



Letter to Editor

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Pediatric leukemia related depression in Pakistan

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The purpose of this letter is to describe the problem facing during and after the treatment of pediatric leukemia. Depression and anxiety are the most leading challenges faced by children and its family. Anti-depressant used to cope this problem but they have many side effects. So, timely proper diagnosis, good healthy behavior of health care professionals and nurses and positive psychological therapy may be useful to reduce the stress level, effectiveness of social stigma, anxiety and hopelessness in Pediatric leukemia survivor children. By implementation of positive psychological therapy in government hospitals of Pakistan rate of better progression recovery after chemotherapy in pediatric leukemic patients towards the stress free life could be possible.

Pediatric leukemia is preponderant malignancy in children under age 18 in Punjab, Pakistan. It is most eminent cancer among the children in which body produces abnormal immature lymphoblast which do not form a mature lymphocyte for normal functioning of body [1]. Leukemia is an assemblage of disorders that affect the blood making tissues in spleen and in many other parts such as bone marrow and lymphatic system. The leukemia means “white blood” because it is specifically associated with the white blood cell (leukocytes) proliferation. Production of specified blood cells from stem cells are formed according to requirement of body by hematopoiesis process. In leukemia myeloid or lymphoid cells are defected.

According to Punjab Cancer Registry report 2018, 3.5% leukemia frequently reported in all age groups in both genders, 3.4% in adult males and 14.9% acute lymphoblastic leukemia in children age group less than 18 years old. This is a most common cancer among children in 2018 [1]. From 2018 to 2022 the rate of leukemia is increased among all groups such as 3.9% in all age groups including both genders and 25% (acute lymphoblastic leukemia) in children \leq 18 years old [2].

Pediatric type of cancers such as leukemia are mostly treated by parental expenses and many variables related to family, are strongly associated with the health outcome, morbidity and mortality of children. Its diagnosis and therapies may have confrontational psychological executes on child and his family. Anxiety is first significant problem faced by Leukemic patient and its parents at post diagnosis of disease and depression is continuous mental state during treatment [3]. Cancer survivors have deep fear of loneliness, hopelessness, depression, anxiety and social stigma. Family caregivers are the hidden sufferer of this psychological disorder. Their social, economic and emotional life are strongly disturbed and neurotic [4, 5]. The whole process from duration of treatment of children to their survival after illness is challenging task for both parents and children, physically and psychologically which influenced the family structure and function [6].

Mostly people in developing countries like Pakistan has no formal care on this issue, this can lead towards depressed life even after successful treatment. Pharmacological treatments such as antidepressant drugs are used to cure for depression. But due to side effects of anti-depressant, patients are not adhering to this type of cure and prefer to choose non pharmacological treatments to reduce the anxiety. Positive thinking is one of the best psychiatric treatments [7]. Positive psychotherapy relief the patients from stress by encouraging more positive emotions and meetings rather direct targeting the symptoms of depression and anxiety [8].



Positive psychological conciliation and healthy behavior of health care professionals is the good contrivance for cultivating positive behavior, emotions and cognition for healthy quality of life in leukemia survival. Psycho educational programs are eloquently escalated hope in child and his family and return towards the healthy happy life after depressed process of treatment [9].

Routine mental screening for anxiety and evaluation of parental functioning are significant methods which is helpful to identify the target patient with family who suffered with high level of depression. Psychological assessment surveys and distress thermometer may be important useful tool can be used by health care professional or nurses during checkup for better evaluation [10]. A significant number of leukemia patients in different hospitals of Pakistan experienced with disturbed depressed psychological mental state. Government of Pakistan should take all these approaches with positive psychological conciliation, practically in hospitals in different phases of cancer such as pediatric leukemia treatment, to help the child to cope with depression and escalating stress-free life expectancy.

Competing Interest

The authors declare that there is no conflict of interest.

References

1. Punjab Cancer Registry Report-2018, <http://www.punjabcancerregistry.org.pk>, [date accessed 22 September 2019].
2. Punjab Cancer Registry Report-2022, <http://www.punjabcancerregistry.org.pk>, [date accessed 06 March 2023].
3. Myers RM, Balsamo L, Lu X, Devidas M, Hunger SP, Carroll WL, Winick NJ, Maloney KW, Kadan-Lottick NS. A prospective study of anxiety, depression, and behavioral changes in the first year after a diagnosis of childhood acute lymphoblastic leukemia: a report from the Children's Oncology Group. *Cancer*, (2014); 120(9):1417-25.
4. Hacialioglu N, Ozer N, Yilmaz Karabulutlu E, Erdem N, Erci B. The quality of life of family caregivers of cancer patients in the East of Turkey. *European Journal of Oncology Nursing*, (2010);14:211-7.
5. Roche V. The hidden patient: Addressing the caregiver. *American Journal of the Medical Science*, (2009);337:199-204.
6. Maurice-Stam H, Oort FJ, Last BF, Grootenhuys MA. Emotional functioning of parents of children with cancer: the first five years of continuous remission after the end of treatment. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, (2008);17(5):448-59.
7. Gartlehner G, Wagner G, Matyas N, Titscher V, Greimel J, Lux L, *et al.* Pharmacological and non-pharmacological treatments for major depressive disorder: Review of systematic reviews. *BMJ Open*, (2017);7:e014912.
8. Seligman ME, Rashid T, Parks AC. Positive psychotherapy. *American psychologist*, (2006) ;61(8):774.
9. Douki HE, Elyasi F, Hasanzadeh R. Effectiveness of positive thinking training on anxiety, depression and quality of life of mothers of children with leukemia. *Journal of Nursing and Midwifery Sciences*, (2019);6(1):21.
10. Kazak AE, Barakat LP, Ditaranto S, Biros D, Hwang WT, Beele D, Kersun L, Alderfer MA, Mougianis I, Hocking MC, Reilly A. Screening for psychosocial risk at pediatric cancer diagnosis: the psychosocial assessment tool. *Journal of pediatric hematology/oncology*, (2011);33(4):289-94.



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