CHILD AND ADOLESCENT DEPRESSION IN THE SCHOOL ENVIRONMENT

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BACKGROUND

A good quality of life implies multiple aspects which may be subjected to individual debate, depending on various factors, both intrinsic and extrinsic. Of these, one strand that is universally accepted as fundamental for one's day-to-day well-being is a balanced mental state. In order to become happy and confident adults who contribute to the health and well-being of nations, people need a good start as happy and confident adolescents. Self-esteem, conduct, academic performance and attendance, social cohesion and future health and life chances are all influenced and partly determined by emotional health and wellbeing [1, 2].

Regrettably, more often than not, the general public does not pay the needed attention to the mental well-being of the paediatric population, as many otherwise well-intentioned adults still cannot believe that a child can suffer, for instance, from depression (*"What do kids have to be depressed about? At their age, we were nothing but happy."*). One of the reasons for this type of misunderstanding is that information and awareness about childhood depression has not caught on at the same rate with the growing rates of the disorder and children with mental disorders such as depression face major challenges with stigma, isolation and discrimination. Thus, the present article's main purpose is to present some up-to-date information regarding childhood depression and its connections and implications in the everyday life of children and adolescents.

If we take a look at recent statistics published by the WHO (The World Health Organization), we will discover that 10-20% of this world's children and adolescents suffer from various forms of mental disorders, half of these mental illnesses beginning by the age of 14. The same organization estimated that by the year 2020, childhood and adolescent mental health problems will become one of the leading causes of morbidity, mortality, and disability among children worldwide [3, 4].

In this context, depressive and bipolar disorders in children and adolescents, through frequency, clinical and treatment aspects, and by impact on child development, occupy a central place in the concerns of mental health specialists. Thus, 9% of children will experience a major depression episode by the age of 14, and 20% will experience a major depressive episode before graduating from high school. And children who have suffered an episode of childhood depression will be more vulnerable to depression than adults [5].

According to M. Rutter, the point prevalence of depressive disorders is 1–2% in preschool and older children who haven't gone through puberty and 3–8% in adolescents, with the lifetime prevalence by the end of adolescence of around 20%. The fact that depression can affect children prior to

their adolescent years is often an overlooked fact [6]. One very important aspect of depression among school-aged children is that those affected in these younger years are at significantly increased risk of psychiatric disorder in adult life [7]. When it comes to prevalence in in countries of lower or middle income, which not only have the majority of the world's population but also the largest proportion of youth, studies conducted there report higher point prevalence of clinically significant depressive symptomatology (10–13% in boys and 12–18% for girls). Poverty, civil conflict and environmental stressors tend to be endemic in these countries and contribute to significant psychiatric morbidity, including depression, anxiety and post-traumatic stress disorder (PTSD) [8].

If subclinical levels of depression were to be taken into consideration, the percentage would have been higher. Research has found that if self-reports were considered, 10% to 30% of adolescents would meet clinical cutoffs, suggesting that "if 20% is considered a 'middle ground' approximation, the data would indicate that, in a classroom of 30 adolescent students, approximately six would have serious depressive symptoms or disorders" [9]. The important aspect that is needs to be taken into consideration after viewing data such as these is that this type of students can exhibit significant depressive symptoms (although subclinical) and functional impairment and are at increased risk for the later development of clinical levels of depression [10].

With regards to male: female ratio, various studies have found greater prevalence of depressive symptoms in boys than in girls aged between 6 and 12. On the other hand, a fter the age of 12, the prevalence of depressive symptomatology tends to be higher in girls, reaching a ratio of as much as 2:1 with respect to boys [11].

The risk for recurrent depression after an initial episode ranges from 30% to 70% within the first 2 years, and is higher in those with chronic depression, subsyndromal symptoms, comorbidity, and family conflict [6].

Adding to high prevalence rates, depression is high in the ranking of burden of disease as well. Depression is the second leading cause of global disability (Years Lived with Disability; YLDs) and the eleventh leading cause of global burden of disease (Disability Adjusted Life Year; DALYs) in 2010. Major Depressive disorders accounted for 8.2% of YLDs and 2.5% of DALYs. The WHO reported that depression is in third place of leading causes of burden of disease (65.5 million DALYs) for all ages worldwide, being on first place in middle- and high-income countries. Otherwise said, depression is one of the most leading disabling conditions worldwide because of the subjective burden of the disease on those affected by it [12].

Thus, given the fact that depression in children is associated with long-standing consequences such as adverse current functioning which potentially impacts peer relationships, school performance and relationships with parents, it is imperative that we begin discussing about the link between depression and school environment an thus, open a gate to a future where school prevention programs for this affliction replace disinformation, stigma and the isolation these cause [10].

DEPRESSION AND ACADEMIC PERFORMANCE

Adolescent depression has a significant negative impact on school performance and consequently produces maladaptive outcomes in terms of subsequent education and occupational functioning. Several key symptoms of depression, such as impaired ability to concentrate, loss of interest, poor initiative, psychomotor retardation, low self-esteem, sense of worthlessness as well as social withdrawal may significantly disturb cognitive

performance and diminish initiative in learning. Depression may impair cognitive functioning because the depressed adolescent concentrates on depressive thoughts and interpretations instead of the actual tasks, or because depression directly blocks cognitive resources, or due to both reasons. The negative reactions of teachers and peers may also cause learning problems via paying attention to the depressed adolescent's behaviour and emotional problems instead of learning. Failures and negative feedback are likely to further exacerbate the depressive cognitive style typical of depression or strengthen depressive thought(s) promoting learned helplessness, passivity and avoidance. There are studies that have suggested an association between depression and poor school performance measured by grade point average (GPA) or numerical evaluation of success on various courses. Of the different types of depression, major depressive disorder was associated with poor school performance even long after symptomatic remission. The study by Fröjd et al. was done on 2516 7th–9th grade pupils. 18.4% of the girls and 11.1% of the boys were considered depressed after evaluation. There was a link between these depressed students and their grades, as it follows: the lower the self-reported grade point average (GPA) or the more the GPA had declined from the previous term, the more commonly the adolescents were depressed. Depression was associated with difficulties in concentration, social relationships, individual school performance and reading and writing as well as perceiving schoolwork as highly loading. These results were similar with both sexes, although some gender differences appeared when studying the severe end of the depression scale. This study indicates that pupils reporting difficulties in academic performance should be screened for depression [13].

In a study from 2011 done by Bernaras et al., it is stated that is has been previously demonstrated that potentially depressed students showed poorer adjustment according to their teachers. Their school behaviour was poorer, they worked and learned less, their academic performance was lower, with no differences among genders. Keeping this in mind, it must be taken into consideration that there is an interrelation between children's mood and their academic performance. Thus, it is also true that poor academic performance is a risk factor for suffering from depression since it feeds the negative self-concept that the child may be developing during his or her years in school. Moreover, some studies have proven that the risk of depression is cumulative, since pupils' academic failure contributes to increasing their perceived lack of competence, academic self-concept being identified as a predictor of academic performance. There is general agreement that both children and adolescents with depressive symptomatology have lower self-esteem than those who are not depressed. Regarding sex-differences, some studies indicate that girls tend to show poorer self-esteem than boys, especially after age 12. The results of Bernaras's study indicate inverse and significant correlations between depressive symptomatology, academic performance and self-esteem, and a positive correlation between depressive symptomatology and school maladjustment. These correlations were maintained in both the boys' and girls' groups, but with slight differences. It should be highlighted that although in general boys presented higher levels of school maladjustment than girls (negative attitude toward the school, negative attitude toward teachers, etc.), the association with depression is greater in girls: it would seem that problems of school adjustment affect girls more than boys. The relation between self-esteem and depression was also found to be stronger in older pupils and in girls. It could be postulated that the level of self-awareness and reflection is higher in girls than in boys at

these ages, and that it increases as children get older. The hypothesis that school maladjustment, academic performance and self-esteem would be predictive factors of depressive symptomatology in the schoolchildren – was partially confirmed. In the case of girls, both school maladjustment and self-esteem emerged as predictive factors of depressive symptoms, but not academic performance; in the case of boys, only school maladjustment turned out to be predictive. It may be that girls feel more incapable of responding adequately to the demands of school and that their perceived lack of success increases, resulting in a reduction of their self-esteem and self-confidence [14].

Another study that focused on the link between depression and academic achievements was done by Jayanthi. et al in 2015. The cross-sectional study was conducted at higher secondary schools in India, on 1120 (560-cases and 560-control group) adolescents studying in grades 9th to 12th. Adolescents who were described as having academic stress were at 2.4 times higher risk of depression than adolescents without academic stress. These findings were consistent with previous studies, which found academic achievement to be significantly correlated with depression and self-expectations. Parent and teachers expectations were the main sources of academic stress among adolescents [15].

Asseraf et al., in 2014, published data from a study that focused on a particular trait that links depression to academic performance, that individual trait being perfectionism. Data from previous studies that were presented indicate that perfectionist personality style has been shown to be associated with depression in children and adolescents. Perfectionists consistently self-impose most-often-than-not-unattainably high standards for themselves and consequently evaluate themselves based on their ability to meet these demands. Those self-evaluations are often made on a dichotomy, where they perceive that they have either succeeded or failed. Because their goals are often excessively high and unattainable, perceived failure is often the case, inviting self-criticism and a negative self-image. Perfectionism is also associated with feelings of shame, guilt, failure, and low self-esteem. Some of these traits correspond to features and cognitive errors found in individuals with depression such as dichotomous thinking (making polarized conclusions about events), overgeneralization (developing conclusions from a single incident), and personalization (incorrectly assuming responsibility for an external event that happened). Asseraf and colleagues studied the temporal relation between two types of perfectionism - self-oriented and socially prescribed perfectionism - and depressive symptoms, in a sample of 653 children from sixth to eight grades. Their results suggest that in childhood, depressive symptoms increase the perception that others are expecting excessively high standards of oneself and the need to satisfy this perception.

DEPRESSION, SCHOOL AND SOCIAL MEDIA

Nowadays, children can access the Internet and social media applications from many different devices. Social networking and media tools have become an integral part of children's life, as they offer school children the opportunity to communicate, get in touch, access information, research, and chat. Although at this point there aren't many studies on the short and long term effects of social media use, those that have been done so far present sometimes contradicting results. In some studies, a positive impact of using new media tools was noticed with regard to communication abilities, information research, and technical skills development, while others showed the negative effects of these tools, such as higher risks for

depression, cyberbullying, and sexual harassment [17].

In his 2005 book – "Last Child in the Woods", Richard Louv coined the term "nature deficit disorder", referring to the fact that humans, especially children, are spending less and less time outdoors, resulting in a wide range of behavioural and mental health problems, including depression [18].

Several studies have so far suggested that internet use in general, as well as certain specific online activities, such as social networking may be associated with feelings of loneliness, low self-esteem and depression. One of the first studies on the issue of internet and mental health was published in 1998 by Kraut et al. and the results showed that online activities were related to the reduction of communication between family members, and increased symptoms of depression. This was named ''internet paradox'', as internet as a social technology decreases social involvement of users as well as their psychological well-being [19, 20]. This research was later extensively cited and discussed, and numerous other efforts have been made to confirm or deny the connection between internet and symptoms of depression. So far, most of the research has been done on healthy children and adolescents and there is no proof that online activities cause or are related to depression as a clinical entity. However, some authors did indicate that internet use is associated with dysphoric mood often within a physiological range, measured by conventional psychiatric scales [20].

In 2012, Pantic et al. published a study on social networking and depression in adolescents in which the authors stated that the time spent on Facebook and other SNS (social networking site) platforms is positively related to depression symptoms quantified by Beck depression inventory. It was estimated that interpersonal connections made on SNSs may lack the necessary quality when compared to conventional, ''face-to-face'' communication between individuals [21]. Another reason why in scientific literature social networking is often connected with depression, is the assumption that an internet user often perceives his SNS ''friends'' as being happier and more successful. In computer-mediated communication, and especially in social networking setting, people tend to exaggerate their personal, professional and other qualities while at the same time concealing their potential faults. Banjanin and colleagues published in 2015 the results of a cross-sectional observational study conducted on a sample of 336 high school students in Belgrade, Serbia. Their results indicated that internet use and level of internet addiction were positively correlated with depressive symptoms [20].

Another study from 2015 was performed by D. Maras et al. on 2482 English-speaking grade 7 to 12 Canadian students. Their data showed that severe symptoms of depression and anxiety were associated with a greater duration of sedentary screen time, thus suggesting that screen time may represent a risk factor for, or a marker of these psychiatric disorders among teenagers. In the light of these findings, the authors recommend that mental health professionals inquire about screen time in their assessment of children and adolescents seeking treatment for anxiety or depression, as it could influence the treatment plan and underline the importance of providing children and adolescents proper information on the potential psychiatric risks of excessive sedentary screen-based activities [22].

Some other recent studies found links between media use and poorer mental health only among people with certain use patterns—very light or very heavy. Less information is known about the impact of mobile phone use on depression, even though these devices are owned by approximately 78 % of 12- to 17-year-olds [23]. Although teenagers report a belief that mobile phone use

has positive effects on depression by promoting personal relationships and increasing access to social support, the theories of social support indicate that communicating through mobiles may not promote the strong social connections that decrease stress and lead to positive psychological outcomes. The connectivity to a social network afforded by cell phones is seen by young people as being helpful for managing depression, while results from multiple studies suggest that smart phone use is more of a risk than protection a protection factors, as high levels of use are associated with more depressive symptoms [24, 25]. A study performed on a group of 126 adolescents (grades 7 through 9 i.e. 12–15 year olds) from public schools in a city in northern U.S.A, investigating the longitudinal and cross-sectional associations between different types of electronic media use (mobile phones, TV, computers, video games, and music) and young adolescents' depressive symptoms, found that mobile phone use and TV viewing were associated with depressive symptoms, while computer use, music listening, and video game play were unrelated [24].

DEPRESSION, SCHOOL AND BULLYING

Bullying in school is defined as a malicious repeated action inflicted by a more powerful person, or group of persons, over someone else perceived as weaker. Bullying can be direct - physical and verbal (e.g. kicking, punching, hitting, calling names), or indirect: psychological and relational (e.g. spreading rumours, excluding someone on purpose). After conducting a study to determine the extent to which direct and indirect bullying and victimization at school affects the mental and physical health of 661 Italian boys and girls, aged 11 to 15 years old, Baldryn A.C. et al. found that being a victim of indirect bullying is the strongest predictor of withdrawn behaviours, somatic complaints, and anxiety/depression. Direct victimization significantly predicts somatic complaints, anxiety, and depression. Indirect bullying (spreading rumours or not talking to someone on purpose) does significantly predict anxiety and depression, as well as withdrawn behaviours. Other research findings presented in the same paper indicated that regardless of the type of victimization to which victimized children were exposed, they reported relatively high levels of internalizing problems. Victims of bullying, especially girls, are also more likely to report the worst mental health condition, with higher levels of depression and suicidal ideation [26].

The results Kumpulainen K. et al. got after interviews with 423 parents and 420 children suggested that depression was equally likely to occur among adolescents who were bullies and among those who were bullied, but in particular among individuals who both bully and are bullied themselves. Among bullies 12.5% had depression, while among bully-victims, depression rates went up to 17.7% [27].

Another study on bullying included 11 108 twins included in the final sample (5894 girls and 5214 boys), recruited from population records of births in England and Wales between 1194 and 1996, with a mean age of 11.3 years at the first assessment and 16.3 years at the last assessment, presented the following results: the most stringent twin differences estimates (monozygotic) were consistent with causal contribution of exposure to bullying at 11 years to concurrent anxiety, depression, hyperactivity and impulsivity, inattention, and conduct problems [28].

One study on a sample of 403 9th grade (13 to 16-year-old) adolescents presented results that analyses indicated that both traditional victimization and cyber victimization were associated with suicidal ideation indirectly through depressive symptoms. The relation between depressive symptoms and

suicidal ideation was found to be significantly stronger for girls than boys [29].

A meta-analysis presented recently investigated the relations of traditional versus cyber-victimization with internalizing problems. Both forms of victimization had significant, medium-sized associations with internalizing problems such as depression [30].

The negative impact that direct and indirect bullying others and being victimized has on the mental and physical health of youngsters can be buffered by a positive relationship with one or both parents, because of the support and help the parents can provide to their troubled children. As indicated by Rigby in 2010, social support by teachers, peers, or parents can reduce the negative consequences of bullying, especially in those children most at risk: a positive relationship with one or both parents is expected to protect against victimization, reducing the risk of developing poor mental and physical health [31].

Given the normative nature of bullying, it will be a continual struggle to keep it to within acceptable limits—limits such that suicides caused by bullying, actual physical harm to victims, or life-long depression and feelings of low self-worth in those victimized become rare indeed. Such a goal will, however, be a most worthwhile one for the combined efforts of researchers and practitioners to try to achieve [32].

AS FINAL NOTE – A PLEA FOR PREVENTION

Given the developmental nature of depression and the cascading effect of early symptoms of depression on later development of depressive disorders, prevention of depressive disorders should focus on interventions that prevent the emergence of symptoms and the development of syndromes such as major depressive episodes. The logic is irrefutable: preventing major depressive episodes would prevent major depressive disorders [10].

The literature suggests that depression prevention in children and adolescents is feasible and shows promising evidence for efficacy. Depression prevention with children and adolescents is a vital public health goal with potential to improve population health and reduce health care costs. Prevention is critical in part because of limitations associated with treatment availability, access to care, and the impact of depression on overall health. There is an insufficient number of providers (particularly in low-resource global settings) to treat all individuals who have depression. Several other barriers also impede service use, including attitudinal factors (like stigma) and structural barriers (eg, distance from appropriate facilities, unavailability of linguistically and culturally appropriate services, financial constraints). Moreover, not everyone with depression responds to treatment; research indicates that up to one-third of patients do not improve following treatment of depression. Prevention of depression offers opportunities for improving long-term emotional and physical outcomes and overall functioning. First episodes of depression generally occur during adolescence or young adulthood. Prevention and early intervention can boost a young person's chance of healthy social and emotional development during these critical developmental phases. Most depression prevention programs for children and adolescents should be implemented in school settings. Schools are a promising context for preventing depression, because most young people spend a large portion of their time in schools, and schools have potential for significant influences on child development.

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