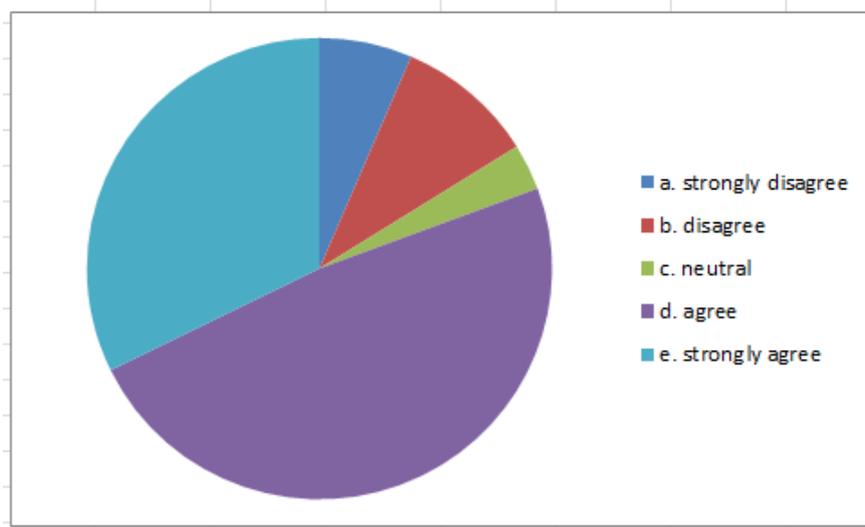
**Figure 4: The awareness of environmental change and health issues among nurses is important**  
(Source: MS-Excel)

In this part, the respondents had been asked that the awareness of environmental change and health issues among nurses is significant. The majority of the participants strongly agreed with the fact.



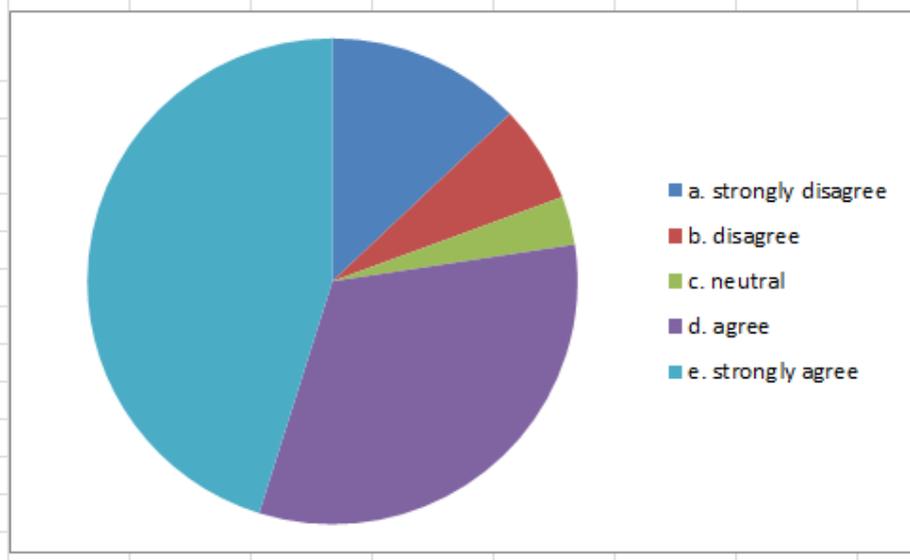
**Figure 5: Climate change has severe effects on people from middle and low-income households**  
(Source: MS-Excel)

In the above data figure, the respondents had been asked whether climate change has severe effects on people from middle and low-income households. Here, also the majority of the participants strongly agree with the fact.



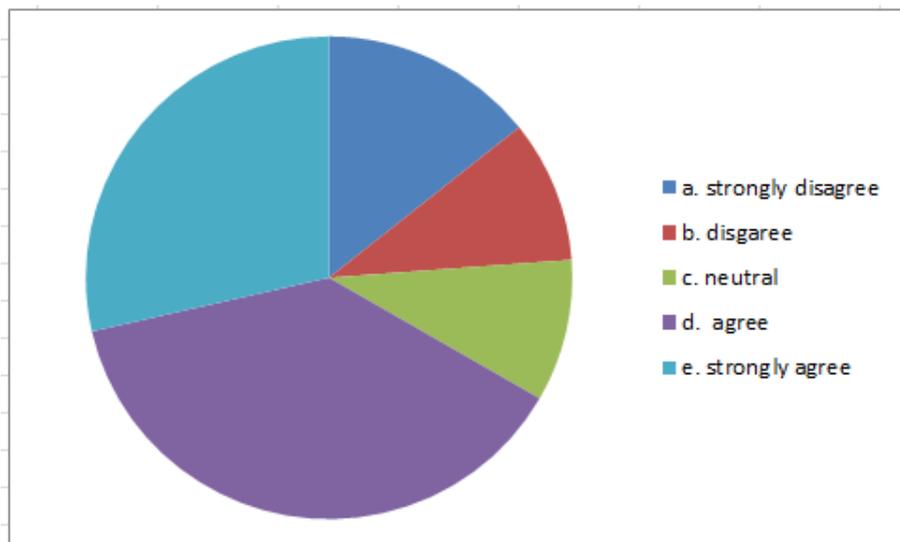
**Figure 6: Nurses can mitigate the emissions of greenhouse gasses from the health sectors**  
(Source: MS-Excel)

In the above figure, the participants had been asked whether nurses can mitigate the emissions of greenhouse gasses from the health sectors. A maximum number of respondents strongly agreed with the fact.



**Figure 7: There is a relationship between climate change and people's health**  
(Source: MS-Excel)

In the above data set, the respondents had been asked whether there is a direct relationship in the middle of "*climate change*" and people's health. Here, the majority of the participants strongly agreed with the fact.



**Figure 8: Nurses face different obstacles while attending to the patients**  
(Source: MS-Excel)

In the above-presented data set, respondents had been asked whether nurses face different obstacles while attending to patients. The maximum numbers of participants have agreed with the statement.

## 5. Conclusion

From the above study, it can be concluded that nursing students had positive attributes to the inclusion regarding the “*climate change*” and sustainability within the curriculum of nursing. They are strategically significant in the war against climate change in healthcare. More provisions are required within the mainstream health problems due to environmental changes in medical education, as involvement of nursing students in its related health problems is increasing.

## References

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## Appendices

Q.1 What is your age?

- a. 18 - 25
- b. 25 - 32
- c. 32 - 39
- d. 39 - 46
- e. 46 and above

Q.2 Nurses have a crucial role in recognizing the health-related issues due to climate change, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

Q.3 There are different adverse impacts on health due to climate change, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

Q.4 The awareness of environmental change and health issues among nurses is important, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

Q.5 Climate change has severe effects on people from middle and low-income households, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

Q.6 Nurses can mitigate the emissions of greenhouse gasses from the health sectors, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

Q.7 There is a relationship between climate change and people's health, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree

Q.8 Nurses face different obstacles while attending to the patients, do you agree?

- a. Strongly disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly agree