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# Climate Change, Aging and Disability: Life Experience of Being Old, Disabled and Affected by Climate-Induced Disasters in China

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**Abstract:** Climate change is predicted to disproportionately affect the world's poorest and most vulnerable groups of people like persons with disability (PWDs). While much research on climate change is ongoing, it's yet to devote considerable attention to study its impact on PWDs. To this matter, China and Uganda remain susceptible to climate-induced disasters since they are located in the most affected regions. Also, the pace of the aging population in both countries is substantially increasing. Bearing this in mind, therefore, the project is set to explore what could be the risk of climate-induced disasters on the elderly PWDs in China and Uganda.

**Keywords:** Climate Change; Aging; Disability

**Knowledge Focus:** Advocacy/Activism

**Topic:** Health & Wellbeing

Climate change is predicted to disproportionately affect the world's poorest and most vulnerable groups of people who among others include persons with disability (PWDs). While much research on climate change is ongoing, it is yet to considerably study its impact on the vulnerable groups. Moreover, it is noted that climate change-induced extreme events will pose a disproportionate effect on the developing countries – especially in Asia and Africa. One way to investigate how climate change affects the vulnerable groups is to establish a nexus between climate change, disability and aging. To this matter, China and Uganda remain susceptible to climate-induced disasters since they are located in the most affected regions. Also, the pace of ageing population in both countries is substantially increasing compared to other countries. More so, China has a considerably large number of PWDs – estimated at 82 million whereas in Uganda it is reported at 4.4 million people. Bearing this in mind, therefore, the project is set to explore what could be the risk of climate-induced disasters on the elderly PWDs in China and Uganda upon which appropriate treatment and rehabilitation actions will be recommended. The project will be implemented in four (4) phases to achieve the following:

- A. To establish relationship between climate change, aging and disability in China and Uganda through a systematic literature review;

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- B. To determine the risk of climate change on +65 years old PWDs living in the climate-induced disaster provinces or regions in China and Uganda based on a Delphi technique;
  - C. To examine the nature of healthcare (diagnosis, preventive, treatment and rehabilitative) rendered to +65 years old PWDs affected by climate-induced disasters in China and Uganda by employing both qualitative and quantitative methods;
  - D. To identify the coping mechanisms adopted by +65 years old PWDs living in the climate-induced disaster settings in China and Uganda by using a phenomenology approach.

### **Project Setting**

At least three regions/provinces in both China and Uganda which have been recently affected by flash floods, landslides, typhoons and tropical storms or droughts shall be considered.

### **Eligibility of Respondents or Studies**

Inclusion criteria shall be applied to select eligible studies and participants in the project (both men and women) who shall consent to being enrolled in the project according to the four phases.

#### *Project designs*

**Phase I:** A review of literature following the Preferred Reporting Items for Systematic Reviews and Meta-Data Analysis (PRISMA) guidelines will be employed. In accordance with this phase's topic, a search strategy will be determined to search for all relevant articles based on a predefined, inclusion criteria (as noted above) from the electronic databases and journal collections (e.g. the Google scholar, Medline, PubMed, Science Direct, OVID, John Wiley, Web Science and Springer etc.). The Google search engine will also be searched to retrieve any other potentially relevant articles. All the articles' main references (e.g. title, abstract and keywords) that will be reviewed and considered relevant to the topic; shall be carefully read, retrieved and stored using latest EndNote software. Their details shall be sub-grouped for full text review and analysis.

**Phase II:** A matrix shall be developed based on the findings in phase I about climate-sensitive health conditions, aging and disability particularly in the selected provinces or regions. Using a Delphi panel approach, at least three (3) series of consultations with the experts and key stakeholders across agencies, institutions and organizations which respond to climate change, aging and disability in China and Uganda shall be undertaken either through face-to-face interfaces or a survey questionnaire administered via online (an email). This will seek the views of Delphi participants about the key risks which are posed by climate change to +65 years old PWDs in China and Uganda especially those living in the climate-induced disaster settings.

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Participants will rate the identified risk factors in the matrix based on a Likert type scale (e.g. insignificant, moderate and catastrophic). They will also be required to state the rationale behind their rating. This will be intended to derive the most important climate risk factors affecting the +65 years old PWDs living in the selected climate-induced disaster provinces or regions, followed by risk quantification and mapping.

**Phase III:** This phase shall be descriptive in nature – combining both qualitative and quantitative approaches for data collection. A validated survey questionnaire presented in both Chinese and Ugandan dialects shall be used to investigate a wide range of healthcare matters (e.g. medical and rehabilitation services) rendered to +65 years old PWDs in the selected provinces or regions. The respondents in this phase shall either choose to complete the survey by themselves or have a face-to-face questionnaire interview with the research assistants who shall administer the interview. The respondents will be able to identify and indicate their existing and unmet diagnosis, preventive, treatment and rehabilitation services as far as their elderly and disability situation in climatic-induced disasters is concerned.

**Phase IV:** A phenomenology approach with the aid of semi-structured interviews will be employed to gather and gain in-depth experiences from a sample of purposively identified +65 years old PWDs in the project settings. The approach is considered to help to create a certain level of trust between the researcher(s) and participants via personal face-to-face contact. Also, it has been chosen so as to help not only in identifying and to understanding the psychological essences, patterns and structures of experience but also to thematize the phenomenon of consciousness in its most comprehensive sense based on the real, live coping experiences of +65 years old PWDs in the provinces/ regions that shall be identified as having been affected by the climate-induced disasters.

The Colaizzi's seven-step method (reading participant's narratives; extracting significant statements; formulating meanings; validation; integrating the research themes; reducing themes and returning to participants) shall be used to analyze the data.

#### *Ethical approvals*

The project shall be subjected to ethical approvals from all relevant authorities in China and Uganda and the principles of the Helsinki Declaration.

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## Authors



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*Image Description: Photo of Joseph Kimuli Balikuddembe*