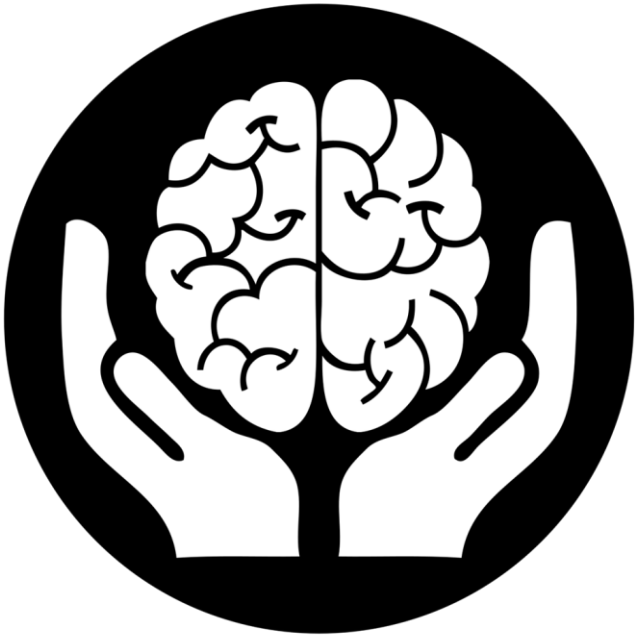
Scoping review of ethics regulations for research on cognitively impaired adults in Sub-Saharan Africa



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Background

- Mental health and depressive disorders as well as Alzheimer's disease and other dementias are rising in Sub-Saharan Africa.
- Data from the burden of diseases estimates from the Institute for Health Metrics and Evaluation (IHME), show that the DALYs lost due to mental health disorders increased from 11.7million in 2010 to 15.1million in 2019 in Sub-Saharan Africa[1]
- Persons living with Dementia in Sub-Saharan Africa are projected to increase from 2.1m in 2015 to 7.6m in 2050[2].

Problem statement and study aim

Problem Statement

- Engagement of Cognitively Impaired Adults in research has specific ethical implications because of concerns about:
    - Capacity to consent
    - Individual voluntary consent
    - Proxy/surrogate consent
- Establishing specific guidelines for ethical conduct of research among cognitively impaired adults is important, especially in African countries due to their socio-cultural peculiarities.
- However, the availability and scope of these guidelines in Africa is not well known.

Aim

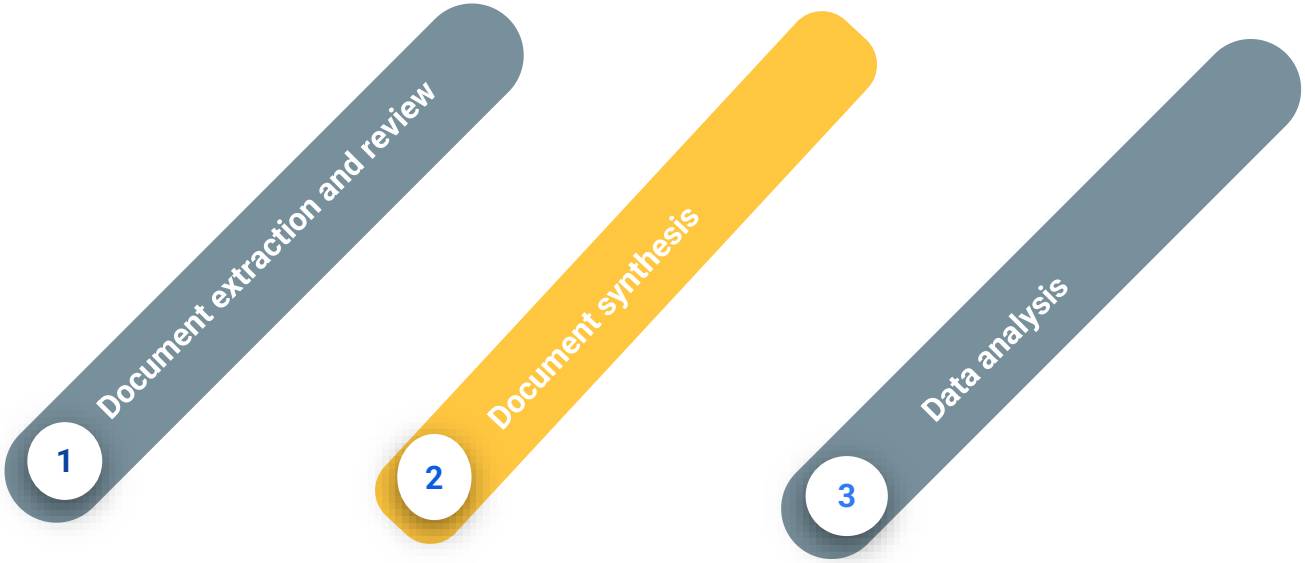
To determine the availability and scope of guidelines for ethical conduct of research among cognitively impaired adults in Africa.

Method: Source Document Description

International Compilation of Human Research Standards, 2019 edition

- Compiled by the United States Office of Human Research Protections
- First published in 2005
- Lists over 1,000 laws, regulations, and guidelines from **131** countries
- Also includes standards from international and regional organizations.
- Contributions directly from National Regulatory Authorities, National Research Ethics Committees and other relevant experts in included countries

Method: Review, Synthesis and Analysis



Classification of instruments

Controlling Instrument

stipulate what should be fulfilled before including persons with cognitive impairment in studies – actions from other than the participant.

Empowering Instrument

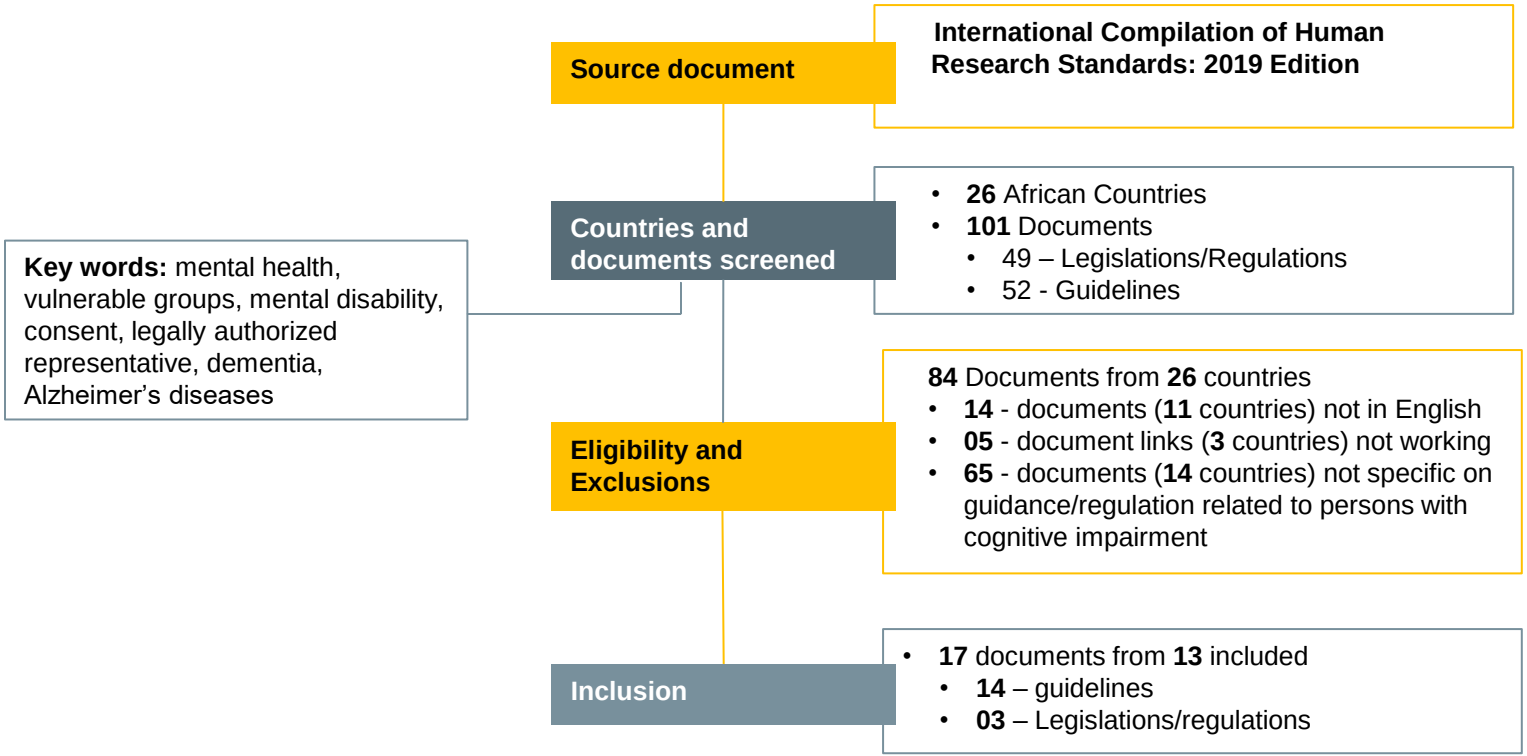
recognize and seek to uphold the rights of the research participant to self-determination to the extent possible

Study sample

26 African countries included in source document

13 African countries with provisions for research on cognitively impaired adults in the documents

Method: Review Schema



Results: Type and Number of Documents Reviewed by Country

Country	Documents Reviewed		Documents Included	
	Legislation/Regulation	Guideline	Legislation/Regulation	Guideline
Algeria	2	-	-	-
Benin	1	-	-	-
Botswana	2	4	-	1
Burkina Faso	2		-	-
Cameroon	2	1	-	-
Congo, Democratic Republic of	-	1	-	-
Côte-d'Ivoire	1	-	-	-
Ethiopia	1	1	-	1
Gambia	-	1	-	-
Ghana	2	4	-	1
Guinea	2	-	-	-
Kenya	3	3	-	2
Liberia	-	3	-	1
Madagascar	1	-	-	-
Malawi	3	9	-	1
Mali	1	-	-	-
Mozambique	-	1	-	-
Nigeria	-	3	-	1
Rwanda	-	1	-	-
Senegal	1	-	-	-
Sierra Leone	-	5	-	2
South Africa	10	5	1	3
Tanzania	4	6	-	1
Uganda	2	1	-	-
Zambia	2	1	1	-
Zimbabwe	7	2	1	-

Results: protections and their nature in documents reviewed

Controlling Instrument

stipulate what should be fulfilled before including persons with cognitive impairment in studies – actions from other than the participant.

- Documents from all 13 countries, except Uganda mostly contained provisions that were of the ‘controlling’ type
  - Stringent stipulations on how or when a cognitively impaired person can be included in research
  - Unclear requirement for proxy/surrogate consent by a Legally Authorized Representative
- All countries’ documents, except those from Botswana, Ghana and Zimbabwe, provided conditions under which participation of persons with cognitive impairment is permissible.

  “*The Authority shall not consent to health research…where …- (b) the health research or experimentation is not likely to significantly improve scientific understanding of the special group’s condition, disease or disorder to such an extent as shall result in significant benefit to their health or well being [The National Health Research Act, 2013, Zambia*].

Results: protections and their nature in documents reviewed

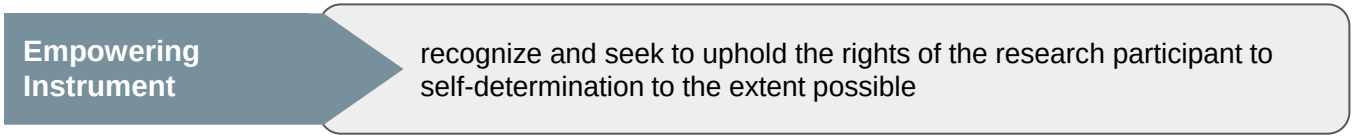
Controlling Instrument

stipulate what should be fulfilled before including persons with cognitive impairment in studies – actions from other than the participant.

- All documents, except those of Ethiopia, Uganda and Zambia, stipulated that the consent of a legally authorized representative (LAR)/guardian is required where a participant is deemed to lack the cognitive capacity to consent on his/her own

- Only 31% (n=4) countries with stipulations of interest provided guidance on the qualifications of LAR:
  - Kenya (other appropriate representatives),
  - Malawi (parents or legal guardians),
  - Sierra Leone (responsible family member),
  - South Africa (legally appropriate person: spouse or partner; parent; grandparent; adult child; brother or sister, according to the National Health Act 2002).

Results: protections and their nature in documents reviewed



- Empowering instruments/provisions in the documents reviewed include provisions that required:
  - research participants to pay attention to consent or assent by the research participant where possible, (All countries except: Ethiopia, Ghana, Kenya, Uganda and Zimbabwe)
  - recognition of advance consent or advance directive as a means of respecting the participant's wishes in addition to proxy consent (Liberia and South Africa only)
  - respecting refusal by research participants (Sierra Leone and South Africa only)

Discussion and conclusion

- Of 26 African countries in source document, only 13 had documents with stipulations guiding ethical research involving persons with cognitive impairment
- Documents from all 13 countries, except Uganda mostly contained provisions that were of the ‘controlling’ type
  - Care needs to be taken not to arbitrarily assign consent proxies/surrogates
  - Limited number of countries with documents explaining who constitutes LAR shows the need for further guidance and application of LAR
  - How ‘communal’ decision making (and its paternalistic) can affect the enduring legacy of LARs
  - Challenge of enduring relevance of capacity assessments in longitudinal studies and the need for capacity re-assessments – time and resource implications for researchers

Discussion and conclusion

- Only 8 countries had provisions of the ‘empowerment’ type: advanced consent/directive, assent/consent, respect for dissent
    - Enduring nature of advance directives in the face of changing preferences, change in identity, increase in symptoms severity, uncertainty and complexity of future research
    - How ‘communal’ decision making (and its paternalistic) can affect the ensuring legacy of advance directives
    - Challenge in determining and respecting ‘true’ dissent as against changes in character that are symptomatic of the condition

- The limited number of countries with regulations on addressing research with cognitively impaired persons is likely a reflection of the limited number of research studies them.
- Research into existing guidelines to provide information that could guide research in those countries even as they develop their guidelines in the future is important

Discussion and conclusion

- The following are important to better support ethical research involving persons with cognitive impairment:
  - instruments to support determination who can serve as LAR
  - Guidance on what decisions LARs can support in making and how
  - Guidance on joint and supportive decision making between LARs and participants with cognitive impairment

- Exploring in-depth legal provisions and social implications for advocating/adoption of advance directives in African countries
  - Practical applications of the LAR provisions
  - respect for the dissent of the cognitively impaired research participant.

- Future research to identify the optimal balance in human participant protection:
  - ‘supporting decision making’ (CRPD) versus ‘making decisions’ for them (most current guidelines

Limitations

- Only documents written in English were included. It is likely that documents from the eleven countries whose documents were not written in English contain provisions guiding research with cognitively impaired persons
- No additional documents beyond those referred to in the source document were reviewed. With only 26 out of 54 African countries represented in the source document, it is likely that we are missing relevant guidance from the remaining countries

Acknowledgement

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