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## ДЕПРЕССИЯ, СУИЦИДАЛЬНОЕ ПОВЕДЕНИЕ И ВЛИЯНИЕ СЕМЬИ В ПОДРОСТКОВОМ ВОЗРАСТЕ

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**Ключевые слова:** самоубийство, депрессия, семья, подростки.

**Аннотация.** Казахстан, вот уже более 10 лет занимает лидирующие позиции в списках стран с высоким индексом суицидального поведения. Согласно отчетам ЮНИСЕФ и ВОЗ, Казахстан в период 2010-2013гг возглавлял список стран с высоким уровнем суицидального поведения. В Казахстане уровень смертности по причине самоубийства 24 случая на 100 000 человек, среди подростков в возрасте 15- 19 лет. Принятая в настоящий момент био-социо-психологическая модель суицидального поведения определяет суицидальное поведение через призму факторов, таких как депрессия и роль семейно-родительских отношений (роль отца – матери, конфликт- отсутствие конфликта, сепарация – слияние); все это является определяющим в описании как факторов суицидального риска, так и факторов защиты.

## DEPRESSION, SUICIDE AND FAMILY SUPPORT IN ADOLESCENCE

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**Keywords:** suicide, depression, family, adolescents.

**Abstract.** Kazakhstan is ranked 10<sup>th</sup> among the world's most suicidal countries. Global suicide statistics, released by UNICEF and WHO, shows that Kazakhstan had the highest rate of suicide among teenagers in 2010-2013. In the Kazakhstan, the death rate by suicide is 24/100000 in adolescents aged 15 to 19. Not with standing these interesting results, the complex association between family factors, depression and suicidal behaviors among adolescents remains to be explored in samples large enough to allow multivariate analysis, so as to understand specific contributions (e.g. mother vs. father; conflict vs. no conflict; separation vs. no separation) taking into account other risk factors and severity of depression and suicidal behaviors.

During the past quarter-century, suicide among the young has emerged as a significant global public health problem. In many countries, youth suicide is one of the leading causes of death, having increased markedly from the 1960s through the early 1990s [1]. Progress has been made in our understanding of the phenomenology and risk factors of adolescent suicide and suicidal behavior. This report will first review the descriptive epidemiology of youth suicide and suicidal behavior.

Then we examine risk for adolescent suicide and suicidal behavior with regard to salient domains:

1) mental and physical disorder;

- 2) personality and psychological traits;
- 3) family factors;
- 4) biology;
- 5) contagion;
- 6) access to lethal agents;
- 7) intervention and clinical management.

Finally, public health approaches to the reduction in youth suicide and further research will be discussed. In this review, definitions of suicidal thoughts and behavior developed by O'Carroll et al. and adopted by the Institute of Medicine in 2002 will be used [2]. Suicidal ideation refers to thoughts of harming or killing oneself. Attempted suicide is a non-fatal, self-inflicted destructive act with explicit or inferred intent to die. Suicide is a fatal self-inflicted destructive act with explicit or inferred intent to die. Suicidality refers to all suicide-related behaviors and thoughts including completing or attempting suicide, suicidal ideation or communications. This review will focus on the spectrum of suicidality, from suicidal ideation to suicidal behavior, with passive thoughts of death and completed suicide representing extreme ends of the risk spectrum. Non-suicidal self-harm, sometimes referred to as 'parasuicide,' is viewed as distinct from suicidal behavior and most commonly involves self-cutting without suicidal intent. Factors associated with parasuicide will not be reviewed, although often, non-suicidal self-harm and suicidal behavior co-occur.

Current models of suicide phenomena in adolescents emphasize:

- the importance of distinguishing suicidal ideation, non-suicidal self-harm, suicide attempt and completed suicide [3,4]
- the key role of depression in the transition from suicidal ideations to suicide attempts, in which depression is a strong proximal factor [5];
- the fact that the numerous risk factors identified do not capture the whole risk leading to the idea that protective factors should be taken into account for suicide risk prediction [6].

#### Pathways to suicide

Adolescent suicide sometimes occurs without any prior warning, but more commonly it is the endpoint of chronic problems. Figure 1 shows a pathway model of adolescent suicide<sup>37</sup>, which postulates three kinds of contributing factor: individual disposition, proximate (trigger) factors, and the social milieu.

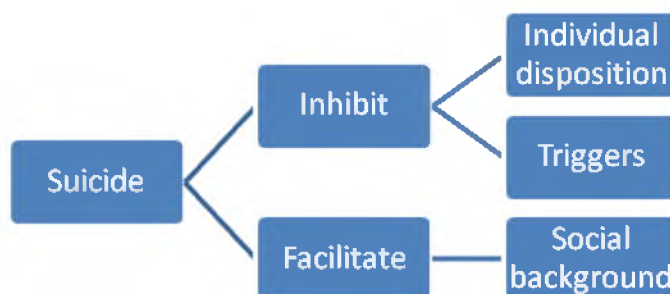


Fig. 1 – Pathway model of teenage suicide (adapted from Shaffer).

Psychological autopsy studies suggest that the most significant predisposing factors are depressive disorder, previous attempts, antisocial behaviour, substance misuse and dependence, and personality traits such as impulsivity or obsessionality. There may be gender differences in the ways that these risk factors lead to suicide. Conduct disorder and alcohol misuse are more common among males, but depression is more common among females.

Three factors, often in combination, can trigger a serious suicidal attempt among young people. The first is an acute event such as a disciplinary crisis. An example would be an adolescent who has been caught stealing and who is told by the police that the family will be informed. Other acute stressors include humiliating events or breaking up with a girl or boy friend. The second trigger is any factor that alters the adolescent's state of mind. These include marked hopelessness, rage, or intoxication with drugs or alcohol. The third proximate factor is the opportunity for suicide. The method that young people use to kill themselves varies according to where they live, suggesting that it is in part determined by availability.

The wider social context, such as societal taboos or role models, can also influence the liability to suicidal behaviour. For example, portrayal of deliberate self-harm on television is associated with an increased risk presentation at hospital after deliberate self-poisoning.

#### Risk factors for completed and attempted suicide

First, psychiatric disorders are present in about 90% of suicidal adolescents. Depressive disorders are consistently the most prevalent psychiatric disorder among adolescents who commit suicide with a prevalence

ranging from 49% to 64% and among adolescents who attempt suicide. Secondly, adolescents who attempted suicide in the past are up to 60 times more likely to commit suicide than those who have not. Also, self-harm is an important predictor of future completed suicide. Thirdly, substance abuse plays a significant role in adolescent suicide and in suicide attempts, especially in older adolescent males when it is comorbid with mood disorders or disruptive disorders. Fourthly, social factors such as socio-economic status, school exclusion and social isolation have been also implicated. Finally, several studies pointed a significant association with family factors, including family psychopathology, abuse, loss of a parent (death, divorce), intrafamilial relationships, familial cohesion, support and suicidality.

### **Depression**

Defining the boundaries between extremes of normal behaviour and psychopathology is a dilemma that pervades all of psychiatry. It is especially problematic to establish the limits of depressive disorder in young people because of the cognitive and physical changes that take place during this time. Adolescents tend to feel things particularly deeply and marked mood swings are common during the teens. It can be difficult to distinguish these intense emotional reactions from depressive disorders. By contrast, young adolescents do not find it easy to describe how they are feeling and often confuse emotions such as anger and sadness. They have particular difficulty describing certain of the key cognitive symptoms of depression, such as hopelessness and self-denigration.

Assessment of young people who present with symptoms of depression must, therefore, begin with the basic question of diagnosis. This will mean interviewing the adolescent alone. It is not enough to rely on accounts obtained from the parents since they may not notice depression in their offspring, and may not even be aware of suicidal attempts. Indeed, it is now common practice to obtain information from several sources. Adolescents usually give a better account of symptoms related to internal experience whereas parents are likely to be better informants on overt behavioural difficulties. Accounts from young people and parents are usually supplemented by information from other sources, particularly teachers and direct observations.

The psychological and biological mechanisms that link these risk factors to depression remain poorly understood. The most influential of the psychological models (which have had important implications for treatment – see later) have been the so-called cognitive theories, which were first developed with adult cases of depression. The main idea behind these theories is that depressed people develop a distorted perception of the world (such as the expectation that things will always go wrong), which is caused by earlier adversity. When the child experiences current adversity, these negative cognitions become manifest and this then leads to depression. The occurrence of distorted negative cognitions has been documented in numerous studies of depressed young people though their causal role is still uncertain.

### **Family relationship**

Indeed, the family factors, and especially the perceived quality of family relationships, have been pinpointed as an important risk or protective factor in clinical and community samples of adolescents. However, only few population-based studies have examined family factors. They showed several predictive or associated factors, like: poor family environment (low satisfaction with support, communication, leisure time, low parental monitoring), low family support, low family cohesion, poor family functioning, poor parent-child attachment and problems of parental adjustment. On the contrary, higher family cohesion has been reported as a protective factor against future suicide attempt as well as having positive relationships with a parent. Improved family connectedness was related to less severe depressive symptoms and suicidal ideation. Nevertheless, equivocal findings exist with regard to the relationship between adolescents' suicidal behaviors and family variables. This is mainly due to methodological limitations, such as considering only parental marital status or parents together, and ignoring other common risk factors from multivariate analysis. Moreover, data suggest a different effect of family factors on suicidal behaviours according to gender, clinical severity, parental marital status, dissatisfaction with relationship with parents, and different relationship with mother vs. father.

Notwithstanding these interesting results, the complex association between family factors, depression and suicidal behaviors among adolescents remains to be explored in samples large enough to allow multivariate analysis, so as to understand specific contributions (e.g. mother vs. father; conflict vs. no conflict; separation vs. no separation) taking into account other risk factors and severity of depression and suicidal behaviors. The aim of the present study was to assess the link between family factors and suicidal behaviors, adjusting for several potential confounding factors, in a large community-based sample of adolescents aged 17 years. Given that the prevalence of suicide differs substantially between boys and girls, we hypothesized that the impact of familial risk factors would differ according to gender. Similarly, given the role of current depression, we hypothesized that family risk would be related to depression severity, defined as depression associated with suicidal ideation in the last year and/or life-time suicide attempt.

Adolescent health and behavior occur within the social context of family and peer relationships. These relationships and their effects are complex; not only do family relationships influence an adolescent's behavior, but they are influenced by the adolescent's behavior as well. The complex influence of family begins before birth and is carried into the transition to adult independence and pursuit of individual identity. Over the course of development

from infancy to adolescence, the family's impact on basic physiologic systems, emotion processing, and social competence has relevance for health. As adolescents begin to spend more time with peers, the relative importance of peer group influence over family influence may change.

Parent-child relationships, family structure, and peer group relationships all affect our ability to modify adolescent health and health behavior. Previous research links family and peer relationships to adolescent health behaviors such as seat belt use, smoking, sexual behavior, alcohol use, and violence and aggressive behavior. Family support, parenting styles, and the influence of peer pressure have been linked to adolescent health behavior. A thorough review of research on effects of the family social environment found two generally 'risky' family characteristics that have adverse physical and mental effects on children and youth: 1) conflict and aggression, and 2) a cold, unsupportive or neglectful home. In addition to direct effects on health, such as physical abuse, the impact of the home may be mediated or sustained by disruptions in the child's ability to mount a successful physical and/or behavioral response to stress and to acquire appropriate emotional and behavioral self-regulatory skills.

Similarly, research has also shown that adolescents from one-parent families are more likely to demonstrate increased substance and alcohol use as well as more emotional problems, such as depression and loneliness, compared to those in intact families.

Adolescence is a critical period for the development of healthy behaviors and lifestyles. Findings from numerous studies over the past 20 years suggest that the quality of the parent-adolescent relationship has significant impact on the development or prevention of risky adolescent health behaviors.

Future research is needed to study how inconsistent or mixed parenting styles influence adolescent cognitive processes and behavioral outcomes. Another limitation is that most of the studies included in this review are cross-sectional and not longitudinal. There are also a number of methodological limitations that relate to the difficulty in identifying the effects of various confounders and contextual factors that carry great weight in shaping behavior among youth. For example, much research on parenting styles does not assess parental risk behaviors and their influence on their child's risk behaviors. In looking at adolescent health risk behaviors, however, parental modeling of those specific behaviors is especially important. Parents are their child's most influential teachers, exerting tremendous influence on their child's risk-taking behaviors by way of example (i.e., smoking, drinking, poor eating and exercise habits). Similarly, parents influence their child's behaviors by way of their values and their expectations for their child. For example, adolescent perception of their parent's disapproval of early sex has been positively correlated with delayed initiation(55) and future development of sexually transmitted infections. Future research will need to examine these and other important but unmeasured factors using more sophisticated methodological tools than those presently available.

#### UNICEF study in Kazakhstan

The psychiatrists in cooperation with the UNICEF worked on a research among Kazakhstani teens and children to identify the main causes of the suicides. The research supported by the UNICEF was conducted in five Kazakhstani cities among 1700 teenagers. The research identified social issues as the main reason for suicide among teens. In particular, it is family problems and problems at school where teens feel insecure. Many teens feel that no one hears them out.

When analyzing the data of the annual report of the Agency on Statistics of the Republic of Kazakhstan, in addition to indicators of the youth population, fertility and AFR, we have analyzed the mortality in this age group (14 - 29 years). According to the 2011 mortality rate among the general population in our country has reached the numbers 9.95 per 1,000 people, including young people, the figure is 1.44 per 1,000 (see Table 1) [8].

Table 1 – The official report from Agency on Statistic of the Republic of Kazakhstan

	2010	2011	2012	2013	2014
<b>Demographic indicators</b>					
The mortality rate (per 1,000 people)	9,0	8,8	8,5	8,0	7,6

Regarding knowledge about suicide and its prevention, much remains to be learned and to be done. Some facts are established, but even for these, fitting the facts into a coherent overarching theory has proven elusive.

The magnitude of influence that parenting styles and behaviors exert on youth risk and protection indicates a clear need for more research-based, family-centered interventions to improve adolescent health outcomes. Along with this, a clearly specified conceptual framework to guide family intervention development, implementation, evaluation and dissemination will be needed to successfully move forward, and should be another important focus of future research. More research is also needed to better understand the optimal time to intervene with parents and families to most effectively reduce adolescent health risk behaviors.

Although it is frequently acknowledged that adolescent risk behaviors often co-occur, and although there have been many studies examining the relationship between parenting styles and individual adolescent risk behaviors, no published review articles to our knowledge have reviewed studies across all major categories of risk behaviors collectively and compared their similarities and differences. In our review examining how various parenting styles influence adolescent health risk behaviors, our findings support those of previous similar studies indicating that adolescents of authoritative parents who have positive parental relationships, healthy open communication and perceived parental support, are less likely to report symptoms of depression or engage in substance use, sexual risk and violent behaviors. Our review extends the existing literature by demonstrating that adolescents benefit from authoritative parenting practices across numerous domains, including five of the six focused on by CDC as critical issues threatening adolescent health. The only behavior lacking evidence for an effect of parenting style is physical activity. Careful examination of parenting style patterns in diverse populations, particularly as they relate to physical activity and unintentional injury will be a critical next step in the development of efficacious, culturally tailored adolescent health promotion interventions.

#### REFERENCES

- [1] Baumrind D. The influence of parenting style on adolescent competence and substance use. *J Early Adolesc.* 1991; 11(1):56-95.
- [2] Baumrind D. Rearing competent children. In: R. Lerner, R. Petersen, A.C. Brooks-Gunn, J. editors. *The encyclopedia on adolescence.* New York: Garland; 1991. p.746-58
- [3] Bonell C, Allen E, Strange V, Oakley A, Copas A, Johnson A, et al. Influence of family type and parenting behaviours on teenage sexual behaviour and conceptions. *J Epidemiol Community Health.* 2006; 60(6):502-6.
- [4] Broman CL, Reckase MD, Freedman-Doan CR. The Role of Parenting in Drug Use Among Black, Latino and White Adolescents. *J EthnSubst Abuse.* 2006; 5(1):39-50
- [5] Chapman RP. Parenting characteristics in predicting adolescent smoking and drinking expectancies and intentions: *ProQuest Information & Learning;* 2002
- [5] DeVore ERMD, Ginsburg KRMD. The Protective Effects of Good Parenting on Adolescents. *Postgrad Obstet Gynecol.* 2005; 25(25):1-5.
- [6] Fromme K. Parenting and other influences on the alcohol use and emotional adjustment of children, adolescents, and emerging adults. *Psychol Addict Behav.* 2006; 20(2):138-9.

#### ДЕПРЕССИЯ, СУИЦИДТИК МІНЕЗ-ҚҰЛЫҚ ЖӘНЕ ЖАСӨСПІРІМДЕРГЕ ОТБАСЫНЫҢ ҮҚПАЛЫ

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**Тірек сөздер:** өз-өзіне қол салу, депрессия (торғыу), отбасы, жасөспірімдер.

**Аннотация.** Қазақстан, міне 10 жылдан астам уақыттан бері суицидтік (өз-өзіне қол салушылық) мінез-құлықтың жоғары көрсеткішімен көш басында келеді. ЮНИСЕВ-тің және ВОЗ-дың есебіне сәйкес Қазақстан 2010-2013 жылдар аралығында суицидтік мінез-құлықтың жоғары деңгейіндегі елдердің тізімін басқарды. Қазақстанда 15-19 жастағы жасөспірімдердің арасында өз-өзіне қол салудың себебінен өлім деңгейі 100 000 адамға 24 жағдайдан келеді. Қазіргі сәтте қабылданған суицидтік мінез-құлықтың биологиялық-әлеуметтік-психологиялық үлгісі суицидтік мінез-құлықты депрессия (торғыу) және отбасылық-ата-аналық қатынастардың рөлі (әке-шеше рөлі, жанжал-жанжалдың болмауы, бөліну-қосылу) сияқты факторлардың әсері арқылы анықтайды; мұның бәрі суицидтік тәуекел факторларын да, қорғаныс факторларын да сипаттауда анықтаушы болып табылады.

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