Senior High School Students' Perceptions of and Recommendations for Mental Health Support in Ghanaian Schools

by
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Abstract

School-based mental health programmes (SBMHP) have been recommended to address the unmet mental health needs of children and adolescents and to minimise the problem of poor utilisation of mental health services by this group. In Low and Middle-Income Countries (LMICs), where the treatment gap for child and adolescent mental disorders is almost 90% only a few countries have SBMHPs operating in schools. In Ghana, no such programme exists in the schools except for services provided by school nurses in the infirmaries of senior high schools, which are expected to include counselling services. However, these services have not been evaluated from the user's perspective. The purpose of this study was to explore the perceptions (experience, acceptability and barriers) of adolescents in senior high schools (SHS) about the existing school-based mental health support and their recommendations for an SBMHP. Twenty-two adolescents between the ages of 14 and 19 years from 12 different SHS were individually interviewed virtually. Data were analysed with NVivo 12 and the themes generated were based on the aims of the study. Results from the analysis revealed that although most of the participants' schools have a school nurse, not every student perceived that the school nurse's role included providing mental health support. Despite some of the participants being aware of the nurse's mental health support role and in some schools, the presence of a school counsellor, the majority had not accessed support from them despite having experienced mental health distress previously. While some participants accessed formal support, others sought informal assistance or relied on themselves to deal with their distress. However, participants were accepting of mental health support from both the counsellor and nurse, expressing the usefulness and helpfulness of these services. Barriers to accessing formal support included physical and emotional unavailability of providers and discomfort in accessing services. Finally, participants recommended that an SBMHP should have a combination of universal and

individualised prevention strategies, including strategies for identifying adolescents who may need help without waiting for them to seek help. Also, there should be varied characteristics of providers or counsellors with attitudes of friendliness, warmth and the ability to ensure confidentiality. Lastly, participants recommended that school health or mental health clubs would also help students deal with mental distress to get help when needed. A review of the mental health service in Ghana's SHS may be necessary and incorporating the recommendations from adolescent service users could improve mental health service to this population and hence foster early detection and intervention.

Opsomming

Skoolgebaseerde geestesgesondheidsprogramme (*SBMHP*) is aanbeveel om die onvervulde geestesgesondheidsbehoeftes van kinders en adolessente aan te spreek en om die probleem van swak benutting van geestesgesondheidsdienste deur hierdie groep te verminder. Onder lae- en middelinkomstelande waar die behandelingsgaping vir geestesversteurings by kinders en adolessente byna 90% is, is daar slegs 'n paar lande waar Skoolgebaseerde geestesgesondheidsprogramme in skole bestuur word. Geen sodanige program bestaan in skole in Ghana nie, behalwe vir dienste wat deur skoolverpleegsters in die siekeboeg van senior hoërskole verskaf word en na verwagting beradingsdienste sal insluit. Hierdie dienste is egter nie vanuit die gebruiker se perspektief geëvalueer nie. Die doel van hierdie studie was om die persepsies (ervaring, aanvaarbaarheid en hindernisse) van adolessente in senior hoërskole ten opsigte van die bestaande skoolgebaseerde geestesgesondheidsondersteuning en hul aanbevelings vir 'n skoolgebaseerde geestesgesondheidsprogram te verken. Twee-en-twintig adolessente tussen die ouderdomme van 14 en 19 jaar vanaf 12 verskillende senior hoërskole is individueel en virtueel ondervra. Data is deur middel van NVivo 12 ontleed en die temas wat gegenereer is, is gebaseer op die doelwitte van die studie. Alhoewel die meeste van hierdie deelnemers se skole 'n skoolverpleegster het, het die resultate van die analise aan die lig gebring dat nie elke student daarvan bewus was dat die skoolverpleegkundige se rol die verskaffing van geestesgesondheidsondersteuning insluit. Alhoewel sommige van die deelnemers bewus was van die verpleegster se geestesgesondheidsondersteuningsrol en, in sommige skole, van die teenwoordigheid van 'n skoolberader, het die meerderheid nie toegang tot hulle gekry nie, ten spyte daarvan dat hulle voorheen geestesgesondheidsnood ervaar het. Terwyl sommige deelnemers toegang tot formele ondersteuning verkry het, het ander informele bystand bekom, of

op hulself staatgemaak om hul nood te hanteer Deelnemers was egter bereid om geestesgesondheidsondersteuning van beide die berader en verpleegkundige te aanvaar, wat die nut en behulpsaamheid van hierdie dienste aangedui. het. Hindernisse wat toegang tot formele ondersteuning belemmer het, omvat die fisiese en emosionele onbeskikbaarheid van verskaffers en ongemaklikheid met toegang tot dienste. Ten slotte het deelnemers aanbeveel dat ‘n skoolgebaseerde geestesgesondheidsprogram 'n kombinasie van universele en geïndividualiseerde voorkomingstrategieë moet insluit, met strategieë om adolessente wat dalk hulp nodig het te identifiseer sonder om te wag tot hulle hulp soek. Houdings van verskaffers of beraders moet ook verskillende eienskappe openbaar, soos vriendelikheid, warmte en die vermoë om vertroulikheid te verseker. Laastens het deelnemers aanbeveel dat skoolgesondheids- of geestesgesondheidsklubs ook studente sal help om geestelike nood te hanteer en om hulp te kry wanneer dit nodig is. Hersiening van die geestesgesondheidsdiens in Ghana se senior hoërskole kan nodig wees en die insluiting van die aanbevelings van adolessente diensgebruikers kan geestesgesondheidsdiens aan hierdie bevolking verbeter en dus vroeë opsporing en intervensie bevorder.

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Terms and Definitions

School-based mental health support/service	Any form of support provided in the school setting to alleviate emotional or mental distress of adolescents either in a formal (professional) or informal setting.
School-based mental health programme	A structured school-based mental health support or intervention aimed at promoting wellbeing, preventing mental illness, identifying mental health problems and treating (or referring) mental health illness.
Mental health problems:	Emotional, behavioural and cognitive symptoms of mental disorders/illness which may or may not be diagnosed as a disorder.
Mental health support:	The stress or mental health care provided to adolescents in the form of group or individual counselling services or psychosocial support.

List of Abbreviations

LMICs	-	Low- and Middle-Income Countries
MDD	-	Major Depressive Disorder
HIC	-	High-Income Countries
CAMH	-	Child and Adolescent Mental Health
DALY	-	Disability-Adjusted Life Years
ADHD	-	Attention Deficit Hyperactivity-Impulsivity Disorder
CMD	-	Common Mental Disorders
CBCL	-	Child Behaviour CheckList
CIDI	-	Composite International Diagnostic Interview
UK	-	United Kingdom
SBMHS	-	School-Based Mental Health Services
SBMHP	-	School-Based Mental Health Programme
WHO	-	World Health Organisation
AdHD	-	Adolescent Health and Development
GES	-	Ghana Education Service
SHEP	-	School Health and Education Programme
GHS	-	Ghana Health Service
HREC	-	Health Research Ethics Committee
CAMH	-	Child and Adolescent Mental Health
SSA	-	Sub-Saharan Africa

Chapter 1: Background

Available literature suggests that child and adolescent mental health is a public health concern in Low- and Middle-Income Countries (LMICs), with a significant number of children and adolescents experiencing mental health problems. For instance, prevalence studies in LMICs indicated a 28% prevalence of significant depression and anxiety symptoms among children and adolescents (Yatham, Sivathasan, Yoon et al., 2018). Also, Cortina, Sodha, Fazel et al. (2012), reported that one in 7 children and adolescents up to the age of 16 years (14.3%) in Sub-Saharan Africa (SSA) have significant mental health symptoms while one in 10 (9.5%) have a psychiatric disorder.

The high prevalence of mental health problems in LMICs is not surprising because, young people in LMICs have a high risk of exposure to a range of risk factors for poor mental health including, violence from armed conflicts or war, parental neglect, and trauma among others (Walker, Wachs, Gardner et al., 2007). LMICs have various adverse issues such as increased poverty, natural disasters, different forms of violence and civil unrest which are known risk factors for the development of mental health problems in childhood and adolescence (Okasha, 2002). Factors such as poverty, exposure to stressful life events like trauma, unstable family system and other social adversities increase the risk of psychological difficulties among young people (Vijayakumar, John, Pirkis et al., 2005; Yatham et al., 2018). A WHO report indicates that many LMICs are affected by armed conflict, poverty, violence or natural disasters (WHO, 2004), yet resources in mental health care and planning for young people in these countries are inadequate.

In SSA, as in many LMICs, limited attention is placed on mental health care compared to communicable diseases such as HIV and tuberculosis (Gouda, Charlson, Sorsdahl et al., 2019;

Jenkins, Baingana, Belkin et al., 2010). The priority on communicable diseases in these countries is a contributor to the wide treatment gap for mental healthcare generally. Even for adult mental healthcare in developed countries, there is concern about the treatment gap for mental healthcare, however, there is a good proportion of difference in the treatment gap in HICs and LMICs (Demyttenaere, Bruffaerts, Posada-Villa et al., 2004). For instance, while 1 in 5 people living with Major Depressive Disorder (MDD) receive treatment in HICs, 1 in 27 with MDD receive treatment in LMICs (Thornicroft, Chatterji, Evans-Lacko et al., 2017). Additionally, the mental health needs of the child and adolescent population are largely unmet globally (Kieling, Baker-Henningham, Belfer et al., 2011), with a large number of children and adolescents in LMICs with mental health disorders being unidentified, undiagnosed and not treated for their conditions (Morris, Belfer, Daniels et al., 2011). With the limited resources and inequitable allocation in LMICs (Saxena, Thornicroft, Knapp et al., 2007) as well as their low priority for Child and Adolescent Mental Health (CAMH), the neglect for CAMH is apparent.

The wide treatment gap for CAMH in LMICs is of great concern for a few reasons. Firstly, 44% of the world's population consists of children and adolescents and 90% of them live in LMICs (United Nations, 2015). However, in Africa, about 41% of the population are children and adolescents (United Nations, 2015) and in SSA, they make up 33% of the population. It is estimated that 20% of the world's children and adolescents with mental disorders live in LMICs (Belfer, 2008).

However, mental disorders, unlike other health problems, have less focus in terms of human resources, funds and service provision (Hossain, 2006; Saxena et al., 2007). Further to the neglect of mental health in least resourced countries is an even lesser resource allocation and, in

most cases, inadequate mental health service and care for children and adolescents in LMICs (Belfer & Saxena, 2006; Kleintjes, Lund, Flisher et al., 2010).

Secondly, 50% of adult mental disorders have their onset in adolescence by the age of 14 years (Jones, 2013). This implies that, although symptom remission of adolescent mental illness is likely with or without treatment (depending on symptom severity), some mental disorders in the adolescent period may progress into adulthood with similar or other disorders (Collins & Muñoz-Solomando, 2018; Patton, Coffey, Romaniuk et al., 2014).

Thirdly, untreated or unresolved mental disorders in the adolescence period may contribute to various challenges and impairments in the young person's development and have consequential effects in adulthood. For instance, untreated Child and Adolescent Mental Disorders (CAMD) may affect cognitive ability and contribute to low educational attainment or school dropout (Esch, Bocquet, Pull et al., 2014; Lee, Tsang, Breslau et al., 2009; Mojtabai, Stuart, Hwang et al., 2015). Consequent to this impairment and disability are poor career attainment, unemployment, and hence a poor economic status. Mental disorders in young people also contribute to an increased risk of alcohol and substance use (Goodwin, Fergusson, & Horwood, 2004), risk of problems with the judicial system and imprisonment (Haney-Caron, Esposito-Smythers, Tolou-Shams et al., 2019).

1.1 Child and Adolescent Mental Health Situation in Ghana

As in most SSA countries, Ghana also has a wide treatment gap for mental healthcare as reported in a study by Roberts, Mogan and Asare (2014). The authors estimated that out of the 2.4 million people with mental disorders as at 2011, only 2.8% had received treatment and of those who received treatment, only 14% were below the age of 17 years.

Ghana had its first mental health policy developed in 1994, and a Mental Health Act in 2012 (ACT 846 of 2012), however, mental health care in the country continued to experience challenges in the areas of availability and accessibility of service (National Academies of Sciences, 2016). Policy implementation has been impeded by barriers such as low priority and lack of political commitment to mental health, among others (Awenva, Read, Ofori-Attah et al., 2010). As at 2018, the country had no structured mental health service for children and adolescents. The only specific support for this group was a designated ward in one of the psychiatric hospitals which has mostly children with neurodevelopmental disorders (Ministry of Health, 2018). There is now a new mental health policy with a vision to ensure a standard and modern mental health care for the country for the next 12 years (Ministry of Health, 2018). CAMH has had a low investment in the country largely due to no legislation or policy, leading to the neglect and lack of priority for young people with mental health (Formentos, Ae-Ngibise, Nyame et al., 2021). Mental health services available to the population include outpatient services with clinic-based follow-up and outreach clinics, as well as residential services, but none of these is exclusively reserved for children and adolescents (Roberts et al., 2014). The new mental health policy makes provision for children and adolescents with a stated strategy to develop specific programmes to improve mental health service delivery across the lifespan (Ministry of Health, 2018).

One of the major problems with mental health services in Ghana is the poor or limited access to the service due to various barriers (Badu, Apos, Brien et al., 2018). Badu and colleagues identified barriers including geographical proximity, knowledge of the service, cost of accessing and the generally poor state of mental health facilities. They also identified that vulnerable groups such as children and adolescents needing the service are often marginalized.

With such barriers to accessing service in LMICs such as Ghana, it is vital that other settings for service provision are utilised for this underserved population.

Strategies that low resourced countries such as Ghana can employ to strengthen CAMH or reduce the long-term effect of mental disorders include the use of available human resources and integrate CAMH services into other child and adolescent services such as education or social services (Kleintjes et al., 2010; Patel, Maj, Flisher et al., 2010). Using available human resources to improve CAMH care implies building the capacity of other professionals involved in catering for various aspects of child and adolescent needs to identify and intervene in mental health problems (Patel, Flisher, Hetrick et al., 2007). In addition, the integration of CAMH services into other sectors or programmes for young people is based on the consideration that child and adolescent services should consider all aspects of a child's life, including mental health, general health, education and sports, among others. As a result, it is essential to expand the use of available resources to include improving the mental health and wellbeing of young people.

1.2 School-Based Interventions

In a WHO report on mental health programmes in schools, Hendren, Birrell Weisen, Orley et al. (1994) indicated that the school has a central role to play in children's lives and development in providing interventions where possible. Given this, one strategy for dealing with the gap between mental health service needs and mental health service utilization among children are School-Based Mental Health Programmes (SBMHPs), which can also reach the minority and disadvantaged children in society (Armbruster, Gerstein, & Fallon, 1997). SBMHPs are interventions, programmes or strategies applied in a school setting, specifically to influence students' emotional, behavioural or social functioning (Kern, Mathur, Albrecht et al., 2017). Such a programme may entail the promotion of psychosocial competence, provision of

mental health education, psychosocial interventions and professional treatment (Hendren et al., 1994). SBMHPs have the potential to reach young people (in school) in need of mental health support and are endorsed as a means to provide adolescent mental health promotion and prevention (Barry, Clarke, Jenkins et al., 2013; Fazel, Patel, Thomas et al., 2014; Salam, Das, Lassi et al., 2016). These programmes provide opportunities for young people to deal with issues of mental illness from an early stage, which may assist to improve academic achievement (Borges, Medina Mora-Icaza, Benjet et al., 2011; Esch et al., 2014), reduce symptoms of depression (Garmy, Jakobsson, Carlsson et al., 2015) and increase mental health help-seeking behaviour (Berridge, Hall, Dillon et al., 2011).

SBMHPs are not common in most African countries (Gimba, Harris, Saito et al., 2020) and while a few LMICs have SBMHPs, most of these interventions are adopted from HICs (Gimba et al., 2020) and may not be culturally sensitive to the targeted population.

1.3 Adolescent Health and Development Services in Ghana

With the absence of a child and adolescent mental health policy, there are limited human resources in the country, leading to limited access to mental health services for young people. To deal with the poor access to services, various strategies have been implemented in Ghana. One such strategy involves the integration of mental health and wellbeing into other aspects of adolescent services such as adolescent reproductive health, general health, and the educational sectors, among others. To elaborate further, an adolescent health service policy and strategy was developed (GHS, 2016). One of the strategies in this document is the integration of mental health into all adolescent health services where a basic mental health care must be provided at all adolescent health service points. Focusing on mental health conditions such as depressive

disorders, anxiety disorders, conduct disorder, self-harm, substance use and suicide, the policy identified the need to build capacity of adolescent health service providers to be able to provide the service needed. Ghana has an adolescent health and development programme responsible for every aspect of adolescent health including mental health and wellbeing which is guided by the service policy discussed above. As part of the programme, a National Operational Guidelines and Standards for Adolescent and Youth-Friendly Health Services was developed to inform the strategies for reaching adolescents with health information and services (GHS, 2019). The national operational guidelines is to direct various adolescent health related activities and engagements both in non-governmental bodies and the government sector including schools (GHS, 2019).

The operational guidelines ~~has~~ have a minimum package of mental health services section outlining the kind of mental health services providers must render to adolescents. These services include basic mental status examination, teaching of coping strategies and mechanisms, teaching of life skills, providing psychosocial support in various situations (including drug and substance abuse, sexual and gender-based violence, suicidal tendencies, depression and other mental health conditions), providing management for drug and substance abuse, stress related conditions, emotional disorders, behavioural disorders, developmental disorders and self-harm/suicidal tendencies. Providers are also to refer adolescents for further assessment management where necessary. Another section of the minimum package of services is the need to address adolescent developmental problems, under which is for a HEADSS assessment to be conducted at the initial visit. HEADSS (Home, Education/Employment, peer group Activities, Drugs, sexuality and suicide/depression) assessment is a psychosocial interview guide developed by Goldenring and Rosen (2004) to aid in adolescent interview and identification of psychosocial

needs. Following the assessment, counselling or psychosocial support is to be provided based on the outcome of the assessment (GHS, 2019).

In the educational system, the programme is integrated into the health care provided to young people in the school's infirmary. Therefore, despite the absence of a specific SBMHP in Ghanaian schools, mental health services are supposed to be provided at the infirmary guided by the national operational guidelines. The document also provides a guide to monitor the services provided in various adolescent health service points by providing quality measurement tools. One of the tools, The Adolescent/Youth Client Exit Interview Tool is used to get the adolescent's opinion of the service received. The tool uses mostly 'yes' or 'no' responses to gather the adolescent's view of the facility, the service received (including the provider conducting a HEADSS assessment) and the attitude of the service provider as well as the adolescent's knowledge of some adolescent related health issues (GHS, 2019). Adolescents in senior high schools have the opportunity to complete this tool electronically anonymously on electronic tablets provided by WHO to participating school infirmaries.

Despite the adolescent being part of the evaluation of the service provided to them, it is recognised that the tool does not allow the adolescent to give detailed views and the mental health service provided is not focused on. It is to this end that the current research has become necessary because although counselling is utilised in some of the other health services provided by the nurse the service provision may vary when the counselling is related to a mental health condition or illness. The purpose of the research, hence, is to determine adolescents in senior high school's perceptions (experience, acceptability and barriers) and their recommendations for the mental health services in school.

The research questions for this study are as follows:

1. What are senior high school-going adolescents' perceptions (experience, acceptability and barriers) of the current mental health support and programme provided in their schools?
2. What are senior high school students' recommendations for a school-based mental health intervention?

Chapter 2: Literature Review

2.1 Overview

This chapter will provide a review of the existing literature on adolescent mental health problems, what makes school-based mental health services essential, what has been done in the field in other countries, what is being done in Ghana, and how that has been perceived. The chapter will start with an outline of the global burden and prevalence of child and adolescent mental disorders, emphasizing specific conditions of concern. It will then describe the prevalence of child and adolescent mental disorders in LMICs and outline what is known in the literature which will be narrowed to the prevalence and burden in SSA. The prevalence studies review will then conclude with a report on the prevalence of CAMD in Ghana. The chapter will also discuss studies on the effects of untreated adolescent mental illness and the wide treatment gap for adolescent mental illness at the global, regional and country (Ghana) levels. The need for school-based mental health support will be described, including how such support has been used in other countries (mostly HICs) to bridge the treatment gap and how it has been perceived. The chapter will conclude with a description of school-based mental health support in Ghana, what is known about it in literature and what the gap in the literature is.

2.2 Global Burden of Child and Adolescent Mental Disorders (CAMD)

Globally, there is a significant burden of CAMD. Estimates of the burden of CAMD come from studies such as the Global Burden of Disease (GBD) Study which measures population disease and injury burden from the perspective of morbidity, disability and mortality under the single metric - disability-adjusted life year (DALY) (Murray & Lopez, 1997). The DALY is a summary metric of population health which combines estimates of years of life lost due to premature mortality (YLL) and years lived with disability (YLD). In other words, the

DALY represents both the non-fatal and fatal disease burden. The fatal burden which is described in terms of YLL is attained by multiplying the number of deaths occurring before the standard life by the number of years of the standard life expectancy remaining at age of death. For non-fatal burden, GBD Study focuses on disability, which is, any long term or short-term health loss or impairment as a result of a disease or injury. Expressed as YLD, it is computed as the prevalence of different disease sequelae and injury or number of disability cases multiplied by the average duration of the disease and the weight factor that reflects the severity of the disease on a scale of 0 (perfect health) to 1 (dead).

Since the 1990 GBD Study reports, mental health problems have gained attention and the contributions to health loss have been quantified (Mokdad, Forouzanfar, Daoud et al., 2016; Patton, Sawyer, Santelli et al., 2016). Mental health problems among young people have also gained attention in research and in GBD Study reports. Results from the 1990 to 2010 GBD Study showed that of the 291 diseases, mental and behaviour disorders were among the main causes of DALY for young people between ages 15 and 39 years (Murray, Vos, Lozano et al., 2012).

Specific GBD reports have presented the estimated burden of mental health problems among children and adolescents and has shown an increasing burden over the years. In the analysis of data for 2013, mental disorders such as depression and anxiety were found to be among the top 10 causes of years lost due to disability (YLD) among adolescents between 10 and 19 years (Mokdad et al., 2016). Among young people, conditions such as depressive disorders, conduct disorder and anxiety disorders were named in 1990, 2005 and 2013 data as contributing to disability due to the level of effect of these disorders on functioning. Major depressive disorder was in the top three causes of YLDs among 10- to 14-year-old children, and their

burden increased from 6.5%, 95% CI [4.3, 9.1] in 1990 to 7.4%, 95% CI [5.2, 10.3] in 2013. For older adolescents between 15 and 19 years, depressive disorders (major depressive and bipolar disorders) were the second leading causes of YLDs with an increment from 9.9%, 95% CI [6.6, 13.4] in 1990 to 11.2%, 95% CI [7.6, 15.1] in 2013. A similar trend was found with anxiety disorders which increased from 4.6%, 95% CI [2.6, 7.1] in 1990 in early years (10-14 years) to 5.0%, 95% CI [3.0, 7.6] in the same group in 2013. In older adolescents (15-19 years), the disorder increased from 5.4%, 95% CI [3.7, 8.1] in 1990 to 5.8%, 95% CI [4.0, 8.5] in 2013. The trend of YLDs due to conduct disorder also increased over the period between 1990 and 2013 in the two age groups. In early adolescents, conduct disorder increased from 6.1%, 95% CI [4.2, 8.4] in 1990 to 6.7%, 95% CI [4.7, 9.0] in 2013, likewise in late adolescents, from 5.3%, 95% CI [3.7, 7.2] in 1990 to 5.6%, 95% CI [4.0, 7.6] in 2013. Mental health disorders were hence a leading cause of DALYs for adolescents between 10 and 19 years during the period. Depressive disorders in 1990 was the eighth (8^{th}) leading cause of DALYs (3.1%, 95% CI [2.0, 4.3]) but in 2013, it was the third (3^{rd}) leading cause (4.3%, 95% CI [3.0, 5.8]) in early adolescents. In late adolescents, depressive disorders were the third (3d) leading cause of DALYs in 1990 (4.2%, 95% CI [2.8, 5.9]) but by the year 2013, it was the second (2^{nd}) leading cause of DALYs (5.6%, 95% CI [3.8, 7.7]). The table below (Table 1) is a summary of the trend described above.

Table 1.

Trend of burden of mental disorders on young people between 10 -19 years in YLD

Age Range (Yrs)	Disorders	Period and Burden (%) (95%*CI)	
		1990	2013
10-14	Major Depressive Disorder (MDD)	6.5 (4.3, 9.1)	7.4 (5.2, 10.3)
15-19	Depressive disorder (Bipolar and MDD)	9.9 (6.6, 13.4)	11.2 (7.6, 15.1)
10-14	Anxiety Disorder	4.6 (2.6, 7.1)	5.0 (3.0, 7.6)
15-19		5.4 (3.7, 8.1)	5.8 (4.0, 8.5)
10-14	Conduct Disorder	6.1 (4.2, 8.4)	6.7 (4.7, 9.0)
15-19		5.3 (3.7, 7.2)	5.6 (4.0, 7.6)

*CI Confidence Interval Data extracted from Mokdad et al (2016)

The trend of the burden of mental disorders among young people has not changed over the years but the burden varies in different nations. In a study analysing the GBD 2015 study of young people between 5 and 14 years within six WHO regions, the difference in the burden of mental disorders between regions was evident. While mental disorders were among the leading cause of YLDs and DALYs in Europe and the Americas, infectious diseases were within the top five causes of DALYs in the African region (Baranne & Falissard, 2018). Again, mental disorders were among the top ten leading cause of YLDs in other regions but not in Africa. The limited impact of mental disorders in African countries was also reported in the GBD 2010 study analysis reported by Erskine, Moffitt, Copeland et al. (2015). They found that unlike HICs where mental and substance use disorders among young people was the leading cause of DALYs, it is the seventh (7^{th}) in LMICs. However, DALYs estimates for mental disorders in Sub-Saharan

Africa has a lot of uncertainties due to the lower coverage of epidemiological research and data in this subregion (GBD Mental Disorders, 2022).

2.3 Prevalence of CAMD

A WHO report indicates that in any given year, 20% of the world's children and adolescents experience a mental disorder mostly depression or anxiety (WHO, 2012). This is significant especially in relation to the burden of the disorder on young people. A global high prevalence of CAMD has been reported in a few studies with variations between screening or diagnostic instruments of measure. Screening instruments are standardized assessment tools used to identify individuals with a potential high risk of a particular mental disorder (APA, 2014; Gilbert, Logan, Moyer et al., 2001). A diagnostic tool on the other hand, may involve the use of a combination of strategies and tools (clinical interviews, psychometric tests, etc) to assess and diagnose presence and severity of specific mental disorders (APA, 2014). In a meta-analysis of 41 studies from 27 countries, the pooled prevalence of mental disorders among young people below 18 years was 13.4% (Polanczyk, Salum, Sugaya et al., 2015). The authors reported the following specific prevalence estimates from a combination of clinical interviews and a variety of standardized diagnostic tools: anxiety disorders of 6.5%, 95% CI [4.7, 9.1], any depressive disorders of 2.6%, 95% CI [1.7, 3.9], attention deficit hyperactivity-impulsivity disorder (ADHD) of 3.4%, 95% CI [2.6, 4.5] and any disruptive disorder of 5.7%, 95% CI [4.0, 8.1]. Polanczyk and colleagues' analysis was specifically on prevalence estimates of adolescents with functional impairment as a result of mental illness, excluding those with subthreshold symptoms.

However, there is a higher proportion of young people with subthreshold mental illness compared with those with diagnosable illness (Balázs, Miklósi, Keresztény et al., 2013), hence the need to consider this in prevalence studies. Investigating the prevalence of adolescents with

subthreshold depression and anxiety, Balázs and colleagues found that from a sample of 12,395 adolescents between 14 and 16 years, 29.2% had elevated symptoms of depression and 32.0% had elevated symptoms of anxiety disorder but did not meet diagnostic criteria. These results are significantly higher compared to those who actually met the diagnostic criteria in the same sample: 10.5% for major depression and 5.8% for generalized anxiety disorder. Individuals with subthreshold mental disorders / subsyndromal mental disorders have substantial functional impairment as a result of the illness although they may not meet criteria for diagnosis (Balázs et al., 2013; Judd, Rapaport, Paulus et al., 1994) on existing classification systems such as the Diagnostic and Statistical Manual of Mental Disorders (DSM) by the American Psychiatric Association (APA) and International Classification of mental and behavioural Disorders (ICD) by WHO. To reiterate, people with subthreshold symptoms of mental disorders form a larger part of the population compared to those with diagnosed disorders (Balázs et al., 2013; Judd et al., 1994). As a result, the exclusion of this group of young people in a prevalence study suggests that the 13.4% prevalence from the Polanczyk study may be an underestimation of the mental health need among young people.

In another study, Silva, Silva, Ronca et al. (2020) also estimated the prevalence of mental disorders with studies from 19 countries. Focusing only on symptoms of common mental disorders (CMD) among adolescents up to 19 years, Silva and colleagues analysed studies which used the General Health Questionnaire (GHQ), a screening tool. Silva's meta-analysis found a higher prevalence estimate of 25.0%, 95% CI [19.0, 32.0] and 31.0%, 95% CI [28.0, 34.0] at symptom cut-off points of at least 4 and 3 respectively on the GHQ, compared to the Polanczyk study outcome.

Although the Silva study analysed 43 studies from five regions of the world, only one study was from Africa, with a larger number of the studies coming from HICs compared to those from LMICs. In global CAMD studies, LMICs, including Africa are under-represented mostly due to limited research studies from those countries (Erskine, Baxter, Patton et al., 2017; Kieling et al., 2011). This is of concern because more than half of the world's children and adolescents live in LMICs where a larger proportion of the population are young people (between ages 10-19 years), making up 23% of the population in SSA for example (UNICEF, 2019).

Meanwhile, despite the poor coverage of LMICs, there are estimates of the prevalence of mental disorders of young people in LMICs (8-27% for anxiety and 0-28% for depressive symptoms) which appear to be similar to estimates from HICs, (9-30% for anxiety and 2-25% for depressive symptoms) as reported in Yatham et al. (2018). The result corresponds with a study by Biswas, Scott, Munir et al. (2020) who also found similar prevalence estimates of anxiety in lower-middle-income economy countries (9.0%, 95% CI [9.0, 10.0]) and high-income economy countries (10.0%, 95% CI [9.0-10.0]) in their population-based study of adolescents, comparing LMICs to HICs. The authors analysed data from 82 countries (25% low-income economies, 31.5% lower-middle-income economies, 20.1% upper-middle-income economies and 23.4% high-income economies, according to World Bank classification) extracted from the Global School-based Health Survey (GSHS) with adolescents between the ages 12 – 17 years. Again, anxiety was assessed with one question which measured presence of worry that affects sleep and lasted for the past 12 months. Although the results from the school-based study may not be a true representation of the adolescent population in the countries studied, Biswas and colleagues reported that there was a wide variation of anxiety between regions of the world. For instance,

pooled prevalence of anxiety symptom in the African region was found to be 13.0%, 95% CI [13.0, 14.0], while for the European region, it was 4.0% (4.0-5.0%).

The next section will discuss the prevalence of mental health disorders among adolescents in LMICs with specific attention to Africa.

2.4 Prevalence of CAMD in LMICs and Africa

A recent data extracted from the Global School-based Health Survey collected in 25 LMICs showed a rather high prevalence of depressive symptoms, 30.3%, 95% CI [27.0, 33.8] among in-school adolescents between 12 and 15 years of age (Liu, Chen, Towne et al., 2020). The prevalence for anxiety symptoms, 8.3%, 95% CI [7.9, 11.9] was similar to that found in lower-middle-income economies in Biswas et al. (2020). As stated earlier, prevalence studies in Africa are scarce hence the region is greatly under-represented in regional or global studies. For instance, in Liu et al. (2020), there were only 6 African countries out of the 25 LMICs represented in the survey data.

While literature on prevalence in Africa is limited, the few studies conducted in SSA showed a variation from that reported in LMICs, possibly owing to the sampling population and assessment tools used. Unlike the above study which focused on school-based adolescents, other SSA prevalence studies have used population-based samples from primary care facilities. In a systematic review published by Jörns-Presentati, Napp, Dessauvagie et al. (2021) in which narrative synthesis was used to assess the point prevalence of both mental health disorders and mental health problems (elevated mental health symptoms). Jörns and colleagues used 37 studies conducted between 2008 and 2020 to estimate a point prevalence which they defined as the prevalence of mental health problems measured from 2 weeks to 6 months prior to data collection. With a total population of 97,616 adolescents from 16 SSA countries, the median

point prevalence in the general population was calculated. For depression (both elevated symptoms and diagnosed MDD), the point prevalence was 26.9% (interquartile range (IQR) 20.1-31.1) from 9 of the 16 studies including a total of 14 409 young people. Also, the median point prevalence of anxiety symptoms in the general population was 29.8% (IQR 18.6-36.4) from 4 studies with a total sample of 3 104 adolescents. Prevalence estimates for emotional and behavioural problems was found to be 40.8% (IQR 31.2-41.4) from a total population of 1 597 adolescents, and that for symptoms of posttraumatic stress disorder (PTSD) was 21.5% from a sample of 1 034 adolescents between 13-19 years.

In a similar study, Cortina et al. (2012) reviewed ten prevalence studies of child and adolescent psychopathology from 6 SSA between 1977 to 2008, to estimate the prevalence for overall psychopathology in children and adolescents in the region. With a total sample size of 9 713 children from ages 5 to 16 years, an adjusted prevalence of 14.5%, 95% CI [13.6, 15.0] was found for emotional disorders (mostly major depression), anxiety, conduct disruptive and reactive behaviour and posttraumatic stress, measuring both symptoms and disorders. The prevalence for elevated symptoms of mental disorders (mental health difficulties – listed above) was 19.8%, 95% CI [19.8, 20.7], was higher than that of mental health disorders (listed above), 9.5%, 95% CI [8.4, 10.5]. The above, Cortina and colleagues translated to mean that 1 in 7 children and adolescents in SSA have a significant mental health difficulty (elevated symptoms of mental disorders) and 1 in 10 young people in SSA have a specific psychiatric disorder such as major depressive disorder, anxiety disorders, conduct and other disruptive behaviour disorders and posttraumatic stress disorders (from the few studies that used diagnostic tools). Prevalence for specific disorders was however not estimated.

Although the number of epidemiological studies on child and adolescent mental health in the SSA has increased over time (Jörns-Presentati et al., 2021), not every country in the sub-region has had this transformation. Of the 54 SSA countries, only 6 countries were represented in the study by Cortina et al. (2012) and 16 were represented in the Jorns-Presentati studies, making the prevalence studies an incomplete representation of the sub-region. Ghana has been poorly represented in child and adolescent related epidemiological studies. Meanwhile, there are country variations in conditions or factors which may contribute to increasing prevalence rates. For instance, in a Nigerian cross-sectional study involving adolescents, the prevalence of symptoms of depression was 21.2% with various levels of severity (Fatiregun & Kumapayi, 2014). However, in a review of prevalence studies in LMICs, Yatham et al. (2018) found a prevalence of about 87% for symptoms of PTSD in armed conflict affected areas. It is hence necessary that a country like Ghana should have specific prevalence studies showing country specific rates.

2.5 Prevalence of CAMD in Ghana

Literature on prevalence of CAMD in Ghana is scarce and the few studies in the field do not qualify for generalization of the state of CAMD in the country. In a pilot cross-sectional study on primary school children, Kusi-Mensah, Donnir, Wemakor et al. (2019) found the prevalence of mental disorders among grade 3 pupils between 7 and 15 years to be 7.2%. The specific disorders with their prevalence were depressive disorders [1.31%], anxiety disorders [1%], ADHD –1.64% and conduct disorder [1.97%] obtained from the use of a diagnostic tool, the Kiddie-Schedule for Affective Disorders and Schizophrenia Present and Lifetime Version – (K-SADS-PL). Despite being a pilot study, Kusi-Mensah and colleagues' study provides a good addition to the limited literature on prevalence of CAMD. They however did not specify the

categories of depressive and anxiety disorders making up the above prevalence rates. Also, the study had a small sample size (303 pupils) and the geographical location was limited to one district in a country of over 260 districts spread through 16 administrative regions. For these reasons, the study does not give a true representation of the country, hence results cannot be generalised. Additionally, collecting data from grade 3 pupils only, although with a wide age range (7-15 years), cannot be generalised to the wider population of children and adolescents.

The prevalence of suicide in Ghana has also been studied, with a cross-sectional study of street children and adolescents in a Ghanaian urban city showing a 26.4% prevalence of suicidal ideation and 26.0% prevalence of suicide attempts (Oppong Asante & Meyer-Weitz, 2017). The authors did not assess the relationship between suicidal ideation and attempt, which makes the above prevalence rates questionable as it is unlikely that almost every child who has a suicidal thought will attempt suicide (Bachmann, 2018), as the results imply. The study placed more emphasis on the factors associated with suicidal ideation and attempt among the population under study. The authors however excluded homeless children and adolescents with severe mental illness from the study, which may pose a limitation because of the existing relationship between risk of suicide and mental illness (Bachmann, 2018; Brådvik, 2018).

Contrary to the above study, a cross sectional study (across 6 Sub-Saharan African countries) of adolescents to determine burden of depressive symptoms and prevalence of suicidal ideation and attempt found a wide variation between prevalence of suicidal ideation (4.0%) and attempt (2.2%) among the 625 Ghanaian participants (Nyundo, Manu, Regan et al., 2020). Nyundo and colleagues on the other hand assessed for depressive and somatic symptoms in their participants and found a 32.5% burden of depressive symptoms in Ghana.

2.6 Consequences of Untreated CAMD

Adolescence may be the starting point for many mental health problems in later life (Jones, 2013). Left untreated, adolescent mental health problems contribute to mortality (reported in the high rates of adolescent suicide), morbidity (reported in cases of depression and psychosis resulting in impairments and disabilities) and socioeconomic consequences (resulting from unemployment, poor career attainment, poor interpersonal relationships among others) (Brasić & Morgan, 2005; Evensen, Lyngstad, Melkevik et al., 2017; Samuel & Sher, 2013; Weissman, Wolk, Goldstein et al., 1999). In other words, untreated mental disorders in the early years have social, clinical and functional consequences for the individual, their families and society (Asselmann, Wittchen, Lieb et al., 2018; Kessler, Heeringa, Lakoma et al., 2008). Studies in the area have shown that mental disorders in adolescence may proceed into young adulthood (Patton et al., 2014; Whiteford, Harris, McKeon et al., 2013) with both homotypic (the continuous presence of same disorders) and heterotypic (subsequent development of other mental disorders) patterns of transition (Burke, Loeber, Lahey et al., 2005).

In a recent prospective-longitudinal study of adolescents with mental disorders in a community sample, Asselmann et al. (2018) assessed the sociodemographic, clinical and functional outcomes in young adulthood over a 10-year period. The investigators conducted three follow-up assessments within the study period on 2 210 young people between ages 14 and 21 years. They assessed participants and diagnosed various disorders including: anxiety disorders (panic disorder, the phobias, generalized anxiety disorder, PTSD and obsessive-compulsive disorder), affective disorders (major depressive episodes, dysthymia, hypomanic and manic episodes), substance use disorders (nicotine dependence, alcohol abuse/dependence, illicit drug abuse/dependence), somatoform disorder and eating disorders (typical and atypical anorexia and

bulimia). Outcomes measured included sociodemographic (comprising educational level, employment, social class, financial situation and marital status), clinical (made up of 12-month mental diagnosis), other clinical outcomes such as suicidal attempt, 12-month use of alcohol, help-seeking behaviour due to mental illness and functional outcomes (such as school /education, parents/family, friends, partner, pregnancy/childbirth, work, finances, law and physical health). At the 10th year study follow-up, participants with substance use disorder were 32% to 52% less likely to attain favourable sociodemographic outcomes, such as having employment. For the clinical effect, anxiety disorders, affective disorders, substance use and eating disorders were all likely to predict 12-month diagnosis of the same and another mental disorder. Unfavourable functional outcomes were also predicted by all the disorders with each diagnosis predicting different aspects of poor functioning. Of great significance was that early age of onset of a mental disorder (OR 0.88 – 0.92) and persistence in years of the disorder predicted 12-month anxiety, affective and somatoform disorders at follow-up (OR 1.08 – 1.14). Results from the above study show to what extent mental disorders in early years could contribute to further mental health problems and how symptoms could affect various aspects of life, health and functioning. Asselmann and colleagues' findings about the clinical outcomes and consequences of adolescent mental disorders are consistent with part of the outcome of a study by Patton and colleagues.

In a 14-year cohort study of 1,943 adolescents between the ages 14-15 years, Patton et al. (2014) investigated the prognosis of common mental disorders (major depression disorder and anxiety disorders which encompass generalized anxiety disorder, social phobia, agoraphobia or panic disorder) in adolescents. The investigators assessed participants of mental disorders at baseline and annually over a five-year period during adolescence and later in young adulthood.

Patton and colleagues found that almost a third of the males (29%, 95% CI [25, 32]) and more than half of the females (54%, 95% CI [50, 57]) had a common mental disorder at baseline. Further analyses showed that for adolescents with persisting mental disorders (over 6 months), there was a continuity of the disorder into young adulthood at a rate of 55%, 95% CI [44, 65] among boys and 70%, 95% CI [64, 75] among girls. Again, the odds of a disorder persisting in adolescence (from one assessment year to the other) into young adulthood was 2.0, 95% CI [1.51, 2.67]. The implication here is that adolescents with a mental disorder are two times more likely to have the disorder in young adulthood compared to adolescents without a mental disorder. The authors also found that 47%, 95% CI [40, 54] of the male and 65%, 95% CI [60, 69] of the female participants with a minimum of one mental disorder further developed an extra episode of mental disorder. Again, development of other mental health disorders as well as an existing disorder persisting into adulthood is likely especially when treatment is not provided. The study did not have only one outcome.

Another significant finding in this study was that~~,~~ adolescent mental disorders were short lived or even when they persisted into the early 20s, they may resolve. This finding is consistent with findings from a study by Whiteford et al. (2013) which showed a high probability of remission of major depression among children and adolescents (OR 1.88, 95% CI [1.09, 3.25]) compared to adults (OR 1.0%). These rates, the authors found from a systematic review of studies in which out of the 21 studies reviewed, only five reported on the remission in children and adolescents with a sample size of 124. Despite the small sample size, the outcome is consistent with a prospective case-control study by Weissman et al. (1999) which sought to describe the clinical course of adolescent onset major depressive disorder (MDD). They assessed and diagnosed 73 adolescents younger than 18 years with MDD and monitored the course of

their diagnosis over a 10 to 15-year period. The authors found that 37% of the participants (adolescents) with MDD survived without a later episode of the disorder at the 15-year follow up. This number is low compared to the control group of which 68% were free from any episode of MDD within the study period. The overall outcome implies that although adolescent mental disorders may resolve with or without intervention in certain situations, it is more essential that mental disorders avoided or risk of its development is reduced.

Studies have however reported that untreated mental disorders in adolescents have an impact on educational attainment (Kusi-Mensah et al., 2019; Lee et al., 2009), contributing to early school dropout (Borges et al., 2011; Mojtabai et al., 2015). Lee et al. (2009) conducted a cross-sectional survey with 16 countries to determine the correlation between early onset mental disorder and termination of education. They used the Composite International Diagnostic Interview (CIDI) to assess four categories of mental disorders, namely anxiety disorders, mood disorders, behaviour / impulse control disorders and substance use disorders. From the sample size of 41,688, data on retrospective age-at-onset of mental disorders, educational attainment and childhood adversities showed that prior presence of mental disorders has an association with termination of secondary and tertiary education before completion. Variations however existed between high-income and LMI countries. Anxiety and mood disorders showed a positive association with secondary school termination before completion in HICs (ORs = 1.2–1.6 and ORs 1.4–1.7 respectively). In other words, the presence of either anxiety or mood disorders increases risk of school termination before completion. However, in LMICs, generalized anxiety disorder (GAD) was negatively associated with early school termination (OR=0.6, 95% CI [0.3, 1.0]). This means that the presence of GAD does not increase risk of early school termination. Again, in HICs, greater complexity of mental health conditions (such as a larger number of

comorbid mental disorders) was associated with educational termination at all levels (primary, secondary and tertiary). In LMICs on the other hand, a larger number of mental disorders per respondent was negatively associated with early termination of primary education but positively associated with terminating secondary education before completion. The finding from Lee and colleagues is attributed to a possible random variation in results in not assessing educational attainments and school level repetitions.

Findings in HICs are consistent with a systematic review on early school termination where anxiety, substance use and mood disorders were associated with school dropout (Esch et al., 2014). Esch and colleagues included both longitudinal and cross-sectional studies and found also that anxiety disorders, specifically social phobia is a strong predictor of poor educational outcome when other confounding factors have been controlled. Esch's findings concur with those of a pilot study in Ghana which found an association between children and adolescents with mental disorders (anxiety disorders, mood disorders, ADHD, conduct disorder and intellectual disability) and poor academic performance (lower average) compared to children without mental disorders (Kusi-Mensah et al., 2019).

2.7 The Mental Health Treatment Gap and Help-Seeking Behaviour of Adolescents

From the above consequences of untreated CAMD especially in the area of education, it is evident that support for adolescents with mental illness is essential. However, there is a difference between the number of people in need of mental health services and those who actually receive the services (Kohn, Saxena, Levav et al., 2004). This treatment gap for mental disorders is a global problem (Robles & Bronstein, 2020) but most severe in LMICs. The rate of unmet mental health need in LMICs is reported to be nearing 90% (Demyttenaere et al., 2004) with an even more profound gap in the area of child and adolescent mental health (Costello, He,

Sampson et al., 2014). Factors that contribute to the unmet need among children and adolescents include the absence of prioritization of services for children and adolescents, limited uptake or utilisation of the few services available, and the limited effectiveness of services for this population (Patel, Flisher, Nikapota et al., 2008). The absence of service prioritization has been associated with the lack of policy and infrastructure for CAMH resulting in limited funds allocated to the service. The lack of or limited resources allocated for mental health in general is strongest in the LMICs including Africa (Saxena et al., 2007), which implies a limited allocation (if any) of human and financial resources as well as infrastructure for CAMH in these countries (Rocha, Graeff-Martins, Kieling et al., 2015). The implication is that there is limited access to CAMH services as these are inequitably distributed within these countries. These services are specialist mental health treatment and care by child psychiatrists, child psychologists, social workers and psychiatric nurses. With the limited services available for CAMH, uptake is low because of reasons such as stigma, out-of-pocket payment for the service and high time cost (travelling and long waiting time in facilities) due to inadequacy of the service (Qin & Hsieh, 2020).

For young people (12 to 25 years), the factors above, in addition to feelings of embarrassment, problems recognising symptoms of poor mental health, and preference for self-reliance contribute to poor utilization of mental health service or poor help-seeking behaviour (Gulliver, Griffiths, & Christensen, 2010). From their systematic review of 20 studies, Gulliver and colleagues found other barriers including confidence or trust in the provider and the characteristics of the provider (profession, credibility, ability to provide needed help and the race of the provider) and poor knowledge of the service. In their qualitative and quantitative synthesis of the literature, facilitators for seeking help included past experience of help-seeking behaviour

and social support or encouragement from others. Albeit from HICs, the above review results are consistent with a qualitative study with Sub-Saharan African migrants in Australia (McCann, Mugavin, Renzaho et al., 2016). McCann and colleagues found that stigma and lack of mental health literacy were some barriers to young people seeking help. Facilitators for seeking mental health care on the other hand included confidentiality of provider, being open with family and friends (for informal support seeking) and perceiving the expertise of the provider.

2.8 Interventions and Support for Adolescent Mental Health

The poor help-seeking behaviour of adolescents plays a significant role in the treatment gap for mental health service to adolescents. The proposal to expand mental healthcare services to adolescents to reduce the prevalence and burden of adolescent mental disorders (Sayers, 2001) may also potentially close the treatment gap but, this strategy has been ineffective in doing so (Jorm, Patten, Brugha et al., 2017). Jorm and colleagues argue that not targeting people in greatest need of the service is one of the reasons for the lack of improvement in prevalence. In support of this assertion, Sadler, Vizard, Ford et al. (2018) found in a study that expansion of mental health services for adolescents did not reduced prevalence. A 2017 UK national report of child and young people's mental health also indicated an increased prevalence of common mental disorders between 1999, 2004 and 2017 from 9.7% to 10.1% and 11.2% respectively despite the increased mental health services.

Alongside increasing treatment service is also a proposal to use preventive interventions to reduce the onset of or development of severe mental disorders (Kieling et al., 2011; National Research, Institute of Medicine Committee on the Prevention of Mental, Substance Abuse Among Children et al., 2009). Scott (1995) describes three classifications of preventive interventions: universal, selective and indicated. Universal preventive interventions are targeted

at all individuals in the population who may or may not be at risk of developing a mental disorder. Selective preventive interventions target individuals or a section of population identified to have a higher-than-average risk of developing a mental disorder, while indicated preventive interventions target high risk individuals. Indicated preventive intervention also targets individuals who may have minimal but detectable signs or symptoms of mental disorders but, may not meet criteria for diagnosis. Randomised controlled trials (RCTs) on preventive interventions for common mental disorders have shown however that preventive interventions, though effective, have small effect sizes and limited effects in the long-term (Jorm & Mulder, 2018; Ormel, Cuijpers, Jorm et al., 2020). In a meta-analysis of RCTs examining the effects of prevention interventions in participants with no diagnosis of major depressive disorder (MDD), van Zoonen, Buntrock, Ebert et al. (2014) used incidence rate ratio (IRR) and number needed to treat (NNT) to determine the effectiveness of interventions. NNT is the number of people needing an intervention to prevent a new case of a disorder such as depression. The lower the NNT, the more effective the intervention. Results from the meta-analysis of 32 studies with 6214 participants showed that, the preventive interventions, which included mainly selective and indicated preventive interventions, reduced the incidence of depression by 21% with an IRR of 0.79, 95% CI [0.69-0.91] but with a high overall NNT of 20, 95% CI [13-37]. The NNT of 20 indicated that 20 people needed to be treated to prevent one new case of depression. Unlike van Zoonen's study, which included studies on both adults and young people, Stockings, Degenhardt, Dobbins et al. (2016) focused only on preventive studies on young people.

In their systematic review of universal, selective and indicated preventive interventions for symptoms of depression and anxiety, Stockings et al. (2016) focused on RCTs involving children and adolescents between 5-18 years of age. Using the relative risk (RR) of depression

and anxiety disorders to determine effect size of intervention outcome, Stockings and colleagues reported a reduction in the onset of depressive and anxiety disorders up to 9 months post intervention. With universal prevention, RR was 0.47, 95% CI [0.37-0.60], with selective prevention, RR was 0.61, 95% CI [0.43-0.85] and with indicated preventive intervention, RR was 0.48, 95% CI [0.29-0.78]. Reduction of depressive and anxiety disorders onset at 12 months post intervention was present, only in the universal prevention participants but, not in the other 2 intervention types, although there was a reduction of depressive and anxiety symptom onset in the three prevention strategies up to 10 months. Stockings and colleagues (2016) however, did not report specific depressive and anxiety disorders although studies reviewed used a clinical interview for the diagnostic check based on DSM and ICD. Meanwhile, Stockings and colleagues found efficacy for large-scale implementation of preventive interventions in school settings.

2.9 School-Based Mental Health Programme (SBMHP)

School-Based Mental Health Programmes (SBMHPs) have become popular as schools are recommended sites for the provision of mental health services to children and adolescents due to easy accessibility, affordability and availability of the service (Mason-Jones, Crisp, Momberg et al., 2012). Services may include counselling, violence prevention, suicide prevention, mental health diagnoses, grief and loss therapy, crisis intervention and medication management or administration (Arenson, Hudson, Lee et al., 2019). These services may be provided by trained professionals (child psychiatrists, behaviour therapists or child psychologists with support from nurses, health educators, school staff and outreach workers. A school-based mental health service is any programme, intervention or strategy, applied in a school setting, specifically to influence students' emotional, behavioural or social functioning and has the

potential of reaching young people in need of the service (Kern et al., 2017). Kern and colleagues state that this service may encompass a broad spectrum of prevention, assessment, counselling, intervention and referral services which can be classified into the universal, selective and indicated preventive strategies described above. SBMHS may also have the potential of reducing the treatment gap associated with child and adolescent mental disorders by reducing the barriers of access to service (including cost and stigma), which is common in the adolescent population (Armbruster et al., 1997). Other benefits include early identification of mental illness among children and adolescents, and providing appropriate intervention including referral or links to other services. This strategy is relevant because although children and adolescents in most need of mental health support are the least likely to seek help (Barker, 2007), the situation is opposite in the case of SBMH service, where adolescents with more complex mental health challenges are more likely to seek the service in the school (Bains, Cusson, White-Frese et al., 2017).

Although this form of intervention is relevant to deal with some of these barriers to mental health service by young people, SBMH service outcome is not always expected. For instance, utilisation of the service in school does not appear to be as high as expected as was found in a study by Spencer, McGovern and Kaner (2020). In their study, the authors aimed at exploring young people's views of early and preventive school-based support. Spencer and colleagues found that participants' experience of school-based support was with a whole school mental health related educational activity at school assembly. While some students chose to share emotional challenges with teachers they trusted and felt comfortable with, others did not find it easy to speak about their mental health problems. Some students also did not think teachers have adequate understanding of mental health, hence felt discouraged to seek support

from them. When however, Radez, Reardon, Creswell et al. (2021) reviewed studies to determine why young people would seek or not seek professional mental health support, reasons for poor help-seeking behaviours included embarrassment, poor mental health literacy and not perceiving their situation to be serious enough to seek support. Studies also reported that students who did not perceive the expertise of the professional and their ability to keep information discussed confidential, deterred students from accessing service. As a result, seeking support from friends was discouraged by participants considering the possibility of privacy and confidentiality issues of information.

School-based mental health support, if well-planned, organized, and implemented comes with numerous benefits to the adolescent as shown in various studies. A systematic review of 57 studies on school-based mental health interventions (both mental health promotion and prevention programmes) and their effectiveness at improving adolescent mental health and wellbeing found 56.14% (32) of studies reporting improved mental wellbeing (psychological, subjective and psychosocial wellbeing) among students (Cilar, Štiglic, Kmetec et al., 2020). The authors found that the efficacy of school-based interventions depends on the specifics of the intervention, the process of development, the geographical location where intervention was developed or implemented and the personnel administering the intervention. While the above review is literature from mostly HICs with only one study from Africa (South Africa), the outcome is relevant and consistent with other studies from LMICs.

In a WHO commissioned study, fourteen studies of school-based mental health promotion and universal prevention programmes conducted in eight LMICs had 12 of them reporting a significant positive impact (improved social and emotional wellbeing, self-esteem, motivation and self-efficacy) of programmes on young people (ages 6-16 years) (Barry et al.,

2013). They reported improvement in depressive symptoms, anger and anxiety scores and reduction in conduct and peer problems. The interventions evaluated included Classroom-Based Interventions (CBI), school-based psychosocial interventions, those which combined mental health promotion with other health-related activities (sexuality education, physical fitness) as well as a universal depression prevention intervention. Barry and colleagues' results were consistent with the outcome of a study by Caldwell, Davies, Hetrick et al. (2019).

In their study, Caldwell and colleagues employed both a systematic review and network meta-analysis to determine the effectiveness of school-based interventions (distinct psychological, educational and physical interventions) in preventing depression and anxiety symptoms in children and adolescents between 4 and 18 years (Caldwell et al., 2019). They reviewed 137 studies made up of 76 universal prevention studies and 61 studies focusing on targeted prevention (51 indicated and 10 selective) interventions. The 137 studies (comprising a total participant size of 56 620) focused on prevention of either depression only, anxiety only, or both depression and anxiety among children and adolescents. Different intervention strategies were used in the various studies, including cognitive behavioural therapy (CBT), relaxation or mindfulness-based intervention, interpersonal therapy, among others. Results indicated weak evidence to support CBT to reduce anxiety in children and adolescents and no one type of intervention is effective at preventing depression in universal or targeted prevention programmes. Regarding the evidence of CBT in reducing anxiety and depression, Caldwell et al. (2019)'s outcome is consistent with findings by van Zoonen et al. (2014) which also found interpersonal therapy (IPT) to be more effective at preventing anxiety and depression (NNT 7; IRR 0.36, 95% CI [0.13-0.96] compared to CBT (NNT=71; IRR 0.86, 95% CI [0.76-0.98]).

The above reports are contrary to other study findings from preventive interventions involving CBT and its techniques. One is a quasi-experimental study of a school-based depression prevention intervention programme (DISA) which utilised CBT techniques (Garmy et al., 2015). Results from the evaluation showed reduced symptoms of depression among the 62 14-year-old participants. Garmy and colleagues found that depression scores of female participants post-intervention (at the last session of the DISA programme) and at the 12-month follow-up reduced or improved significantly ($p = 0.018$). For the male students, although scores were significantly reduced from preintervention to postintervention ($p = 0.027$), the same could not be said for the follow-up score ($p = 0.726$). Garmy et al. (2015) however, did not indicate whether participants were free of depressive symptoms prior to the DISA intervention as it was meant to be a universal prevention intervention. However, the DISA programme was originally meant as a treatment intervention, but changed into a preventive intervention but there was no corresponding change in content (Kvist Lindholm & Zetterqvist Nelson, 2015). These limitations are relevant especially in relation to the part of their research which sought to measure experience of students and tutors of the intervention. Focusing only on the participants' (students) experiences, there were mixed responses from 'it being a helpful intervention' to 'it being a boring and unhelpful intervention'. In other words, although preventive interventions may be effective at reducing symptoms or its onset, service users' views and perceptions should also be considered in determining effectiveness in terms of acceptability and accessibility.

2.10 Accessibility of SBMH Programmes

In another study to determine student's perspectives of the DISA programme, Kvist Lindholm and Zetterqvist Nelson (2015) interviewed 32 schoolgirls between 12 and 14 years old. From their discourse analysis of the group interview responses, Kvist Lindholm and Zetterqvist

Nelson (2015) found that participants perceived the programme as a treatment intervention and not a preventive one as intended. The majority of the girls expressed the concern that the intervention assumed that they had an existing problem of negative thinking or low self-esteem. As a result, where these problems did not exist, participants reported that following through with the intervention was difficult. This report gives another indication the need to incorporate the voice of the service user in intervention design, planning and implementation.

In support of the above assertion, Plaistow, Masson, Koch et al. (2014) suggest that the acceptability and effectiveness of SBMH interventions on the adolescent can be attained if adolescents and young people are engaged in the redesign and assessment of the programme meant for them. James (2010) also argues that young people must not be viewed as merely recipients of school education but awareness must be given to their experiences (emotional and relational) of what they are receiving so as to learn about its impact on them. Kohrt, Asher, Bhardwaj et al. (2018) also emphasised the need to involve service users of community mental health interventions in the development and implementation of interventions.

Arora and Algios (2019) sought to determine how schools can improve engagement of Asian American school going youth in SBMH services and how best to address their mental health needs by eliciting information from the students themselves. Using focus group discussions, the authors assessed the students' perceptions of the SBMH services and their recommendations for how to promote students' engagements in SBMH services. From the qualitative analysis of responses from the 33 student participants between ages 14 and 20 years, perceptions surrounded the awareness of the SBMH service (some students not being aware of the existence of the service) and misconceptions of the service (assuming the service is either for academic support or for those with serious mental health concerns). In addition, positive views of

the service were also expressed to include the practicality of having such a service in the school in terms of ease of access due to the duration spent in school and the familiarity of the school situation to the service provider. Another positive view is privacy as students may not need to inform parents prior to seeking help while in school. Some negative views of SBMH services were also identified, including it not being helpful, concern about the time allocated by the provider, the length of the waiting period after booking the appointment, the issue of confidentiality due to the need to inform parents or school principal when the provider is concerned about an issue discussed by the student; and finally, stigma and cultural fit of the service. Some recommendations raised by the participants included the need to provide psychoeducation to students, the service provider engaging with students even before students sought help from them as well as engaging with parents to clarify their understanding of counselling. Ensuring privacy and confidentiality was also recommended.

Arora and Algios' study outcome is similar to results from a systematic review of literature on young people's views of UK mental health services (Plaistow et al., 2014). Studies which included both in-school and out of school settings found that views expressed about the service were around information about CAMH services; ease of access of the service; and skill set of the provider, including their ability to keep confidentiality. Concerns of stigma, medicalization of their problems and the lack of continuity of care were also raised. Another theme that stood out was young people's value of self-reliance (ability to be in control of self and to solve problems on their own) which was raised by young people who have no experience of service use. These indicate that although SBMH services may have specific motives, other aspects of the intervention need to be considered to increase effectiveness and appropriately address the needs of the adolescent. Although the need for SBMH service is high in SSA, little is

known of what young people think of the interventions and what they will recommend interventions to entail. The need to incorporate experiences of adolescents in interventions meant for them is my motivation for undertaking this study considering the Ghanaian setting. To date, no study has assessed the adolescents' perceptions, experiences and recommendations for the mental health support in senior high schools.

2.11 School-Based Mental Health Support in Ghana

Adolescent mental health in Ghana falls under the umbrella of the Adolescent Health and Development (AdHD) Programme which is spearheaded by the Family Health Division of the Ghana Health Service (GHS) (an implementing agency of the Ministry of Health). Currently, no standalone school based mental health programme exists in Ghana. One of the programmes the Ghana Education Service (GES) has rolled out in Ghana is the School Health and Education Programme (SHEP). One of SHEP's mandate is, in partnership with GHS, to facilitate the creation of a school-based health centre or infirmary in every school (mostly senior high schools) in the country to deal with the health needs of the learners on site. The health care provision in the infirmaries is the responsibility of the GHS (Policy and Guidelines, 2018).

The AdHD programme of GHS is responsible for running the school health service which is domiciled in schools' infirmaries. To ensure that adolescent health services in schools are adolescent sensitive, the National Operational Guidelines and Standards for Adolescent and Youth-friendly Health Services informs the services to be provided (GHS, 2019). The document provides a list of minimum package of services to be rendered to adolescent and among it is mental health services.

The section on mental health accentuated the need for healthcare providers (nurses in the sickbays) to provide a basic mental state examination, teach life skills and coping strategies

where necessary (either as part of whole school programme or for students who may access care). In addition, they are to provide psychosocial support for mental health problems, drug use and other concerns or distress of the adolescent student, provide management for mental health conditions as well as refer the adolescent for specialist services where necessary. Among the minimum package of services is also a need to conduct a HEADSS assessment as part of addressing adolescent developmental problems (GHS, 2019). The nurses are trained with the adolescent health and development manual which contains guidelines and protocols of care to be applied in providing the minimum package of services. The manual is to ensure that service provision is appropriate, of quality and universal across public schools in the country. The minimum package also has a section on general health education, which guides the nurse to sensitise students on specific health education topics including substance use and mental health promotion topics (Policy and Guidelines for School-Based Health Services, 2018). In short, school nurses as part of their responsibilities of providing first aid medical care to students in schools are also to provide some form of counselling to the students. In addition, the nurses also use a guided interview tool called HEADSS (**H**ome, **E**ducation/Employment, peer group **A**ctivity, **D**rugs/Substances, **S**uicide/Depression and **S**afety) to assess for psychosocial needs. Additionally, continuous capacity building programmes are held for school nurses across the country. Some schools also have trained counsellors who also provide counselling services to students who may need it. Across the country, school nurses in charge of infirmaries have general nursing training and further training as adolescent health provider. These nurses have been trained in basic counselling, common adolescent mental disorders and basic mental health management including referral systems (Family Health Division Annual Report, 2021).

2.12 Theoretical Framework

This research is guided by the social ecological model by McLeroy, Bibeau, Steckler and Glanz. McLeroy, Bibeau, Steckler et al. (1988) developed the social ecological model based on the ecological model of human development by Bronfenbrenner (1977). In his Ecological Systems Theory (EST), Bronfenbrenner identified four inseparable and interconnected contexts within which individuals exist and develop. EST proposed that human development cannot be understood outside the context of the environment within which the individual's growth takes place (Burns, Warmbold-Brann, & Zaslofsky, 2015; Navarro, Tudge, & Doucet, 2019). The four systems that make up the EST are the microsystem, mesosystem, exosystem, macrosystem and chronosystem.

McLeroy et al. (1988) assume that "appropriate changes in the social environment will produce changes in the individual and that the support of individuals in the population is essential for implementing environmental changes". They developed an ecological model that focuses on both the individual and the social environmental factors which health promotion interventions target. McLeroy and colleagues proposed five interactive and reinforcing levels specific to health behaviour. These levels are:

Intrapersonal factors: The characteristics of an individual which include knowledge, attitudes, behaviour, self-concept, skills and the developmental history of the individual. In the current study, the intrapersonal will include the mental health problems experienced by the adolescent and how those problems have influenced or interfered with their functioning. These factors are assumed to impact the adolescent's choice of mental health support, their acceptability of the support, barriers to accessing help for their emotional distress and the recommendations they would make for an ideal mental health intervention or programme in the school.

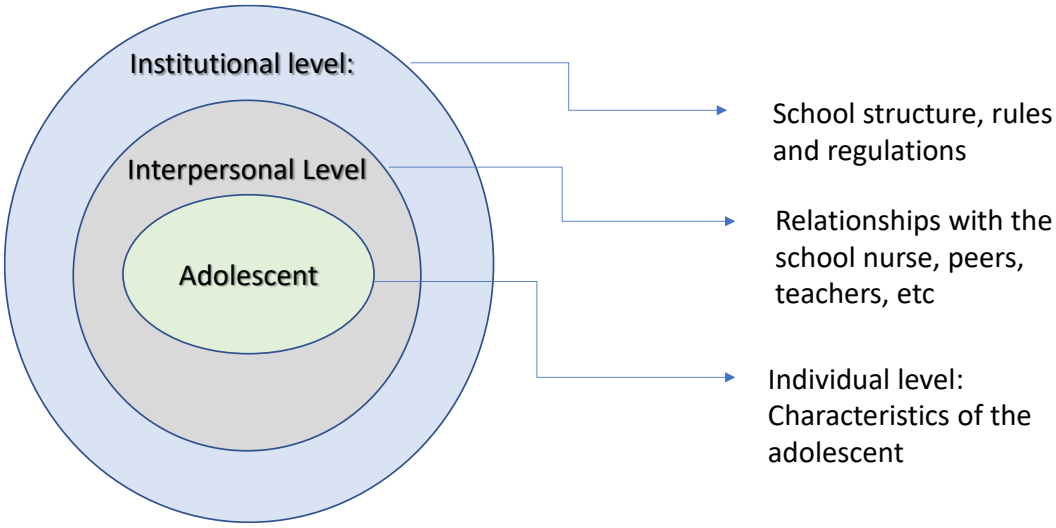
Interpersonal process and primary groups: These processes and groups are the formal and informal social network and support system available to an individual at a particular point in his or her life. In relation to the current study, the social networks and support system will include the school nurse, teachers, peers, school authorities and the family. The kind of relationships formed at this level will influence their perceptions of acceptability, barriers and recommendations they will make. Further, relationships within this level may provide mental health support for adolescents, either in addition to or instead of support accessed through school health services.

Institutional Factors: These are the formal and informal rules and regulations of the social institutions as well as the organizational characteristics of these institutions. For the current study, the school rules, regulations and structure of the school health services could influence adolescents' interactions with the services. Again, these could influence perceptions and recommendations from participants.

The last two levels are the community factors (relationships among organsations, institutions and informal networks within defined boundaries) and public policy (local, state and national laws and policies) (McLeroy et al., 1988). The current study will focus on the first three levels of the social ecological model (individual, interpersonal and institutional factors) in addressing the research questions. These levels are most pertinent when exploring adolescents' subjective experiences, and their needs in the school context. Figure 1 gives a graphical representation of the social ecological model structure and levels of influence in this project.

Figure 1

An Ecological Systems Model (Adapted from Bronfenbrenner, 1979)



Summary

Child and adolescent mental disorders are a global public health issue due to the burden of diseases such as major depression, anxiety and psychosis. The disease burden of these disorders is not only on the adolescent experiencing the disorder but also on the family, society and the country at large. There are also long-term effects in terms of social, economic, physical health and general functional ability. For the adolescent, mental disorders may result in various problems including academic performance and educational attainment. Despite these worrying findings about child and adolescent mental disorders, a wide treatment gap exists which is close to 90% in LMICs where a large percentage of the population consists of children and adolescents One of the various ways of dealing with the treatment gap in HICs is the introduction of school-based mental health programmes which have the potential to aid the early detection, treatment and linkage or referral of adolescents in school. Although limited in LMICs, SBMH interventions

are highly recommended for low resourced countries to deal with the treatment gap of child and adolescent mental disorders. Various forms of the SBMH intervention programmes have been recommended and their effectiveness assessed.

What is limited in literature from LMICs is a measure of adolescents' perceptions of school-based interventions or programmes. In Ghana, SBMH support is integrated into the school-based health programme which was implemented in schools countrywide about 10 years ago. However, the perceptions of the student adolescents regarding the mental health aspect of the programme have not been assessed. Being mindful of the need to incorporate the voice of service users in the adaptation and evaluation of existing programmes, the service provided in Ghanaian schools will benefit from adolescents' views of the programme. To this end, the research questions are: (1) 'what are adolescents in senior high schools' perceptions (experiences, acceptability and barriers) of mental health support in their schools?' and (2) 'what are senior high school students' recommendations for a school-based mental health intervention?'

The chapter which follows describes the methodological approach of the study.

Chapter 3: Methodology

3.1 Overview

This chapter will outline in detail the process employed towards answering the research questions. It will describe the study design that was used and the reason for the choice of design. The population and a description of participants eligible for participation in the study will be discussed in addition with an outline of the recruitment strategy, data collection process, management of data collected, analysis of data and ethical issues that were considered during the data collection process.

3.2 Purpose of Study

The purpose of the study was to identify the perceptions of secondary school students about the school-based mental health support they received in their schools and to explore their recommendations for what such a support should entail to meet their mental health needs. The study explored student participants' perceptions of the school-based mental health support in terms of their acceptability, usefulness and barriers of the support.

Aim and Objectives

The study aims to explore the perceptions of adolescents in senior high schools with regards to school based mental health service and their recommendations for such a service.

Objectives

1. To assess adolescents in senior high schools' perceptions (experience and acceptability) of mental health service by the school nurse in their schools.
2. To explore the perceived barriers to accessing current mental health support in senior high schools.
3. To elicit adolescent students' recommendations for school-based mental health support.

3.3 Study Design

A qualitative study design was used. Using this approach, participants had the freedom to describe their own experience in their own language, hence the research gave a voice to people who might not have the opportunity to share their thoughts (Cooper, 2012). A semi-structured interview approach was used to assess perceptions and recommendations for student participants. The semi-structured interview helped to guide and focus the interview but also allowed participants to share their experiences in their own words. The interviews were audio-recorded, manually transcribed and analysed on NVivo 12.

3.4 Setting

Due to COVID-19 related restrictions in Ghanaian schools and difficulties with school entry, participants were recruited from online. Flyers were distributed electronically on social media platforms during the school holiday period which enabled participants from various parts of the country and from different schools to be recruited into the study. Virtual interviews were conducted in accordance with participants' choices (although face-to-face interviews were also available), hence geographical location was not an obstacle for participating. Ghana is in the sub-region of West Africa and has 16 regions with the Greater Accra Region being the capital. The country has about 872 senior high schools (public and private) scattered across the 16 regions of the country.

3.5 Study Population

The population from which participants were selected was adolescents in Ghana in senior high schools (SHS). Generally, SHS in Ghana run a 3-year educational system (with 3 semesters per year) in over 500 public schools. The majority of adolescents in senior high schools are in boarding facilities where they spend 3-4 months in school each semester. As part of the support

for students during school time (while in boarding house or as a day student), a school infirmary is operated by trained nurses. At the time of writing, adolescents in senior high schools were typically between ages 16 and 18 years although there were students below 16 years or above 18 years as well.

3.6 Sample

Participants were adolescent students between the ages of 14 and 19 years. The age range was extended from the typical age in senior high school in Ghana so that students who were not within the typical age range but were in senior high school could also be eligible to participate. Initially, convenience sampling was used to sample participants through multiple sources. Thereafter, with the assistance of school nurses, purposive sampling was used to recruit adolescents who had a history of or current mental health problem and had received counselling service from the school nurse. Snowball sampling was also used but I ensured that participants did not all attend the same school. It did not matter whether student participants had accessed counselling service from the school nurse or not. The following inclusion and exclusion criteria were applied in the recruitment process.

Inclusion Criteria

Adolescents between the ages 14 and 19 years in public senior high school were eligible to be included in the study. The school the adolescent was attending was required to have a functional school infirmary staffed with trained nurses. Participants could be students with or without a mental health problem.

Exclusion Criteria

Students who were below 14 years or above 19 years were not included in the study. Also, adolescents between 14 and 19 years in private senior high schools or international schools

were excluded, as were adolescents in tertiary institutions. Also, adolescents without parental consent were excluded from the study.

3.7 Procedure

3.7.1 Recruitment and data collection.

Ethical clearance was received from both Stellenbosch University ethics committee and the Ghana Health Service ethics review committee. Flyers with brief details of the study were circulated electronically on social media platforms including WhatsApp, Telegram, Facebook and Instagram (see Appendix A). The electronic distribution of flyers helped to reach a wide group of adolescents from various senior high schools across different regions in Ghana. Interested participants contacted the investigator through social media (WhatsApp) or telephone call.

Adolescents who made contact with the investigator were briefed about the research and provided with an information sheet and an informed consent or assent form to complete. Adolescents who were above 18 or 19 years old at the time of the interview were asked to provide informed consent (see Appendix C), and those younger than 18 years, informed assent (see Appendix D). The adolescents aged 14 to 17 years were asked to consult with their parents who were then asked for parental consent telephonically. Verbal statements of agreement were also accepted as consent or assent as this was ethically approved and to facilitate electronic recruitment. Some participants also signed an electronic form which they submitted together with parental consent as necessary. Most participants were interviewed for the research the same day that they expressed interest and parental consent could be attained. Every participant was briefed about the research verbally prior to the verbal consent or assent. As schools reopened during the data collection period, some adolescents were recruited by school nurses. Such

adolescents provided details of parents or guardians and consent (see Appendix E) was sought telephonically. Adolescents aged 18 years and above did not need parental consent.

Once consent was given, the interview started together with the audio recording. The semi-structured interview was conducted with eligible students. Three students who were recruited did not meet the inclusion criteria due to their ages. One participant (female) had completed senior high school almost 2 years previously and two others (a male and a female) were aged 21 years. All interviews were conducted and audio recorded on Zoom where recordings were downloaded from.

3.7.2 Interview Procedure

The aims, objectives and purpose of the study and ethical considerations were read out to the participant as outlined in the information sheet. As part of building rapport prior to commencing the interview, participants' knowledge and understanding of adolescent mental health, stress and emotional problems were discussed and further information about the topic was provided. This discussion period helped to tailor the interview to each participant's knowledge and understanding of mental health. Once consent was given and the participant was ready, the interview (with recording) commenced with introductions of the investigator and the adolescent. Participants were encouraged to choose a pseudonym for the study to ensure anonymity and this name was used to address them throughout the interview process. The interview guide was used to elicit responses from participants. Interviews were conducted by the researcher and lasted a maximum of 60 minutes per participant. Interviews were conducted in the privacy of the investigator's office and participants were encouraged to use a private room during the online interview. None of the participants expressed feelings of distress but all were encouraged to

reach out (to the investigator, school nurse or school counsellor) if they started to feel distressed following the interview, even days later.

3.8 Instruments

As the researcher, I was the main instrument for data collection. An interview schedule was used to gather information of the perceptions and recommendations of adolescent participants (see Appendix B). The interview schedule had three main sections. Section 1 was for briefing, consent and demographic information. Section 2 was for school information and experience with mental health problems as well as experience with the school's mental health support. The concluding section elicited participants' ideas and recommendations for a school-based mental health intervention. The schedule had prompts which helped to elicit more information when participants got stuck or were not forthcoming with information.

3.9 Data Management and Analysis

I manually transcribed verbatim audio-recorded interviews and analysed them using NVivo (QSR International) version 12. I used reflexive thematic analysis to generate themes from codes following Clarke and Braun's six steps (Braun & Clarke, 2006) as follows:

1) **Familiarisation with the data**: I manually transcribed the recorded interviews and uploaded them on NVivo 12. I read the content several times to get fully familiar with the content. I listened to the recordings again along with the transcripts and errors were corrected in the transcripts while noting down initial ideas and relevant information from the interactions.
2) **Generating initial codes**: Once I achieved a good understanding of the context of the conversation, I generated initial codes with the NVivo software. I started with a

deductive approach to coding based on my research questions, which I combined with an inductive approach in order to allow other themes to be identified.

3) **Searching for themes**: From the codes generated, I manually formed themes and sorted codes based on the relationships between codes and themes.
4) **Reviewing themes**: I further reviewed the themes in comparison with the coded extracts and in relation to the data set.
5) **Defining and naming themes**: Themes I identified, I refined and redefined to further enhance the themes and subthemes. I did this to ensure that the themes captured the essence of the data.
6) **Producing the report**: I wrote a report based on the themes, research questions and aims of the project.

The investigator handled all raw and transcribed data which are kept secured on her password protected personal computer and made these available to the supervisor as well as the course representatives. Audio-recordings would be deleted once research is submitted.

3.10 Ethical Considerations (S21/06/111 and 024/10/21)

Ethical approval was received from the Stellenbosch University's ethics committee and ethics review committee of the Ghana Health Service. Each participant was briefed about the purpose and aims of the research and assent (from participants below 18 years) or consent (from participants from 18 years and above) were received prior to commencing the interviews. Parental consent was also sought for participants below age 18 years. Due to the use of virtual recruitment and data collection, verbal consent and assent were accepted from participants and their parents and their initials were used to represent their signatures. The following ethical considerations were followed:

1) Student participants voluntarily reached out to the investigator or were invited to participate in the research. Participants were informed of the voluntary nature of the research. Participants were informed through the participant information sheet and orally at the start of the interview of their voluntary participation and that they could withdraw from the research at any point during the interview or study without giving reasons. They were also assured that their refusal to participate or withdraw from the study would not affect any health care service they would require from any hospital or school's infirmary.
2) Privacy and confidentiality were ensured hence participants' institutional names were not used in the report, rather the regions of the institutions were reported. The identities of students were protected by using pseudonyms participants provided during the interview. Also, I conducted the interview in my private office and measures were taken to ensure that students' interview locations were also private.
3) There was no direct physical risk of harm to participants due to their participation in the research. Psychological distress was anticipated due to participants needing to discuss past experiences of stress but no client reported distress.
4) Minimisation of risk of harm to students was ensured by putting measures in place should any student felt distressed during the interview. No student participant reported any form of distress during the interview.
5) Participants were reimbursed with an amount of money for the internet data usage in the virtual interview.
6) There was no direct benefit associated with participating in the research but participants were assured that their input could help to improve mental health interventions or stress support in senior high schools.

7) To further ensure confidentiality, data collected were handled by the investigator herself and stored on the investigator's password protected personal computer which could be accessed by only the researcher.

Chapter 4: Results

4.1 Overview

This chapter describes the results of the data collected from participants. It outlines the characteristics of the study participants, describes the themes and subthemes extracted from the data, and summarises the findings in the last section.

4.2 Participant Characteristics

A total of 27 student participants reached out to enroll in the study. Two participants (a male and female) were above the age eligible for inclusion; one (female) was a senior high school graduate; one (female) was only interested in receiving support for her mental health problem, hence she was referred after a short conversation. One other adolescent (female) conveyed the impression that she was being coached to respond to the interview questions based on whispers in her background, hence recordings from the above were not used in the analysis. As a result, 22 interviews from 22 student participants were transcribed and analysed.

The majority of participants were males (13 equivalent to 59.1%). Participants were between ages 16 and 19 years and mostly in their 2nd and 3rd years (forms 2 and 3 respectively) in their respective schools. Participants were from 12 different senior high schools in Ghana, spread across 3 different regions (Greater Accra, Central and Eastern regions). Table 2 shows the characteristics of the participants. All participant names used in the report are fictitious names and were chosen by participants as a means to protect their identity in line with ethical considerations.

Table 2

Characteristics of participants

Participant characteristics		Age (Years)				Total
		16	17	18	19	
Gender	Male	5	4	4		13
	Female	3	4	1	1	9
Grade	Form 2	7	4			11
	Form 3	1	4	5	1	11
School location	Greater Accra Region	3	2			5
	Central Region	3	6	5	1	15
	Eastern Region	2				2

4.3 Themes and Subthemes

The aims of the study were to explore Ghanaian senior high school students' perceptions (experience, acceptability and barriers) and recommendations for school-based mental health support in senior high schools. As such, themes and subthemes were developed around these areas. Table 2 shows the various themes generated. Participants' experiences of stress, mental health problems or emotional challenges were discussed and summarised in table 3 below.

Table 3.

Themes and Subthemes and related social ecological levels

Themes and Subthemes	**Description**	**Ecological Level**	**Number of participants**
Knowledge of mental health support from nurse	Knowledge that the school nurse could provide mental health support.	All 3 levels (individual, interpersonal, institutional)	14
Other Mental health support (school counsellor/chaplain)	Awareness of the presence of other mental health support in the school.	Interpersonal	15
Experience of mental health support			
Formal support	Counselling service from school nurse or counsellor	Interpersonal	4
Informal support	Support from peers, family and teachers	Interpersonal	6
Self-reliance	Reliance on self to deal with mental health problem	Individual	7
Acceptability of formal service	Perception of the usefulness and acceptability of the current mental health support	Interpersonal	8
Barriers to accessing formal support			
Unavailability of counsellor	Physical, emotional and professional availability of school nurse or counsellor	• Interpersonal • Institutional	4
Discomfort in Accessing Support	The ease and comfort attached to seeking professional support	• Individual	12
Recommendations for SBMHP			
Theme 1: Kind of mental health intervention			
Universal Preventive Intervention	Whole school prevention intervention	• Individual • Institutional	8
Individualised Prevention Intervention	Individualised support	All 3 levels	12

Theme 2: Service Provision			
Characteristics of provider	Kind of service providers, in terms of professional standing and ability to provide support	• Individual • Interpersonal	21
Attitude of provider	Description of the accepted attitude of provider to enable easy access of service by students	• Individual • Interpersonal	6
Club or committee formation	School mental health club where students can receive support.	All 3 levels	5

Mental Health Problems

A total of 17 participants reported they had experienced some form of mental health problem with varying symptoms. Participants reported emotional symptoms such as sadness, anger, irritability and confusion. Sixteen-year-old Diana said:

> "*I was actually confused and I felt really hurt so I wasn't myself… I was angry and sad…*"

Some participants reported behavioural symptoms such as withdrawal, and restlessness. Sixteen-year-old Joel said:

> *"… at times I will usually put-up erm…unusual behaviour towards people, I wasn't able to relate well, and at times I will just withdraw myself from other people and isolate from them".*

Cognitive symptoms such as problems with memory and concentration were also reported as mentioned by Edmund, aged 17 years:

> *"I became very sad……. and I couldn't concentrate on what I was learning"*.

Participants also reported physiological symptoms such as sleep problems, loss of appetite and headaches. Eighteen-year-old David said:

"...there were these headaches, I was errm restless, I couldn't sleep".

Stressors included academic and examination problems, relationship problems (both romantic and peer relations), family situations, bullying and separation anxiety. Liv, a 16-year-old responded to what makes her stressed by stating:

"*How our other colleagues treat us in school ... some of the things happening in school and at home ...".*

Symptoms and the presence of stressors lasted 2 days for some students, between a week and two and between a month to 2 months for others. Only four out of the 17 participants with stressors had sought or received support from a school nurse.

Knowledge of mental health support from school nurses

The foundation of students' awareness or knowledge of the nurses' additional role as counsellors could be classified under all three levels: individual, interpersonal and institutional levels of the social ecological model. At the individual level, some adolescents had knowledge of healthcare workers' roles, while at the interpersonal level, some participants had acquired knowledge through their peer networks. At the institutional level, some of the students' knowledge was from information provided by the school authorities, information systems and the organisational structure of the school.

Participants expressed awareness that the school nurse is meant to provide mental health support or counselling service. Some students believed that because they (the nurses) were trained in nursing, they should be able to take handle student's mental health problems alongside the other healthcare services. Princess, a 16-year-old student who had received both physical and emotional support from the school nurse in the past responded to the question of how she got to know the school nurse provided mental health support by saying:

> *"Because, erm… he's a health personnel so I think everything around that area is his field so…he needs to give mental health… to people suffering …"*

This response suggested that students had knowledge that the nurse is expected to provide not only physical health care but also mental health care. Unlike Princess who had experience with the school nurse, Justice, an 18-year-old student, expressed he had the knowledge but had not accessed mental health support from the nurse. He just had a belief that mental health support was part of the nursing care. He responded to how he knew the nurse provided counselling by stating that:

> *"Because er… I think she has been given the training on those things so... she would be the perfect person to maybe guide us … and give maybe advice on those things*."

Some students also knew the nurses' roles included counselling because of information provided to them in the school either from the first year in the school, school health programmes (health talks) or from posters in the infirmary outlining these roles. This form of knowledge could be associated with the school's regulations and systems, hence at the institutional level on the social ecological model. Melody, a 17-years-old student said that she got to know that the nurses provided counselling *"because they advise us to always come to them when we're depressed and all that so that we can talk to them."*

Melody, who had never accessed counselling support from the three school nurses in her school reported that there were posters in the infirmary that also outlined these mental health roles. Thus, there is some evidence that certain schools had put measures in place to create awareness of mental health support for students.

There were also some students who based their assumption of the nurses' role in providing mental health support on what they had been told by other students who had received support as well as the way students were cared for in the infirmary. In other words, the behaviour of social networks (school nurses) contributes to adolescents' knowledge and this relationship between the adolescent (at the individual level) and the school nurse is at the interpersonal level of the social ecological model. For instance, eighteen-year-old Dominic explained why he thought the nurses provided counselling services. He stated:

> *"At times some people come … some people go there … he will not give them let's say drug or medicine, he'll just talk to them … then, they will be ok."*

Dominic, despite not knowing what support was provided to the student he observed, assumed that if the nurses did not give medication to a student who reported to the infirmary and the student got well, they might have provided some form of counselling or advice. Again, students' interpretations of the attitude of the nurses as they attended to students with physical health needs was the basis for their assumption and hence their knowledge. David, an 18 years year old student confirmed this notion in his response. He stated:

> *"Because ermm... the last time I visited them ermm..., they were friendly. It seems like somebody you can share your problems with".*

This assumption suggested that students perceived a mental healthcare provider would have a friendly and welcoming attitude, hence having observed a friendly attitude from the nurses indicated that students could receive counselling from them. The opposite was also true where students who observed a poor attitude (rude behaviour) from the nurses assumed they (the nurses) were unlikely to provide counselling services. 17-year-old Paul described the attitude of

his school nurses to be unwelcoming even when providing general medical care. Asked if the services of the nurses included mental health support, he responded:

> *"No,…their customer service is actually bad … it's like they don't know how to talk to students so I'm not even sure someone will even go to them and ask them to solve these problems for them".*

Participants' awareness of the nurses doubling as counsellors was based on them exhibiting an attitude that is friendly and warm to allow openness for the individual to want to share personal concerns. Similar to Paul's assertion, sixteen-year-old Diana, who had also observed the behaviour of the nurses in different settings was sure that their attitude did not indicate that they could provide counselling. Asked why she did not think the role of the nurses included mental health or emotional support, Diana responded:

> *"She is rude and keeps on shouting at us sometimes and she doesn't have patience".*

The implication is that participants were aware of what kind of personality could provide mental health or emotional support, hence accessing counselling services was dependent on the attitude portrayed by a provider. Based on the social ecological model, although knowledge is at the individual level, it is recognised that there are influences from both the interpersonal and institutional levels, a confirmation of the interactive nature of the levels of the model.

Experience of Mental Health Support

This theme encompasses adolescents' experiences at the individual level in the model, however because the experience involves a social support or a social network, it is associated with the interpersonal level as well. Three sub-themes were identified: formal support, informal support and self-reliance.

Formal support: Four participants (three females and one male) reported that they received some form of counselling from their school nurses when they felt stressed. Nana Kwame, an 18-year-old student stated that his emotional problems resulted from what he calls, "*girl issues"* which affected his schoolwork, his social relations and his ability to sleep. Nana Kwame reported that his symptoms were short-lived because he consulted the nurse early and her support was helpful. He stated:

"…. I took her advice and it helped me a lot…"

Princess, a 16-year-old student explained that she sought assistance from the school nurse because she was familiar with him as he had provided therapy for an injured knee. She reported that she discussed her concern with him during one of her visits, and received help from him. She said:

"I talked to the school nurse about it…my sadness, … it was…I think less now because he gave me certain advice so I was like, ok I'll use them"

Both Nana Kwame and Princess (from different schools) had earlier stated that counselling was part of the responsibilities of the school nurse because nurses were trained to provide such support. However, some students had knowledge of the existence of formal support for mental health or emotional problems but did not access it. Some students accessed informal form of support for their distress.

Informal Support: Joel (16 years) did not assume the school nurse was responsible for providing emotional or mental health support in the school although he reported the school authorities had informed them about the service. Joel had heard of his friends accessing the service, for his own emotional support, however, he stated that assistance from a fellow student

was his preferred option. He responded to why he had not seen the school counsellor for assistance before, stating:

> *"…I believe that my friends…some of my friends may be able to help me out of my situations …"*

Sixteen-year-old Jason also reported he consults his friends when stressed out. In response to how he found help, he stated:

> *"Yea I have friends,... I have close friends whom I talk to…"*

Other informal forms of support beside peer support included parental support, assistance from a teacher or the school chaplain. When 17-year-old Edmund was asked how he got help for stress, he reported:

> "*…I called my mum and I told her everything about it and she started to talk to me and I got over it".*

Edmund mostly sought support from his mother when faced with any emotional challenges despite being aware of the services of the school counsellor. He however did not believe the school nurse had time to provide counselling and referred to the counsellor as the one with time to provide such a service. Although he knew friends who had received useful support from the counsellor, he perceived that his mother was the only one to calm him when he was struggling mentally.

The two forms of support (formal and informal) accessed by the participants could be associated to the interpersonal level of the social ecological model.

Self-reliance: This behaviour is strictly at the individual level of the model because participants' self-efficacy, knowledge, values, expectations and various other characteristics contribute to an individual's ability to cope with stressors. A number of participants reported

they cope with their mental health problems and stressors on their own. Various forms of coping were reported to have been employed. Liv, a 16-year-old student who described herself as an introvert said she encouraged herself when she is going through mental health problems.

> *"By telling myself everything is going to be okay so I just have to forget about it and move on".*

Other participants reported other forms of coping such as engaging in helpful activities such as reading motivational books, taking a shower, sleeping, among others. Sixteen-year-old Foster reported he reads:

> *I was just reading ermm… motivational quotes. I have this book, it's a motivational guide. So, I was just reading it"*

Eighteen-year-old David reported he listens to music. He stated:

> *"Mostly erm for me, when I get erm problem, I don't actually tell people, I tend to deal with it myself … I tried to take my mind off it, I'll just play music, I'll just listen to songs and then I'll be a little bit ok"*

Eighteen-year-old Sandra reported she employed various strategies to cope. She stated:

> *"Sometimes I just encourage myself …at times I just…sometimes I just sleep…just have a good rest and I feel ok. And sometimes…I go to the bath house and just shower".*

Some participants also did not actively act at ending their distress, rather allowed it to resolve on its own.

Acceptability of formal support

This theme is at the interpersonal level on the ecological model because it is related to the relationship between the individual and the social network or support, they have. In other words,

the fact that mental health support is with a significant other, the form of relationship developed would be relevant. The relevance of the relationship is due to its impact on the adolescent's decision to accept the support or not.

A majority of the adolescent participants had a favourable opinion of the formal support in the school for mental health problems (either from the school counsellor or nurse) although only a small number had accessed the service themselves. Concerning the school nurse, only a few students who recognised that the functions of the school nurse included counselling services were accepting of such support from the nurses. Leticia, a 19-year-old student who had not accessed counselling service from either the school nurse or counsellor, expressed the need for the service for students. She stated:

> *"Madam, if the school nurses are not here and the counsellors too they are not here, madam, like me, we always feel sad because of the behaviour of our colleagues and the teachers".*

Leticia stated that she was struggling with her emotions (at the time of the interview) due to maltreatment from her colleagues and teachers. The help she sought was from her parents despite her knowledge of the presence of school counsellors and nurses and their ability to support her. From her statement above, she had a good opinion of the service although she had not yet accessed it herself.

Some students who had not accessed counselling service were however accepting of the service because of an attitude observed with the nurse. Sandra, an 18-year-old student, who had not accessed counselling service from the school nurse, expressed her acceptability of their service based on the attitude of the nurses when she visited for a different reason. She stated:

> *"Well, sometimes you visit the place and how they…they're this friendly and they talk to you…you feel you can just open up to them. That they can help you in a way. Whatever you're going through…. you feel like opening up to them".*

This statement implied that students like Sandra could accept counselling from a friendly nurse. Even when they had not accessed such help, they would know where to go when they needed it.

Perceptions of barriers to seeking formal support

This study originally sought to identify students' perceptions of barriers in relation to mental health support (counselling) from school nurses only. However, during the data collection, the support of school counsellors featured in most students' responses. Hence the focus was broadened to barriers to other professional support within schools, namely from school counsellors or chaplains. Although most of the participants did not have a clear reason for not accessing professional help, a few expressed reasons which are categorised into 2 sub-themes, namely, unavailability of counsellor and discomfort in accessing counselling service.

Unavailability of Counsellor

Student participants expressed that the unavailability of the care provider contributed to their not accessing professional help. On the social ecological model, this sub-theme is at the interpersonal and institutional levels in terms of their influence on the individual. At the interpersonal level, the relationship with the counsellor or nurse is relevant in understanding this barrier while the institutional level recognises the influence of the school's regulations or structures contributing to the presence of the perceived barrier.

The unavailability of providers has been grouped into 3 categories: physical

unavailability, emotional unavailability and professional unavailability.

Physical unavailability*:* This is at the institutional level where the systems or structures implemented by the school authorities contributed to the physical presence or not of the counsellor or nurse.

One student, 16-year-old Diana, stated that the counsellors were not easy to reach. When asked why she had not gone for professional counseling for her present emotional challenge, she stated:

> *"…because the counsellors around I think sometimes when you go to their offices, they're not there, or they've gone out for classes …"*

Diana was a student who had experienced several emotional challenges in the past and her reported preferred form of support was self-reliance although she reported having had brief support from the school chaplain (who doubled as a counsellor) in the past. Her perception of the school counsellor not being available was not further discussed but this notion may be a major concern for students. For instance, when asked how mental health services in the school could be improved, a number of the participants suggested the need to increase personnel (school nurses or counsellors) so that a provider is readily available when they need help. Princess, a 16-year-old student agreed, stating,

> *"…let's assume it's only the school nurse and the counsellor and the school nurse is also busy, … and maybe I'll have to come the next day … you'll feel a heavy load … so if there are a lot of people … one of them might be free whom you could go and speak to in order to be free…".*

Emotional unavailability: This sub-theme is at the interpersonal level of the model where the relationship between the individual and the school nurse or counsellor are factors of

influence. Participants were concerned about the emotional expressions of providers. Some had observed or experienced negative emotions exhibited by the nurses, hence could not imagine seeking emotional support from them. Paul, a 17-year-old student, who believed that seeking emotional support was good for one's mental health explained a situation between him and a nurse that would not encourage him seeking emotional support from her. He stated:

> *"... one time I went to the infirmary ...and then I told the woman that...errr my stomach is paining me, ... then the woman replied me with, "how do you know whether your stomach is paining you? we are the ones supposed to tell you", and she said it in a rude manner ... that is not how we are supposed to talk."*

Paul's choice of emotional or mental health support was his friends whom he felt were welcoming and accepting of him based on emotions exhibited. Situations where nurses or providers exhibited negative emotions toward students, indicated to the student that the nurse was not emotionally available to discuss another persons' emotional or mental health problems. The emotions expressed directly or indirectly served as a barrier to students accessing counselling services. Negative emotion such as anger or irritability exhibited by the counsellor did not encourage a desire for students to open up and discuss their issues of concern.

Professional unavailability: This sub-theme is at the interpersonal level due to the influence of professional relationship being discussed by participants. Here, the ability of the provider to allocate enough time to assist with students' mental health problems was questionable. Although not based on direct experience of support, 17-year-old Edmund formed his perception of the school nurse's ability to counsel students from the outcome he observed when fellow students were not allocated enough time by the nurse to have their emotional

problems resolved. Edmund explained that:

> *"… sometimes when some people come to them… when some people come to her, she doesn't really have time for those people …. Yeah, and so the people come back with the same problem again."*

Thus, even if young people knew the professional ability of a provider, not experiencing it may not convince them enough to want to access the service. Edmund's perception was similar to that of Paul's who believed that support from his friends was enough. Seventeen-year-old Paul however did not think the counsellor could provide full mental health support. He suggested that "mental health personnel" should be brought to the school in an effort to improve the current service because, according to Paul:

> *"…the counsellor, it's not everything … he can answer if we're being honest ... the counsellor can be there for non-related mental health problems".*

From the above, Paul appeared to equate the support from the counsellor to that of his friends, which implied he did not perceive the counsellors' professional expertise in mental health care. He further admitted that he would be able to open up more easily to his friends than to the counsellor when he needed emotional support. The implication here is that if students did not recognise the professionalism of the provider, then their choice of source of counselling was dependent on how comfortable they felt with the 'counsellor'. The next section elaborates on discomfort as a barrier.

Discomfort in accessing mental health services

The sub-theme, discomfort in accessing mental health services or counselling services is classified at the individual level of the social ecological model. This is because the individual

characteristics contribute to the feeling of comfort and ease in accessing formal counselling services. The adolescent's age, personality and perception about the behaviour (speaking to a nurse or counsellor) are relevant at this stage to influence the action to be taken. Some students also expressed difficulty in seeking professional support based on familiarity with the person in charge which would give them the comfort to open up freely to share. As a result, the lack of this ease or comfort in speaking to a provider could discourage access to formal service or support. Some students found speaking with their friends to be easier than speaking with a professional, hence they chose fellow students to be their main source of emotional support. Joel, a 16-year-old student who knew well enough the work of the school counsellor but did not believe that emotional support was part of the duties of the nurse described a hierarchy of support seeking which started with his friends because:

> *"Okay, … I think that they're the ones that relate to me…it is easier for me to talk out my issues with them so that's my reason why I choose them".*

When asked why other students did not access the service of the counsellor, Nana Kwame (18 years old) responded that:

> *"Because I don't think they're comfortable enough. Because for me, I won't be... I won't feel ok speaking to someone. I will feel ok speaking to certain people but not a counsellor or a therapist."*

The implication of this statement is that perceived comfort with the nurse may encourage access to counselling service. However, when the nurse seemed friendly and warm, anticipated negative outcome could deter some students from accessing support. For instance, when Leticia, an 18-year-old student, who had been treated poorly by her peers, was asked why she had not

sought support from the school nurses although she knew they could assist with her emotional challenges, she responded:

> *"I think she* (school nurse) *will also behave like that. Madam I want to stay away from them. Even though they are friendly but I'm afraid they'll do the same thing."*

This statement also indicated that the fear of approaching the provider took away the ease and comfort, hence the hesitation of some students. Another student, Liv (16 years old), stated that the fact that she was an introvert was the reason for not seeking support.

> *"I'm kind of an introvert person so I don't normally share my information with anyone"*

Liv reported that she had stressors from both home and school which affected her emotionally, her relationship with her friends, and her school work. She however resolved to keep her concerns to herself instead of seeking counsel. Although there might be an element of discomfort in accessing support, it is assumed from her response that she had a poor attitude toward seeking help for emotional challenges. In another vein, David, an 18-year-old student, had a perception that he had not found anyone who could understand him and hence he mostly kept his problems to himself. During the interview, David recounted a relationship problem that affected him emotionally and instead of accessing support in the school, he instead chose to resolve it himself. He explained that resolving his own problems was his default attitude towards dealing with emotional or mental health problems:

> *"Ermm.. mostly ermm… for me, when I get ermm… problem, I don't actually tell people, I tend to deal with it myself"*

Asked why he resolved his problems himself, he responded that he was used to that. David however confirmed that he was aware that there was professional help in the school.

Recommendations for Mental Health Support in Schools

The second part of the study which was to determine students' recommendations for a school-based mental health intervention yielded a few suggestions from the participants. To this end, participants were asked: "How can the service or support in your school be improved? And if you were to design a mental health service in your school, what would it entail?" All participants responded to these two questions with some repeating their responses for both questions. One participant responded that he did not think he needed mental health support from the school and another stated that he did not have any idea what should be done in that area of students' lives. Some commonalities were noticed in the suggestions provided which have been grouped into the following themes: (1) kind of mental health support (2) service provision and (3) establishing a club.

1. **Kind of mental health intervention**

Some of the recommendations from participants regarding the desired type of mental health support could be can be categorised under two subthemes were identified: universal and indicated prevention. Both universal and individualised prevention strategies suggested are classified under the institutional level of the ecological model because changes in institutional regulations and structures would influence these recommendations.

Universal Prevention

Eight students suggested that their schools should put strategies in place to provide some form of mental health education and training to all students about how to manage their emotions, what mental health is about, and how to prevent mental illness. Samira, a 17-year-old student

described a past mental health problem following an asthmatic attack in school and was sent to a district hospital for healthcare. She recalled being referred to a team of mental health personnel in the hospital who provided her with counselling. Samira made the following suggestion improve mental health services in her school:

> *"I'll suggest we organize all the students …and with the school nurse… and the counsellor to sit us down to talk to us… how we can control our emotional …our emotional things and our physical life things because if not, …people are suffering but they can't tell."*

This suggestion from Samira illustrated participants' opinions that young people desire to be well informed about how to care for themselves. From Samira's statement, it appeared that students may not easily and readily seek help for a mental health problem, hence providing general guidance to all students on how to handle stressful situations would alleviate students' suffering on a large scale. Such an effort (universal intervention) could also improve the mental health literacy and self-referral of students. This notion was supported by Dominic's (18 years old) justification for recommending a universal form of intervention. This participant reported that he accessed support from the counsellor but did not get the full support he needed and thus he had to solve his problem by himself. He suggested that public education would be a good improvement to the mental health support in his school because:

> *"You see, for this one, … we have people when they are in trouble, you will not see it. So, this one they should do it general …."*.

Dominic's suggestion indicated that the need to provide universal support was to serve a large proportion of students who may or may not need mental health support. Such support, according to Dominic should be aimed to:

"teach them how to forget some unnecessary things … we have some things we don't' need to think about them".

Other participants also suggested similar education-giving activities, recommending when and how such an activity could be incorporated into the school's weekly activities. Seventeen-year-old Akwasi suggested:

"On Fridays … the academic work is not all that plenty …so during Fridays, there should be an assembly for…like mental health programme…the nurse should educate us about… mental health … and the need for everyone to have a good mental health condition."

Akwasi reported he had friends who were experiencing mental health problems but had not accessed care. His suggestion hence corroborated with the need for students to be well informed about how to cope in stressful situations even if they did not seek help. Also, from the previous sections which reported that students were more self-reliant and readily sought peer support, if the whole school was provided with series of mental health education, the effect would be far-reaching.

Individualised Prevention

Students also recommended the need to have structures or systems in place for students who needed individualised counselling to be able to access it. Twelve students provided suggestions that could be characterized under such an intervention. Mellita, a 17-year-old student, recommended that provision must be made for students to access individualised counselling when she was asked what she would want the mental health service in her school to entail. She stated:

"Erm…, okay, I think there will be a counsellor and he will like, have his or her own office … so that people can go, in case they are having problems."

Participants also suggested that strategies should be put in place for students experiencing emotional challenges to be identified and assisted appropriately. This suggestion was based on the acknowledgement that help-seeking behaviour or the attitudes of adolescents may be poor when it comes to going for counselling (if not all other aspects of health). Some students recommended that instead of counsellors or nurses waiting for students to approach them for counselling, there should be strategies to find students who need help. David, an 18-year-old student who had already indicated his hesitance at seeking help when he needed it, suggested that students experiencing problems should be identified and assisted. He proposed:

"They should come down and observe what ermm … others are going through … you'll see that ermm,… maybe someone is suffering but they may not find a way to approach you or tell you ermm … this is her problem … try to assess … what's happening to him …"

This suggestion also indicated that students or adolescents may not readily access counselling services but wished to be identified and assisted somehow. In other words, when common symptoms such as poor academic performance, depressed feeling or inappropriate behaviour are noticed, a nurse, a teacher or a counsellor could attempt to engage with the adolescent towards providing counselling or psychosocial support. David further suggested that the nurses could also assess other aspects of the adolescent's health even when a medical problem was the reason for the adolescent's visit to the infirmary. He stated:

Let me say erm, let me say for a nurse, ok, if we ... let me say erm if you're coming to check up on your health ok, they are to ask you about things in your house ... or like what's going on with your things in school, I think all those will help with the mental aspect.

Although from the initial submissions, participants did not readily access mental health support in the school, a few students suggested that the number of providers should be increased. Peter and Princess, like other participants, proposed that more providers should be made available to students. Neither reported that students had a long waiting period to access service or that providers were not available when needed. They suggested that:

"... I think more people should be…err... employed to be counsellors ...so that ...we can accommodate more people" (Peter, 16yrs)

"... I think that err…they should err… bring enough people, a lot of people to help with this mental health" (Princess, 16yrs)

Another suggestion elicited was for a mental health centre to be established in the school. Paul, a 17-year-old student, who did not perceive that the nurses or counsellors could provide mental health support, even though he knew a friend who had benefitted from the school counsellor's assistance, recommended the need to have mental health personnel in his school.

"Err…they should create like avenues for mental health personnel like those specialized in mental health because the counsellor, it's not everything he can, he can answer if we're being honest … (he continues) *…so if they bring like ... a personalized mental health centre in our school, it will be good".*

This suggestion indicated and confirmed further the adolescent's desire to have a professional provide counselling services. This submission led to the next theme linked to the service provision students anticipated for their schools.

2. Service Provision

In addition to the above-suggested kind of service, participants also suggested the details of services to be provided in terms of the kind of service provider (nurse or counsellor) and characteristics of the provider. These sub-themes are associated with both the interpersonal and institutional levels of influence.

Kind of Service Provider

The recommended provider type has institutional level factors according to the ecological model because institutional rules and regulations would guide the allocation of nurse and counsellors, further training of these providers and requisite skills of providers in the school. Some participants suggested that the provider should be a professional (a therapist or mental health personnel) with training to provide professional counselling or therapy. Nana Kwame, an 18-year-old student, who had a belief that the nurse should be capable of providing counselling suggested that:

> *"…there should be errrmm.... a real therapist.... someone who is fully into therapy... someone who is purposely for that."*

Similarly, Peter, a 16-year-old student, who assumed that students may be reluctant to access counselling, suggested having a variety of providers for students to choose from. When asked the kind of providers he would recommend, he simply responded that they should be professionals. The suggestion to have professionals was mainly for the individualised counselling proposed by student participants. Other students recognised the work of the

counsellor in this kind of support and suggested the need for a permanent counsellor to be allocated to their school instead of a chaplain. For instance, one school had only a chaplain who assisted with students' mental problems. When asked what support she could suggest for her school, the desire to have a permanent provider was 17-year-old Melitta's priority especially as she did not think the nurse had the capacity to assist with students' mental health needs. She suggested:

> *"I think, …like, it'll be good if we got a permanent therapist, or a counsellor or something, because… I don't think it's really the Father's job to help us, but he does"*.

The above suggestions indicated that students' idea of mental or emotional support is one that is from a professional or someone they believed has the capacity to ease their struggles. This notion of who could ease their mental health problems came from the perception of what their existing support entails. For instance, some students who perceived that a teacher or the school nurse was capable of providing support did not suggest the need to have professionals. One of such students was 18-year-old Dominic who had suggested that a day should be set aside for people with problems to receive counselling. This participant stated that the chaplain, nurse and teachers would be capable of providing such support to students. When asked who the mental health personnel should be, he stated:

> *"…we have the school chaplain and…we have the school nurse and we also have other teachers who can do that"*.

Participants also suggested that the nurses needed to upgrade their knowledge to provide counselling. Akwasi, a 17-year-old student who was confident about the nurses' ability to

support students who had mental health problems, also thought the nurses could benefit from further training in the area. He stated his reason as:

> *"I think we're in the modern world and as time goes on things change… I think they* (the nurses) *need to be updated on how to do things so that they improve on their professional skills so they can help those who are having mental problems"*.

This suggestion indicated that students could get comfortable receiving emotional or mental health support from people they knew are trained to provide help. This notion was also evident in the suggestion to train fellow students to provide mental health support to other students. Diana, (16 years old) who reported that the counsellors were not easy to reach and the nurse was not capable of providing mental health support suggested:

> *"Like training sessions for some of the students themselves so they are able to help others because some of the students don't feel comfortable around older people so probably their peers can help…"*.

Diana's suggestion was in response to how mental health support in her school could be improved. This suggestion showed that participants continued to have preference for peer support for mental and emotional support.

Other students from other schools also proposed that their peers should be given the platform to assist other students. David, an 18-year-old student, suggested that a mental health committee should be created in his school which would consist of teachers, nurses and counsellors as well as interested students. He acknowledged that involving students in such a committee would be desirable as some students may be more comfortable interacting with their friends. He stated in response to who the committee members should be:

> *"Let me say, erm... colleagues, yes students. You see, ermm ... we should get students that will try to… you see, mostly students interact with their friends".*

The indication here is that peer support in mental health problems may be an opportunity to improve the mental health of adolescents in senior high schools as well as possibly encourage students to seek counselling when this was necessary.

The final suggestion in this subtheme was the need to have different personalities and gender of mental health care providers so students could have a variety to choose from. This notion was suggested by Peter, a 16-year-old student, who stated that access to mental health care was low because students are 'shy' due to the one-on-one nature of counselling. His suggestion to address this problem was to have a variety of providers for students to choose from based on ease, comfort and the ability to want to share. Peter proposed that mental health support in his school should:

> *"… have … let's say different people of different personalities so that if, let's say... you don't like this person you can go to the other person for help…."*.

This suggestion implied that if adolescents had a variety of professionals to choose from, they may be more likely to access support.

Characteristics of Provider

This theme is an interpersonal level influence where although the characteristics of the provider will be specific to the provider, in relation to the adolescent, the relationship between the provider (nurse or counsellor) would be the point of influence. From the previous sections, the attitude of the nurse played a role in participants' views on the acceptability of the

counselling service and barriers to accessing the service. In line with these, participants' recommendations of an ideal mental health support included a description of what the attitude of the counsellor or nurse should be. The attitude that was most recommended was 'friendliness' as well as having a welcoming and smiling demeanour. Other provider characteristics recommended included patience, one who could accept students irrespective of race, tribe or gender, and one who could make time for students. Asked how the service could be improved, Edmund, a 17-year-old student, who believed that the nurses did not have time for students compared to the counsellors suggested that:

> *"They (the nurses) should have more time to listen to people who come to them…also they shouldn't really get angry at some people who come to them…"*

Edmund stated that his friends had indicated these problems (impatience of the nurses) when they had consulted them for help. He then explained his reason for suggesting the preferred attitudes he mentioned. As already indicated, the attitude of the provider goes a long way to influence students' desire to seek counselling and these suggestions confirmed the notion. Participants also described the need to create a comfortable environment for students to access support and hence, to feel comfortable to open up and to share their concerns. Again, this suggestion could curb some of the barriers addressed above. As a result, Princess who had received counselling from the school nurse suggested that the provider should be less strict and should smile at clients. She stated:

> *"…people who will help in this mental health service should also be like, smile often and they shouldn't be too strict…".*

Finally, one other attitude mentioned was the need to ensure privacy and confidentiality

of problems shared. Only one participant, 16-year-old Princess recommended this attitude and explained clearly in her submission the consequences if confidentiality is ignored.

> *"It should be concealed, it shouldn't be outside …. Because if they discuss something with you and then at the long run, they find it somewhere which is not supposed to be, it will be a disaster and then, yeah… they'll become sad and worsen …".*

From Princess statement, mental health providers are expected to ensure that a private place or room is used in such discussions and the providers must be able to maintain confidentiality of information discussed. This attitude was indirectly mentioned by a couple of participants who refused to seek help for fear that their information would not be kept confidential. The implication was that participants valued their privacy and having the confidence that it (privacy) would be ensured could improve support seeking.

3. Establishing a Club

The final theme that was extracted from participants' recommendations was the suggestion to establish a health or mental health club in schools. This theme is at the interpersonal level of influence on the social ecological model because it would involve informal social networks, in this case, their peers.

Only one participant mentioned that a school health club existed in the school. Five participants spoke about a club in various forms when asked what a mental health intervention in their school should entail. Joel, a 16-year-old who stated that he did not think he needed the support of a counsellor or a school nurse for his mental health problems because his friends were enough for him, suggested that a club comprising students will be beneficial. He suggested:

> *"I think it should be in the form of a club that meets on particular days during the week…as a body that'll assist the counsellor in dispensing her service".*

His statement suggested that there would be a limit to what the club could provide to students, hence the professional support was still endorsed. Similarly, Rhoda, a 17-year-old who had consulted the school nurse about a past emotional challenge related to her studies also suggested the need to have support within the student body through the formation of a club. When asked what mental health support in her school should entail, she suggested:

> *"I'll suggest health club…* (she continues)*… It will help us with students to share our opinions and more so whatever we're going through, whether emotional, or physical problem or stress… we will be able to discuss about it.".*

Rhoda's suggestion encompassed a school health club that would cover the holistic healthcare needs of its members. Some participants elaborated that, members of the club may consist of students, nurses and counsellors in the school. Another suggested including students who were suffering from mental or emotional problems as well as educators. Again, this recommendation indicated the strong desire for young people to provide emotional and mental health support to each other as well as a desire for them to build on their knowledge and capacity to continue to rely on themselves for mental health support.

4.4 Summary

In summary, this chapter has reported the thematic analysis of data collected from 22 adolescent participants, exploring their perceptions (experience, acceptance and barriers) of and their recommendations for a mental health intervention in senior high schools in Ghana. With these aims, themes and sub-themes were extracted from the analysis.

With regards to knowledge of mental health support in the school, participants reported knowledge and awareness of the school nurse and counsellor providing mental health support including counselling. In terms of participants' experience of mental health support, participants had utilised both formal (counsellor, nurse) and informal (parents, peers, teachers) forms of support while others relied on themselves to cope. Despite the poor access to formal mental health support, participants who perceived the counselling role of the school nurse or counsellor were accepting of their service. The barriers to accessing formal support included unavailability of counsellor and discomfort in accessing support. With recommendations, participants described the kind of service they require, the kind of provider they require and a significant number of them suggested that a health or mental health club will be established in schools. The above themes and sub-themes had a good association with the first three levels of the social ecological model by McLeroy and colleagues, namely the individual, interpersonal and institutional levels.

Chapter 5: Discussion

5.1 Overview

This chapter describes the findings of the research in relation to the literature reviewed. It further discusses the implications of the findings for policy and practice as well as recommendations for future research. Finally, the limitations and conclusions will also be discussed.

5.2 Summary of Findings

The purpose of the study was to explore the perceptions of adolescents in senior high school of the school-based mental health service and their recommendations for such a service in the schools. Perceptions were measured in the areas of experience, acceptability and the barriers to mental health service or support in senior high schools. From the twenty-two interviews analysed, themes and sub-themes were generated which were categorised using the first 3 levels (individual, interpersonal and institutional factors) of the social ecological model by McLeroy and colleagues.

Although most of the participants were aware of the existence of counselling services in the school through the counsellor or school nurse, utilisation of the service was poor compared to the number of students who had previous experience of some form of distress at the time of the interview. Three types of mental health support were utilised – formal (through school nurse, counsellor), informal support (family, peers, teachers or school chaplain) and self-reliance which included engaging in activities that help to cope. The majority of participants engaged in the last two types of support and a lesser number in the formal mental health support. Despite having had limited experience with formal school mental health service, most of the participants reported that the counselling service provided by the school counsellor was acceptable and some

participants also found the nurses' counselling services acceptable. Barriers to accessing formal counselling service (mental health support) from the school nurse or counsellor included the unavailability of the support, which was categorised into physical, professional and emotional unavailability. In addition to the above is the discomfort in accessing formal counselling services.

With regards to participants' recommendations for school-based mental health intervention, three main themes emerged. Firstly, participants suggested that the kind of service should include universal and individualised interventions. The second theme, service provision was categorised into two sub-themes – kind of provider (teachers, nurses, counsellors, fellow students and mental health professionals) and characteristics of providers (including attitudes such as friendliness, smiling and able to keep confidentiality). The third theme was the recommendation that a mental health club consisting of students and other authorities be established in schools. This was to enable students provide peer support to other students in distress as well as learn more about mental health.

5.3 Discussion of Findings

Mental Health Support Experience

Findings showed that the majority of the adolescent participants had experienced various degrees of emotional distress or mental health symptoms resulting from problems at home, academic challenges and relationship problems. Despite the distress experienced, adolescent participants did not readily seek counselling services, although they were aware of available support from the nurse or counsellor. This outcome is consistent with the notion that adolescents had poor uptake of mental health services, including mental health assessment which Patel et al. (2008) identified as a factor contributing to the unmet mental health needs of adolescents. This

concern about poor service utilisation due to limited resources allocated to child and adolescent mental health, especially in LMICs (Saxena et al., 2007) is a reason SBMHP is recommended (Arenson et al., 2019; Ormel & VonKorff, 2020). Some evidence has shown that young people do access SBMHP for their mental wellbeing. For example, Bains et al. (2017) assessed the utilisation of mental health services in school-based health centres over a three-year period showed that 31.8% of the 19,281 visits to the centre were for mental health reasons. Although the present research did not determine the total number of visits that were for mental health reasons compared to general medical reasons, only four out of the 17 participants with previous possible mental health problems had sought help. The finding supports the outcome of a study by Arora and Algios (2019) who found that adolescents' utilisation of the service was low because of poor awareness of the service, a reason which was contrary to the present study where, among the small group of participants, utilisation was reported as low despite participants' awareness of the service.

In the present study, students who sought support did so from people (teachers, nurses or fellow students) they felt comfortable with. In a study by Spencer et al. (2020) which assessed the views of students about school-based mental health interventions, it was found that individualised support was based on having a positive trusting relationship with a provider and that could be a non-practitioner. This outcome implied that adolescents may seek support when they locate the appropriate person, which may explain why participants in the current study consulted their friends or fellow students for mental health or emotional support.

Acceptability of Support

The findings from the research showed that despite poor access to formal counselling services in the schools, most participants reported that the service from the nurse and counsellor

is acceptable even without accessing it themselves. Reasons given included the usefulness of the support to other students (for those who had not experienced it) and helpfulness at the time they accessed it. The perceived usefulness of school-based mental health support has been reported in other studies (Cilar et al., 2020) and the findings of the present study correspond with Cilar and colleagues' work although those were not reports from adolescents only. In their systematic review of 57 school-based interventions or programmes, over half of studies reported a positive impact on adolescents. One major kind of support which was found to be acceptable by a number of participants in the present study was peer support for emotional or mental health problems. This finding is contrary to Goodwin and colleagues' study outcome in which their participants did not find it comfortable to disclose mental health concerns to friends or family members, rather to a formal source where privacy and confidentiality are assured (Goodwin, Savage, & O'Donovan, 2022). On the contrary, participants in the current study found their fellow students easy and comfortable to speak with when they had an emotional problem. This form of support seeking could be explained from the perspective of adolescent social development where there is a greater affiliation and orientation towards peer engagement compared to family or adult figures (APA, 2002).

Barriers to seeking professional support

The present study found two main barriers to accessing formal support from the counsellor or the school nurse. These barriers were: unavailability of provider and discomfort in accessing mental health service. The findings from this study were in contrast to findings by McCann et al. (2016) where stigma and lack of mental health literacy were the barriers to seeking mental health support among young sub-Saharan African migrants in Australia. In the

present study, there was no expression of stigma being a reason for not consulting a school nurse or counsellor.

Self-reliance was also identified in the present study to be preferred by young people, which corresponds to a study by Gulliver et al. (2010). Gulliver and colleagues classified preference for self-reliance as a barrier to seeking mental health support but in the present study, participants did not describe that as a barrier to seeking support. Participants' self-reliance was based on them feeling uncomfortable in sharing their problems or not perceiving their problems were serious enough for formal (professional) counselling. These reasons were classified as a discomfort in seeking help, which is common among young people. These reasons for poorly seeking help for mental health problems were also found in Radez and colleagues' systematic review of qualitative and quantitative studies (Radez et al., 2021). They assessed why young people would or would not seek help for mental health problems and preference for self-reliance, uncertainty about the problem being serious enough and expecting that the problems would resolve on their own were some of the themes extracted.

Recommendations for School-Based Mental Health Support

The second part of the study which sought to determine participants' recommendations for mental health support in schools produced suggestions that were grouped into three main themes. First was the suggestion to have a preventive kind of intervention with both universal and individualised strategies. These suggestions are supported by a previous study by Spencer et al. (2020) whose qualitative exploration of adolescents' views of mental health support in schools showed that a regular whole school mental health education was recommended by adolescents. In addition, the need for teachers to be proactive in identifying students going through emotional or mental health problems was suggested. As part of the recommendations, it

was also suggested that adolescents have access to support when they are experiencing emotional problems, which were also consistent with recommendations for participants in the present study. Again, the suggestion that providers are given further training was also evident in Spencer's study. Participants in the present study suggested that service providers should be trained professionals but training should also be given to teachers, nurses and fellow students to provide counselling services. This ~~proposal~~ suggestion forms part of the second theme, service provision with sub-themes, kind of service provider, attitude of provider and increasing the quantity of service provision.

The second theme as outlined above corresponds with a previous study in the United Kingdom, which reviewed studies that assessed young people's views of mental health services in the United Kingdom (Plaistow et al., 2014). When the authors assessed what young people wanted from mental health services, ideas included accessibility of the service in terms of timing, location and no time spent waiting, similar to what was proposed by participants in the present study. Again, in the present study, participants hoped that more providers were put in the schools to make the service readily accessible. In addition, provider attitudes as described by participants that it should be friendly, and warm was also found in Plaistow et al. (2014)'s study in which specific worker qualities/skills were recommended. Here, providers were expected to be approachable, friendly, kind, warm and genuine as well as be able to maintain confidentiality. Plaistow's study however encompasses participants' views of both school-based and facility-based mental health service and involved not only young people but adults as well.

One proposal from the present study that stood out was the formation or establishment of a club. Students suggested that a club be established to help with peer support. This finding could not be supported in the literature but judging from the form of support participants in the present

study had utilised in the past (self-reliance and peer support), a mental health club could help with mental health literacy and early detection of mental health problems.

Theoretical framework of findings

The role of the social ecological model has been evident in the findings of this research. The social ecological theory, which pays attention to the social, institutional and cultural contexts of people-environment relations has been found useful in the design, planning, implementation and evaluation of health promotive interventions (Stokols, 1996). In the present study, three levels of the social ecological framework were identified to be influential in the behaviour of the adolescent participants.

A social ecological analysis of the findings of this study showed that in relation to adolescents' perceptions, the intrapersonal or individual level and interpersonal level factors were prominent. Participants' experience of mental health support was influenced by individual factors such as, their knowledge, personality, health conditions, health practices or attitudes. For instance, a participant who perceived themselves to be an introvert was less likely to seek help while knowledge of available mental health support also influenced decisions to formally seek help. However, the role of person-environment interaction could not be ignored in this study. Besides person characteristics, the interpersonal or social environmental factors such as the form of interaction and relationship between individual and the formal or informal social networks were relevant in decision making and behaviour. As a result, participants' characteristics alone did not determine their help-seeking behaviour but attitude by social others (example, friendly provider) towards the individual influenced perception and health behaviour. This analysis is relevant in health promotional strategies under the social ecological model where the need to apply a multilevel intervention is recommended in designing an intervention (McLeroy et al.,

1988). In addition to the individual and interpersonal level factors of influence, institutional factors influenced perception of barriers to mental health support, where physical unavailability of mental health provider (nurse or counsellor) was reported. Specifically, institutional structures or systems contribute to the availability of the provider, hence unavailability of the provider could be associated with institutional or school regulations and system in place towards making a provider available to students when needed.

Suggestions about school-based mental health intervention details were classified in the first 3 levels of the social ecological framework – individual, interpersonal and institutional level factors. Again, institutional regulations, structures and systems are relevant in promoting mental health in this population. According to envirogenic (health-influencing functions of the physical and social environment), the social and physical environment could serve as an enabler of health behaviour as well as provider of health resources (systems and services) towards improving health and wellbeing (Stokols, 1992). Thus, the school has a role to play in enhancing mental health and wellbeing of adolescents based on the kind of systems they can institute. The proposals by adolescent participants to have a universal and individualised approaches as well as a school health or mental health club include the interpersonal and institutional levels.

5.4 Implications for Policy and Practice

School-based mental health interventions or programmes have been found to be helpful in resource constrained countries to deal with the wide mental health treatment gap. Such programmes are meant to provide support to adolescents who may or may not have a clinically significant mental health problems and may or may not be aware of their need for mental health support. For this reason, various forms of preventive intervention programmes have been recommended and assessed for effectiveness in improving psychological wellbeing, reducing

mental disorders, detecting early signs of mental disorders, and providing some level of intervention including referral to specialized care. No such programme exists in high schools in Ghana to support school-going adolescents to manage mental health problems. The current mental health intervention strategy in existence at the time of conducting this study was individualised basic counselling services provided by a school nurse or counsellor as and when the adolescent recognised the need for stress support. However, from the present research, it has become evident that students did not readily access the service even when they had distress and were aware and accepting of formal counselling in the school. With some of the concerns raised regarding the provider characteristics or attitude and the preference for universal and individualised intervention strategies, policy makers and school authorities could consider the need to review the current service.

From the findings on the recommendations reported by the adolescent participants, school-based mental health interventions in Ghanaian high schools should have a mix of universal (whole school education) and individualised counselling strategies. As was reported by the participants, adolescents will benefit more from having mental health support brought to them compared to leaving them (adolescents) to initiate help seeking. That is, teachers, nurses and other school authorities must be quick to identify from adolescents' behaviour and actions that help is needed and take initiative to commence communication towards providing some form of counselling or psychosocial support. As a result, school health policies could also incorporate strategies that can help identify students experiencing mental health symptoms of any kind. Such a strategy may involve teachers, nurses, counsellors and even other students as recommended by participants who would have their capacity developed to enable them detect and assist (including referring) an adolescent with symptoms. School authorities should have a system (or policy) in

place that will ensure a positive attitude of authority figures such as teachers, counsellors and nurses towards students. In other words, there is the need for schools to work towards ensuring that the school environment is mentally healthy. Such schools will ensure that every student and official of the school is conscious of the need to promote general mental wellbeing, be each other's helper and provide support where need be. For practice purposes, the Ghana Health Service, the body in charge of training and placing nurses in school infirmaries, should ensure that nurses in schools have the requisite skills, attitudes and understanding of adolescent mental health. Strategies should also be put in place to periodically monitor and evaluate the mental health service provided in schools to ensure continuous improvement of the service.

5.5 Recommendations

It is recommended that as counselling services are integrated into the medical services provided to students in school, structured protocols are enforced that will help nurses assess more than student's medical needs but also psychosocial needs. Also, the capacity of nurses, counsellors and other school authorities must be built towards easy identification of adolescents with early signs of mental illness and strategies to initial counselling or psychosocial support. Such capacity building activities should also focus on improving adolescents and adult relationships and encouraging friendliness and lack of judgement in the provider, in order to engage positively with adolescents. It is also recommended that health promoting activities in the school have a lot more mental health promotion components incorporated, possibly including aspects of mental health in every health promotion activity in the school. This will help to give more insight to students about mental health and strength and make them responsible for ensuring their own and each other's mental wellbeing.

5.6 Strengths and Limitations

This research has some limitations as a result of which the outcome should be interpreted with caution. The fact that the research used a qualitative design means generalization of the findings is compromised because the small sample size (n=22) cannot be a representation of perceptions of all adolescents in senior high schools in Ghana. However, a qualitative design was necessary for this research because of the need to give voice to adolescents who are service users of the interventions in school. In addition, the aims of the researcher (perceptions and expectations) could not have been realized without a qualitative design. Meanwhile, the use of qualitative analysis also brings another limitation as researcher bias in the interpretation of the themes was also possible. As the researcher for this study, I am familiar with the school-based mental health support in Ghana and have had experience with some of the school nurses and counsellors about the mode of care and mental health support in the schools. I am also aware of the challenges of adolescents in senior high school in Ghana hence it is anticipated that my own perceptions may have influenced the interpretation of findings. To reduce this bias, I ensured that participants' responses were reviewed several times to ensure the actual meaning or understanding was realized from each transcript.

Another limitation of the study is that adolescents who were interviewed were mainly from the southern part of Ghana where more attention was provided in education and health. In the northern part of the country, human resource allocation and capacity building is limited compared to the south. As a result, students' perceptions and recommendations for mental health services may be different from what was found in the south. Again, due to cultural variations in the two sectors of the country, young people's understandings of need for mental health care may also vary. The present research is however rich with some level of variation as participants were

from 12 different senior high schools because of the utilisation of virtual forms of data collection. These 12 schools were from 3 different regions and although all three regions are located in the south of the country, there was some variation because the students were from different parts of the country as they were in boarding schools. The final limitation is from the recognition that recruiting some of the participants through school nurses could have influenced students' responses towards favouring the school nurses. To limit this response bias, students were assured of the confidentiality of the interview. The response of one adolescent participant who appeared to be receiving coaching during the interview was not included in the analysis.

5.7 Recommendations for Future Research

As it was identified that knowledge and awareness of presence of counselling services, did not guarantee utilisation of service, future research should explore more into Ghanaian adolescents' barriers to mental health care. Identifying the barriers to adolescents' seeking mental health services will help to develop interventions that may reduce the problem of poor mental health seeking behavior of adolescents. Again, future research should incorporate perceptions of both adolescents in senior high schools and the mental health service providers (school nurses and counsellors) to identify their challenges and ways to improve their support for young people. Future research should also explore perceptions and recommendations for adolescents in other parts of Ghana, especially the northern part. Finally, research should go beyond in-school adolescents and include out-of-school adolescents who may also have high risk for mental health disorders but may be not have easy accessibility to mental health services in the community.

5.8 Conclusion

In conclusion, evaluating acceptability of interventions from the perspective of the service user gives an insight that will help to improve the design and delivery of interventions. SBMHP in Ghanaian schools must not only include individualised counselling and psychosocial services but must also have a whole-school intervention approach as well. It is necessary that a formal structure is in place for adolescents in school to access mental health support but adolescents must also have the opportunity to access support and counselling in more informal ways. Such informal structures may include peer support, support from teachers and group support through school health clubs. In all these, the characteristics of the nurse, counsellor, teacher and even the peers are vital in encouraging adolescents to seek help and in providing an acceptable adolescent-friendly service.

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Addendum A: Flyer

ARE YOU AN ADOLESCENT BETWEEN 14 AND 19 YEARS AND IN SENIOR HIGH SCHOOL IN GHANA?

DO YOU HAVE A SCHOOL CLINIC / SICKBAY WITH A SCHOOL NURSE?

WILL YOU BE INTERESTED TO BE PART OF A STUDY THAT TALKS ABOUT:

- HOW YOU FEEL ABOUT THE SUPPORT STUDENTS WHO ARE STRESSED OR SAD IN SCHOOL RECEIVE AND
- WHAT SUPPORT YOU THINK SHOULD BE GIVEN TO STUDENTS WHO ARE FEELING BAD, SAD OR STRESSED, ETC?

-

IF YOU WOULD LIKE TO KNOW MORE ABOUT THIS PROJECT AND BE PART OF IT, CONTACT:

MAURA CRANNY NTOW
TEL / WHATSAPP: 0268 531 807
EMAIL: MAURACNTOW@GMAIL.COM

Addendum B: Interview Procedure

Study Title: *Senior High School Students' perceptions and expectations of mental health support in Ghanaian Schools*

1. Opening: Introductions and Demographics
   - Introduction of investigator, rapport building and description of purpose for the interview
   - Description of interview format, need to record and duration of the interview
   - Once consent is given, permission is taken to commence recording

     "For the purpose of this interview, please choose a name you may not be identified with".

     "Please provide your age, gender, school grade and where you live".
2. Body / main questions:
   - School Information and Mental Health Experience

     "Please provide your school name, its location and how many years you've been in the school".

     "Describe a past or recent mental health problem, an emotional problem or a period you felt so stressed that you could not do the things you would normally do":

     Probes: "What happened"? "How long ago"? "How long did it last"? "Effects on you (physical, emotional, social, cognitive / academic)".

     "How did you find help"?

     Probes: "Who provided it"? "How did it feel for you, receiving the service"?
   - Experience and perceptions

     "Are you aware of the services the school nurse provides in your school"?

     "Does it include mental health / emotional support or stress coping service?

     "Describe the mental health/stress coping service".

     Probes: "Who provides the service"? "What does the service entail"?

     "How useful do you think the service is in addressing your emotional/mental health needs"? "Tell me about why you gave that answer".

     "Have you accessed the service before"? "Why"?

"How useful did you find it with regards to your mental health/emotional needs at the time"? "Tell me about why you gave that answer".

"How useful do you think the service is in addressing the emotional/mental health needs of your fellow students"?

"Do you talk to your peers about the service"? "What do you think your peers think about it"?

"If the service did not exist how would that affect your life"?

- Expectations

"How can the service be improved"?

"If you were to design a mental health service, what would that entail"?

Probes: Who should deliver it? Where should it be delivered? What should they offer (information/counselling/safe space to talk)? How do you understand counselling?

3. Concluding questions

"Is there anything else you would like to tell me about your school's mental health service / support"?

"Why did you decide to participate in this research"?

Appreciation for participation and allowing participant to ask any question he/she might have.

Recording ends.

Addendum C: Participant Information Leaflet and Consent Form

	STELLENBOSCH UNIVERSITY **FACULTY OF HEALTH SCIENCES**	

Participant Information Leaflet and Consent Form

TITLE OF THE RESEARCH PROJECT: Senior High School Students' perceptions and expectations of mental health support in Ghanaian Schools

REFERENCE NUMBER:

PRINCIPAL INVESTIGATOR: Maura Cranny Ntow

ADDRESS: Department of Psychology, Stellenbosch University, South Africa

CONTACT NUMBER: 021 808 4622

Dear Student,

My name is Maura Cranny Ntow and I am an MPhil Public Mental Health student and I would like to invite you to participate in a research project that aims to investigate the acceptability and usefulness of school-based mental health support to Ghanaian adolescents

Please take some time to read the information presented here, which will explain the details of this project and contact me if you require further explanation or clarification of any aspect of the study. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee (HREC) at Stellenbosch University** and will be conducted according to accepted and applicable National and International ethical guidelines and principles, including those of the international Declaration of Helsinki October 2008.

The study will entail you responding to some questions in an interview which will last for 60 minutes and will be recorded. The questions will be to find out your idea of stress or mental health issues and how you or your friends get help from your school sickbay (through the school nurse). It will also ask about what you think about the stress, emotional or mental health service provided by the school nurse and your experience of it if you've accessed it before. It will also ask about your expectations of a mental health or stress support / service in your school and what will help you and your friends in the school.

The interview will be conducted in a private room which is the investigator's consulting room to ensure privacy. You will be asked to choose a pseudonym to protect your identity. Information shared during the interview will be kept confidential and your recorded responses will be kept on the investigator's password protected personal computer. Your information will be listened to or read (when transcribed) by only the investigators and other supervisors of the study.

There is no anticipated harm to you due to this study but you may get tired or feel distressed during the interview. When this happens, the interview will be discontinued and the investigator, who is also a psychologist, will attend to the distressed participant immediately. Interview may be continued when you feel calmer or another day according to your preference. Where necessary, you'll be referred to a psychologist for further support / therapy.

Results from the project will be shared with Ghana Health Service officials responsible for adolescent health and development programme but you will not be identified in that information.

If you have any questions or concerns about this study or you want to be informed of the outcome of the study, please feel free to contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

If you are willing to participate in this study, please sign the attached Declaration of Consent and hand it to the investigator.

Yours sincerely

Maura Cranny Ntow
Principal Investigator

Declaration by participant

By signing below, I ……..……. agree to take part in a research study entitled Senior High School Students' perceptions and expectations of mental health support in Ghanaian Schools.

I declare that:

- I have read the attached information leaflet and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I understand that a pseudonym I will choose will be used to address me throughout the study.
- I understand that the interview will be recorded but my identity will not be revealed.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.
- I understand that results from this study will be published in a local or international journal but your child's name or any form of identification will not be used in the publication

I agree that my answers may be kept for further research on youth mental health: Yes ……

No …….

I agree that results from the study will be shared with Ghana Health Service officials in charge of adolescent health and development programme: Yes …… No …….

Signed at.....…..…… On ……...……. 2021.

.....

Signature of participant

Addendum D: Participant Information Leaflet and Assent Form

STELLENBOSCH UNIVERSITY

FACULTY OF HEALTH SCIENCES

TITLE OF THE RESEARCH PROJECT: Senior High School Students' perceptions and expectations of mental health support in Ghanaian Schools

RESEARCHERS NAME(S): Prof Ashraf Kagee & Maura Cranny Ntow

ADDRESS: Department of Psychology, Stellenbosch University, South Africa

CONTACT NUMBER: 021 808 4622

What is RESEARCH?

Research is something we do to find new knowledge about the way things (and people) work. We use research projects or studies to help us find out more about disease or illness. Research also helps us to find better ways of helping, or treating children who are sick.

What is this research project all about?

We all get stressed when we have to go to school and have to write examination or tests. Sometimes, we get sad or stressed when our friends say something bad to us or when mummy or daddy does not give us what we want. Sometimes, the sadness goes away but sometimes too, it will not go away and may cry or not feel like talking to anybody in school or at home. Sometimes, we cannot sleep or eat or don't want to do anything like playing with friends, learning or watching our favorite TV programme. When this happens, we need to talk to someone for help. You can

talk to your parents or your pastor but because sometimes your sadness may make your head pain you, you may speak to the school nurse.

This study wants to find out if the school nurse at the sickbay has helped you or your friend feeling sad or confused before and to find out how it felt when they spoke with the school nurse. It also wants to find out what you and your friends would want the school nurse to do to help you when you are feeling sad or confused.

Why have I been invited to take part in this research project?

You have been asked to take part in this research project because you are between the ages 14 and 19 years, attend a government school and have a school nurse in your school.

Who is doing the research?

My name is Maura Cranny Ntow. I am a student at Stellenbosch University and have to do a research project as part of my studies / learning at the University.

What will happen to me in this study?

You will be interviewed for about 60 minutes / 1 hour in which I will ask you some questions about how your school nurse helps people or yourself when you or your friends are sad or confused. The interview will be recorded so that what you say will be written out and analyzed or studied more.

Can anything bad happen to me?

Nothing bad will happen to you when you take part in this research project. You may get tired though or you may start to feel sad about something during the interview. When that happens, you will be given a break and then we will chat about what makes you sad.

Can anything good happen to me?

Nothing good will happen to you but your answers to the questions will help us make help you or your friends who may be feeling sad or stressed get from your school be what you want.

Will anyone know I am in the study?

The answers you give will be kept private and no one will know you are in the study. Only myself, my supervisor and other people helping in this research project will have access to the recording or the written information. Your real name will not be used in the interview and will not be written anywhere in the research hence nobody will know what you said.

But where you report of being abused or you have plans of harming yourself or another person, the investigator will have to take steps towards your wellbeing and may have to report to the appropriate body following the right procedure.

Who can I talk to about the study?

If you have any questions or have any problems about the research project, you may contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

What if I do not want to do this?

You can refuse to take part in this project even if your parents have agreed that you take part. You can stop or change your mind about taking part in the study at any time and you won't get into trouble.

Do you understand this research study and are you willing to take part in it?

YES	NO

Has the researcher answered all your questions?

YES	NO

Do you understand that you can pull out of the study at any time even if my parents agree for me to take part?

YES	NO

Do you understand that you can choose a false name for the interview which will be used to address you throughout the study?

YES	NO

Do you understand that the interview will be audio recorded but my identity will not be revealed?

YES	NO

Do you understand that your information may be kept for use in another research on children's mental health?

YES	NO

Do you understand that the results from the research may be shared with people in Ghana Health Service who work with young people like yourself?

YES	NO

Do you understand that the results from the project will be published in a local or an international journal?

YES	NO

_____ _____

Signature of Child Date

Addendum E: Parent Information Sheet and Consent Form

	STELLENBOSCH UNIVERSITY **FACULTY OF HEALTH SCIENCES**	

Parent Information Sheet and Consent Form

TITLE OF THE RESEARCH PROJECT: Senior High School Students' perceptions and expectations of mental health support in Ghanaian Schools

REFERENCE NUMBER:

PRINCIPAL INVESTIGATOR: Maura Cranny Ntow

ADDRESS: Department of Psychology, Stellenbosch University, South Africa

CONTACT NUMBER: 0268531807

Dear Parent,

My name is Maura Cranny Ntow and I am an MPhil Public Mental Health student from the psychology department at Stellenbosch University. I would like to invite your child to take part in a study. Your child will be invited as a possible participant because he/she is between the ages 14 and 19 years, attend a government school and have a school nurse in the school.

This study has been approved by the **Health Research Ethics Committee (HREC) at Stellenbosch University** and will be conducted according to accepted and applicable National and International ethical guidelines and principles, including those of the international Declaration of Helsinki October 2008.

Please take some time to read the information presented here, which will explain the details of this project and contact me if you require further explanation or clarification of any aspect of the study.

1. PURPOSE OF THE STUDY

The reason for this study is to determine how your child and other children in government schools feel about the mental health service provided by the school nurse when students feel stressed or sad. It also wants to find out what your child and other children want from their schools when they are stressed, sad or confused.

2. WHAT WILL BE ASKED OF MY CHILD?

If you consent to your child taking part in this study, the researcher will then approach the child for their assent to take part in the study. If your child agrees to take part in the study, he/she will be interviewed for about 60 minutes / 1 hour. He/she will be questioned on what they think of the emotional, stress or mental health support from their school nurse, whether they or their friends have been helped by her/him before and how helpful it was. They will also be asked how they think they should be helped when stressed or sad. Their answers will be recorded on a tape and written out.

3. POSSIBLE RISKS AND DISCOMFORTS

Nothing bad will happen to your child when he/she takes part in this research. Your child may get tired during the interview or may start to feel sad about something they will be talking about. When this happens, he/she will be given a break and the recording will be stopped. The investigator is a psychologist so she will help your child by debriefing him/her about what made her/him sad or confused. The interview will be continued if your child is ready to continue the same day or another day.

4. POSSIBLE BENEFITS TO THE CHILD OR TO THE SOCIETY

There will not be any direct benefit to your child but the study will help to improve the mental health support / service in secondary schools so that children / adolescents like your child will receive the right help if they feel stressed, confused or sad when in school.

5. PAYMENT FOR PARTICIPATION

You or your child will not be paid for participating in the research however you will be compensated for transport costs or data usage depending on whether you choose in-person interview or online interview.

6. PROTECTION OF YOUR AND YOUR CHILD'S INFORMATION, CONFIDENTIALITY AND IDENTITY

Any information you or your child will share during this study that could be used to identify you or your child will be protected. This will be done by conducting the interview in a private room which is the investigator's consulting room to ensure privacy. Information from the interview will be recorded and transcribed later. These will be kept confidential and saved on the investigator's personal computer which is locked with a password. Your child's name will not be used in the interview or mentioned anywhere in the report so as to protect his/her identity. Your information will be listened to or read (when transcribed) by only the investigator and other supervisors of the study.

The findings from the research may be shared with Ghana Health Service officials responsible for the adolescent health and development programme if they need the result to help improve the service in schools. Your child will not be identified in that information. Information sharing will be done such that no one will can see the information so as to protect your child's

identity and information shared. If you will not want your child's information shared, please indicate it below.

Information provided by your child will be kept for future research. If you prefer not to have your child's information kept for future research, please indicate it below.

The results from this study will be published in a local or international journal but your child's name or any form of identification will not be used in the publication. Your child will be asked to use a pseudonym for the research and nobody will be able to identify or link him/her by that name.

7. PARTICIPATION AND WITHDRAWAL

You and your child can choose whether to be part of this study or not. If you consent to your child taking part in the study, please note that your child may choose to withdraw or decline participation at any time without any consequence. Your child may also refuse to answer any questions they don't want to answer and still remain in the study. The researcher may withdraw your child from this study if he/she uses abusive or insulting words and efforts to stop him/her do not work.

8. RESEARCHERS' CONTACT INFORMATION

If you have any questions or concerns about this study, please feel free to contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

9. RIGHTS OF RESEARCH PARTICIPANTS

Your child may withdraw their consent at any time and discontinue participation without penalty. Neither you nor your child are waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding you or your child's rights

as a research participant, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

If you are willing for your child to participate in this study, please sign the attached Declaration of Consent and hand it to the investigator.

Yours sincerely

Maura Cranny Ntow
Principal Investigator

Declaration by parent / legal guardian of child participant

By signing below, I ……..……. agree that the researcher may approach my child to take part in this research study entitled Senior High School Students' perceptions and expectations of mental health support in Ghanaian Schools.

I declare that:

- I have read the attached information leaflet and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that my child taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to withdraw my child from the study at any time and will not be penalised or prejudiced in any way.
- My child may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.
- The researcher may withdraw my child from this study if he/she uses abusive or insulting words and efforts to stop him/her do not work".
- I understand that results from this study will be published in a local or international journal but your child's name or any form of identification will not be used in the publication.

- I understand that my child will be asked to choose a false name (pseudonym) for the interview which will be used to hide my child's identity.
- I understand that the interview will be audio recorded but this will be secured kept.

I agree that my child's answers may be kept for further research on youth mental health: Yes …… No …….

I agree that results from the research will be shared with Ghana Health Service officials in charge of adolescent health and development programme: Yes …… No …….

Signed at.....…..…… On ……...……. 2021.

.....

Signature of parent / legal guardian