

WW#03: Methodology

Written Work #03: Research Methodology - ALEXIE

Good morning, Sir, and to everyone. Today, we will delve even deeper into the research methodology of our topic: An Investigation into the Prevalence and Aggravating Factors of Atopic Dermatitis in the National Capital Region (NCR) Through Predictive Modeling.

1. Main Research Question or General Objective: ALEXIE

Our general objective is to develop a geomapping model to predict and visualize the pattern of atopic dermatitis (AD) incidence in NCR. A geomapping model converts raw data from surveys into geographic data in a world map form, enabling accurate analysis and information communication. To provide a convenient visual representation of patterns and trends in Metro Manila, this will effectively illustrate the research results.

2. Specific Research Objectives: GAB

Our general objective branches out into 3 specific research objectives, which are as follows:

- Investigate the prevalence of AD through environmental and population factors within the specified area. Environmental factors such as temperature and humidity within the area, as well as population factors including population density, can assist in identifying the trends that contribute to the development of Atopic dermatitis (AD) within the region.
- Analyze the patterns of AD incidence between specific demographics such as different age groups and genders. This analysis will assist in identifying individuals who are more susceptible to the disease.
- Identify the factors that exacerbate the prevalence of AD within the specified area. Identifying the determinants is vital in understanding the distribution of atopic dermatitis in creating a geomapping model in order to predict and visualize the disease.

3. Ethical Issues: RIN

Moving on to the final section, we have the ethical characteristics of our research. First, the issues needed to consider in the entire data process are:

- **First, Disregard for participants' anonymity and confidentiality of data.** In the context of this research, unsolicited sharing of a patient's identity and medical history or records could lead to a patient's safety issues, loss of trust between researchers and participants, and affect the quality and reliability of the study.
- **Second, Performing the study without participants' informed consent.** This violates the participants' autonomy and provides no space for the participants' decisions regarding the use of their data.
- **Last., Absence of communication between researchers and participants.** This overlooks the needed transparency between both parties regarding crucial information such as use of confidential data and results of the study.

4. Ethical Standards: ADA

In light of these possible issues, we have then developed standards or bases that will lessen the probability of these happening.

- On privacy and anonymity, there must be strict compliance with the Data Privacy Act of 2012, or Republic Act 10173. Replacement of personal identifiers into specific codes will also be implemented in order to protect the participants' information. Lastly, constant privacy checks, wherein researchers will continuously reach out to the participants to check if there is any breach of confidentiality.
- On informed consent, there must always be clear conveyance and complete understanding of the study for participants. Voluntary participation will be emphasized, highlighting their right to retract their consent may discomfort arise. All of this will be clarified in special forms that possible participants may choose to sign for proof of involvement.
- On proper disclosure, importance must be placed on an open and continuous line of communication. Along with this, there is prioritization of transparency, wherein data must be collected accurately. To avoid unnecessary confusion, there must be proper dissemination of factual information related to the case.

5. Conclusion: GERICA

In summary, this research aims to develop a geomapping model to predict and visualize the incidence patterns of atopic dermatitis (AD) across Metro Manila, and ethical considerations are fundamental to our methodology, with strong safeguards in place to protect participants' privacy, and ensure informed consent throughout the research process.

To conclude our presentation, always remember that the ethics involved in your research is just as important as the research itself. Disregarding ethics is disregarding the society that you plan on contributing your research to.

In conclusion, data collection instruments are incredibly vital, and it is just as important to be highlighted along with the research itself. Without these said instruments, one will not be able to proceed with their topic as a whole, because the absence of data is the absence of meaning. Remember that the quality of your conclusions is only as strong as the quality of your data instruments.

WW#04: Data Instruments

I. Introduction - **Gab**

Data instruments are tools used to collect, measure, and analyze data related to research interests. Commonly used on a population to assess collected information, data instruments are usually determined by the researchers, and it is influenced by the study methodology. Our topic: **An Investigation into the Prevalence and Aggravating Factors of Atopic Dermatitis in the National Capital Region (NCR) Through Predictive Modeling** uses the following data instruments, as presented in the following tables.

II. Slide 2 - **Alexie**

Our research utilizes Secondary Data, such as medical records, for our first Data Instrument. This tool uses hospital data resources to support high-quality, informed decisions about a patient's care, and with the help of medical data collection tools and analysis, the information may result in a quick and effective evaluation of patient data for future reference. These Secondary data include medical records such as Patients' age and gender, Medical history, Diagnoses, and Test results. Moreover, an example of this data may be records of 150 patients from hospitals across Manila, to be selected through targeted sampling of patients with eczema. Lastly, some ethical issues addressed with this tool are informed consent, privacy, and confidentiality with the patient.

III. Slide 3 - **Rin**

The second data collection instrument that we will be using in our research is the Eczema Area and Severity Index or EASI. The EASI is a tool to assess the severity of AD in its affected patients. The corresponding data is obtained through evaluating the severity of AD manifestations including redness, thickness, scratching, and lichenification in four body regions: the head and neck, trunk, as well as the upper and lower limbs. These data will help in analyzing the causes of AD's onset.

The type of data that will be collected using this instrument is secondary data, specifically medical records. These data will contain records on the redness, thickness, scratching, and lichenification of the four mentioned body regions, as well as the intensity of AD in those areas. These data will be sourced from the medical records of around 150 patients, selected through targeted sampling with the diagnosis of AD as the criteria, from hospitals across Manila. The ethical issues that are affiliated with this data collection instrument and procedures are issues regarding the patients' privacy, as well as data confidentiality.

IV. Slide 4 - **Ada**

Our third data instrument is what's called an Environmental Exposure Ticklist. This tool aids the researchers in measuring the impact of various household and environmental factors that may

aggravate AD. The variants of this data include the Presence of dust, pets, traffic proximity, Air quality, and Use of cleaning products. An example of the source of this tool may come from Household surveys collected from said 150 patients through convenience sampling, and some ethical issues addressed with this tool are Personal Information, Informed Consent, and Data Confidentiality.

V. Conclusion - **Ada**