

## BACKGROUND

- Epilepsy is a common and serious neurological disorder in sub-Saharan Africa (SSA). There exists a significant “treatment gap” as diagnosis and therapeutic access is poor, possibly due to relative scarcity of neurologists<sup>1,2</sup>.
- Psychological distress, particularly depression, is highly comorbid with epilepsy. 1/3 receive an additional diagnosis of ≥ 1 mental illnesses in their lifetime. Similarly, deficiencies exist in psychiatric care of people with epilepsy<sup>3</sup>.
- Epilepsy and mental illness hold extensive histories shrouded in misbeliefs, superstition and ignorance. Thus, both conditions are highly stigmatised<sup>4,5</sup>.
- The result of stigma is poor access to healthcare, discrimination, and decreased adherence to treatment. Ultimately this leads to poor health outcomes and negative impacts on quality of life (QoL)<sup>6</sup>. Increasingly, improving quality of life is being recognised as an essential goal of epilepsy treatment<sup>7,8</sup>.

## AIMS

- The perspectives of healthcare providers to mental health in people with epilepsy in SSA has not been explored in any meaningful manner.
- In this study, we sought to understand healthcare providers attitudes toward epilepsy and comorbid mental illness, as well as the management practices and barriers to adequate holistic care in SSA.
- In addition, we explored what healthcare providers perceive as barriers to adequate psychiatric care, the main objective being to draw international attention to these identified gaps in the treatment of mental illness in people with epilepsy in SSA.

## METHODS

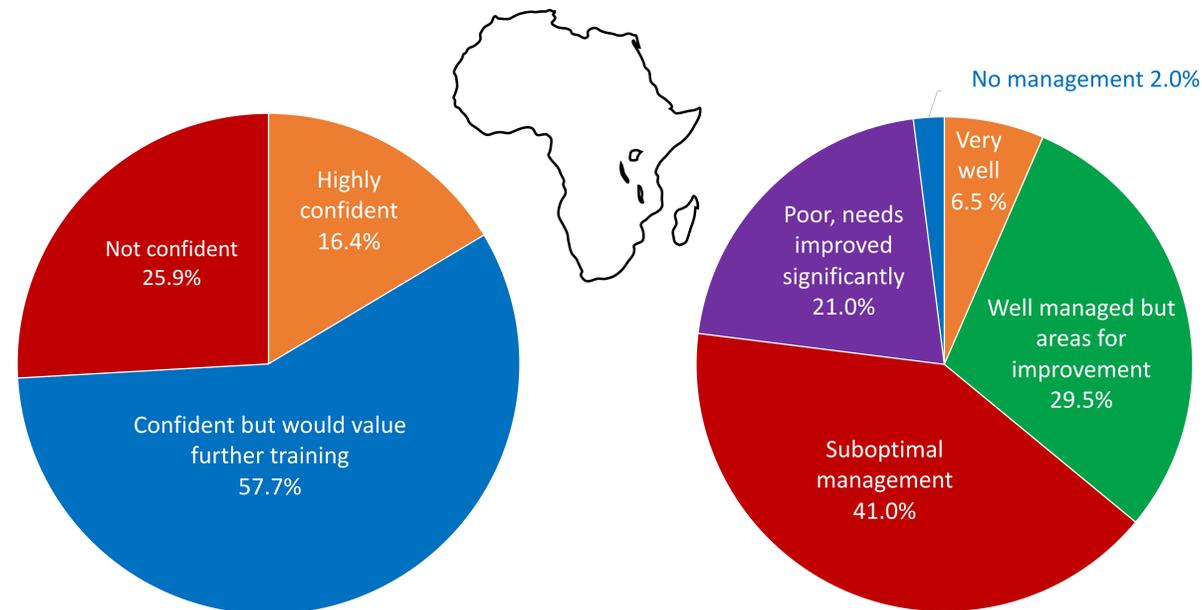
- A cross-sectional survey using the STROBE guidance was conducted among healthcare providers who were attending a virtual epilepsy training programme provided by Pretola Global Health & Consulting Ltd.
- A bespoke structured questionnaire was designed by a group of epilepsy and mental health experts, containing 11 questions that aimed to collect relevant professional demographic information and individual specialism, and to ascertain attitudes about epilepsy and comorbid mental illness in SSA.
- The survey was undertaken online using the google platform and set to approximately 5-10 minutes to complete, allowing optimum time to balance response engagement and gain the minimum required information to draw meaningful conclusions.
- The survey was available online from 19th May to 2nd June. It was circulated using an exponential and non-discriminatory snowballing technique. This should be considered non-probability sampling, as it does not include complete coverage of services in the field and/or any particular sector.
- Analysis of data was performed using Microsoft Excel. Descriptive statistical analyses were carried out.

Chloe Gilkinson<sup>1</sup>, Tolu Olaniyan<sup>2</sup>, Rohit Shankar<sup>3</sup>, Michael Kinney<sup>1</sup>

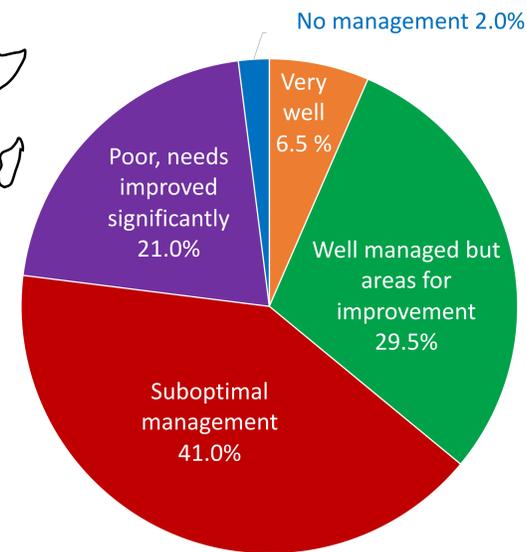
<sup>1</sup>Queen's University Belfast, School of Medicine, Dentistry and Biomedical Sciences, Belfast, UK.

<sup>2</sup>Pretola Global Health Consulting Limited, ILAE UK, Isle Of Wight, UK.

<sup>3</sup>University of Plymouth, Peninsula School of Medicine, Plymouth, UK.



**Figure 1.** Respondent confidence that they have sufficient knowledge to be able to recognise, diagnose and / or refer mental illness in patients with epilepsy.



**Figure 2.** How well respondents feel mental illness is managed in patients with epilepsy within their local healthcare settings.

## RESULTS

### Sample demographics:

- 203 healthcare professionals from SSA responded (response rate difficult to ascertain due to methodology).
- 3 countries, The Gambia (n=58), Nigeria (n=45) and Cameroon (n=27), made up 64%.
- The sample consisted predominantly of nurses (n=72) and doctors (n=95) who are mainly based in an urban setting and have been in their role < 5 years.

### Addressing understanding of epilepsy and comorbid psychiatric conditions:

- Most (80.0%) respondents recognised a bi-directional relationship between mental illness and epilepsy.

### Identifying routine practice regarding mental health education and screening in epilepsy populations:

- Screening for mental illness (14.4%) or provision of education on the risk of developing mental illness (12.4%) in people newly diagnosed with epilepsy is infrequently performed.
- Similarly, screening at check-ups or review clinics is rarely-never performed by approximately ½ (49.3%).

### Perspectives of current mental health management in epilepsy populations:

- Only 1 in 7 (16.4%) respondents had confidence in their clinical competence in this aspect of care provision.
- The majority would value further training (74.1%) and improvements to be made in current management practices within their local healthcare settings (93.5%).

### Available treatment options for mental illnesses in patients with epilepsy:

- The mainstay of treatment for comorbid mental illness is pharmacological (90.5%). Local community support (5.5%), patient referral (3.0%) or religious interventions (1.0%) are the other management options.

### The major themes identified as challenges to the management of mental health within this population were:

- A lack of confidence in how to assess a patient for mental illness (n=104).
- Lack of awareness of ↑ risk of mental illness in people with epilepsy (n=91).
- Limited access to psychological services (n=63).
- Patient barriers such as traditional beliefs that may result in discrimination of patients diagnosed with mental illness (n=62).

## DISCUSSION

- It is well recognised that efforts should be made to routinely assess for mental health disorders in epilepsy populations<sup>9</sup>. Failure to screen for psychiatric illness is suboptimal epilepsy care<sup>10</sup>. With the lack of assessments for mental illness, a substantial proportion of cases would go undetected, suggesting a possible gap relating to mental illness care provision in epilepsy populations within SSA.
- Whilst understanding the neurological aspects of epilepsy is essential, healthcare providers should also be aware of the high rates of psychopathology, the unmet mental health needs and the significant lack of professional training regarding comorbid mental illness in populations with epilepsy in SSA.
- Psychiatric comorbidities in people with epilepsy are associated with poorer health outcomes and reduced QoL<sup>11</sup>. There is a pressing need to re-invest in training to improve health, social, QoL and economic outcomes.

## FUTURE DIRECTIONS

- The COVID-19 pandemic has showcased the global potential for technology to be a medium for education/training transfer. Our practical recommendation is to provide accessible training to practicing healthcare providers in different SSA countries by way of a validated, online education programme detailing optimal multidisciplinary care of comorbid mental illness in epilepsy populations.
- Local needs must be considered in the development of training and, fundamentally, people with epilepsy should also be involved. Therefore, we hope that our study will catalyse further assessment of country-specific training and treatment disparities in greater depth to inform more refined education programme development.

## CONCLUSIONS

Our study provides novel data on healthcare provider perspectives of psychiatric illness management in people with epilepsy in SSA. It highlights the need for improving routine assessment and treatment of mental health disorders in this population.

Healthcare providers responded that they require further training relating to the recognition and management of psychiatric comorbidities in people with epilepsy. During the pandemic, the development of bespoke virtual educational initiatives to tackle the identified gaps in management are urgently needed.

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