Literature Review

Loneliness in Bereaved Children and Adolescents

Vanessa Budiawan Soetioso¹, Izzatul Fithriyah¹

¹Department of Psychiatry, Faculty of Medicine, Universitas Airlangga - Dr. Soetomo General Academic Hospital, Surabaya, Indonesia

Received: June 16, 2024 Accepted: August 12, 2024 Published Online: December 2, 2024

You are free to: Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.



Correspondence Author: Email: vanessa241193@gmail.com

Abstracts

Introduction: Bereavement in children and adolescents was a common life event, but often unrecognized. It is potentially followed by a reaction of grief. Bereavement may cause feelings of loneliness, which is associated with poor mental well-being. This study aims to understand the impact of loneliness on bereaved children and adolescents. Methods: Literature Review. Results: Childhood loss is a significant social and public health problem associated with developmental disorders - including relational, academic, and occupational functioning — as well as an increased risk of mental health problems. Loneliness occurs in childhood and adolescence is a risk factor for poorer well-being. Loneliness in children and adolescents is a risk factor for depression, social anxiety, behavioral disorders, hyperactivity, substance abuse, suicide, and premature death. Studies showed more than 50% of mental health problems develop during childhood and adolescence, with the average age being 14.5, and poorer well-being resulting from loneliness has a long-term impact on health and well-being during adulthood. Conclusions: Bereavement during childhood and adolescence period is a risk of loneliness, which is associated with a variety of mental and behavioral health problems, decreased academic performance, and impairments in developmental tasks. Early prevention and intervention are needed to reduce the risk of disorders later in life and to increase resilience among bereaved children and adolescents.

Keywords: Bereavement, Loneliness, Well-Being, Children And Adolescent

Cite this as: Soetioso. V. B., and Fithriyah. I. "Loneliness in Bereaved Children and Adolescents". Jurnal Psikiatri Surabaya, vol. 13, no. S11, pp.46-53, 2024. doi: <u>10.20473/jps.v13.isi1.62655</u>



INTRODUCTION

The death of a loved one is one of the various life events that can cause suffering. Coping with bereavement is considered a notably challenging experience. Bereaved individuals may experience a range of negative emotions such as sadness, disbelief, longing, anxiety, anger, and feelings of guilt [1, 2].

The prevalence of bereavement in childhood and adolescence is estimated to be around 1.5% in cases of loss of siblings and overall at 3.5% in the loss of a family member. Children can be spared the suffering associated with bereavement due to the immature development of cognitive and psychological functions. As a result, they are insensitive to loss. Studies suggest that a child who deals with bereavement is at risk for many health problems [2–6].

Bereavement can cause somatic symptoms in children (sleep disturbances, enuresis, decreased appetite, and anorexia). The psychosomatic and socioeconomic impacts of children experiencing bereavement include anxiety disorders, internalizing and behavioral externalization disorders, sleep disorders, low self-esteem, suicide attempts, substance use, mental disorders such as schizophrenia, and social withdrawal. Mental health problems that developed due to bereavement might be associated with loneliness [4, 7].

Loneliness is a subjective negative emotion that arises when a person feels that their social relationships are not as desired, quality or quantity. Loneliness can occur in children and adolescents as a consequence of bereavement and can affect the mental health of children and adolescents up to 9 years later. Studies have shown that loneliness in children and adolescents was considered a risk factor for poorer well-being [8–10].

This literature review aimed to understand the impact of loneliness on bereaved children and adolescents.

REVIEWS

Bereavement in Children and Adolescents

Definition

Grief is a natural human response to bereavement or loss, especially the loss of a loved one. The terms grief, mourning, and bereavement are often used interchangeably but have different meanings. "Deuil" is a French word that means the loss of a loved one as well as the reaction of grief caused by the experience of loss. English vocabulary presents definitions of the three aspects: bereavement, which is defined as a major life event in the form of loss of a loved one; grief, which deals with cognitive, affective, and behavioral responses to loss; and mourning, which is the process of adaptation to loss, a dynamic process strongly influenced by sociocultural norms. Bereaved individuals may experience a period of intense emotional pain and thoughts which include yearning and longing, intense sadness and crying, anger, anxiety, loneliness, guilt, blame, depersonalization, preoccupation with thoughts and memories of the deceased person, insistent memories, disturbed neuro vegetative functions, difficulty concentrating, and relative disinterest in other people and disruption of daily life activities, that is both expected as well as socially sanctioned. The normal process of bereavement takes 3 to 6 months in the acute phase, and up to 1 year for complete resolution [2, 11, 12].

The clinical approach to grief among children is the developmental approach. This required a phase of mental and cognitive development that must be taken into account in order to understand and accurately describe the grief reaction of children. Children gain five concepts in understanding and dealing with death, namely (1) irreversibility (permanent death), (2) personal mortality (death applies to oneself), (3) universality (death is inevitable), (4) non-functionality (termination of all functions of life), and (5) causality (a realistic understanding of the concept of death). A proper understanding of the concept of death is generally achieved between the ages of 9 and 11, although brain maturation and higher cognitive function continue to develop during adolescence and early adulthood [4, 13].

Prevalence

The prevalence of children and adolescents experiencing bereavement is estimated to be approximately 1.5% in cases of loss of a sibling, and overall 3.5% experiencing the loss of a family member. Epidemiological studies of bereavement in childhood and adolescence in the United Kingdom showed that 3.5% experienced the death of a parent or sibling, and 6.3% experienced the death of a close friend. Another study conducted in the United States showed that 4% of children and adolescents experienced the death of a parent before the age of 18. A study conducted by Berg, et al (2016) showed that of 862,554 people included in the study population, there were 1.1% of children experienced maternal loss, 2.6% lost fathers, and 519 people experienced the loss of both parents before the age of 18 years [2, 5, 6, 14].

Psychological Impacts

Bereavement in children and adolescents is a risk factor for various psychiatric and somatic disorders. Childhood bereavement is also a significant social and public health problem associated with developmental disorders - including relational, academic, and occupational functioning - as well as an increased risk of mental health problems, substance abuse, suicide, and premature death. The death of the figure of attachment to any cause, and the symptoms resulting from the difficulties experienced after death can significantly disrupt the lives of children, impact health, and disrupt the developmental phase. Unlike adults, bereaved children might show withdrawal, seek attention, misbehave, complain of aches and pains, pick fights easily, argue, have nightmares, fear the dark, lose their appetites, or overeat. Secondary stressors also add to family difficulties in grieving households so bereaved teens also often experience decreased financial security and changes at school and home [2, 15, 16]. Depression, post-traumatic stress disorder (PTSD), and/ or prolonged grieving disorder (PGD) are estimated to occur in 5-10% of children who experience bereavement. Depression and PTSD are associated with an increased risk of alcohol and substance abuse and dependence [17–20].

A longitudinal study conducted by Wilcox, et al. (2010), showed that the method of parental death and the age of children at the time of parental death moderate the risk of suicide. The risk of suicide also differs in the different developmental periods in which parental suicide occurs. Children or adolescents show a higher risk of suicide, compared to young adults [21].

A study showed that losing a parent before age 18 is associated with an increased risk of schizophrenia. The link between loss and schizophrenia tends to decrease with age when experiencing loss, with the loss occurring in the first 3 years of life having the highest risk. The risk is mainly associated with the death of a parent from suicide or accident. This suggests that children who experience loss may be considered a "highrisk" group for schizophrenia, especially if parents have mental health problems [7].

Loneliness in Children and Adolescents Definition

Loneliness is the absence of social relationships and feeling less affectionate about the current social relationships. It is a subjective negative emotion that arises when a person feels that their social relationships are not as desired, quality or quantity. Loneliness is one of the factors that affect well-being. Loneliness has two components, described by Weiss (1973), that are emotional loneliness, which is related to the absence of an intimate relationship (partner, best friend), and social loneliness, related to the absence of a broader, engaging social network (siblings, cousins, friends, and neighbors). Emotional loneliness is characterized by intense feelings of emptiness, being abandoned, and sadness. People who move to a new place often feel social loneliness [10, 22, 23].

Prevalence

Loneliness is a common issue and may be experienced by 80% of the population below 18 years of age and 40% of people above 65 years old. Loneliness is mostly reported by adolescents and young children. In recent meta-analysis studies, the prevalence of loneliness among adolescents between 12 and 17 years of age was ranging from 9.2% to 14.4%, across 76 different countries. A study conducted by Lempinen (2018) showed that 20% of children reported having feelings of loneliness, and 25% wished that they had more friends. The stability of loneliness experiences is an important aspect of loneliness itself. Although most children show stable low or decreasing levels of loneliness over time, some may experience stable high or increasing loneliness over time, thus indicating chronic loneliness. Studies showed that more than 50% of mental health problems develop during childhood and adolescence, with the average age being 14.5, and poorer well-being resulting from loneliness has a long-term impact on health and well-being during adulthood [24–27].

Psychological Impact of Loneliness

Loneliness in children and adolescents is a risk factor for poorer well-being, including higher depression symptoms, anxiety symptoms, gaming addiction, and sleep problems. Loneliness was related to symptoms of depression from childhood to adolescence. A rapid systematic review of 63 studies of 51,576 participants found that loneliness was associated with mental problems in children and adolescents up to 9 years later, with depression having the strongest association. Loneliness also showed a vicious cycle of social anxiety among adolescents. Reviews by Loades (2020) and Hards (2022) on a population at a mean age of 21 years and younger without and with pre-existing mental health conditions, showed that loneliness and mental health difficulties including anxiety and depression symptoms were significantly associated [8, 9, 28–30].

Loneliness had direct and indirect effects on

suicidal ideation mediated through depression. Studies about loneliness and suicidal ideation showed that loneliness is significantly associated with depression and suicidal ideation. The condition of being alone (e.g., living alone) and the subjective feeling of loneliness were associated with suicidal outcomes [31–34].

A study by Lempinen (2017) showed that loneliness at the age of eight was also simultaneously associated with psychiatric problems such as conduct problems, hyperactivity, and emotional problems. It was found that hyperactivity and conduct problems were independently associated with higher levels of loneliness among boys and girls, and emotional problems were independently associated with loneliness among boys [30]. Loneliness is common in psychotic disorders, particularly in depressive psychosis. The prevalence of loneliness ranged from 74.75% in participants with delusional disorders to 93.8% in depressive psychosis. It is thought to be associated with continuous anhedonia and disorganized thoughts as well as impairment in cognitive functions. A meta-analytical review of loneliness in psychosis showed that psychosis and loneliness were significantly interrelated. Gayer-Anderson and Morgan suggested the self-preserving cycle of psychosis and loneliness and suggested that loneliness plays a role in maintaining psychotic experiences. A cognitive model of psychosis proposed by Garety, et al., suggested that the development of psychosis might be related to poor self-concept and self-esteem, which lead to maladaptive cognitions about self and others. Self-esteem is poor in many people with psychosis, while hallucinations and delusions that contain negative content are associated with negative self-concepts, thus feelings of loneliness can strengthen negative self-concepts and harm self-esteem [35-38].

Loneliness may lead to high-risk behavior, such as substance use, especially in young adults. A study conducted with Russian and U.S. adolescents showed that loneli-

ness increased the use of alcohol and other substances. A study about the relationship between loneliness and the tendency of substance use in children and adolescents revealed that participants who felt lonelier had a higher tendency to use substances. Adolescents might use substances as a means of self-medication to alleviate the negative feelings of loneliness or as an attempt to reach out and gain peer approval. Loneliness has a negative impact on the child and adolescent mental health and therefore increases the rate of substance use [39–41].

Loneliness in Bereaved Children and Adolescents

Bereavement was different as compared to many other adverse life events and losses. Bereavement in children and adolescents was a common life event, but often unrecognized. It may be followed by a reaction of grief. Children had a limited capacity to hold intense emotions following bereavement for long periods and were unable to express such experiences adequately. The inability to understand the concept of death clearly can lead to grief reactions in which general distress, regression, separation anxiety, and somatic symptoms (sleep disturbances, enuresis, loss of appetite, and anorexia) are the dominant complaints. Adolescents who have a clearer perception of the concept of death and engage in processes of subjectivization and individuation to their attachment figures will often express their distress in the form of existential questions, anxiety, learning difficulties, feelings of isolation from their peers, or risky behaviors [2, 13].

Bereavement may cause feelings of loneliness, which is associated with poor mental well-being. As described above, loneliness has two components, that are social and emotional loneliness. Bereavement was said to be associated with an increase in emotional loneliness. These findings follow the attachment theory, which states that losing loved one(s) means losing major attachment figure(s), which can not be compensated with social support (family and friends). Loneliness in bereaved children and adolescents was significantly associated with the security towards attachment figure(s). Insecure attachment (avoidant and anxious) showed a higher level of loneliness compared to secure type of attachment [23].

Loneliness in bereaved children and adolescents was correlated with lower mental and physical health, with major depressive disorder, post-traumatic stress disorder, and prolonged grief disorder (persistent complex bereavement disorder) having a higher association with loneliness. Adequate support is needed to prevent the impacts of bereavement that leads to loneliness, on academic, relationships, and emotional well-being. Lower social support from family, friends, and neighbors during the process of bereavement, is associated with a higher risk for loneliness [23, 42, 43].

Loneliness was included in the Diagnostic and Statistical Manual of Mental Disorders, fifth edition – "Intense loneliness as a result of the death" – as a part of criterion C in persistent complex bereavement disorder (PCBD). Studies have shown that a group of children experiencing PCBD were associated with impaired functioning of life although most children who experience loss appear to exhibit adaptive grief reactions and maintain normal functioning across all domains of life.

CONCLUSION

Bereavement during childhood and adolescence is a risk factor for loneliness. Loneliness, pain, and grief of bereaved children and adolescents were often socially not recognized, yet the suffering of these youngsters is intense. Loneliness that occurs in childhood and adolescence is associated with poorer well-being. Loneliness in bereavement is a risk factor for mental and behavioral health problems. Early detection and intervention of loneliness in bereaved children and adolescents are necessary to reduce the risk of mental and behavioral disorders and increase resilience among bereaved children and adolescents, therefore increasing their well-being.

ACKNOWLEDGEMENTS

Not declared.

CONFLICT OF INTEREST

The authors have no conflict of interest.

REFERENCES

[1] J. C. Thimm, A. E. Kristoffersen, and U. Ringberg, "The Prevalence of Severe Grief Reactions after Bereavement and Their Associations with Mental Health, Physical Health, and Health Service Utilization: A Population-based Study," Eur J Psychotraumatol, vol. 11, no. 1, p. 1844440, Dec. 2020, doi: 10.1080/20008198.2020.1844440.

[2] A. Revet, E. Bui, G. Benvegnu, A. Suc, L. Mesquida, and J.-P. Raynaud, "Bereavement and Reactions of Grief among Children and Adolescents: Present Data and Perspectives," Encephale, vol. 46, no. 5, pp. 356–363, 2020.

[3] N. M. Melhem, G. Porta, W. Shamseddeen, M. Walker Payne, and D. A. Brent, "The Course of Grief in Children and Adolescents Bereaved by Sudden Parental Death," Arch Gen Psychiatry, vol. 68, no. 9, pp. 911–919, 2011, doi: <u>10.1001/archgenpsychiatry.2011.101</u>.

[4] A. Ridley and S. Frache, "Bereavement care interventions for children under the age of 18 following the death of a sibling: a systematic review," Palliat Med, vol. 34, no. 10, pp. 1340–1350, 2020, doi: 10.1177/0269216320947951.

[5] E. G. Hulsey, R. M. Hill, C. M. Layne, D. A. Gaffney, and J. B. Kaplow, "Calculating the incidence rate of sibling bereavement among children and adolescents across the United States: A proposed method," Death Stud, vol. 44, no. 5, pp. 303–311, 2020, doi: 10.1080/07481187.2018.1541946.

[6] B. Fauth, M. Thompson, and A. Penny, "Associations between childhood bereavement and children's background, experiences and outcomes," Children, no. 258825, pp. 1–41, 2009.

[7] H. Liang et al., "Early Life Bereavement and Schizophrenia: A Nationwide Cohort Study in Denmark and Sweden," Medicine, vol. 95, no. 3, pp. e2434–e2434, Jan. 2016, doi: <u>10.1097/MD.0000000002434</u>.

[8] M. Elizabeth Loades et al., "Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19," 2020. [Online]. Available: www.jaacap.org

[9] A. H. Farrell, I. Vitoroulis, M. Eriksson, and T. Vaillancourt, "Loneliness and Well-Being in Children and Adolescents during the COVID-19 Pandemic: A Systematic Review," Children, vol. 10, no. 2. MDPI, Feb. 01, 2023. doi: <u>10.3390/chil-dren10020279</u>.

[10] J. de Jong Gierveld and T. van Tilburg, "The De Jong Gierveld short scales for emotional and social loneliness: Tested on data from 7 countries in the UN generations and gender surveys," Eur J Ageing, vol. 7, no. 2, pp. 121–130, 2010, doi: <u>10.1007/s10433-</u> <u>010-0144-6</u>.

[11] D. K. Glorioso, A. Iglewicz, and S. Zisook, "Bereavement and Grief," in Handbook of Mental Health and Aging, N. Hantke, A. Etkin, and R. B. T.-H. of M. H. and A. (Third E. O'Hara, Eds., San Diego: Academic Press, 2020, pp. 245–256. doi: <u>https://doi.org/10.1016/B978-0-12-800136-3.00018-1</u>.

[12] B. J. Sadock, V. A. Sadock, and P. Ruiz, Eds., Kaplan and Sadock's Comprehensive Textbook of Psychiatry, Tenth. Philadelphia: Wolters Kluwer, 2017.

[13] E. Bui, Clinical Handbook of Bereavement and Grief Reactions. 2018. doi: 10.1007/978-3-319-65241-2.

[14] L. Berg, M. Rostila, and A. Hjern, "Parental death during childhood and depression in young adults – a national cohort study," J Child Psychol Psychiatry, vol. 57, no. 9, pp. 1092–1098, 2016, doi: <u>10.1111/jcpp.12560</u>.
[15] B. Oosterhoff, J. B. Kaplow, and C. M. Layne, "Links between bereavement due to

sudden death and academic functioning: Results from a nationally representative sample of adolescents.," Sch Psychol Q, vol. 33, no. 3, pp. 372–380, Sep. 2018, doi: <u>10.1037/</u> <u>spq0000254</u>.

[16] N. B. Webb, Ed., Helping bereaved children: A handbook for practitioners, 3rd ed. in Social work practice with children and families. New York, NY, US: The Guilford Press, 2010.

[17] N. M. Melhem, G. Porta, M. W. Payne, and D. A. Brent, "Identifying Prolonged Grief Reactions in Children: Dimensional and Diagnostic Approaches," J Am Acad Child Adolesc Psychiatry, vol. 52, no. 6, pp. 599-607.e7, 2013, doi: <u>http://dx.doi.</u> org/10.1016/j.jaac.2013.02.015.

[18] S. Pham et al., "The burden of bereavement: Early-onset depression and impairment in youths bereaved by sudden parental death in a 7-year prospective study," American Journal of Psychiatry, vol. 175, no. 9, pp. 887–896, 2018, doi: <u>10.1176/appi.</u> <u>ajp.2018.17070792</u>.

[19] S. Hamdan, N. M. Melhem, G. Porta, M. S. Song, and D. A. Brent, "Alcohol and Substance Abuse in Parentally Bereaved Youth," J Clin Psychiatry, vol. 74, no. 8, pp. 828–833, 2013, doi: <u>10.4088/JCP.13m08391</u>.

[20] A. Thapar, D. S. Pine, J. F. Leckman, S. Scott, M. J. Snowling, and E. Taylor, Eds., Rutter's Child and Adolescent Psychiatry Sixth Edition, Sixth., no. 3. Wiley Black-well, 2015. [Online]. Available: <u>http://mare-fateadyan.nashriyat.ir/node/150</u>

[21] H. C. Wilcox, S. J. Kuramoto, P. Lichtenstein, N. Långström, D. A. Brent, and B. Runeson, "Psychiatric Morbidity, Violent Crime, and Suicide Among Children and Adolescents Exposed to Parental Death," J Am Acad Child Adolesc Psychiatry, vol. 49, no. 5, pp. 514–523, 2010, doi: <u>10.1016/j.jaac.2010.01.020</u>.

[22] M. H. Lim, R. Eres, and S. Vasan, "Understanding loneliness in the twenty-first century: an update on correlates, risk factors, and potential solutions," Social Psychiatry and Psychiatric Epidemiology, vol. 55, no. 7. Springer, pp. 793–810, Jul. 01, 2020. doi: <u>10.1007/s00127-020-01889-7</u>.

[23] A. Vedder, K. Boerner, J. E. Stokes, H. A. W. Schut, P. A. Boelen, and M. S. Stroebe, "A systematic review of loneliness in bereavement: Current research and future directions," Current Opinion in Psychology, vol. 43. Elsevier B.V., pp. 48–64, Feb. 01, 2022. doi: <u>10.1016/j.copsyc.2021.06.003</u>.

[24] D. L. Surkalim et al., "The prevalence of loneliness across 113 countries: systematic review and meta-analysis," BMJ, p. e067068, Feb. 2022, doi: <u>10.1136/bmj-</u> <u>2021-067068</u>.

[25] R. Mushtaq, S. Shoib, T. Shah, and S. Mushtaq, "Relationship between loneliness, Psychiatric disorders and physical health ? A review on the psychological aspects of lone-liness," Journal of Clinical and Diagnostic Research, vol. 8, no. 9. Journal of Clinical and Diagnostic Research, pp. WE01–WE04, 2014. doi: 10.7860/JCDR/2014/10077.4828.
[26] L. Lempinen, N. Junttila, and A. Sourander, "Loneliness and friendships among eight-year-old children: time-trends over a 24-year period," J Child Psychol Psychiatry, vol. 59, no. 2, pp. 171–179, Feb. 2018, doi: 10.1111/jcpp.12807.

[27] A. E. Salo, N. Junttila, and M. Vauras, "Social and Emotional Loneliness: Longitudinal Stability, Interdependence, and Intergenerational Transmission Among Boys and Girls," Fam Relat, vol. 69, no. 1, pp. 151– 165, Feb. 2020, doi: <u>10.1111/fare.12398</u>.

[28] P. Qualter, S. L. Brown, P. Munn, and K. J. Rotenberg, "Childhood loneliness as a predictor of adolescent depressive symptoms: An 8-year longitudinal study," Eur Child Adolesc Psychiatry, vol. 19, no. 6, pp. 493–501, Jun. 2010, doi: <u>10.1007/s00787-</u> 009-0059-y.

[29] E. Hards et al., "Loneliness and mental health in children and adolescents with pre-existing mental health problems: A rapid systematic review," British Journal of Clinical Psychology, vol. 61, no. 2, pp. 313–334, Jun. 2022, doi: <u>10.1111/bjc.12331</u>.

[30] S. Danneel et al., "Internalizing Prob-

lems in Adolescence: Linking Loneliness, Social Anxiety Symptoms, and Depressive Symptoms Over Time," J Abnorm Child Psychol, vol. 47, no. 10, pp. 1691–1705, Oct. 2019, doi: <u>10.1007/s10802-019-00539-0</u>.

[31] H. McClelland, J. J. Evans, R. Nowland, E. Ferguson, and R. C. O'Connor, "Loneliness as a predictor of suicidal ideation and behaviour: a systematic review and meta-analysis of prospective studies," Journal of Affective Disorders, vol. 274. Elsevier B.V., pp. 880–896, Sep. 01, 2020. doi: 10.1016/j.jad.2020.05.004.

[32] R. Calati et al., "Suicidal thoughts and behaviors and social isolation: A narrative review of the literature," Journal of Affective Disorders, vol. 245. Elsevier B.V., pp. 653–667, Feb. 15, 2019. doi: <u>10.1016/j.jad.2018.11.022</u>.

[33] T. Antonelli-Salgado et al., "Loneliness, but not social distancing, is associated with the incidence of suicidal ideation during the COVID-19 outbreak: a longitudinal study," J Affect Disord, vol. 290, pp. 52–60, Jul. 2021, doi: <u>10.1016/j.jad.2021.04.044</u>.

[34] G. Turecki et al., "Suicide and suicide risk," Nature Reviews Disease Primers, vol. 5, no. 1. Nature Publishing Group, Dec. 01, 2019. doi: 10.1038/s41572-019-0121-0.

[35] Garety, P. A., Kuipers, E., Fowler, D., Freeman, D., & Bebbington, P. E. (2001). A cognitive model of the positive symptoms of psychosis. Psychological medicine, 31(2), 189–195. <u>https://doi.org/10.1017/</u> <u>s0033291701003312</u>

[36] C. Gayer-Anderson and C. Morgan, "Social networks, support and early psychosis: A systematic review," Epidemiology and Psychiatric Sciences, vol. 22, no. 2. pp. 131–146, Jun. 2013. doi: <u>10.1017/</u> <u>S2045796012000406</u>. [37] B. Michalska Da Rocha, S. Rhodes, E. Vasilopoulou, and P. Hutton, "Loneliness in Psychosis: A Meta-analytical Review," Schizophrenia Bulletin, vol. 44, no. 1. Oxford University Press, pp. 114–125, Jan. 01, 2018. doi: 10.1093/schbul/sbx036.

[38] J. C. Badcock et al., "Loneliness in psychotic disorders and its association with cognitive function and symptom profile," Schizophr Res, vol. 169, no. 1–3, pp. 268–273, Dec. 2015, doi: <u>10.1016/j.</u> <u>schres.2015.10.027</u>.

[39] C. Segrin, M. McNelis, and C. A. Pavlich, "Indirect Effects of Loneliness on Substance Use through Stress," Health Commun, vol. 33, no. 5, pp. 513–518, May 2018, doi: 10.1080/10410236.2016.1278507.

[40] K. Kayaoğlu, A. Okanlı, F. K. Budak, and E. Aslanoğlu, "The correlation between loneliness and substance use proclivity in child and adolescent substance users," J Subst Use, vol. 27, no. 1, pp. 70–73, 2022, doi: <u>10.1080/14659891.2021.1894495</u>.

[41] A. Stickley, A. Koyanagi, R. Koposov, M. Schwab-Stone, and V. Ruchkin, "Loneliness and health risk behaviours among Russian and U.S. adolescents: a cross-sectional study," 2014. [Online]. Available: http:// www.biomedcentral.com/1471-2458/14/366 [42] J. Cockle-Hearne, E. Reed, J. Todd, and E. Ream, "The dying parent and dependent children: a nationwide survey of hospice and community palliative care support services.," BMJ Support Palliat Care, Mar. 2020, doi: 10.1136/bmjspcare-2019-001947. [43] D. Hawari, Margarita Maria Maramis, and Subur Prajitno, "Effects of Family Relations Towards Risk of Depression in Adolescents," Jurnal Psikiatri Surabaya, vol. 12, no. 1, pp. 20–27, May 2023, doi: <u>10.20473/</u> <u>ips.v12i1.24909</u>.