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Malawi Educators' Assessment of Student Mental Health Outcomes

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Abstract

Purpose: This paper presents teacher perceptions of life improvements achieved by students following the application of a school based curriculum mental health literacy resource in Malawi.

Methods: Life improvement metrics were generated based on educators' self-reported questionnaires obtained as part of the midterm evaluation of a larger youth Depression intervention project. These metrics include a stigma reduction variable, an improved behaviour at school variable, and a mental health related help-seeking variable.

Results: Most teachers (81.3 %) reported a positive change in their students' attitudes toward mental illness following exposure to the mental health literacy curriculum resource. Ninety-six percent of teachers reported improvement in student behaviours at school, and all teachers reported one or more mental health care related help seeking behaviours among students.

Research Limitations: The sample size was relatively small and recruited from only two districts in Malawi. This is a pilot field implementation and will need to be expanded with larger numbers into a greater number of school districts in order to improve the robustness of the findings.

Originality/value: To our knowledge this is the first study to examine teachers' perspectives on student life improvement metrics related to mental health literacy in sub-Saharan Africa. This method of measuring the impact of school-based interventions on students in African schools may be a useful and culturally meaningful approach to youth mental health assessment.

Keywords: Mental health; Mental illness; Anowledge; Attitudes; Stigma; Help-seeking, Help-seeking efficacy; Mental health literacy; Life improvement metrics

Introduction

Depressive disorders account for 4.46% of all disability adjusted life years (DALYs) worldwide [1]. In Africa, these disorders contribute 1.2% to the overall burden of disease [1]. The lifetime prevalence of Depression in Sub-Saharan African is reported to be between 3.1 and 9.7% [2] and the onset of Depression frequently occurs during adolescence (prior to age 25), where it is linked to numerous adverse personal, social, vocational and academic outcomes, as well as increased early mortality and higher risk for suicide [3-8].

Depression in Malawi is common, with rates ranging from about 20 to 30 percent in clinical populations [9,10]. In young people rates vary between 10 and 20 percent [11–13]. While rates for Tanzania are not available they are not expected to significantly differ from those in Malawi as studies from Nigeria and Kenya, other similarly low income Sub-Saharan African countries, have reported in-school youth depression rates as ranging between 21 and 26 percent respectively [9,10,14-16].

Effective treatments for young people with Depression are known but are largely unavailable to young people in Sub-Saharan Africa. Reasons for the inaccessibility of adolescent mental health services include: lack of training of health providers in diagnosis and treatment of Depression; lack of public awareness about Depression; high levels of stigma and low levels of mental health literacy (MHL) in both young people and teachers; a lack of available mental health treatments such as cognitive behavioural therapy and appropriate medications [16-18]. Since MHL is foundational as a method for addressing Depression through mental health promotion, prevention and treatment applications [19], and given that many young people attend school, schools provide an unparalleled opportunity to enhance the MHL of students and teachers.

The understanding of MHL has expanded in recent years from its original definition of "knowledge and beliefs about mental disorders which aid their recognition, management and prevention" [20] to a more comprehensive framework, grounded in the World Health Organization [21] approach to health literacy, to encompass: "1) enhancing capacity to obtain and maintain good mental health; 2) enhancing understanding of mental disorders and their treatments; 3) decreasing stigma related to mental illness; 4) enhancing help-seeking efficacy" [22-24].

The importance and challenge of addressing MHL in young people globally is well-documented [2,25-29]. A recent systematic review of community MHL in Sub-Saharan Africa reported that the predominant perspective of the cause of mental illness is that it is the result of ultra-human or supernatural forces [30]. Several studies note that traditional care providers are preferred over "orthodox" clinics, often due to cultural influences and a lack of awareness of psychiatric services. Strategies to improve public knowledge and attitudes about mental health and illness, and partnerships with traditional care providers to enhance identification and referral, have been recommended both by scholars and practitioners. Further, the importance of adopting "culturally nuanced qualitative approaches to the assessment of mental health literacy" as a means of evaluation of interventions was noted [30]. Informed by these considerations, the project team worked with local experts to develop a model for improving MHL for young people and teachers in Malawi. This evaluation collected and analyzed teachers' perceptions of life improvement metrics following the initial application of this model in two districts of Malawi.

In the resource-constrained Republic of Malawi [31,32], there historically have been very limited mental health services targeted towards adolescents and no formal programs addressing school based MHL. Poor understanding of mental health and mental illness persists throughout all segments of society [17]. To help improve MHL in young people and educators and to enhance the capacity of primary care providers to give mental health care for youth, an innovative and novel program called 'An integrated approach to addressing the challenge of Depression among the youth in Malawi and Tanzania' was developed by a Canadian team of experts in mental health, education and radio-based communication. In collaboration with local mental health experts, educators and broadcasters, the team developed training resources, a training program and a communication strategy to enhance MHL and begin to improve the provision of mental health care, specifically Depression, for adolescents.

The school component of the program applies a culturally and contextually modified MHL curriculum (the Guide) which has undergone substantial field testing and research in Canada, demonstrating significant and substantial positive impacts in both student and teacher MHL [22,33-35]. The Guide is made up of a teachers' self-evaluation test, a teachers' mental health knowledge self-study guide and six classroom ready modules, including: the stigma of mental illness; understanding mental health and wellness; information about specific mental illnesses; experiences of mental illness; seeking help and finding support; and the importance of positive mental health. Both hard copy and online versions are readily and freely available through TeenMentalHealth.org.

This curriculum resource was modified for use in Malawi by educators, Ministry of Education consultants and counselors affiliated with the Guidance, Counseling and Youth Development Centre for Africa (GCYDCA). The revised version of the Guide (AGMv) received final review and sign-off from both Dr. Dixie Maluwa Banda and Dr. Kenneth Hamwaka, then Executive Director of the GCYDCA. This version was reviewed by an expert mental health team consisting of psychiatrists, psychologists and Ministry officials and approved for use in Tanzania within the context of this project. It was enriched with an educational module that is based on a Canadian College of Family Physicians certified Canadian Adolescent Depression training program for continuing medical education [36] which has been supported by the Pan American Health Organization [37] to create the African Guide Malawi version (AGMv). Dr Dixie Maluwa Banda, Professor of Education and Psychology at the University of Malawi and former consultant to the Ministry of Education of Malawi, and Dr Kenneth Hamwaka, Executive Director of the GCYDCA, independently reviewed and signed off on the cultural adaptation of the AGMv.

One certified counsellor, one psychiatrist, and four GCYDCA staff members with some background in mental health were trained on the use of the AGMv. Following a teach-the teacher technique, the trainers taught teachers and youth club leaders in schools and out-of-school youth clubs involved in the program how to apply the AGMv to teach their students about mental health and mental illness. Results previously reported have demonstrated a significant and substantial positive impact of this training on teachers MHL [38] and project evaluation of the effect of this approach on the MHL of both teachers and students is ongoing. This paper examines teacher reports of the impact of the school MHL program on students who received classroom instruction from teachers trained to deliver the AGMv resource.

Methods

As part of an ongoing project evaluation of the outcomes of the MHL classroom-based intervention on students, we obtained teacher self-reports of their observed impact of the AGMv implementation according to a number of life improvement metrics for students which focus on behaviour at school, mental health care related help-seeking, and social and emotional wellbeing.

We developed an educators' questionnaire, containing both quantitative and qualitative components, which was completed by a sample of teachers who received training on the delivery of the AGMv and applied it in their classroom instruction (Appendix One). The training program was delivered by Master Trainers to teachers selected by District Educational Authorities. Teachers attended a one week training session. Evaluation of the impact of the training showed significant improvements in teachers mental health knowledge and decreases in stigma [38]. The questionnaires were administered in person by members of the project staff in a face-to-face interview where the teacher respondents' answers were recorded on paper. The student life improvement metrics were generated based on these educators' self-reports, and included a stigma reduction variable, improved behaviour at school variable, and a mental health care related help-seeking variable.

In an attempt to reduce qualitative responder bias in the responses (providing investigator desirable written answers to open ended questions), two evaluators (one involved in the development and delivery of the training program and one independent of the program) separately examined all the written responses to open-ended questions to evaluate: a) whether or not the comment was relevant to student mental health, and b) whether or not the comment seemed reasonable and likely to be credible. Any comments that were not scored the same by both reviewers were discussed to reach a consensus. For any comments for which consensus could not be reached (n=3) a third evaluator (clinical psychologist), independent of the project and blind to which reviewer made which determination, provided the final decision.

The mental health care seeking metric was determined from the quantitative components of the teacher's questionnaire. The raw data was converted into percentages. Only those items whose response percentages were greater than 50% were included.

Results

Thirty-two teachers' (11 female; 21 male) surveys were available for analysis. Educators were predominantly from Mchinji district (71.9%) and Lilongwe district (18.8%). The teaching district for the remaining participants (9.4%) was uncertain. Respondents' ages ranged from 25-53 years old (M=40.8, SD=7.4) with one participant's age not reported. Grade levels taught ranged from Forms 1-4 and Standards 6-8, comprising upper primary level and secondary level education.

Stigma Metric

In response to the question that was probing for change in student attitudes, most teachers (81.3%) reported a positive change in their students' attitudes toward mental illness after classroom exposure to the AGMv. Response examples included:

- "If students have a problem they know what to do and where to go".
- "Learners now feel like they should act and not ignore people they meet who might have a mental illness".
- "Learners were able to express their problems to others".
- "One mentally ill person visits the school, at first students used to stone him but now they are very friendly to him."
- "One student resisted others who were teasing. Student helped the person who was being bullied by teaching the bullies about mental health".
- "One student was fond of just keeping quiet in class but after the lesson, he came out and disclosed to the teacher the problem he was facing".
- "Relationships to clubs: mental health club has much more membership now".
- "Some learners who suffer did not know that it was an illness. Lessons can now be adjusted to assist them (e.g. minimize noise in class)".
- "Students approached teachers about changes such as stopping smoking and drinking beer".
- "Students were able to explain how Depression is caused and how to handle different situations that can lead to suicide".
- "The students are now open to talk about their mental illness experiences".
- "They have changed how they treat the mentally ill. E.g. A student in Std. 8 who is mentally ill, now the students take good care of them."

Behaviour at School Metric

In response to the question designed to probe for changes in student behaviours at school, most teachers (96.9%) answered that yes, they had noticed specific changes in at school behaviours of their students after they taught their lesson(s). Examples provided by the teachers included:

- "If someone has a problem others can take the students to the teacher".
- "One student was depressed because she had a baby and the other students could not just accept her, after the lessons the other students accepted her and she started concentrating in class."
- "One student, very quiet, was asked about having problems at home. She was counselled and opened up about her issues. She improved in class and interactions with fellow students".
- "Some boys were drinking & smoking. They are doing this less now because it can affect their brain".
- "Students are now able to air out their problems to the mental health club matron unlike before".
- "The students now behave well towards their friend who is mentally ill".
- "They now have a spirit of helping out their friends who are depressed or stressed out". -"When they have a problem they can easily share their thoughts and seek assistance".

Mental Health Care Related Help-Seeking Metric

In terms of students' mental health care related help-seeking, all educators sampled reported they had a student approach them with a concern about their own mental health and/or that of a friend, and/or the educator advised someone to seek help for a mental health concern, and/or the educator sought help themselves. Over two thirds (68.8%) of educators who participated in the assessment had students seeking assistance come to them with concerns about their own mental health following implementation of the AGMv, while half (50.0%) of the educators had students come to them with concerns about another student's mental health following classroom delivery of the AGMv. Many educators sampled (62.5%) personally sought mental health care related help based on what they learned through the training they received and their subsequent implementation of the AGMv and 93.8% encouraged someone else to seek mental healthcare help.

Teacher's self-reports on their own mental health care related help-seeking

Many educators sampled (62.5%) personally sought mental health care related help based on what they learned through the training they received and their subsequent implementation of the AGMv and 93.8% encouraged someone else to seek mental healthcare help.

Discussion

This paper describes teachers' self-reports of positive life improvements (stigma, behaviour, mental health care related help-seeking) noted in their students, which they linked to the implementation of a classroom based MHL intervention (the AGMv) in the Malawian districts of Mchinji and Lilongwe. To our knowledge this is the first such study of teacher reports on life improvement related to the delivery of a school based MHL program in this population.

Obtaining student behavioral outcomes data from teachers is an approach that is very applicable to the African context. As student numbers within schools are relatively small, teachers generally know each student fairly well. Furthermore, teachers often supervise school clubs that students attend. In this case, the participating teachers supervised school mental health radio listening clubs over the entire period of the program duration (the entire school year). In addition, due in part to strict academic and registration requirements for school attendance, both teachers and Headmasters keep record of student behaviors and academic accomplishments. It is not unusual for students who exhibit behavioral problems to be asked to leave school. Thus, teachers are in a unique position to provide feedback on student behaviors, both at the individual and group levels.

Overall, student life improvements related to mental health as measured by teacher reports were substantial. Over 80% of teachers

sampled described a positive change in their students' attitudes toward mental illness after their classroom MHL exposure. Almost all teachers (96.9%) also described specific changes in more positive mental health related school based behaviours of their students after they were exposed to the MHL curriculum resource. Examples of enhanced openness, acceptance and positive interactions were provided for both of these measures. All educators included in this evaluation also reported having observed improvement in mental health care related help-seeking behaviour in their students and/or themselves.

In the broader context of health literacy, the "cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health" [39], these teacher reported life improvements in students illustrate the potential impact of empowering young people by addressing MHL through a school-based approach. Our findings align with Kwan, Frankish and Rootman's report of the association between health literacy and improved quality of life [40]. These increases in positive attitudes towards mental illness, improvement in behaviour, and more specifically mental health care related help-seeking behaviours, exemplify the positive effects of increased health literacy pertaining to mental health [20,24,41-43].

The findings of this study are limited by the sample size and the self-reported nature of the data. However, the culturally-embedded method of having teachers report on their impressions of student improvements in attitudes, behaviour and help-seeking may serve as a culturally relevant approach to assessing the impact of MHL interventions in young people in Sub-Saharan Africa, an approach that could be incorporated into other measurements of health impacts as noted by Atilola [30]. As the number of teachers trained in these districts increases, the sample size will continue to grow and further evaluation of this issue can then be conducted with larger samples.

The life improvement metrics in this study extend beyond usual measures of MHL applied in other research [22,35,38] and provide an additional and wider ranging assessment of the impact of a school based MHL intervention. The teacher reported improvements in students' at-school behaviour and mental health care related help-seeking behaviour suggests that the mental health curriculum resource (AGMv) embedded and applied in schools may have the potential to lead to wider improvements in students' health outcomes. Albeit based on very preliminary results, the potential for an application that is easily suited to school environments and can be embedded into existing school curriculum with minimal external inputs to enhance a number of life improvement metrics in young people provides an exciting opportunity for achieving widespread improvements in some youth health outcomes. Further study in a number of different populations in this region is needed to better understand this possibility.

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