ORIGINAL RESEARCH PAPER

Paediatrics

"I DON'T WANT TO BRING SHAME UPON MY FAMILY": A CASE OF SUICIDE IN AN ADOLESCENT GIRL.

KEY WORDS: Adolescent, Herbicide, Suicide.

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ABSTRACT

Background: Suicide is the second leading cause of death among young people aged 15-29 years. The rate decreased during the 1990s but increased again in the early 2000s.
Case report: A 16-year-old girl presented with a six day history of ingestion of herbicide, three days history of vomiting of blood and two days history of yellowish discoloration of the eyes. She was three months pregnant and ingested herbicide to kill herself so as to prevent bringing shame on her family. She started vomiting after taking the poison, it contained recently ingested foods, and she had several episodes, volume of 20-30mls per vomitus. However, 3 days later the vomitus became bloody with clots of blood, there was also history of passage of melaena stools. She developed yellowish discolouration of the eyes 2 days prior to presentation and severe body weakness. All other systemic reviews were nil of note.
On examination, she was severely pale, icteric, with petechial haemorrhages on her tongue. Pulse Rate (PR) -112bpm, Blood Pressure (BP) - 120/80mmHg, Respiratory Rate (RR) -30cpm. Abdomen was gravidly enlarged about 18weeks size, with epigastric tenderness
Diagnosis was attempted suicide with severe anaemia due to upper GI bleeding. Results: PCV-24%, E/U/Cr- Deranged, LFT- Deranged. Treatment: IV N/S and Omeprazole, Vitamin C and E. She was started on blood transfusion, howbeit; she became dyspnoeic and was saturating at 31%. Patient started gasping and died 12hrs on admission despite resuscitative measures.
Conclusion- The rate of suicide among young people is on the increase and efforts should be put in place to stem this trend.

INTRODUCTION

Suicide is the second leading cause of death among young people aged 15-29 years. Youth/Adolescent suicide rate increased by over 200% between the 1950s and the mid-1990s, then the rate decreased during the 1990s but increased again in the early 2000s. Each year, approximately 800,000 people worldwide die by suicide [1-2]. Although suicide is one of the leading causes of death in all age groups, young people's suicidal thoughts and behaviors deserve special attention for many reasons. First, the most dramatic increase in the number of suicide deaths throughout the life cycle occurs in adolescence. Second, compared to other age groups, suicide ranks higher in the cause of death in young people. It is the second leading cause of death in young people, and it is the 10th leading cause of death in all age groups [1-2].

Adolescence is a critical developmental stage in which depressive symptoms are commonly present and this is particularly problematic in low- and middle-income countries (LMIC) where 90% of the world's adolescents live [3-4]. Adolescence is an important period due to the transition from childhood to adulthood. The physical, social, and cognitive changes during this period cause considerable stress [5]. In addition, a study of adolescents 13-17 years of age in 59 LMICs found that approximately 17% of had attempted suicide in the past year [6]. Indeed, global estimates ranked suicide as the second leading cause of death among young people aged 15-29 years [7].

Suicide attempt is an action intended to deliberately end one's own life. The most common method among youth is typically drug overdose or ingestion of poisonous substances, followed by hanging/suffocation and the use of a sharp object e.g. cutting [8]. Suicide death is a fatal action that deliberately ends one's own life, as frequently determined by a medical examiner, coroner, or proxy informant. The most common methods among youth are overdose or ingestion, hanging/suffocation and the use of firearm [9]. Suicides are considered secondary deaths by their nature. This is because people who commit suicide often lose their will to live on leading to the demise of their inner strength and the ability to effectively exist in society In Africa, more than 34,000 people die from suicide. Nigeria is ranked 15th in the world in 2016 with a suicide rate of 17.3 per 100,000 [10]. This is despite the fact that suicide is grossly under reported in the country due to poor vital statistics system, stigma, socio-cultural and religious beliefs [11-14].

The factors related to suicide among adolescents include: gender differences, psychological factors, bad relationships, changes in family structure, polygamy, poor academics, mental disorders, bereavement, maltreatment, neuroendocrine system dysfunction and socioeconomic factors [15-16].

Adolescent pregnancy, defined as pregnancy between ages 10–19 years, is a crucial public health problem in the world. The problem is said to occur more in developing countries. The effects of pregnancy in an adolescent girl are numerous and they include; loss of educational and occupational opportunities, psychological and physical stress, which may lead to depression and further increase the risk of suicide [17].

Studies have shown that women have a higher suicide attempts than men. Therefore, being a pregnant adolescent increases the risk of suicide in this population. Li et al found out that among pregnant adolescents, unwanted pregnancy, lack of social and emotional support from friends and family is associated with suicide attempt. Studies have shown that the rate of depression and suicide attempt among adolescent pregnant girls is as high as 20% [17].

Pregnancy in adolescence, especially when unexpected, can generate lots of negative situations from the girl and the people around her. It can lead to confusion about resources, social isolation, impulsive spontaneous decision, self- doubt, hopelessness, depression, anxiety, dropping from school,

shame and stigmatization, family conflicts, which can lead to suicide if not well handled [18].

Musyimi et al in a qualitative study using Focused Group Discussion (FGD) and Key informants interview (Kii) found five risk factors for suicide in pregnant adolescents. They are: poverty, family rejection, intimate partner violence (IPV), social isolation and stigma, and chronic illness [19]. Lack of family support and family conflicts was a common factor and trigger to suicidal ideation and attempts among pregnant adolescents in the study. Unwanted pregnancy, poor social support, mental illness were factors that were significantly associated with suicide ideation in the study done by Belete et al [20].

This case report highlights the trigger factor of lack of family support as a cause of suicide in pregnant adolescent girls.

Case report

A 16-year-old girl was brought into the hospital with a six days history of ingestion of herbicide, three days history of vomiting of blood and two days history of yellowish discolouration of the eyes.

She was said to be apparently well until 6 days prior to presentation when she ingested about 10mls of herbicide that contains paraquat dicloride, which she bought from the market to drink and die following the misunderstanding she had with the mother when she returned late at night from a night party. She had a disagreement with her mother who said she was already pregnant because of her wayward ways but has not learnt her lesson.

She developed abdominal pain and vomiting few hours after ingesting the herbicide, she became afraid and told her mother who took her to a nearby clinic 3 days after the ingestion when the vomitus became bloody with clots of blood, with associated passage of melaena stools. She was admitted and was given intravenous fluid and some intravenous medications, and discharged after 24hours. Two (2) days prior to presentation in our hospital, she developed yellowish discoloration of the eyes and severe body weakness. As such, when the mother noticed worsening of the symptoms she decided to bring her to our hospital. No history suggestive of depression. All other systemic reviews were nil of note.

She is the 4th child in a monogamous family of 5 children. She was said to have dropped out of school 3months ago when she got pregnant for a teenage boy that is also out of school and only engage in doing menial jobs. She was sent to live with the boy's family, but they refused saying they will only take care of the baby when she delivers. Her father is a mason that stays in another city (Abuja) while her mother is a meat seller who lives in Jos with the children.

On examination, she was severely pale, icteric, with petechial haemorrhages on her tongue.

Cardiovascular System:

Pulse Rate (PR) -112bpm, Blood Pressure (BP) - 120/80mmhg, Apex beat not displaced. Heart sound -S1 and S2 only

Respiratory System: Respiratory rate (RR) -30cpm, vesicular breath sounds, SPO2-97%

Abdominal:

epigastric tenderness, gravidly enlarged uterus - 18 weeks size. Nil organ palpable Diagnosis was attempted suicide with severe anaemia due to upper GI bleeding.

RESULTS:

Packed cell volume-24%, Urea, electrolyte & creatinine: Blood urea nitrogen-22mmol/L↑↑, Creatinine- 953μmol/L↑↑↑, Sodium- 135mmol/L↔, Potassium -4.6mmol/L ↔, Chloride-103mmol/L↔. Liver function test: Aspartate transaminase-58U/L↑, Alanine transaminase- 55U/L↑, Alkaline Phosphatase-4591U/L↑↑↑↑. Uric Acid-757μmol/L↑↑↑, Glucose -3.5mmol/L↓.

Treatment:

Intravenous Normal saline and Omeprazole, Vitamin C and E, PO DF118, Group and Cross-Match blood for transfusion. Nephrologist to review for possible dialysis, for Psychiatrist review.

She started complaining of severe abdominal pain, became dyspneic and saturation dropped to 31%. Patient started gasping and died 12hrs on admission despite resuscitative measures.

DISCUSSION

This is a case of a teenager who was out of school due to financial constraint and she became pregnant for a teenager. She was not getting enough support from her family, the father was said to have separated from the mother. The risk factors seen in this case are similar to the risk factors enumerated for adolescent suicide by Li et al and Musyimi et al, where being an adolescent with an unwanted pregnancy and little or no family support, impulsive spontaneous decision, self- doubt, hopelessness, drop from school, shame and stigmatization [17,19].

She was said to have been scolded and then decided to end her life, which was an impulsive spontaneous decision, which is common among adolescent pregnant girls. The delay in presentation and treatment could have worsened the prognosis.

The method used was poisoning with herbicide that she got from the market. This is one of the commonest methods of suicide in adolescent in developing countries [8]. This is because there are no laws and regulation prohibiting the sales of these harmful substances to people and no government licensing of vendors that deal with such chemicals.

Wherefore, it is important to prevent depression and the factors that can lead to depression in adolescents, in our environment where the burden and risk are so high and access to effective treatments is scarce. The rate of depression and suicide attempt among young people is on the increase and efforts should be put in place to stem this trend.

Efforts should be put in place to identify teenagers who are at risk of depression and suicide. Awareness and programmes should be implemented for both parents and adolescents so as to stem this trend.

REFERENCES

1. World Health Organization. The global burden of disease: estimates for 2000–2012. Available from: http://www. who.int/ mediacentre/ factsheets/ fs369/ en/. [Accessed 15th January, 2022].
2. World Health Organization. Disease and injury country mortality estimates, 2000–2015 [Data files]. Available from: http://www.who. [Accessed 15th January 2022]
3. Avenevoli S, Swendsen J, He JP, Burstein M, Merikangas KR. Major depression in the national comorbidity survey-adolescent supplement: prevalence, correlates, and treatment. J. Am. Acad. Child Adolesc. Psychiatry 2015;54:37–44.
4. Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O et al. Child and adolescent mental health worldwide: evidence for action. Lancet 2011;378:1515–1525.
5. Scholten A. Depression (Major Depressive Affective Disorder; Unipolar Disorder; Unipolar Mood Disorder). Available from: http://www.mcksc.com/ apps/HealthGate/Article.aspx?chunkiid=11908 [Accessed 15thJanuary, 2022]
6. Uddin R, Burton NW, Maple M, Khan SR, Khan A 2019. Suicidal ideation, suicide planning, and suicide attempts among adolescents in 59 low-income and middle income countries: a population-based study. Lancet Child Adolesc. Health 2019; 3:223–233.
7. World Health Organization. Preventing Suicide: A Global Imperative. World Health Orgranization, Geneva, Switzerland 2014.
8. Cloutier P, Martin J, Kennedy A, Nixon MK, Muehlenkamp JJ. Characteristics and co-occurrence of adolescent non-suicidal self-injury and suicidal behaviours in pediatric emergency crisis services. Journal of Youth and Adolescence 2010;39:259–269. Center for Disease Control and Prevention

(CDC). Web based Injury Statistics Query and Reporting System [Data file].). Available from: https:// [Accessed 15th January, 2022].
9. World Health Organization. Suicide rate estimates, age-standardised estimates by country 2016.
10. World Health Organization Preventing suicide: a global imperative, 2014. Available: https://www.who.int/publications/i/item/preventing-suicide-a-global-imperative [Accessed 16 January 2022].
11. Alabi O, Alabi A, Ayinde O. Suicide and suicidal behavior in Nigeria: a review. Psychiatry Journal 2014;37:1–6.
12. Gureje O, Alem A. Hidden science? A glimpse at some work in Africa. World Psychiatry 2004;3:178–81.
13. Panyayong B, Tantirangsee N, Bogoian RRD. Psychiatric disorders associated with intimate partner violence and sexual violence in Thai women: a result from the Thai national mental health survey. Gen Psychiatr 2018;31:1-13
14. United Nations World Population Prospects. Health Nutrition and Population Statistics: population estimates and projections. Country-series combination for Country: Nigeria 2018.
15. Olaosebikan, Abdulmalik. Causes of suicide among the youths 2020. Available from: 10.6084/m9.figshare.12199733. [Accessed 15thJanuary ,2022]
16. Johnan Bilsen. Suicide and youth: Risk factors. Available from: https:// www.frontiersin.org/articles/10.3389/fpsyt.2018.00540/full. [Accessed 15th January, 2022]
17. Li J, Imam SZ, Jing Z. Suicide attempt and its associated factors amongst women who were pregnant as adolescents in Bangladesh: a cross-sectional study. Reprod Health 2021;18:71-80.
18. Steve Johnson. Teen pregnancy and addiction: Why suicide becomes a concern. Available from: https://www.hansenspear.com/teen-pregnancy-and-addiction-why-suicide-becomes-a-concern/. [Accessed 15thJanuary, 2022]
19. Musyimi CW, Mutiso VN, Nyamai DN, Ebuenyi I, Ndetei DM. Suicidal behavior risks during adolescent pregnancy in a low-resource setting: A qualitative study. PLoS One. 2020;15(7): 15-22.
20. Belete K, Kassew T, Demilew D, Amare Zeleke T. Prevalence and Correlates of Suicide Ideation and Attempt among Pregnant Women Attending Antenatal Care Services at Public Hospitals in Southern Ethiopia. Neuropsychiatr Dis Treat. 2021;17:1517-1529.