Unemployment as a Medical and Social Problem and Incidence among Unemployed Young People

Samal Duisekova, Zakira Kerimbayeva, Adil’ Mustafin, Akmaral Mussakhanova, Assiya Turgambayeva, Rimantas Stukas

Department of Public Health and Management, NJSC “Astan Medical University,” Nur-Sultan, Kazakhstan; Department of ENT-Diseases, NJSC “Astan Medical University,” Nur-Sultan, Kazakhstan; Department of Public Health, Institute of Public Health, Faculty of Medicine, Vilnius University, Vilnius, Lithuania

Abstract

BACKGROUND: The problem of unemployment among young people worries the world for many generations, since young people are the stratum of the population on which the future in each country depends (Brydsten et al. 2016). The socioeconomic situation of young people, especially the unemployed, is alarming, which is not always emphasized in the priorities of social policy. The study of incidence among unemployed youth is carried out in many countries, where it is noted that the unemployed people have worse mental and physical health compared to employed one (Grzegorczyk and Wolff, 2020).

AIM: Our study aims to assess the difference between the incidence of working and unemployed youth.

METHODS: The study involved 536 people, from 18 to 29-years-old, among whom women - 69.2%, men - 30.8%, from all regions of Kazakhstan.

RESULTS: The results of the work showed that the level of youth unemployment increased during the pandemic by an average of 1% in the world and in Kazakhstan, young people had limitations in receiving medical and social assistance due to financial constraints, deficiency of health insurance and personal reluctance. It was also found that social status is a significant predictor of vaccination (beta = −0.225, R² = 0.0507, p < 0.001) and a predictor of alcohol consumption (beta = −0.0908, R² = 0.00824, p = 0.037). More often unemployed youth noted health problems over the past year (42.3%) than in other social groups (35.6–37.8%), a similar situation was observed when assessing the frequency of chronic diseases (p = 0.365).

CONCLUSION: In our study, we show that the decline in health by virtue of unemployment is likely to be significant, since our estimated effect implies that the health of young people is almost 10% worse (in absolute terms) due to unemployment compared to the employed population. This further underscores that unemployment is a public health problem that needs more attention. Furthermore, the results obtained show that unemployment has the most negative consequences for vulnerable people, including young people.

Introduction

Quality of life is a complicated concept that encompasses employment, productive activities that provide income and social status. In recent decades, the issues of the influence of socioeconomic factors on the level of incidence among the population have been widely studied; such factors include education, income, as well as the social status of the population [1], [2], [3], [4].

The situation with the apparition of the COVID-19 pandemic has become isolated, when socioeconomic instability manifests itself more clearly and exacerbates the situation with ensuring employment of the population [3], [4], [5], [6]. The world society does not have time to cope with the previous crises in the labor market, as the problem of employment and job loss appeared, associated with the introduced restrictive anti-epidemic measures to reduce the spread of coronavirus incidence [3], [6], [8], [10]. According to forecasts of the International Labor Organization (ILO), the current crisis will lead to an increase in the number of unemployed people according to a positive scenario by 5.3 million people, according to a negative scenario by 24.7 million people compared to previous years, while a decline in the labor market to this day is far from complete [6], [7], [9]. In particular, the informal employment sector suffered, where such categories of citizens as women, children, and youth turned out to be even more vulnerable, since their share of participation in the informal sector is higher than others [9], [10]. Modern youth has a more vivid transformation, often with high lability in the world of work; the NEET generation (neither work, nor study, nor improve their qualification) has become a frequent occurrence among young people [11], [12]. This transformation has far-reaching implications for the health and quality of life of young people. Young people are more exposed to unemployment than other age groups, because they
are emotionally labile; they are more likely to change
their field of activity, and less competitive due to the lack
of sufficient qualifications and experience [13], [14], [15].
According to research conducted by the ILO, the level of
temporary employment among young people is twice as
high as among adults, young people are more likely to be
employed in irregular paid work without a contract [16].

Youth unemployment is recognized as one
of the problems that creates social and economic
problems for society at the global level [11], [16], [20].
In addition, mass youth unemployment exacerbates
social problems, which can manifest itself in the form
of such negative consequences as the emergence of
major social conflicts, the criminalization of society,
drug addiction, prostitution, and can also lead to
suicide [17], [18], [19], which, as a result, leads to an
increase in the number of young patients with venereal
and other diseases. World statistics showed that the
highest level of youth unemployment, according to
data for 2021, was registered in South Africa (64.4%),
Angola (57.7%), Nigeria (53.4%), and further relatively
high unemployment rates showed such countries such as
Kosovo (49.9%), Namibia (46.1%), and Palestine
(43.1%). Furthermore, a high unemployment rate is
typical for the countries of Southern Europe, in particular,
Spain (35.1%) and Italy (27.7%). In contrast, the lowest
unemployment rates were recorded in Germany
(7.5%), the Netherlands (7.3%), South Korea (7.1%),
Japan (4.2%), Kazakhstan (3.7%), and Switzerland
(2.3%) [20].

In connection with the above, it follows that the
structure of employment has changed from stable and
predictable, to more flexible and uncertain due to the
economic downturn, and this has led to an increase in
the number of unemployed, which may have a greater
impact on the health of the population [1], [2], [10], [14].

Many studies have shown that the harm of
unemployment can be not only on the financial and
psycho-emotional state of a person but also on his well-
being [1], [15], [16], [17], [18], [19], [21], [22], [23]. For
many years, the authors have been discussing the causal
relationship between unemployment and deterioration
in health, and there is also a tendency for young people
with health problems to have problems getting a new
job [23], [24], [25], [26]. Nevertheless, the literary sources
about the relationship between unemployment and the
state of health of young people are contradictory; the
greatest controversy arises over the causal relationship
between these processes [23], [27]. Some authors cite
data that unemployment arises due to poor health of
the proposed workers during selection for work. Along
with this, people who have been unemployed for a long
time for reasons not associated with any diseases, for
example, less often undergo preventive examinations,
have stress, limitation of material and financial
resources for maintaining good health, poor nutrition,
limitation in the availability of medical insurance all lead
to a deterioration in health [27], [28], [29]. Plus, the
adverse effects of unemployment are also observed for
the relatives of young people [23], [29], [30].

A number of countries in the world are
wondering about the impact of unemployment on the
health of young people, and the degree of influence
of such factors as economic recessions in Sweden,
political decisions in the form of reforms in Germany
is being studied [3], [30], [31] [32]. The most active
studies on the impact of youth unemployment were
carried out in Sweden [3], the Netherlands, where a
reliable relationship was found between the impact of
unemployment on the physical and mental health of
young people.

Furthermore, a number of works by foreign
authors indicate the relevance of the problem of
unemployment impact on the mental state of young
people [33], [34], [35], [36], [37], [38], [39]. Changes
arise in mental health during prolonged exposure to stress
as a result of the impossibility of employment at a
decent job, pressure from relatives, the influence of bad
habits [30], [40], [41]. Researchers from the Department
of Public Health (Rotterdam, The Netherlands) suggest
that re-employment of the unemployed for paid work
can be a powerful means of improving public health, in
particular mental health, as well as improving the quality
of life [42]. The impact of unemployment on mental
health was found when looking at cohort studies, where
unemployment is perceived as a factor influencing
health status, leading to stress, persistent feelings of
guilt and low self-esteem, and therefore dissatisfaction
with life [43].

Historically, unemployment has been associated
with a variety of physical and psychological consequences,
such as alcohol and cigarette consumption, low self-
esteeem, and life satisfaction [44], [45], [46]. In addition
to mental health, unemployment also adversely affects
the physical health of young people [47], [48], [49]. Youth
unemployment as a chronic disease has a number of
complications [50], [51], [52], which are exacerbated by the
lifestyle factors of an unemployed young person, including
an irregular regime and nutrition, and an increased
stressful environment. An American study examined the
hypothesis that unemployed people have a higher risk
of cardiovascular disease [48], [49]. All models showed
that the presence of the unemployed was significantly
associated with a higher level of depressive symptoms
and a lower level of physical activity. Compared to their
colleagues, unemployed participants had lower levels of
systolic blood pressure [49].

Therefore, we consider that the study of the
relationship between unemployment and incidence
among young people, taking into account other
indicators of social well-being makes sense [50], [51].

The aim of the study was to examine the status
of employment and the incidence among young people.
Materials and Methods

We searched PubMed/Medline, Science Direct, Web of Science, and Scopus (July 2021) for studies focused on the impact of youth unemployment on the health of the population aged 18–29. After checking the titles and abstracts of 591 articles taken from four electronic databases, 123 articles remained for full-text reading. 51 studies of these met the inclusion criteria and were assessed for methodological quality. There is more research on the relationship between unemployment and health than between precarious employment and health (43 and 23, respectively). The overwhelming majority of studies (44) found support for the hypothesis of social causation, with the most common health outcomes being mental disorders, health risk behavior, poor quality of life, and occupational injuries.

The data of the national database of the Bureau of Statistics of Kazakhstan and the statistical data of the ILO for the period from 2015 to 2020 were studied.

As part of a cross-sectional study, a questionnaire was sent to unemployed young people in the number of 600 people aged 18–29, living in cities and villages of Kazakhstan in 2021. The questionnaire was approved by LEC. Both working and unemployed young people took part in the survey, where the first were as a control group. Gender, age, place of residence, educational level of the respondent and his parents, and previous health status were used as covariates in our analysis. The survey consisted of 42 questions, 17 of which were of a general nature, 25 were aimed at studying the impact of unemployment on the health of young people.

The questionnaires were completed online - 518, in person - 18. A t-test was performed to determine whether there was a significant difference between personal or virtual responses, and it was found that there were no differences in these responses. Therefore, it was decided to revise the data together. Participants were recruited through a variety of channels, including employment centers, youth policy departments, parties, non-governmental organizations, online forums, and messengers.

The study involved 536 people, among whom women - 69.2%, men - 30.8%. The average age of the participants was 26.0 ± 6.34. The research participants were people from all regions of Kazakhstan, most (42%) from the city of Nur-Sultan, 14% from the Akmola region. Socio-demographic data are presented in Table 1.

The collected data were statistically processed using the Jamovi 1.6.23 software. The calculation of the main indicators of descriptive and analytical statistics has been carried out. Assessment of the differences between the incidence rates of unemployed and working youth and determination of the presence or absence of a relationship between health and incidence in unemployed youth.

## Table 1: Socio-demographic data of respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>165 (30.8)</td>
</tr>
<tr>
<td>Female</td>
<td>377 (69.2)</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>219 (40.9)</td>
</tr>
<tr>
<td>Single</td>
<td>131 (24.4)</td>
</tr>
<tr>
<td><strong>Prefer not to answer</strong></td>
<td>4 (0.7)</td>
</tr>
<tr>
<td><strong>Place of residence</strong></td>
<td></td>
</tr>
<tr>
<td>Village</td>
<td>65 (12.1)</td>
</tr>
<tr>
<td>City</td>
<td>464 (86.6)</td>
</tr>
<tr>
<td><strong>Prefer not to answer</strong></td>
<td>7 (1.3)</td>
</tr>
<tr>
<td><strong>Educational background</strong></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>10 (1.9)</td>
</tr>
<tr>
<td>Incomplete secondary education</td>
<td>15 (2.8)</td>
</tr>
<tr>
<td>Specialized secondary education</td>
<td>41 (7.5)</td>
</tr>
<tr>
<td>Secondary vocational education</td>
<td>91 (17.0)</td>
</tr>
<tr>
<td>Undergraduate or equivalent level</td>
<td>246 (45.9)</td>
</tr>
<tr>
<td><strong>Master’s, specialist’s degree or equivalent level</strong></td>
<td>114 (21.3)</td>
</tr>
<tr>
<td>Postgraduate/Doctoral studies or equivalent level</td>
<td>12 (2.2)</td>
</tr>
<tr>
<td><strong>Prefer not to answer</strong></td>
<td>7 (1.3)</td>
</tr>
<tr>
<td><strong>Mother’s educational background</strong></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>9 (1.7)</td>
</tr>
<tr>
<td>Incomplete secondary education</td>
<td>30 (5.6)</td>
</tr>
<tr>
<td>Specialized secondary education</td>
<td>85 (15.9)</td>
</tr>
<tr>
<td>Secondary vocational education</td>
<td>130 (24.3)</td>
</tr>
<tr>
<td>Undergraduate or equivalent level</td>
<td>177 (33.0)</td>
</tr>
<tr>
<td>Master’s, specialist’s degree or equivalent level</td>
<td>49 (9.1)</td>
</tr>
<tr>
<td>Postgraduate/Doctoral studies or equivalent level</td>
<td>15 (2.8)</td>
</tr>
<tr>
<td><strong>Prefer not to answer</strong></td>
<td>41 (7.6)</td>
</tr>
<tr>
<td><strong>Father’s educational background</strong></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>12 (2.2)</td>
</tr>
<tr>
<td>Incomplete secondary education</td>
<td>35 (6.5)</td>
</tr>
<tr>
<td>Specialized secondary education</td>
<td>88 (16.4)</td>
</tr>
<tr>
<td>Secondary vocational education</td>
<td>128 (23.9)</td>
</tr>
<tr>
<td>Undergraduate or equivalent level</td>
<td>148 (27.6)</td>
</tr>
<tr>
<td>Master’s, specialist’s degree or equivalent level</td>
<td>48 (9.0)</td>
</tr>
<tr>
<td>Postgraduate/Doctoral studies or equivalent level</td>
<td>8 (1.5)</td>
</tr>
<tr>
<td><strong>Prefer not to answer</strong></td>
<td>69 (12.9)</td>
</tr>
</tbody>
</table>

Among men, the share of unemployed youth was 24.8%, while among women - 22.6%, however, no significant differences were found (p = 0.578). Furthermore, there were no significant differences in the level of unemployment by marital status (p = 0.462). The largest number of unemployed youth was observed among citizens living in rural areas (21.6%), moreover, 41.6% of rural youth were unemployed (p < 0.05).

Results and Discussion

Based on the data studied, it is noted that in recent years the labor market has been characterized by instability and lability. The TOP-10 countries with the highest and lowest overall unemployment rate in the world at the end of 2020 are shown in Figure 1.

According to ILO researchers, the low unemployment rates can be explained by the fact that the data are not properly recorded.

Gender inequality in the labor market remains an important aspect in the phenomenon of unemployment. According to official ILO data, Palestine, Iraq, and South Africa are the leaders in female unemployment and have rates of 41.14%, 30.59%, and 30.50%, respectively, while the highest rates for
male unemployment are in South Africa - 26.68%, Palestine - 21.32%, Namibia - 20.94% for 2020.

Such data show that in the world there are significantly fewer young women in the labor market than men, and their unemployment rate is higher than that of men.

Despite conducted political activities, too many young people remain unemployed. In Figure 2 shows, the rate of youth unemployment in the world from 2015 to 2020 in dynamics. According to the ILO, young people belong to such a group that will be quite severely affected by the pandemic, both in the short- and long-term, which enhances this effect and the fact that, even before the situation with COVID-19, young people have already faced significant problems in relation to employment, more often such experience is described in the countries of Europe and as can be seen in the following Figure 2, the country with the highest level of youth unemployment is Italy.

In Kazakhstan, as in most countries of the world, the young community is faced with painful manifestations of anti COVID measures, in particular, the loss of a job or the difficulty of finding a job. The high level of youth unemployment increases social tension and causes political instability in society. The NEET generation in Kazakhstan is growing and puzzling. The ILO NEET Index is the proportion of young people (aged 15–28) who do not work, are not engaged in education or vocational training, are outside the education system and employment, and are a potential source of the youth labor market. According to the ILO methodology for 2020, the indicator reached 7.7%. The following Figure 3 shows the youth unemployment rate in Kazakhstan from 2016 to 2020, which also reveals an increase in the number of unemployed with the arrival of the emergency event.

“Leaders” are metropolises, such as Nur-Sultan, Almaty, Shymkent, cities with a high influx of young people.

The level of education also plays a significant role in shaping the structure of employment. According to the results of a sociological survey among respondents, the distribution of the educational level of respondents and their parents depending on social status is presented in Figure 4. The regression analysis revealed a significant relationship between the social status and the level of education of respondents ($\beta = 0.221$, $R^2 = 0.0489$, $p < 0.001$ ($\beta = 0.2149$, $R^2 = 0.0657$, $p < 0.001$). Moreover, the unemployed respondents were less satisfied with their education (67%), while in other groups this indicator varied within 78–80% ($p > 0.05$).

Least of all, people with incomplete higher, secondary and incomplete secondary education speak about full and stable employment. The unemployment rate is highest among those with incomplete secondary and general secondary education. For questions about
education, the following results were obtained: education of respondents, but not of their parents, was a predictor of hospitalization ($\beta = 0.124, R^2 = 0.0154, p = 0.004$), education of the mother but not the father was a predictor of social status ($\beta = 0.132, R^2 = 0.0239, p = 0.019$).

Table 2 presents data on the feeling of support from the state, family and relatives/friends among 4 groups of respondents by social status. Participants of the study who are not employed and not studying ($n = 125$) feel social support significantly lower ($p < 0.05$). This is due to the fact that young people are required to provide financial support, from school they impose a specialty in which the future specialist either does not have the desire to work or does not have the ability.

Table 2: Distribution by feeling of support

<table>
<thead>
<tr>
<th>Social status</th>
<th>Support from (%)</th>
<th>State (n = 530)</th>
<th>Family (n = 533)</th>
<th>Relatives/friends (n = 532)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed/n student</td>
<td>28%</td>
<td>71.3%</td>
<td>56.6%</td>
<td></td>
</tr>
<tr>
<td>Unemployed/student</td>
<td>28%</td>
<td>95.3%</td>
<td>74.1%</td>
<td></td>
</tr>
<tr>
<td>Unemployed/not student</td>
<td>18%</td>
<td>76.0%</td>
<td>53.6%</td>
<td></td>
</tr>
<tr>
<td>Employed/student</td>
<td>23%</td>
<td>88.9%</td>
<td>70.0%</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.006</td>
<td>&lt;0.001</td>
<td>0.009</td>
<td></td>
</tr>
</tbody>
</table>

Unemployed youth more often noted health problems over the past year (42.3%) than in other social groups (35.6–37.8%), but this difference was not significant ($p = 0.724$). A similar situation was observed when assessing the incidence of chronic diseases ($p = 0.365$). However, unemployed respondents (16.1%) were hospitalized more often in comparison with other groups (2.2–13.0%), $p = 0.010$. The distribution of such bad habits as smoking and alcohol consumption did not have a significant difference between the groups ($p = 0.180$).

About 35.5% of unemployed youth were not attached to polyclinics, while among other groups of the surveyed this indicator varied in the range of 9.0–19.1%, while most of the attached respondents were among those employed ($p < 0.001$). Satisfaction with the provision of medical care was approximately the same among the study groups ($p = 0.881$).

We raised the question of vaccination among the working and unemployed population, where the result determined that social status was a reliable predictor of vaccination ($\beta = -0.225, R^2 = 0.0507, p < 0.001$). The smallest number of young people vaccinated against COVID-19 was unemployed respondents (50%), $p < 0.001$.

According to the studied literature, the question of alcohol consumption was raised, where, according to the results of the survey, it turned out that social status was a reliable predictor of alcohol consumption ($\beta = -0.0908, R^2 = 0.00824, p = 0.037$).

In the final part of the study, the respondents were asked to write the opinion about the existing difficulties of unemployed young people, where such answers as “ill-being disturbs family relations,” “lack of jobs in the speciality, low wages and high living costs,” “restrictions during the quarantine period influenced the search for work,” “post-COVID made it difficult to work”, “health problems do not allow finding a job,” “job search is difficult and requires material costs” and other, which shows that young people have health difficulties and both before employment and as a result of its absence.

**Conclusions**

This study revealed limited opportunities in the search for information, medical information systems do not take into account the social status of young people. Young unemployed men and women are at higher risk of incidence compared to their working peers. The data show a strong positive association between unemployment and many adverse health effects. However, the answer to the question of whether unemployment causes these adverse effects is not so straightforward, since there are many indirect and confusing factors that can be social, economic or clinical. Many authors have proposed causal mechanisms, but further research is needed to test these hypotheses.

According to the results of a sociological survey, the majority of unemployed young people from urban areas have higher education, while none of the respondents surveyed is registered at the employment center. There are diseases such as disorders of musculoskeletal and respiratory system. Among the respondents, one thirds have bad habits, in particular, alcohol consumption prevails. The survey showed that the level of youth unemployment in the country is high, there are systemic reasons leading to this
phenomenon, and there is also an impact on the health of young people.

The results of the study emphasize the need to take medical and social measures to prevent health losses and improve the quality of life of unemployed youth. Activities should also be aimed at promoting employment among the unemployed with chronic diseases.

Acknowledgments

All authors are grateful to the heads of medical organizations in the regions of Kazakhstan for supporting this study.

Institutional Review Board Statement

The study was conducted in accordance with the guidelines Declaration of Helsinki and approved by the Ethics Committee NJSC Astana Medical University.

References


PMid:8724235

PMid:23837086

PMid:21721936

PMid:31579139

PMid:31048926

PMid:30476022


PMid:16087487

PMid:32616488

PMid:33350454

PMid:15641890


PMid:30963349

PMid:29867666

PMid:21035154

PMid:29677604

PMid:30813974

PMid:32791351

PMid:26740687

PMid:24556535

PMid:15233317

PMid:29955789

PMid:31618497

PMid:23543880

PMid:30616606

