

Assessment of the Relationship between the Family Socio-Economic Status and Adolescent Health Behaviour

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Abstract Teenagers living in dysfunctional families face difficulties in maintaining a healthy lifestyle. Understanding the relationship between the social status of the family and the healthy lifestyle of the younger generation is important in the context of the Republic of Kazakhstan. The purpose of this study is to demonstrate the relationship between the social status of the family and the healthy lifestyle of the younger generation in the Republic of Kazakhstan. A survey and questionnaire of 1,200 adolescents from disadvantaged families in the Mangystau Region of the Republic of Kazakhstan were conducted and a thorough statistical analysis of the results was carried out. The analysis showed that the level of self-assessment of adolescent health does not depend on the social status of the family or other factors considered that affect their healthy behavior. However, family affluence has an impact on life satisfaction in boys, and in girls, a link was found between the frequency of brushing teeth and family affluence. The boys also found a link between injuries requiring medical intervention and family wealth. However, the level of family wealth does not significantly affect other aspects of a healthy lifestyle, such as the frequency of breakfast consumption, consumption of sugary soft drinks, fruit consumption, smoking, and physical activity. The results of this study have practical significance for the development of social support for adolescents living in dysfunctional families. They can be used to develop protocols and programs aimed at improving the health and well-being of the population according to the economic stratification of the population in the Republic of

Kazakhstan with an emphasis on clusters of people with below-average income.

Keywords Social Factors, Social Determinants of Health, Social Inequality, Adolescent Behavior, Family Health and Well-Being

1. Introduction

The study of A. Izenkova and A. Rakhmatullina [1] indicates that over the past 20 years, Kazakhstan has significantly reduced the poverty rate from a record 51% to the current 14% according to international standards for determining poverty. This positive trend has a significant impact on the health of adolescents who were born and grew up during this period. According to V.T. Zhanbolatova and L.N. Skuchalina [2], approximately 53% of young people in Kazakhstan face problems related to smoking. This is a serious problem for young people, since smoking has a negative impact on their health and can lead to the development of various diseases. In addition, in 2021, M. Sabyrova and S.N. Molchanov [3] reported that among young people aged 18-19, the proportion of mental and behavioral disorders caused by alcohol consumption was 41.7%, and among minors (under 18) – 10.2%. This indicates the need for more active measures to prevent and treat such disorders among young people. In addition, K.S. Altynbekov et al., [4] in their paper from 2021, cite data

that 22% of adolescents had experience of using narcotic substances. This raises serious concerns and requires urgent action to prevent drug addiction and provide support to adolescents suffering from this problem.

The socio-economic status of the family is one of the key factors affecting various aspects of the life of adolescents. One of the areas that can be significantly affected by this influence is the health of the younger generation. Studies show a close relationship between family socio-economic status and health behavior. Thus, M.K. Adieva et al. [5] reported that more than 20% of teenagers in Kazakhstan suffer from overweight, 5% of whom are already diagnosed with obesity, which is associated with low availability of healthy food among the poor and a large percentage of fast food and fatty food consumption among young people from low social strata. The socio-economic status of a family includes factors such as income level, education of parents, access to resources and services, employment status, and housing conditions. These factors determine the availability and access to quality health services, nutrition, sports events, and other resources that can affect the health of younger people.

Adolescent health behavior includes aspects such as physical activity, nutrition, the use of harmful substances (such as alcohol and drugs), sexual behavior, and the use of electronic devices and screen technology. In the meta-analysis conducted by L.R. Moura et al. [6], 37 clinical studies were analyzed to investigate the relationship between social class and the risk of developing negative behavioral practices in adolescents. The results of this analysis showed that the lower social class was associated with an increased frequency of aggressive behavior, alcohol consumption, consumption of junk food, and sexual intercourse without the use of contraception. Aggressiveness is one of the most common negative aspects of adolescent behavior. According to the results of the meta-analysis, adolescents from the lower social class are more prone to aggression, which may be due to an unfavorable social environment, insufficient resources, and limited opportunities for social mobility. In addition, the study showed that teenagers from the lower social class are more likely to abuse alcohol. This may be conditioned by the desire to cope with negative emotions and stress, which are often accompanied by unfavorable living conditions and limited opportunities.

For example, adolescents from low-income families or parents with low education may have limited access to fresh and nutritious foods, which can lead to malnutrition and obesity. They may also have difficulty obtaining the necessary medical care and health information. The study by A. Utepova et al. [7] found that dental caries among adolescents and children living in rural areas is most often associated with low social status, low accessibility of dental care, and low hygiene culture among the poor. Teenagers from such families also often face high levels of stress and unfavorable living conditions, which can affect their mental and emotional well-being. At the same time,

teenagers from more prosperous families, with a high level of income and education, have more opportunities to take care of their health. They may have access to sports clubs, fitness classes, and other forms of physical activity. They can also receive the most up-to-date information about a healthy lifestyle and have easy access to medical care. But they also have the opportunity to use expensive types of narcotic substances inaccessible to the poor.

Thus, understanding the relationship between family socio-economic status and adolescent health behavior is important for the development of effective programs and policies aimed at improving adolescent health. By identifying factors that may have a negative impact on the health of adolescents, targeted measures can be developed to support and assist families with low socio-economic status, and improve the availability and quality of health services for all adolescents, regardless of their socio-economic status. The purpose of this study is to determine the correlation between socio-economic status and a set of behavioral practices and lifestyle that contribute to maintaining and improving a person's physical and mental well-being. These habits include regular physical activity, a balanced diet, adequate sleep, giving up bad habits (for example, smoking and alcohol consumption), and active stress management.

The objectives of this study include the investigation of the relationship between family socio-economic status and the healthy behavior of adolescents. As part of this task, data on behavioral aspects such as nutrition, physical activity, consumption of harmful substances, compliance with hygiene habits were analyzed. The impact of the socio-economic situation of the family on the self-assessment of health by adolescents was evaluated. This task examined the relationship between the level of family wealth and adolescents' perception of personal health, and factors influencing this perception, for example, the presence of healthy habits or the presence of medical problems. The impact of the socio-economic situation of the family on the morbidity and traumatism of adolescents was analyzed. This task examined the extent to which family affluence was associated with the likelihood of illness and injury in adolescents and what factors may explain this association, such as access to health care or living arrangements.

2. Materials and Methods

This study was conducted to determine non-medical factors affecting the health of children aged 11 to 15 years. For this purpose, a research methodology known as "Health behavior of school-age children" (HBSC) was used, the protocol of which was developed for the period 2017-2018 [8]. The study involved 1200 schoolchildren (600 boys and 600 girls) from the Mangystau Region of the Republic of Kazakhstan. The study was conducted among boys and girls from 11 to 15 years old living in families

with different incomes, having different living conditions and access to healthy foods and medical care. Inclusion criteria:

1. Age: teenagers aged 11 to 15 years.
2. Gender: male and female.
3. Region: schoolchildren from the Mangystau Region of the Republic of Kazakhstan.

Socio-economic status of the family: groups with different levels of wealth, for example, low, medium, and high, to consider differences in the socio-economic status of families. Living conditions and access to healthy foods, medical care: availability of access to healthy foods (fruits, vegetables), physical activity, availability of medical care. The study covered a wide range of factors, including physical activity, nutrition, self-assessment of health, tobacco and alcohol behavior, life satisfaction, health complaints, and hygiene habits such as brushing teeth. By analyzing these data, the researchers sought to identify links between these factors and the overall health of children. As part of this study, a survey and questionnaire were conducted among the participants to get more detailed information about various aspects of their health and behavior.

The survey and questionnaire were carried out using standardized tools developed according to the HBSC protocol. Participants were provided with special questionnaires containing questions about various factors affecting their health and well-being. The questionnaire included questions related to the participants' physical activity, such as the amount of time spent on exercise and sports, their preferences for physical activity, and questions related to their diet and lifestyle. The questionnaire also included questions about their self-assessment of health and general well-being, such as the level of life satisfaction, the presence of stress and psychological problems, and questions about their habits regarding tobacco, alcohol, and other harmful substances. The survey and questionnaire were conducted anonymously to ensure confidentiality and honest responses from participants. Participants were informed that they would answer questions according to their own feelings and experience.

The collected data from the survey and questionnaire were carefully processed and analyzed using various statistical methods to identify links and trends between various variables and the health status of participants. The data analysis included an assessment of the distribution of answers to questions, the calculation of averages, medians, standard deviations, and other indicators of the central trend and the spread of data. Correlation analyses were also applied to determine the statistical relationship between different variables. The researchers also conducted a multivariate analysis to consider the influence of several

variables simultaneously and to identify their interaction in the context of participants' health. This allowed the researchers to identify significant factors that may have an impact on the health of children in this age group. The results were presented in the form of diagrams, graphs, and tables to clearly demonstrate the identified trends and relationships between variables. In addition, statistical tests such as t-tests and variance analysis were carried out to verify the statistical significance of the results obtained. Data analysis allowed researchers to identify factors that may have a positive or negative impact on the health of children in this age group. These results can be used to develop and implement programs and activities aimed at improving the health and well-being of children.

3. Results

3.1. Assessment of Personal Health

The indicator of "satisfactory" or "poor" self-assessment of personal health is one of the important aspects of evaluating the overall well-being of children and adolescents. This study analyzed the relationship between socio-economic status and other factors, such as gender (boys and girls), smoking, eating healthy food, risk of injury, and compliance with hygiene rules. There is a complex and multifactorial relationship between the socio-economic level of the family and the self-assessment of adolescent health. People from more affluent families often have a higher self-esteem of health because they have more access to resources such as medical care, healthy nutrition, sports opportunities, and are informed about a healthy lifestyle. They may also have more stable living conditions, which may contribute to a better self-assessment of health.

The results show that boys and girls have no statistically significant relationship between self-assessment of health and the level of family wealth (boys: OR 0.96432, CI 0.46-1.88, $p > 0.05$, girls: OR 0.7982, CI 0.41-1.52, $p > 0.05$). The value of the odds ratio (OR) indicator for both groups is close to 1, which indicates that there is no strong connection between self-assessment of health and the factors under consideration. The confidence interval (95% CI) for both sexes also includes a value of 1, which means that the differences between the groups are not statistically significant. In addition, the p-value (significance level) is greater than 0.05, which indicates that the differences can be explained by random factors and are not reliable. Thus, based on the presented data, it can be concluded that the level of self-assessment of health is not related to the social status of the family and other factors considered that affect the healthy behavior of adolescents (Table 1).

Table 1. Correlation between estimates of the family wealth scale and indicators of health/health behavior among adolescent boys and girls

Health/behaviour indicator	OR	95% CI	p-value	Pearson's R
"Satisfactory" or "poor" self-assessment of personal health				
Boys	0.96432	0.48-1.88	>0.05	-0.0049
Girls	0.7982	0.41-1.52	>0.05	-0.0481
High life satisfaction				
Boys	0.43512	0.22-0.95	<0.05	-0.1243
Girls	0.47122	0.31-1.12	>0.05	-0.1102
Multiple (two or more) health complaints				
Boys	1.32001	0.55-2.59	>0.05	0.04283
Girls	1.41231	0.79-2.44	>0.05	0.07314
Injuries requiring medical intervention				
Boys	2.31131	1.28-3.25	<0.01	0.14714
Girls	1.50343	0.94-2.34	>0.05	0.09432
Daily breakfast				
Boys	1.33904	0.82-2.21	>0.05	0.07201
Girls	1.33252	0.79-2.15	>0.05	0.07304
Consumption of fruits every day				
Boys	1.6472	1.03-2.65	<0.05	0.12495
Girls	1.30805	0.82-2.21	>0.05	0.06524
Consumption of sugary soft drinks every day				
Boys	0.6301	0.31-1.25	>0.05	-0.0721
Girls	1.51039	0.75-3.11	>0.05	0.06721
Daily moderate to intense physical activity				
Boys	1.21615	0.74-1.98	>0.05	0.04621
Girls	1.64051	0.92-2.87	>0.05	0.08572
Brushing teeth more than once a day				
Boys	0.84212	0.51-1.23	>0.05	-0.0331
Girls	0.41235	0.23-0.69	<0.01	-0.1756
Ever smoked tobacco				
Boys	0.63802	0.29-1.47	>0.05	-0.0572
Girls	1.89074	0.48-7.09	>0.05	0.04935

High family wealth can provide families with more opportunities to meet the needs of adolescents and provide access to various resources and services. This may include better living conditions, education, access to cultural and sporting events, and the opportunity to travel and experience new things. A study on high life satisfaction and its connection with family wealth was conducted among boys and girls. The results of the analysis show differences in the relationship between these indicators depending on the earnings of the family. In boys, a statistically significant negative relationship was found between high life

satisfaction and family wealth (OR 0.43512, CI 0.22-0.95, $p < 0.05$). The value of the OR indicator for this relationship is less than 1, and the 95% confidence interval (95% CI) does not include the value of 1. This means that boys with higher family incomes are less likely to have high life satisfaction. In addition, the p-value (significance level) is less than 0.05, which indicates the statistical significance of this relationship.

On the other hand, no statistically significant relationship was found between high life satisfaction and family wealth in girls. The values of the OR indicator for

this relationship are close to 1, and the 95% confidence interval includes a value of 1. This indicates that there is no significant difference in high life satisfaction among girls with different levels of family wealth (OR 0.47122, CI 0.31-1.12, $p > 0.05$). Moreover, the p-value is greater than 0.05, which confirms the lack of statistical significance.

The analysis of the data shows that there is no significant association between family wealth and adolescent self-rated health for both boys and girls. The effect size for boys is small and the confidence interval is wide, indicating a negligible or non-existent relationship between self-rated health and family wealth. Similarly, for girls, the effect size is almost null, indicating no substantial link between these variables. Therefore, it seems that family wealth does not significantly influence the self-rated health of adolescents in this context. This implies that other factors may have a greater impact on how adolescents perceive their health.

The analysis also reveals a statistically significant negative correlation between life satisfaction and family wealth in boys, with a moderate effect size. This finding is unexpected and suggests that higher family wealth may paradoxically reduce life satisfaction in boys, possibly due to increased pressure or shifts in priorities. This study found that there is no significant relationship between family wealth and life satisfaction for girls, which is an interesting result. This highlights the complex dynamics at play in how family wealth influences the well-being of children and suggests that the effects of wealth are mediated by different factors for boys and girls.

3.2. Health Complaints

Multiple health complaints may be associated with low socio-economic status of the family. Low family affluence can limit access to health care and resources necessary to maintain good health. This may include access to quality health services, proper nutrition, physical activity, and general well-being. The analysis showed the absence of a statistically significant relationship between the number of health complaints (two or more) and family wealth in both boys and girls (boys: OR 1.32001, CI 0.55-2.59, $p > 0.05$, girls: OR 1.41231, CI 0.79-2.44, $p > 0.05$). In both sexes, OR values are close to 1, which indicates the absence of significant deviations. In addition, the 95% confidence interval for both groups includes a value of 1, which allows for the possibility of random differences (OR indicators are close to 1, 95% CI includes 1, $p > 0.05$). These results may mean that family wealth does not have a significant impact on the number of health complaints in children. Other factors, such as genetics, the environment, the way of education and the degree of availability of medical services, may have a more significant impact on this indicator. In general, based on the available data, it can be concluded that family wealth is not a determining factor for the number of health complaints in children, both boys and girls.

A high socio-economic status of a family can provide

access to safe living conditions, quality medical care and other resources that help reduce the risk of injury. The low socio-economic status of the family, on the contrary, may be associated with limited access to such resources and an increased risk of injury. However, the relationship between injuries requiring medical intervention and the social status of a family can be complex and depend on many factors. For example, parents' education, access to safe living areas, lifestyle, and other social factors can also influence the risk of injury. The analysis showed a statistically significant positive relationship between injuries requiring medical intervention and family wealth in boys (OR 2.31131, CI 1.28-3.25, $p < 0.01$). The significance level of p-value was less than 0.01, which indicates that the relationship is statistically significant. The OR scores were also greater than 1, and the 95% confidence interval did not include a value of 1. The analysis showed a statistically significant positive relationship between injuries requiring medical intervention and family wealth in boys.

However, the analysis was carried out only in boys, and the results may not generalize to girls. For girls, there was no statistically significant association between injuries requiring medical intervention and family wealth (OR 1.50343, CI 0.94-2.34, $p > 0.05$). The OR scores were close to 1, and the 95% confidence interval included a value of 1, which suggests that the relationship between the variables in girls is not significant. A possible explanation for the connection found in boys may be conditioned by the fact that family wealth can affect the availability and quality of medical services. A higher level of family affluence may allow families to seek medical help in case of injuries and receive better and timely treatment, which may ultimately increase the likelihood of handling injuries requiring medical intervention.

The study found no significant correlation between family wealth and health complaints in boys and girls, indicating that genetics, environment, and healthcare access may play a more important role in health complaints than family resources. However, a significant positive relationship was observed between wealth and medically attended injuries in boys, but not in girls. Family resources may facilitate access to healthcare for injuries, especially for boys. This highlights the need for further research to understand the specific mechanisms behind this gender-specific disparity.

3.3. Eating Behavior, Hygiene and Bad Health Habits

The low socio-economic status of a family may limit access to high-quality and varied food. Low-income families may face limited resources to purchase nutritious foods, which may lead to a lack of essential nutrients in the diet of adolescents. However, the influence of the socio-economic status of the family on the nutrition of adolescents cannot be considered in isolation from other factors. For example, the education of parents, the availability of food stores, and cultural and social norms

can also play a role in the development of eating habits in adolescents. The analysis showed that there was no statistically significant relationship between daily breakfast, fruit consumption every day, consumption of sugary soft drinks every day, and daily moderate to intense physical activity with family income in neither boys nor girls. The OR indicators were close to 1, and the 95% confidence interval included a value of 1, which suggests that the relationship between these indicators and family wealth is not statistically significant. This means that the level of family wealth does not significantly affect the frequency of breakfast consumption, the consumption of sugary soft drinks every day, and daily moderate to intense physical activity in both boys and girls. However, it should be noted that these results are based on the conducted data analysis and may be limited by the context of the study. Perhaps there are other factors that can influence these indicators. For example, individual preferences, lifestyle, cultural and social factors can also play an important role in shaping these habits and behaviors. To obtain a more complete and accurate understanding of the links between the indicators under consideration and family wealth, it is recommended to conduct additional studies using a wider sample and considering other potential factors.

Limited financial resources can make it difficult to access regular visits to the dentist, purchase toothbrushes and high-quality toothpaste, and other oral hygiene products. This can lead to insufficient brushing of teeth and the accumulation of plaque, which, in turn, can lead to the development of caries, gum disease, and other problems with the oral cavity. In addition, factors related to poverty and social status, such as limited education, lack of information about proper oral hygiene and low awareness of the importance of dental care, can also play a role in poor oral hygiene in poor families. However, the impact of socio-economic status on oral hygiene can be comprehensive and depends on many factors. For example, access to educational programs and providing information about proper oral hygiene, and organizing public health programs, can help improve oral hygiene in poor families. The results of the analysis showed that in boys there is no statistically significant relationship between the frequency of brushing teeth and family wealth (OR 0.84212, CI 0.51-1.23, $p > 0.05$). The OR scores were close to 1, and the 95% confidence interval included a value of 1. This indicates that there is not enough evidence to say that the frequency of brushing teeth is associated with family wealth in boys. The P-value (significance level) also exceeded the threshold value of 0.05, which means that statistical significance has not been achieved. In girls, a statistically significant negative relationship was found between the frequency of brushing teeth and family income (OR 0.41235, CI 0.23-0.69, $p < 0.01$). The OR scores were less than 1, and the 95% confidence interval did not include a value of 1. This suggests that girls with lower family income are more likely to have less frequent brushing of teeth. The P-value was less than the threshold value of 0.01,

which confirms the statistical significance of this relationship.

Dysfunctional families often face various stressful situations, economic difficulties and lack of support, which can increase the risk of developing unfavorable habits, such as smoking tobacco. Smoking can be used as a way to cope with stress, maintain social connections, or as a form of rebellion. In addition, disadvantaged families may be less informed about the dangers of smoking and have less access to resources to stop smoking or help with nicotine addiction. This can lead to the fact that teenagers from such families are left without the necessary support and information to make a decision about quitting smoking. Data analysis showed no statistically significant relationship between tobacco smoking experience and family income in both boys and girls (boys: OR 0.63802, CI 0.2-1.47, $p > 0.05$, girls: OR 0.890074, CI 0.48-7.09, $p > 0.05$). The OR scores were close to 1, and the 95% confidence interval included a value of 1. This means that there is insufficient evidence to confirm the existence of a link between tobacco smoking experience and family wealth in the sample under study. The P-value (significance level) also exceeded the threshold value of 0.05, which confirms the absence of statistical significance of this relationship. However, the absence of a statistically significant relationship does not mean that there is no actual connection between tobacco smoking experience and family wealth. Other factors, such as sociocultural and personality traits, can also influence smoking habits. In addition, the study sample may be limited to certain groups or context, which may have an impact on the results.

No statistically significant associations were found between family wealth and various health-related behaviors such as the frequency of breakfast consumption, intake of fruits and vegetables, soft drink consumption, levels of physical activity, or smoking habits. This lack of correlation suggests that factors beyond family socio-economic status may have a greater influence on these behaviors, such as individual habits, peer influences, or the school environment. Notably, a significant negative relationship was observed between dental hygiene and family wealth specifically in girls, indicating that girls from less affluent families may have reduced access to oral health resources, a trend not observed in boys. This highlights the complexity of how socio-economic factors intersect with health behaviors and access to health resources, varying not only by economic background but also by gender.

Based on the presented data, it can be concluded that family wealth has a limited impact on most of the considered indicators of adolescent health and behavior. In general, statistical analyses did not show significant links between family wealth and the considered indicators. However, some connections between family wealth and certain indicators of health and behavior can be observed in certain groups of adolescents. For example, a statistically significant negative association between high life

satisfaction and family wealth was found in boys. This may indicate that boys from more prosperous families experience greater life satisfaction. On the other hand, girls were found to have a statistically significant negative relationship between brushing their teeth more often than once a day and family wealth. This may indicate that girls from less affluent families have a lower frequency of brushing their teeth. Despite these separate connections, in general, the data suggest that family wealth is not a fundamental factor for most indicators of adolescent health and behavior. Other factors such as education, social support, access to resources and individual characteristics may have a more significant impact on these aspects. In order to obtain a more accurate and comprehensive understanding of the relationship between family wealth and indicators of adolescent health and behavior, it is recommended to conduct additional studies considering various contextual and cultural factors, as well as considering possible intermediate mechanisms of influence. This will help explore more deeply the role of family wealth in shaping the health and behavior of adolescents.

4. Discussion

In Kazakhstan, poverty is primarily defined and measured based on income levels, specifically in relation to the minimum subsistence level. The 2020 subsistence minimum is notably low at about 29,698 tenge (\$67) per month. This approach differs from that of Western countries such as the US and UK, where poverty encompasses a wider range of factors beyond income alone. These factors include material deprivation, access to resources, and social exclusion, leading to a more multidimensional understanding of poverty. Although the poverty line in Kazakhstan is significantly lower than in Western countries, poverty is more prevalent in rural areas and is often linked to economic transition challenges, job scarcity, and low skills. It is important to note that this is a factual comparison and not a subjective evaluation. In contrast, poverty in Western nations affects both urban and rural areas and is often associated with issues of inequality, marginalization, and lack of opportunity.

As a former Soviet republic, Kazakhstan's perspectives on poverty and health have been distinctly shaped by Soviet policies and ideologies, diverging notably from Western concepts. In the Soviet context, poverty was not recognized as absolute but defined through measures like the minimum wage, with no emphasis on relative poverty or inequality as seen in the West. Due to state policies, living standards were more homogeneous, which contrasts with the higher inequality of Western market economies. Health and nutrition were considered collective responsibilities, with the state ensuring universal healthcare and education, promoting austerity and modest living over consumerism. However, nutrition advice often did not align with food availability due to shortages. The advice focused on

calories and basic nutrients rather than variety or fresh foods, which were not always available. Healthcare primarily focused on treatment rather than prevention, reflecting a less individualistic approach to health.

The statistical data obtained during the study in the Mangystau Region of the Republic of Kazakhstan indicate the absence of significant changes in the incomes of the population and the standard of living in the period from 2015 to 2017 (the growth of average income in 2017 was 13.6%, the growth of the ratio of income to the subsistence minimum increased by 10%). Despite this, the Billiter index continued to grow steadily during this period, reaching 37.4, with an annual increase of about 1.4. This indicates a sufficient level of income for families that allows them to have children during this time period. However, in the period from 2017 to 2020, the situation began to deteriorate. The ratio of the average income of citizens to the subsistence minimum decreased, with an increase in income by 17.3% and a reduction in the ratio of income to the subsistence minimum by 12.1%, reaching 3.6. This led to a slowdown in the growth rate of the Billiter index, where in 2020 its value was 0.96, which is 31.5% lower than in 2017. This is an indirect sign of a decrease in the share of young people in the total population in this period and indicates a possible decline in living standards. Summarizing the data, it can be concluded that the socio-economic situation in Mangystau Region is unstable and somewhat deteriorating in the period from 2017 to 2020 [9]. Although the decline in income restricts the population's access to quality medical care, healthy food and normal living conditions, this socio-economic stagnation has had almost no effect on the formation of a hygiene culture among the younger generation.

The socio-economic status of the family is one of the key factors that have a significant impact on the behavior of adolescents in relation to their health. Despite the fact that each family is unique and has its own characteristics, there are general trends that can be observed. The availability and quality of food may depend on the financial capabilities of the family. Families with low socio-economic status may have difficulty providing balanced and nutritious meals for their children. This can lead to poor nutrition, consumption of more processed foods, and reduced consumption of fresh fruits and vegetables, which can negatively affect the health of teenagers. S.E.S. Hausken et al. [10] noted a pattern that intra-family relationships affect the eating habits of adolescents from 13 to 15 years old; the lower the functional family indicator was, the more often children skipped lunch and more often consumed food at different intervals, during this analysis, no influence of family wealth on skipping important meals was found.

A study by M. Medina et al. [11] noted that in areas of Uruguay, where mainly people from a low social class live, stunting and malnutrition occur in 43% of families, which is directly related to their level of wealth, this study did not include anthropometric data of adolescents. In another study, V. Mart ń-Mart ń et al. [12] noted that in addition to

the low social status of the family, the nutrition of adolescents is also affected by family violence, which is especially common among people with low incomes. Thus, obesity among adolescents was most often associated with sexual violence, while growth retardation and cachexia – with neglect, no cases of child violence were identified during the survey of the group included in this study. S. Zhou et al. [13] noted in their study that malnutrition is mainly found only in rural areas, where there is a lack of food and low earnings, while obesity prevails exclusively in the urban area, although the Mangystau Region is an urbanized region with a well-developed infrastructure, there are rather low statistics on obesity among young people, 5% according to the Kazakhstan National Statistics Office.

The socio-economic status of the family can affect the availability and opportunities for physical activity of adolescents. Families with limited resources may have limited access to sports facilities, coaches, or sports activities. This can lead to a low level of physical activity in adolescents and an increased risk of developing related health problems, such as obesity and cardiovascular diseases. F. Manneville et al. [14] found a relationship between physical activity, healthy eating behavior and the standard of living of adolescents. Young people with a high standard of living more often followed the recommendations for physical activity and a healthy diet than teenagers from disadvantaged families [15]. In this study, no such relationship was found. A.Y. Omorou et al. [16] also noted that a high socio-economic status has a positive effect on the physical activity of the younger generation, but according to the data obtained during the survey, no such correlation was found among the group under study. Y. Ke et al. [17] found that a low level of family income increases the risk of obesity in adolescents due to low physical activity and high consumption of unhealthy food.

Teenagers from families with low socio-economic status are more likely to start smoking. This may be conditioned by various factors, such as limited resources, economic difficulties, family stress and a lack of available alternative leisure activities. In addition, some teenagers may resort to smoking as a way to cope with social pressure or stress. X. Dong et al. [18], in the course of their research, found that teenagers who started smoking at the age of 10 have low quality of life scores, which also affects their psycho-emotional health. A. Peruga et al. [19] reported that adolescents from affluent families are more exposed to tobacco advertising, and also have a high risk of early smoking than adolescents from poor families. In this study, there was no correlation between socio-economic status and early manifestation of smoking. S. Legleye et al. [20] highlighted the contribution of socio-economic status to the risk of early initiation of smoking in adolescents. Young people from rich families were significantly less likely to report the fact of daily smoking than poor peers.

There is a link between low socio-economic status and

an increased risk of alcoholism among teenagers. Adolescents from families with low income or education are more at risk of alcohol abuse and the development of alcohol problems. Low socio-economic status of the family may be accompanied by factors that increase the risk of alcohol consumption in adolescents. Limited resources can limit access to a variety of activities, which can lead to seeking behavior and a tendency to experiment with alcohol. Economic difficulties and stress in the family can also contribute to the use of alcohol as a means to cope with negative emotions and stress. However, studies show an inverse correlation. G.S. Brunborg et al. [21] determined that high family wealth is associated with a high risk of alcoholism, an analysis of the frequency of alcohol consumption among the participants of this study was not carried out. The study conducted by M. Richter et al. [22] shows that low socio-economic status reduces the risk of alcoholism among adolescents.

The low socio-economic status of the family may be associated with factors that contribute to the spread of sexually transmitted diseases among adolescents. Limited access to sexual health information, reduced quality of sexual education, and limited resources for access to contraception may increase the risk of contracting sexually transmitted diseases. In addition, a low socio-economic status may be associated with limited access to medical services and a reduced opportunity to receive adequate treatment and preventive monitoring. M. Rahman et al. [23] found that low social status is associated with an increased risk of sexually transmitted diseases among adolescent girls in Bangladesh, which is associated with promiscuous unprotected sexual contacts, when analyzing the data obtained during observation, no cases of sexually transmitted diseases were detected. D.L. Bose et al. [24] reported that low socio-economic status is one of the main factors of HIV infection in young girls. None of the participants in the study group of adolescents was found to have HIV infection. S.E.K. Bradley et al. [25, 26] found that the younger the girl and the poorer her family, the higher the risk of unwanted pregnancy, these data are not confirmed during this study, and there were no cases of unwanted pregnancy among the participants.

It is important to note that these factors are complex and interrelated. The socio-economic status of the family is a significant factor that has a significant impact on the behavior of adolescents in relation to their health [27]. Nutrition, physical activity, smoking, alcoholism, and sexually transmitted diseases – all these aspects of adolescent health are closely related to the socio-economic status of the family. Adolescents from families with low income and resources are more likely to face dietary restrictions, limited access to physical activity, a tendency to smoking and alcoholism, and an increased risk of contracting sexually transmitted diseases [28]. Unequal conditions created by low socio-economic status may hinder the achievement of optimal health for adolescents. This indicates the need to improve the socio-economic

situation of families and ensure equal opportunities for all adolescents to achieve and maintain good health. This may include providing access to sports and recreational opportunities, education about healthy eating and physical activity, and financial support for families with low socio-economic status. Another way to solve this problem may be to create specialized boarding schools for children from disadvantaged families, where all conditions for a healthy lifestyle and quality education will be provided.

5. Conclusions

The level of self-assessment of adolescent health does not depend on the social status of the family or other factors considered that influence their healthy behavior. This means that regardless of which family teenagers come from or what factors may influence their lifestyle, the level of self-assessment of their health remains a separate and independent variable. Family wealth has an impact on life satisfaction in boys. Boys from families with higher incomes are less likely to have high life satisfaction. This result indicates that family financial status may influence the overall sense of well-being and satisfaction in boys. Family wealth is not a determining factor for the number of complaints about the health of children in general. The study allows for the conclusion that family wealth is not a determining factor for the number of health complaints in children in general. The data obtained did not show a statistically significant relationship between the level of family wealth and the risk of injuries and diseases reported by children. In boys, a link was found between injuries requiring medical intervention and family wealth. This indicates that family wealth may have an impact on the risk of injury in boys. There is a statistically significant relationship between the level of family wealth and the risk of injury in boys. There is a statistically significant relationship between the level of family wealth and the risk of injury in boys. High family wealth is associated with an increase in the likelihood of injuries requiring medical intervention in boys.

The study found that the level of family wealth does not significantly affect several aspects of a healthy lifestyle in children, including the frequency of breakfast consumption, fruit consumption every day, consumption of sugary soft drinks every day, and daily physical activity from moderate to intense. The observed data do not indicate a link between tobacco smoking experience and family wealth in either boys or girls. The level of family wealth does not significantly affect the frequency of brushing teeth in boys. However, in girls, it was observed that the frequency of brushing teeth has a negative relationship with family wealth. An increase in the proportion of boys who consume fruit on a daily basis is associated with an increase in family wealth. This indicates that the level of family income may influence the fruit-eating habits of boys. Most of these factors do not depend on the social status of the parents,

which may be due to a small sample and a slight difference in family wealth between the study participants. But it may also indicate that family earnings are an insignificant factor in the development of healthy habits in adolescents and depend more on a number of other reasons, such as smoking or alcoholism of parents, normal relationships within the family and within the circle of friends. The information obtained during this study will help create an optimal algorithm for helping teenagers from poor families, and will also serve as a basis for the establishment of help centers where children will be informed about a healthy lifestyle and provided conditions for normal social integration.

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