



Adventures of the Alcoholic Rating of Belarus

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Abstract

This paper provides a comparative analysis of the level and dynamics of indirect indicators of alcohol-related problems in Belarus, Russia, Ukraine, Poland, Lithuania, Latvia using data presented in the WHO Global Status Report "Alcohol and Health" for 2014 and 2018. The analysis of the data presented in the WHO report suggests that currently the ranking of countries by the level of alcohol-related is carried out on the basis of insufficiently reliable criteria and, therefore, cannot be considered scientifically substantiated. In this regard, an urgent task is to develop reliable criteria, the use of which will make it possible to objectify the comparison of countries in terms of the level of alcohol-related problems. Despite the improvement in the alcohol situation in recent years, the level of alcohol-related problems in Belarus remains high. Therefore, the priority task of the governments is to implement a set of anti-alcohol measures aimed at reducing the availability of alcohol, as well as reducing the demand for it.

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Introduction

In the global ranking of alcohol-related problems, the leading positions are taken by the countries of Eastern Europe [1-6]. The high level of alcohol-related problems in these countries is due to a combination of a number of unfavorable factors, including a high overall level of alcohol consumption, the prevalence of strong spirits consumption in the structure of alcohol consumption, the intoxication-oriented pattern of alcohol consumption, as well as the prevalence of consumption of alcohol surrogates [7-10].

The rating assessment of countries by the level of alcohol-related problems is an urgent task in the context of the development of an effective anti-alcohol policy. The World Health Organization (WHO) periodically compiles a global status report on Alcohol and Health, which includes a profile of the alcohol situation around the world. According to a WHO report published in 2014, Belarus topped the global alcohol rating [11]. Such dubious leadership undermined the country's authority in the international arena and caused a great public outcry within

the country. However, in the next report published in 2018, Belarus unexpectedly ranked 24th in the ranking [12]. Significant downshifting of Belarus in the global rating for a relatively short period of time was widely discussed, however, no serious analysis of the dynamics of the alcohol rating of the republic was carried out.

In relation to this, the purpose of this work was a comparative analysis of the level and dynamics of indirect indicators of alcohol problems in Belarus and neighboring countries.

Methods

A comparative analysis of the level and dynamics of indirect indicators of alcohol-related problems in Belarus, Russia, Ukraine, Poland, Lithuania, Latvia was carried out using the data presented in the WHO Global Status Report "Alcohol and Health" for 2014 and 2018. The alcohol situation in the country is assessed based on the analysis of the level and dynamics of indirect indicators of alcohol problems, which include the level of alcohol consumption, as well as alcohol morbidity and mortality [3,5].



In this work, the following indicators were used: the level of alcohol sales (average for 2003-2005, 2008-2010, 2015-2017 in terms of the population over the age of 15); the level of consumption of unrecorded alcohol (in terms of the population over the age of 15); the general level of alcohol consumption (in terms of the population over the age of 15); the level of alcohol consumption among the population who consumes it (in terms of the population over the age of 15); the prevalence of heavy episodic drunkenness (drinking more than 60 grams of alcohol at one time during the last month); the proportion of persons abstaining from alcohol consumption (abstainers) throughout their life; the proportion of persons abstaining from alcohol consumption during the last year; the prevalence of alcohol-related problems; the prevalence of alcohol dependence.

A rating comparison by the level of alcohol-related problems of the countries included in the analysis from a methodological point of view seems to be correct due to the similar structure and style of alcohol consumption. In all countries, vodka predominates in the consumption structure, and the consumption style is characterized as intoxication-oriented [1-4].

Results

Average total alcohol consumption for the period 2003-2005 was the highest in Russia (16.1 liters) and the lowest in Latvia (12.0 liters) (Table 1). During this period, the highest level of alcohol sales was recorded in Lithuania (11.9 liters), and the lowest - in Ukraine (6.8 liters). The highest level of unrecorded alcohol consumption was recorded in Ukraine (7.5 liters), and the lowest - in Lithuania (3.0 liters) and Latvia (3.0 liters). The share of unrecorded alcohol in the structure of alcohol consumption was noted in Ukraine (52.4%), and the lowest - in Lithuania (20.1%).

Average total alcohol consumption for the period 2008-2010 was the highest in Belarus (17.2 liters), and the lowest in Latvia (12.3 liters). The highest level of alcohol sales during this period was also noted in Belarus (14.4 liters), while the lowest level of this indicator was recorded in Ukraine (8.9 liters). The highest level of unrecorded alcohol consumption was observed in Ukraine (5.0 liters), and the lowest in Poland (1.6 liters). The highest share of unrecorded alcohol in the consumption structure was recorded in Ukraine (35.9%), and the lowest - in Poland (12.8%).

In the period from 2008 to 2010, compared to the period 2003-2005, overall alcohol consumption increased in Belarus, Lithuania and Latvia, while it decreased in Russia, Ukraine and Poland. During this period, alcohol sales rose in all countries, while unrecorded alcohol consumption declined in all countries. It should be noted that the data on alcohol consumption in Ukraine is characterized by a low level of official sales of alcohol and a high level of consumption of unrecorded alcohol.

In 2010, the level of alcohol consumption by persons who consume it was approximately the same in all countries, except for Latvia, where this indicator was slightly lower than in other countries (Table 2). The proportion of persons abstaining from drinking alcohol throughout their life was approximately the same in all countries, except Poland, where this indicator was significantly lower than in other countries. The proportion of heavy drinkers was the highest in Lithuania (36.6%) and Belarus (25.9%), and the lowest in Poland (5.3%). The proportion of persons abstaining from alcohol consumption during the last year was the highest in Poland (48.3%), and the lowest in Belarus (20.8%). The highest prevalence of alcohol problems was

noted in Russia (17.4%) and Belarus (16.6%), and the lowest in Ukraine (4.9%). The lowest proportion of people suffering from alcohol dependence among the general population was noted in Belarus (11.0%) and Russia (9.3%), and the lowest in Ukraine (2.2%).

Average total alcohol consumption from 2015 to 2017 was the highest in Lithuania (15 liters), and the lowest in Ukraine (8.6 liters). The highest level of alcohol sales during this period was also noted in Lithuania (13.8 liters), and the lowest in Ukraine (5.4 liters). The highest level of unrecorded alcohol consumption during this period was noted in Russia (3.6 liters), and the lowest in Lithuania (1.2 liters). The highest share of unrecorded alcohol in the consumption structure was noted in Ukraine (36%), and the lowest in Lithuania (8%). In the period 2015-2017, compared to the period 2008-2010 the overall level of alcohol consumption has decreased in all countries, except for Latvia, where this indicator has slightly increased. The most significant decrease in consumption was noted in Ukraine (-38.1%), Belarus (-34.8%) and Russia (-22.5%). The level of alcohol sales dropped significantly in all countries, except for Lithuania and Latvia, where this indicator slightly increased. Consumption of unrecorded alcohol dropped sharply in Belarus (2.1 times), Lithuania (2.1 times) and Ukraine (1.6 times), while in other countries this indicator remained practically unchanged.

In 2016, the level of alcohol consumption by persons consuming it was the highest in Russia (20.1 liters), and the lowest in Ukraine (13.8 liters) (Table 3). The prevalence of heavy drinking was highest in Lithuania (49.3%) and lowest in Ukraine (17.5%). The proportion of persons abstaining from drinking alcohol throughout their life ranged from 8.1% in Lithuania to 27.2% in Russia. The proportion of persons abstaining from alcohol consumption during the last year also ranged from 41.9% in Russia to 20.9% in Lithuania. The highest prevalence of alcohol-related problems took place in Russia (20.9%), and the lowest in Ukraine (6%). The prevalence of alcohol dependence was highest in Belarus (11%) and lowest in Ukraine (2.2%).

In 2016, compared to 2010, the level of alcohol consumption in Belarus decreased significantly, by persons who consume it (from 22.1 to 15.2 liters), the proportion of persons abstaining from drinking alcohol during their lifetime decreased (from 12, 8 to 7.5%), the prevalence of alcohol-related problems slightly increased (from 16.6 to 18.8%). In Russia, during the period under review, the level of alcohol consumption among its consumers practically did not change. At the same time, the prevalence of heavy drinking increased significantly (from 19.1% to 35.2%), and among women this indicator increased more significantly than among men. The proportion of abstainers over a lifetime has more than doubled, while the proportion of abstainers has not grown so significantly over the past year. The prevalence of alcohol-related problems has increased slightly, although the prevalence of alcohol dependence has remained the same. In Ukraine, during the period under review, the level of alcohol consumption among its consumers significantly decreased (from 20.3 to 13.8 liters), the prevalence of heavy drinking decreased slightly (from 22.6 to 17.5%), but the prevalence of alcohol-related problems increased (from 4, 9 to 6.9%). In Poland, the level of alcohol consumption among people who consume it has decreased (from 24.2 to 17.1 liters), the prevalence of heavy drinking has sharply increased (from 5.3 to 35.1%), and the proportion of abstainers throughout life has sharply decreased (from 27.3 to 13.5%), the proportion of abstainers has significantly decreased over the past year (from 48.3 to 32%),

the prevalence of alcohol problems has increased (from 8.3 to 12.8%), however, the prevalence of alcohol dependence (from 4.4 to 2.2%).

Table 1: The level of alcohol sales, the overall level of alcohol consumption, and the consumption of unrecorded alcohol (liters of absolute alcohol per population aged 15+).

	Belarus			Russia			Ukraine			Poland			Lithuania			Latvia		
	2005	2010	2015	2005	2010	2016	2005	2010	2016	2005	2010	2016	2005	2010	2016	2005	2010	2016
Sales	11,5	14,4	11,2	11,4	11,5	8,1	6,8	8,9	5,4	9,3	10,9	10,4	11,9	12,9	13,8	9,0	10,5	11,1
Consumption	15,1	17,2	11,2	16,1	15,1	11,7	14,3	13,9	8,6	13,0	12,5	11,6	14,9	15,4	15,0	12,0	12,3	12,9
Unrecorded	3,9	3,2	1,5	4,7	4,7	3,6	7,5	5,3	3,1	3,7	1,6	1,7	3,0	2,5	1,2	3,0	1,8	1,9
Unrecorded (%)	25,8	18,6	13,4	29,2	23,8	31,9	52,4	35,9	36	28,5	12,8	14,7	20,1	16,2	8,0	25,0	14,6	14,7

Table 2: The level of alcohol consumption among people who consume it (liters of absolute alcohol per population aged 15+), the proportion of abstainers among the population, as well as the prevalence of alcohol problems in 2010.

	Belarus			Russia			Ukraine			Poland			Lithuania			Latvia		
	M	F	M+F	M	F	M+F	M	F	M+F	M	F	M+F	M	F	M+F	M	F	M+F
Consumption (liters)	30,9	12,8	22,1	32,0	12,6	22,3	30,0	11,2	20,3	31,5	14,0	24,2	33,3	13,5	23,6	26,5	10,1	18,1
Hard drinking (%)	47,8	7,5	25,9	29,8	10,3	19,1	35,2	12,1	22,6	10,1	0,9	5,3	50,6	25,0	36,6	30,3	13,2	20,9
Abstainers (%)	6,5	18,0	12,8	6,5	18,5	13,0	7,9	16,4	12,5	15,8	37,8	27,3	8,0	24,0	16,8	7,2	20,2	14,3
Abstainers 12month (%)	11,0	29,0	20,8	25,2	38,0	32,2	26,5	35,9	31,7	37,1	58,5	48,3	26,6	41,4	34,7	25,8	37,6	32,3
Alcohol-related problems (%)	29,8	5,5	16,6	31,0	6,2	17,4	9,3	1,1	4,9	14,5	2,6	8,3	16,7	3,0	9,2	14,3	2,5	7,7
Alcohol dependence (%)	19,6	3,8	11,0	16,5	3,3	9,3	4,2	0,5	2,2	7,7	1,4	4,4	8,9	1,6	4,9	7,6	1,3	4,1

Table 3: The level of alcohol consumption among people who consume it (liters of absolute alcohol per population aged 15+), the proportion of abstainers among the population, as well as the prevalence of alcohol problems in 2016.

	Belarus			Russia			Ukraine			Poland			Lithuania			Latvia		
	М	Ж	М+Ж	М	Ж	М+Ж	М	Ж	М+Ж	М	Ж	М+Ж	М	Ж	М+Ж	М	Ж	М+Ж
Consumption (liters)	22,8	7,9	15,2	30,5	10,5	20,1	20,5	7,1	13,8	23,8	8,3	17,1	27,9	9,7	18,9	25,1	8,6	17,2
Hard drinking (%)	40,5	12,2	25,1	48,4	24,2	35,2	29,6	7,5	17,5	54,3	17,5	35,1	70,8	31,6	49,3	66,2	26,3	44,3
Абстиненты (%)	5,9	8,8	7,5	24,0	30,0	27,2	9,8	15,0	12,7	6,5	19,9	13,5	3,6	11,8	8,1	4,6	14,8	10,2
Abstainers 12month (%)	21,0	30,8	26,4	38,6	44,6	41,9	31,3	43,9	38,2	19,3	43,6	32,0	10,9	29,1	20,9	13,5	43,5	25,0
Alcohol-related problems (%)	33,9	6,2	18,8	36,9	7,4	20,9	11,5	1,4	6,0	22,7	3,7	12,8	19,9	3,6	11,0	28,8	4,6	15,5
Alcohol dependence (%)	19,6	3,8	11,0	16,5	3,3	9,3	4,2	0,5	2,2	4,1	0,4	2,2	8,9	1,6	4,9	19,4	3,0	10,4

Discussion

Based on indirect indicators such as the overall level of alcohol consumption, the prevalence of heavy episodic binge drinking, and the prevalence of alcohol-related problems, including alcohol dependence, the highest level of alcohol-related problems in 2010 was observed in Belarus. Russia ranked second in the ranking of alcohol-related problems. Despite the relatively high overall level of alcohol consumption and the prevalence of heavy drinking, the level of alcohol-related problems in Ukraine and Lithuania was relatively low. The high proportion of abstainers, the low prevalence of heavy drinking, and the relatively low prevalence of alcohol-related problems made Poland a country with a relatively low incidence of alcohol-related problems.

In 2016, the rating of countries by the level of alcohol-related problems became more complicated due to the lack of a general pattern of dynamics of indicators. Belarus lost leadership in the overall level of alcohol consumption and the prevalence of heavy episodic drunkenness to Lithuania, however, along with Russia; it retained a high level of prevalence of alcohol-related problems, including alcohol dependence.

It should be noted that a sharp decline in the overall level of alcohol consumption in Belarus occurred mainly due to a decrease in the level of alcohol sales, which could largely be due to an increase in prices for alcoholic beverages [3]. It is characteristic that the rise in prices for alcohol and a decrease in the level of its sale in Belarus and Russia occurred in parallel [3]. Moreover, the decline in the economic availability of licensed alcohol during this period caused an increase in the consump-

tion of unrecorded alcohol [5]. According to expert estimates, in the period from 2012 to 2015, consumption of unrecorded alcohol in Belarus increased from 2.1 to 4.3 liters (calculated for the entire population), while in Russia this indicator increased from 4.5 to 6.3 liters (calculated for the entire population) [5].

The estimate of consumption of unrecorded alcohol in Belarus and Russia, which appears in the WHO report, is significantly lower than expert estimates. Moreover, according to the WHO report, the level of consumption of unrecorded alcohol in the period from 2010 to 2016 in Russia remained the same, while in Belarus this indicator more than halved. Comparison of the data allows us to say that the level of consumption of unrecorded alcohol in Belarus, presented in the WHO report, is significantly underestimated. In addition, the data on the decrease in the consumption of unrecorded alcohol in Belarus in the period from 2010 to 2016 presented in the WHO report does not correspond to reality, since during this period there was an increase in this indicator [11]. To the question of the reliability of the data provided by local officials to WHO, one can refer to the fact that in the Belstat reports the total level of alcohol consumption is estimated at 9.1 liters per capita, while the WHO report contains the same figure per population over the age of 15. If we recalculate this figure for the population over 15 years old, we get about 11.5 liters.

The very fact of a sharp decline in the overall level of alcohol consumption in Belarus over a relatively short period of time seems unique and unlikely. World experience in the field of alcohol policy suggests that a significant reduction in the level of alcohol consumption can be achieved by drastically limiting the physical and economic availability of alcohol, or by implementing a consistent government policy aimed at reducing the availability of alcohol together with a decrease in demand for it [11]. The complex of measures carried out in Belarus within the framework of the state program to combat drunkenness and alcoholism could have contributed to an improvement in the alcohol situation in the country, but could hardly have led to such a sharp decrease in the overall level of alcohol consumption [5]. In addition, the sharp decline in alcohol consumption in Belarus between 2010 and 2016, reflected in the WHO report, does not look very convincing against the background of the absence of a decrease in the prevalence of heavy drinking and alcohol problems, including alcohol dependence.

A similar situation took place in Russia, where, against the background of a significant decrease in the level of alcohol consumption, there was a sharp increase in the prevalence of heavy drinking, as well as a slight increase in the level of alcohol-related problems. Doubtful also appear to be data indicating a sharp increase in the prevalence of heavy drinking, as well as a sharp decline in the proportion of abstainers in Poland against the background of a sharp decline in alcohol consumption.

Obviously, the reliability of the data presented in the WHO report is determined by the sources of their receipt, which are official statistics reports, the results of sociological surveys, as well as expert estimates. Potentially, the problem of poor data quality can relate to each of the listed sources of information. In Ukraine, for example, the quality of data on the level of alcohol sales is reasonably questioned [5]. In Russia and Belarus, there is a problem of low quality data from official statistics on alcohol morbidity and mortality [1,5]. The results of opinion polls conducted in Russia and Belarus should also be interpreted with caution, given the tendency of respondents to underestimate the level of alcohol-related problems. According to experts,

the data on the level of alcohol consumption in the former Soviet republics obtained through sociological surveys should at least be doubled [2]. In this regard, it should be noted that the data on consumption of unrecorded alcohol in Belarus in 2016, which appears in the WHO report, are based on the results of a population survey.

The basic indicator used to compile the alcohol ranking of countries is the overall level of alcohol consumption. However, due to a number of circumstances, this indicator can be used as an indicator of alcohol problems with a sufficient degree of convention. This is primarily due to the fact that the overall level of consumption is the total indicator of the sale of alcohol and its unrecorded consumption. Currently there are no reliable methods for assessing the consumption of unrecorded alcohol. In addition, the level of alcohol problems is determined not only by the general level of alcohol consumption, but also by the structure of consumption, as well as the style of consumption [1]. For example, in countries where the intoxication-oriented pattern of alcohol consumption prevail, the mortality rate from acute alcohol poisoning is high, despite the relatively low overall level of alcohol consumption [11]. At the same time, in countries with a high overall level of alcohol consumption and a predominance of wine in the consumption structure, the mortality rate from liver cirrhosis is high [12]. Taking into account these restrictions, it can be stated that the alcohol rating compiled on the basis of the general level of alcohol consumption does not have sufficient scientific justification. It can be considered correct to use the general level of alcohol consumption for rating assessment of the level of alcohol-related problems in countries with the same structure and style of alcohol consumption.

In conclusion, the analysis of the data presented in the WHO report suggests that currently the ranking of countries in terms of the level of alcohol problems is carried out on the basis of insufficiently reliable criteria and, therefore, cannot be considered scientifically substantiated. In this regard, an urgent task is to develop reliable criteria, the use of which will make it possible to objectify the comparison of countries in terms of the level of alcohol-related problems. The accomplishment of this task is not possible without improving the quality of alcohol statistics. Despite the improvement in the alcohol situation in recent years, the level of alcohol-related problems in Belarus remains high. Therefore, the priority task of the government is to implement a set of anti-alcohol measures aimed at reducing the availability of alcohol, as well as reducing the demand for it.

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