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EFFECT OF SCHOOL-BASED EDUCATIONAL INTERVENTIONS ON DEPRESSION-RELATED HEALTH-SEEKING BEHAVIOUR AMONG INSCHOOL ADOLESCENTS IN OGUN STATE, NIGERIA.

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ABSTRACT

Introduction: Depression is one of the most common mental health diseases among adolescents; the repercussions are penetrating and are visible later in life.

Purpose: To determine the effectiveness of school-based educational interventions on depression-related health-seeking behaviour among in-school adolescents in Ogun state, Nigeria.

Methodology: A quasi-experimental design comprising of one control group and three experimental groups was conducted. Health Belief Model (HBM) was used for the study. The population of the study was 120 in-school adolescents selected using the multi-stage sampling technique from four (4) selected secondary schools. A validated semi-structured questionnaire was used for data collection. Data collected was coded using IBM[®] SPSS version 23. Data were analyzed using descriptive and inferential statistics at 0.05 level of significance.

Findings: The mean \pm SD ages of the adolescents in the teacher-led, peer-led, teacher-led and peer-led and control groups were 14.43 ± 2.315 years, 14.33 ± 1.605 years, 14.97 ± 1.426 years and 15.43 ± 1.960 years in the teacher-led, peer-led, teacher and peer-led and control groups respectively. Equal number of female and male students were in the teacher-led group but different in other groups 19 (63.3%), 19 (63.3%) and 16 (53.3%). Results established that the students recruited for this study shared similar socio-demographic characteristics. The findings revealed that adolescent's level of depression health-seeking behaviour significantly increased after the intervention. The teacher-led group had greater health-seeking behaviour scores (mean difference=24.27; effect size=16.04, t = 75.123; p = 0.000).

Conclusion and Recommendation: The study established that teacher-led educational intervention had the greatest effect size and change in the level depression health-seeking behaviour among adolescents. This reinforces the opinion that teachers are often able to provide adolescents with key support in which they play the role of mentors in schools.

Contribution to theory, practice and policy: The findings of this study which used the HBM theory support the premise that interventions based on theories are effective in influencing behaviour change in which health educators can utilize. A combination of intervention may also be important in influencing specific changes of adolescents' mental health behaviours. Policy briefs with the study's findings and concise summary should be communicated to the policy makers with follow up to aid updating mental health policies available.

Keywords: Depression, Adolescents, Health-Seeking Behaviour, Health Belief Model.

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INTRODUCTION

Depression by the World Health Organization (WHO) is a mental disorder characterized by a persistently low mood, loss of interest and enjoyment and a decrease in energy all of which lead to increased fatigability and diminished activity (WHO, 2020). The prevalence of mental illness in children and adolescents is between 10 and 20% globally (Mulla & Bawazir, 2020). Depression is one of the most prevalent mental health disorders, affecting an estimated 4.4% of the world's population, and it is the single largest contributor to disability.

More than 80% of this disease burden is seen in low-and middle-income countries (LMICs) with Africa accounting for 16% of all cases of depressive disorders (WHO, 2017; Thomas & Seedat, 2018; Yousif, Wahed & Hassan, 2019). Depression, like other mental illnesses, is frequently ignored in most communities around the world particularly in African societies, and it is a major mental health disease condition that affects people of all ages including adolescents (Dapaah & Amoako, 2019). In Sub-Saharan Africa, population-based studies that have been conducted on depression reported a life time prevalence of 3.1% - 9.7% (Herman et al., 2009; Tomlinson, Grimsrud, Stein, Williams & Myer, 2009; Gureje, Uwakwe, Oladeij, Makanjuola & Esan, 2010). According to researches on depression among adolescents, there is a lack of no appropriate source of depression-related health-seeking (Burns & Rapee, 2017).

Nigeria is a developing country and as such it is so much exposed to situations that can intensify mental health of individuals. It is estimated that less than 10% of people with mental disorders such as depression access medical treatment in a year (Ekwe & Ohuakanwa, 2020). According to research conducted in Nigeria's South-West, school-based interventions aimed at improving and promoting proper health-seeking behaviour among teenagers are urgently needed (Adeosun, 2016).

Health-seeking behaviour (HSB) refers to any activity or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy. It is the way or a form of coping that relies on other people and involves social relationships and interpersonal skills (Latunji & Akinyemi, 2018). It includes tasks that are done to preserve good health, prevent illness, and recover from a bad condition of health. Various authors have utilized a variety of models to explain health-seeking behaviour; however, the Health Belief Model has adequately articulated the succession of steps people take to obtain health care (Uguru et al., 2021).

Depression and poor health-seeking behaviour among adolescents existed and it was associated with a wide range of negative health outcomes such as suicide attempt, completed suicides and early pregnancy (Lewinsohn & Essau, 2018). Globally, the mental health help-seeking behaviour of adolescents is reported to be poor; less than one-third of student's report having sought help from formal sources (Gebreegziabher, Girma & Tesfaye, 2019). Sameed et al., (2016) revealed that health-seeking behaviour towards depression among secondary school students was unfavorable towards mental health professionals which is a matter of concern, considering the burden of depression and rates of suicide among adolescents. However, there is a low rate for health-seeking for mental illness, and psychiatric disorders are treated at a late stage.

Educational programs have been recognized as an effective approach for improving health-seeking behaviour for depression (Naylor et al., 2019). School-based programs to enhance a

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pattern of positive thinking in children and adolescents are effective approaches to improve health-seeking behaviour for depression (Oderinde et al., 2018). Schools have been a popular setting for intervention, because they are a convenient point to access large number of young people (Mulla & Bawazir, 2020). Most studies frequently conducted for depression-related health-seeking made use of mostly university students, with relatively less study in younger populations such as adolescents. There have been several studies focused on depression programs among young people. However, most of these studies do not focus exclusively on adolescents and on the school environment (Stockings et al., 2016).

The Health Belief Model (HBM) was used in the research. It is one of the most commonly used theories in health education and health promotion to explain and predict health-related behaviours (Hochbaum, 1958; Rosenstock 1966; Becker, 1974; Sharma & Romas, 2012). The research investigated the effect of educational interventions on health-seeking behaviour regarding depression among in-school adolescents attending secondary schools in Ogun state, Nigeria. The study hypothesized that there would be no significant difference in the level of health-seeking behavior of in-school adolescents to depression at baseline and after an 8-week follow-up period.

MATERIALS AND METHODS

The study utilized a quasi-experimental research design that included three school-based experimental groups: peer-led, teacher-led, peer-led and teacher-led educational interventions with one control group using the quantitative approach. The experimental groups received a health education program focusing on depression-related health-seeking behaviour, while the control group received a placebo. The intervention lasted six weeks and consisted of three sessions lasting an average of 120 minutes each. Data was gathered before and after the program in both the experimental and control groups at baseline and 8-weeks follow-up.

The study was conducted in four (4) public secondary schools that were selected from four local government area (LGA) in Ogun State which are Remo-North, Ijebu-Ode, Odogbolu and Ijebu-North respectively. Ogun state was created on February 3rd, 1976 that was carved out of the old western state of Nigeria and named after the Ogun River which runs across it from north to south. It is in South-West, Nigeria. With an estimated 2016 population of 7.2 million. Ogun State is made up of six ethnic groups predominated by the Egba, the Ijebu, the Remo, the Egbado, the Awori and the Egun. The target population for this study was in-school adolescents in selected public secondary schools in Ogun State, Nigeria.

An education training manual was used for the intervention. A quantitative approach consisting of close ended questions that covered all aspect of the study was used for this research. The instrument was a semi-structured, participant administered questionnaire that solicited information on socio-demographic characteristics and depression-related health-seeking behaviour among inschool adolescents from selected secondary schools in Ogun State. The same instrument was administered at baseline, immediate post-intervention, and 8-weeks follow-up. Those included were students who reside in Ogun state, Nigeria, fully registered students of the schools as at the period of the intervention, male and female students between the ages of 10-19 years, students who gave their assent willing to participate, parents who gave consent for their children to participate and teachers who are interested and were willing to participate in the study. Those excluded were students who do not reside in Ogun state, Nigeria, students who have not been fully registered in



the school as at the period of the intervention, students below and above the age bracket (10-19 years), students who did not give their assent and were not willing to participate, parents who did not give consent for their children to participate in the study and teachers who were not interested and were not willing to participate in the study.

Systematic sampling technique was used for the selection of in-school adolescents from public secondary schools in Ogun State where every 3rd student was approached and participated in the study. Out of the three senatorial districts in Ogun State, Ogun East was purposively selected using the multistage sampling technique. This is because it is made up of about 50% out of the 20 local government areas (LGAs) in Ogun State. Four LGAs were selected from Ogun East senatorial district by balloting technique and were assigned into four groups. Three schools were randomly selected for the intervention groups and a school was selected for the control group from selected LGAs.

The sample size was derived from the computation using a level of significance of 95% and 80% power. The sample size was derived using prevalence at 50%.

$$N = (Z_{\alpha} + Z_{\beta})^{2} \times P_{0} (1 - P_{0})$$
$$(P_{1} - P_{0})^{2}$$

Where N is the minimum sample size per group

 Z_{α} = Standard normal deviation at 95% confidence interval (1.96)

 Z_{β} = Statistical Power at 80% confidence interval (0.84) (Power to detect changes in the outcome variable and avoid type II error)

 P_0 = prevalence at 50%, P_0 = 0.5

 $P_1 = 80\%$ (desired level of outcome variable)

$$N = \frac{(1.96 + 0.84)^2 \times 0.5 (1 - 0.5)}{(0.8 - 0.5)^2}$$

$$\frac{(2.8)^2 \times 0.5 (0.5)}{(0.8 - 0.5)^2}$$

$$\frac{7.84 \times 0.25}{0.09}$$

$$= 21.78 \approx 22$$

The minimum sample size was 22. Ten percent of the minimum sample size was added to take care of attrition. Therefore, the total number of participants after adding 10% of 22 was = $22 + 2.2 \approx 24 \approx 30$. Based on this computation a total number of 120 participants (30 per group X 4) from the four secondary schools were enrolled for this study (indicating 30 people per group). The Peerled and Teacher-led educational interventions were the independent variables while health-seeking behaviour on depression was the dependent variable.

Validity was determined by conducting a face validity in which the instrument was cross-checked by my supervisor and other experts in the department. Content or Item validity was also conducted

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by ensuring that the items in the instrument were carefully and thoughtfully selected in order to operationalize each of the variables. Construct validity using the conceptual framework (Health Belief Model) as a behaviour change model, was conducted. Reliability was conducted for the instrument used for the study. Cronbach's alpha reliability coefficients for the constructs ranged from 0.72 to 0.82. The response rate was 100%. Data were analyzed using descriptive and inferential statistics at 0.05 level of significance.

Ethical clearance for conducting the study was obtained from the ethical committee of the university – Babcock University Health Research and Ethics Committee (BUHREC); the Ministry of Health Research Ethics Review Committee and Ministry of Education Planning Research and Statistics, Ogun State, Nigeria. Informed consent was obtained from all respondents and their parents/guardian before administering the questionnaires. Confidentiality of every information provided was duly kept discrete and the instrument was administered to participants anonymously without requiring the names of the respondents.

STATISTICAL ANALYSIS

The data obtained from the study was screened by cross checking each item on every questionnaire to ensure that the respondents answered correctly, and in cases where no response was given, this was treated as missing data. However, the data collected was collated, cleaned entered and coded using IBM® statistical Package for Social Sciences (SPSS) version 23. Descriptive (means, standard deviation, standard error) and inferential (ANOVA) statistics was used for the data analysis. A Statistical level of significance for the inferential statistics was set at p<0.05.

RESULTS

Socio-demographic characteristics of the respondents

A total of 120 adolescents from four secondary schools in four local government areas (LGAs) in Ogun State, Nigeria, were recruited for the intervention. At baseline, the mean±SD ages of the adolescents in the experimental and control groups were 14.43±2.315 years, 14.33±1.605 years, 14.97±1.426 years and 15.43±1.960 years. A third of the students in the teacher-led group (10; 33.3%) were in SSS 2. Equal proportion (23.3%) of students in the peer-led group were in JSS 2 and while over half were in SSS 1 in the combination group. The control group however had the highest proportion of students in the SSS 1 class as shown in Table 1.



Table 1: Baseline distribution of socio-demographic characteristics of adolescents in control and intervention groups

	TL	PL	TL&PL	Control	n volue
Variables	N (%)	N (%)	N (%)	N (%)	p-value
Age in years					
10 - 13	10 (33.3)	8 (26.7)	3 (10)	4 (13.3)	0.312^{a}
14 - 16	14 (46.7)	20 (66.7)	23 (78.7)	19 (63.3)	
17 - 19	6 (20)	2 (8.7)	4 (13.3)	7 (23.3)	
Total	30 (100)	30 (100)	30 (100)	30 (100)	
Mean±SD	14.43 ±2.315	14.33 ±1.605	14.97 ±1.426	15.43 ±1.960	
Gender					
Female	15 (50)	19 (63.3)	19 (63.3)	16 (53.3)	0.806^{a}
Male	15 (50)	11 (36.7)	11 (36.7)	14 (47.7)	
Total	30 (100)	30 (100)	30 (100)	30 (100)	
Class					
JSS 1	4 (13.3)	6 (20)	0(0)	5 (16.7)	0.901^{a}
JSS 2	7 (23.3)	7 (23.3)	5 (16.7)	7 (23.3)	
JSS 3	4 (13.3)	5 (16.7)	9 (30.0)	0 (0)	
SSS 1	5 (16.7)	7 (23.3)	16 (53.3)	12 (40.0)	
SSS 2	10 (33.3)	5 (16.7)	0(0)	6 (20)	
Total	30 (100)	30 (100)	30 (100)	30 (100)	

^ap-value obtained by Chi-Square Test

For gender, 15, 19, 19 16 were females while males were 15,11,11,14 in total. The distribution of the students' socio-demographic characteristics within the groups was tested for randomization at baseline. The results showed that there was no statistical disparity between the intervention and control groups, according to the findings. The distribution of the students' age, gender, class and religion had no statistical difference (as shown in Table 1).

The ethnic distribution showed that majority of the adolescents in this study were from the Yoruba ethnic group with a minority from the Igbo, Hausa and other ethnic groups. The marital status of the adolescents' parents was assessed and the results showed that majority of the adolescents were with married parents across the four groups (as shown in Table 2). The results showed that there was no statistical disparity between the intervention and control groups, according to the findings. The distribution of the students' age, gender, class and religion (as shown in Table 1) as well as their parents' marital status (as shown in Table 2) had no statistical difference. This implies that the selection of students was randomized between the four groups. However, the ethnicity of the students showed a statistically difference between the groups. Based on the results, it can be concluded that the students recruited for this study shared similar social and demographic characteristics; their inclusion in the sample was randomized.



Table 2: Baseline distribution of socio-demographic characteristics of adolescents in control and intervention groups.

Variables	TL N (%)	PL N (%)	TL&PL N (%)	Control N (%)	p-value
Ethnic Group					
Yoruba	29 (96.7)	27 (90.0)	27 (90)	16 (53.3)	0.000^{a}
Igbo	1 (3.3)	1 (3.3)	1 (3.3)	6 (20)	
Hausa	0(0)	0 (0)	1 (3.3)	0(0)	
Others	0(0)	2 (6.7)	1 (3.3)	8 (26.7)	
Total	30 (100)	30 (100)	30 (100)	30 (100)	
Parents' Marital Status					
Single	0 (0)	2 (10)	1 (2.2)	27 (00)	0.0268
Married	0 (0)	3 (10)	1 (3.3)	27 (90)	0.926^{a}
Divorced	27 (90)	27 (90)	28 (93.3)	0(0)	
Widowed	1 (3.3)	0(0)	0(0)	2 (6.7)	
	2 (6.7)	0 (0)	1 (3.3)	1 (3.3)	
Total	30 (100)	30 (100)	30 (100)	30 (100)	

^ap-value obtained by Chi-Square Test

Baseline Health-seeking Behaviour of Adolescents on Depression

The distribution of the adolescents' health-seeking behaviors at baseline is shown in Table 3. The variable was computed on a 42-point rating scale. The distribution showed that all students in the teacher-led group scoring low points (0-21) while 17 (56.7%) of adolescents in the peer-led group had a low score and 13 (43.3%) had high scores (21.1-42) (as shown in Table 3).

Table 3: Baseline Distribution of Level of Adolescents' Health-Seeking Behaviour towards Depression in Control and Intervention Groups

Variable	TL N (%)	PL N (%)	TL&PL N (%)	Control N (%)	p- value
Health Seeking Behaviour	Me	easured on a 42	-Point Rating S	Scale	
Low $(0-21)$	30 (100.0)	17 (56.7)	15 (50.0)	16 (53.3)	0.430^{a}
High (21.1 - 42)	0(0.0)	13 (43.3)	15 (50.0)	14 (46.7)	
Total	30 (100)	30 (100)	30 (100)	30 (100)	
Mean± Sources of Help for Depression	17.40±199	21.63±5.25	22.87±5.20	21.23±3.73	
Formal: 60% Informal: 40%					

The adolescents in the teacher and peer-led educational intervention group had a 15 (50%) students in the low category of scores and others scored high points. In the control group, 16 (53.3%)



students had low scores and 14 (46.7%) had high scores. Adolescents also scored high in choosing mental health professionals such as psychiatrists (60%) as a formal source of help for depression and parents (40%) as an informal source of depression (as shown in Table 3).

Health-Seeking Behaviour of Adolescents towards Depression at Immediate Post Intervention

Health seeking behaviour of adolescents was measured on 42-point rating scale and the distribution of the adolescents across the scales after the intervention showed that the adolescents had a high level of health seeking behaviours in the three intervention groups while 7 (23.3%) had low levels in the control group. The adolescents in the teacher-led intervention group had mean (SE) and SD of 41.60 (0.17) and 0.93 respectively. (as shown in Table 4). An ANOVA test results showed that the change in means of adolescents' health seeing behaviour was statistically significant ($F_{116} = 314.846$; p = 0.000) (as shown in Table 5).

Outcome Evaluation of Adolescents Health-Seeking Behaviour on Depression at 8-weeks Follow Up

The adolescents' health-seeking behavior towards depression was measured on 42-point rating scale at follow up and the distribution showed that all the adolescents in the teacher-led, peer-led and teacher & peer-led intervention groups had a high level of health seeking behaviors while 7 (23.3%) had low levels in the control group (as shown in Table 6).

Research Hypothesis

There will be no significant difference in the level of in-school adolescents' health-seeking behaviour to depression at baseline and 8-weeks follow up period. The impact of the intervention on the health-seeking behaviours towards depression among adolescents was assessed with a paired t-test. The results revealed that between the baseline and follow up assessment periods, the adolescents in the teacher-led group had a mean difference of 24.27 with an effect size (CI) 16.04 (15.66 – 16.43) which was the highest. The intervention groups had the following results: Teacher-led intervention [(Effect size) ES=16.04, t = 75.123; p = 0.000]. Peer-led intervention [(Effect size) ES=5.30, t = 26.836; p = 0.000]. Combination of teacher-led and peer-led intervention [(Effect size) ES=5.14, t = 19.778; p = 0.000]. (as shown in Table 7).

Table 4: Comparison of Adolescents' Level of Health-Seeking Behaviours to Depression at Immediate Post Intervention for Intervention and Control Groups

Variable	Maximum Score	Teacher- Led	Peer-Led	Teacher & Peer-Led	Control	p-value
Health Seeking						
Behaviours						
Low $(0-22)$	42 points	0(0.0)	0(0.0)	0(0.0)	7 (23.3)	0.000*
High $(22.1 - 42)$		30 (100.0)	30 (100.0)	30 (100.0)	23 (76.7)	
Mean±SD		41.60±0.93	41.37±1.33	41.17±1.23	25.30±4.53	

P-values obtained by One-way ANOVA

^{*}Significant at < 0.05



Table 5: Comparison of Means for the Level of Adolescents' Health-Seeking Behaviours to Depression for all Groups at Immediate Post Intervention using ANOVA

Variable	Variation	Sum of Squares	df	Mean Square	F	p-value
Health Seeking Behaviour	Between	5818.958	3	1939.653	314.846	*0000
	Within	714.633	116	6.161		
	Total	6533.592	119			

Table 6: Comparison of Adolescents' Level of Health-Seeking Behaviours to Depression at 8-week Follow Up for Intervention and Control Groups

Variable	Maximum Score	Teacher- Led	Peer-Led	Teacher & Peer-Led	Control	p-value
Health-Seeking						
Behaviour						
Low $(0-22)$	42 points	0(0.0)	0(0.0)	0(0.0)	7 (23.3)	0.000*
High $(22.1 - 42)$	-	30 (100.0)	30 (100.0)	30 (100.0)	23 (76.7)	
Mean±SD		41.67±0.88	41.50±1.22	41.57±0.63	25.47±4.35	

P-values obtained by One-way ANOVA, *Significant at <0.05

Table 7: Paired T-Test Analysis Showing the Difference in Mean between Adolescents' Level of Adolescents' Level of Depression Health-Seeking Behaviour between Baseline and at 8^{th} week Follow Up

Groups	x̄ (SE)	SD	Mean Difference	ES (CI)	df	t	p- value
Teacher-Led							
Intervention Group							
Baseline	17.40 (0.36)	1.99	9 24.27	16.04 (15.66 – 16.43)	29	75.123	0.000
8th -week Follow-up	41.67 (0.16)	0.83	8				
Peer-Led Intervention							
Group							
Baseline	21.63 (0.96)	5.23	5 19.87	5.30(4.36 - 6.25)	29	26.836	0.000
8 th -week Follow-up	41.50 (0.22)	1.22	2				
Teacher-Led & Peer-							
Led Intervention							
Groups							
Baseline	22.87 (0.95)	5.20	0 18.70	5.14(4.21 - 6.06)	29	19.778	0.000
8 th -week Follow-up	41.57 (0.11)	0.6	3				
Control Group							
Baseline	21.23 (0.68)	3.7	3 4.24	1.06(0.06 - 2.07)	29	1.919	0.565
8th -week Follow-up	25.47 (0.79)	4.3	5				

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DISCUSSION

The results from the study provide understanding into the level of health-seeking behaviour towards depression among adolescents in the study area. The total mean±SD ages of the adolescents in the teacher-led, peer-led, teacher and peer-led and control groups were 14.43±2.315 years, 14.33±1.605 years, 14.97±1.426 years and 15.43±1.960 years in the teacher-led, peer-led, teacher and peer-led and control groups respectively which is comparable to the age as established by (Mogaji, 2017) in Southwest, Nigeria.

The coping appraisal of the adolescents was measured by assessing their level of health-seeking behaviour. At baseline, the respondents had low level of health-seeking behaviour across the intervention groups and there was significant increase after the educational intervention, which continued even at 8-weeks follow up period. Studies have proposed many prevention strategies in the prevention and treatment of depression, including effective health-seeking behaviour techniques. Similar studies (Väänänen, Marttunen, Helminem & Kaltiala-Heino, 2014; Bhattarai, Shrestha & Paudel, 2020; Poudel, Gurung & Khanal, 2020) also highlighted that students' level of perceived health-seeking behaviour is related to their mental well-being. Hence, improving health-seeking behaviour may alleviate depression and mental distress among these adolescents.

Health-seeking behaviour among populations experiencing symptoms of depression and anxiety and for individuals who are at high risk has the potential to aid in early intervention and boost a sense of self-efficacy (Warner, Nannarone & Small-Crevier, 2020). Health-seeking behaviour also have the potential to be an effective, cost-efficient, preventative method to support individuals at high risk of developing major depression (Morgan & Jorm, 2019). Adolescents also scored high in choosing mental health professionals such as psychiatrists (60%) as a formal source of help for depression and teachers (40%) as an informal source of depression which corresponds to research that was established (Mogaji, 2017; Goyal et al, 2013; Dapaah & Amoako, 2019)

It is remarkable to note that the teacher-led intervention program had a higher effect size on the level of health-seeking behaviour of adolescents on depression both at the impact intervention and at the 8-weeks follow up compared to the other modules. These findings suggest that school teachers may be useful in delivering universal preventive programs for depression among adolescents or mental health in general (Lai, et al, 2016; Mælan, Tjomsland, Samdal & Turston, 2021). One can also conclude that the educational intervention was effective in increasing the level of health-seeking behaviour of adolescents. The level of health-seeking behaviour towards depression at baseline and 8th week follow up increased significantly; hence, the null hypothesis is rejected in favour of the alternative hypothesis. This indicates the lasting impact of the intervention on recognition at 8th week follow up. Similar findings were also found in the study of Tan et al (2021), where the intervention was effective at improving student's recognition of depression and their health-seeking behaviour and this effect was sustained at 3-months follow-up.

CONCLUSION

This study established that adolescents' health-seeking behaviour towards depression could be transformed through multi-approach educational interventions. The intervention programs utilized for this study were effective in correcting myths and misconceptions towards depression, the educational intervention based on increasing health-seeking behaviour towards depression implemented by this study is a cost-effective strategy to prevent depression among adolescents.



The teacher-led educational intervention had the greatest effect size and change in the level of adolescents' depression health-seeking behaviour. This study further restates the opinion that teachers are often able to provide adolescents with the necessary support. They also play the role of mentors in schools, which makes adolescents more likely to accept the support that they provide.

RECOMMENDATIONS

Research evidence summarized in this intervention study recommends that health researchers and professionals as well as health service institutions and governments must join forces to deliver integrated and multidisciplinary actions towards depression, especially in the early steps of the prevention.

There is need for studies to explore both the qualitative and quantitative approach in investigating teacher-student relationship on mental health issues such as depression, in Africa. Researchers should also reach out in targeting out-of-school adolescents in improving their depression knowledge and perception nationwide.

The modules that were developed for this study can be adopted by the secondary schools as part of their curriculum since they were effective in improving adolescents' health-seeking behaviour of depression.

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