AVOIDABLE MORTALITY IN MOLDOVA: AN UNTAPPED RESOURCE FOR INCREASING LIFE EXPECTANCY[1]

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Reducing mortality represents one of the main priorities on the government's agenda, and the achieved effectiveness in the public health policy is usually measured by the dynamics of life expectancy. The method of avoidable cause-of-death elimination has been used in this article, in order to emphasize the possible increase in life expectancy. The results suggest that the theoretical exclusion of preventable and treatable mortality would contribute to an increase in life expectancy by 14.2 years in males and 8.1 years in females, respectively. It thus follows that there is a great resource in decreasing young and working-age population mortality. A significant contribution to avoidable mortality is made by cerebrovascular and ischaemic heart diseases, neoplasms, as well as external and alcohol-related causes of death.

Keywords: *avoidable mortality; unnecessary deaths; life expectancy; preventable and treatable deaths; population health.*

INTRODUCTION

Since the mid-twentieth century, a dynamic increase in life expectancy was highlighted in most countries, reaching values unexpected for the earlier periods. At the same time, the increasing rhythms of life expectancy registered different values depending on countries and regions (Vallin and Meslé, 2004; Leon, 2011). Though most Western and Northern European countries have experienced a steady increase in life expectancy, Moldova was among those Eastern European countries (*Figure 1*), where life expectancy has had emphasized stagnation periods, showing a slight fluctuation (Gagauz, *et al*., 2016; Pahomii, Gagauz, and Avram, 2017).

At the moment, general mortality in Moldova accentuates an increased intensity among the young and working-age population, predominantly in males. A significant contribution to overall mortality is made by degenerative causes of

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[1] Articolul a fost elaborat în cadrul Proiectului Programului de Stat (2020−2023) 20.80009. 0807.21, „Migrația, schimbări demografice și politici de stabilizare a situației”.

death, mainly diseases of the circulatory system, neoplasms, and external causes of death (Penina, 2014). The increase in life expectancy observed in recent years has been largely due to reduction in avoidable mortality (Stirba and Pahomii, 2019).

In the case of Moldova, increasing life expectancy represents one of the main priorities on the government's agenda. Moreover, the reduction in mortality is the result of the resources involved and the synergistic capacity of the actors engaged in this process.

In the subsequent research, we assume that avoidance of some "unnecessary deaths" may contribute to a steady decrease in mortality. Thus, the implementation of various policies regarding the health of the population, infrastructure, welfare, behaviour of the populations, etc. will diminish the incidence of certain causes of death. These deaths can be avoided as a result of: a) preventive measures: causes of death that can be mainly avoided through effective public health and primary prevention interventions; or b) their treatment: causes of death that can be mainly avoided through timely and effective health care interventions, including secondary prevention and treatment (OECD/Eurostat, 2019).

The aim of this article is to emphasize the potential increase in life expectancy as a result of avoidable mortality exclusion. At the same time, it identifies the age groups that are most vulnerable to specific avoidable causes of death in males and females. The results of this research may be used as support in the context of policy development in the field of public health.

LITERATURE OVERVIEW

The concept of avoidable mortality dates back to the middle of the 1970s. Back then, researchers proposed a method to measure the quality of the medical system, based on several diseases, disabilities, and deaths that can be treated or prevented. In their article, Rutstein *et al*. published an extended list of "unnecessary untimely deaths" (Rutstein *et al*., 1976). Considering the development of medical technologies, various researchers have tried to re-evaluate this list multiple times. A comprehensive analysis of existing literature on avoidable mortality made it possible to adjust its definition to the current state of the health system (Nolte and McKee, 2004; ONS, 2011; Nolte and McKee, 2011; OECD/Eurostat, 2019).

Several studies concluded that gained life expectancy growth in recent decades was mostly possible due to avoidable mortality diminution (Burcin, 2009; Aburto, Riffe, and Canudas-Romo, 2018). Furthermore, it is argued that the avoidable mortality concept would be a useful tool in the context of health system and effective-treatments measurement (Gavurova and Vagasova, 2017).

The used cause-of-death elimination models suggested a significant capacity in potential life expectancy increase for the analysed countries (Mackenbach, Kunst, Lautenbach, Oei, and Bijlsma, 1999; Alai, Arnold, and Sherris, 2014; Li, Li, Lu, and Panagiotelis, 2019). Instead, conclusions were made that some countries

with the lowest mortality had already reached a peak in life expectancy growth (Dong, Milholland, and Vijg, 2016).

DATA AND METHODS

The performed calculations present age- and cause-specific differences in life expectancy between deaths that occurred during 2014−2016[2] and numerator with excluded avoidable causes of death. In order to present more detailed results, calculations have been developed for the selected groups of avoidable causes of deaths: infectious diseases, cancer, endocrine and metabolic diseases, diseases of the circulatory system, diseases of the respiratory system, diseases of the digestive system, injuries, alcohol-related and drug-related deaths, and other avoidable causes of death[3].

Data on cause-of-death distribution by age and sex have been retrieved from the WHO (World Health Organization) mortality database and refers to the 10th ICD revision (WHO Mortality Database). Selected avoidable causes of death correspond to the OECD/ Eurostat (2019) list on avoidable mortality.

Data on the population with a usual residence presented by NBS (National Bureau of Statistics) has been used as a population exposure. We have to assume that this includes all the persons who stayed within the country for at least 9 months during a calendar year, which may slightly deteriorate our denominator (referring to the number of person/years). The selected denominator is most accurate in the context of the current intensity of outward migration. Considering the lack of data referring to the territory on the left bank of the Dniester River, the Transnistrian region was not included in the research (NBS Database).

Life expectancy decomposition has been performed by using Andreev's method[4], and is based on abridged life tables (five-year age group interval) with the last opened age-group interval being 85+ (Andreev, 1982). Calculations have been performed for the 2014−2016 period. Data has been grouped to diminish small-number errors.

Even if the used model assumes that a great proportion of deaths are avoided, the denominator was not modified, since every death has contributed by an average 0.5 person-years per calendar year. At the same time, we cannot exclude that avoided deaths may occur in the same calendar year.

[2] The NBS provides data on the population with a usual residence only for the period 2014–2019. The last year for which WHO provides a detailed distribution of causes of death for Moldova is 2016.

[3] The ICD-10 set of codes by main groups corresponds to OECD/Eurostat list on avoidable causes of death (OECD/Eurostat, 2019); the group "other avoidable causes of death" includes causes of death that register a less significant contribution to the overall avoidable mortality.

[4] The mortality decomposition method used in this paper is similar to those proposed by Pollard, Arriaga, or Pressat (Pollard, 1982; Arriaga, 1984; Pressat, 1985).

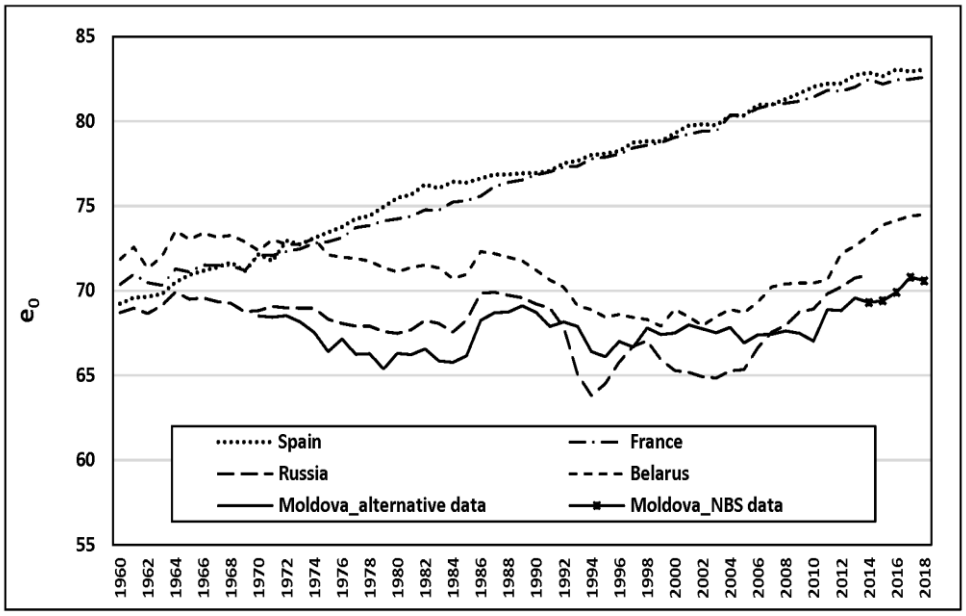
RESULTS AND DISCUSSIONS

The results obtained suggest that a significant proportion of deaths occurring during the analysed period are included in the OECD/ Eurostat list on avoidable mortality. Thus, a hypothetical reduction in avoidable mortality may lead to a substantial increase in life expectancy.

Figure 2 shows age- and cause-specific components of life expectancy changes within the 2014−2016 period, where the possible changes in life expectancy as a result of the exclusion of preventable and treatable causes of death are presented. The used model highlights a different level of vulnerability to avoidable mortality among the population, depending on age, sex, and cause of death. Life expectancy for the 2014−2016 period accounted for 64.6 years for males and 73.2 years for females (*Figure 1*). A theoretical subtraction of preventable and treatable causes of death from general mortality would provide an additional increase in life expectancy by 14.2 years for males and 8.1 years for females. This difference is ensured mostly by relatively high mortality among young and working-age population, especially accentuated in males.

Figure 1

Life expectancy dynamics in France, Spain, Russia, Belarus and Moldova, both sexes, 1960−2018



Source: For Spain, France, Russia and Belarus (Human Mortality Database); for Moldova (Penina, Jdanov, and Grigoriev, 2015) and (NBS Database).

It should be mentioned that there is significant capacity for reducing infant mortality in both sexes, which could lead to an increase of about 0.5 years in life expectancy. Even though most deaths in infants occur in the neonatal period, the largest contribution in the number of avoidable deaths at age 0 is caused by pneumonia, unspecified bacterial sepsis of new-born, accidental injuries, respiratory distress syndrome of new-born, unspecified intrauterine hypoxia and other infectious diseases.

Compared to developed countries where the infant mortality rate is about 3‰, in Moldova, this indicator highlights significantly higher rates, thus registering about 9‰ in 2014−2016 (NBS Database). Besides this, it can be assumed that there is a difference in infant mortality by region; however, we cannot denote the exact regional differences, due to some methodological aspects in the registration of life events[5].

General mortality rates between the ages of 1−14 are not significant for both sexes. In these age groups, the cumulative difference between *de facto* mortality and the one where avoidable deaths were excluded would ensure a life expectancy increase of 0.26 years in males and 0.20 years in females. Thus, a slight contribution to avoidable mortality at those ages is caused by pneumonia (mostly in early childhood) and external causes of death, such as accidental injuries and transport accidents.

Even though female teenagers aged between 15 and 19, continue to register a relatively insignificant number of deaths that could be avoided, an opposite situation can be emphasized in males. Men in the respective age group are more likely to be exposed to risk due to the external causes of death.

Most of the avoidable deaths in males are concentrated in the young and working-age population. Avoidable mortality exclusion in the analysed period would have increased life expectancy in the age groups 35−39 (by 0.8 years), 40−44 (by 1.1 years), 45−49 (by 1.3 years) 50−54 (by 1.6 years), 55−59 (by 1.7 years), 60−64 (by 1.9 years), 65−69 (by 1.8 years) and 70−74 (by 1.8 years).

In females, avoidable deaths are more concentrated in ages above 50. Thus, a hypothetical exclusion of treatable and preventable causes of death would have assured an increase in life expectancy in the following age groups: 50−54 (by 0.7 years), 55−59 (by 1.0 years), 60−64 (by 1.1 years), 65−69 (by 1.3 years) and 70−74 (by 1.6 years).

Preventable and treatable mortality caused by diseases of the circulatory system has a significant contribution to the incidence of mortality and decreases life expectancy by 4.9 years in males and 3.3 years in females. A considerable

[5] a) In Moldova, new-borns are registered at the territorial registry offices according to the mother's official residence, thereby her *de facto* place of residence being ignored; b) The official number of new-borns refers to the number of birth certificates issued by Civil status offices in a calendar year; c) Parents who possess, in addition to Moldovan, foreign citizenship, can initially (or exclusively) apply for a birth certificate to a representative office of another state (Bargan, 2015).

proportion of these deaths, for both sexes, are recorded at relatively young ages, and include the working-age population.

The incidence of mortality caused by ischaemic heart diseases causes the largest losses in the number of deaths by the circulatory system diseases. Avoiding these causes of death in males would contribute to an increase in life expectancy in the following age groups: 35−39 (by 0.1 years), 40−44 (by 0.2 years), 45−49 (by 0.2 years), 50−54 (by 0.3 years), 55−59 (by 0.4 years), 60−64 (by 0.5 years), 65−69 (by 0.6 years) and 70−74 (by 0.7 years). In females, deaths caused by ischaemic heart disease intensify their incidence in later ages, compared to males, and their exclusion would have an effect of increasing life expectancy in the following age groups: 50−54 (by 0.1 years), 55−59 (by 0.2 years), 60−64 (by 0.3 years), 65−69 (by 0.4 years) and 70−74 (by 0.7 years).

Avoidable deaths caused by cerebrovascular diseases decreased life expectancy in the male population by 1.4 years and in the female population by 1.1 years, respectively. Age groups above 45 in both, males and females, represent the most affected population. Avoidable causes of death by hypertensive diseases are largely specific to the population over the age of 55, for both sexes. Avoiding these causes of death would contribute to an increase in life expectancy by 0.5 years for both sexes.

In the context of reducing the number of deaths caused by circulatory system diseases, the government implements a range of policies that are oriented on their prevention and treatment (increasing the price of excise duties on tobacco and alcohol, banning tobacco and alcohol consumption in public places, tightening penalties for violating consumption restrictions of alcohol and tobacco, prohibition to sale alcohol after 10 p.m., setting the minimum age of 18 years for the purchase of tobacco and alcohol products, promotion of a healthy lifestyle, etc.), subsidies for a wide range of medicines and medical services, as well as improving treatment infrastructure and broadening the spectrum of health services. There cannot be neglected that socio-economic factors have a major influence on the incidence of mortality caused by circulatory system diseases. The implementation of these policies will certainly have a varying effect on differing age-groups, given that certain cohorts went through a series of historical events (including economic crises), which have left their mark on the health of the population.

Avoidable deaths from cancer decrease life expectancy by 1.9 years in males and 1.4 years in females, respectively. To a large extent, treatable and preventable deaths caused by neoplasms are associated with ages over 30, and accentuate a distinction between males and females depending on age and cause of death.

A great proportion of preventable and treatable neoplasms in males are associated with lifestyle-related factors, including alcohol and tobacco consumption, nutrition, or physical activity. Thus, during the analysed period, life expectancy was largely reduced by deaths caused by lung cancer, liver cancer, stomach cancer, lip and oral cavity cancer. Policies aimed at reducing tobacco

consumption among the population, which were previously implemented, may have a delayed effect on the incidence of certain causes of death. Some studies suggest the influence of the increased tobacco-related mortality incidence on the subsequent decline in smoking (Thun, Peto, Boreham, and Lopez, 2012). Furthermore, we cannot neglect that certain deaths caused by neoplasms may be avoided due to available mass screening technologies and by providing cancer treatment (surgery, chemotherapy, radiotherapy, etc.).

In females, a lower degree of exposure to lifestyle-related factors is reflected in a lower incidence of deaths caused by lung, liver, stomach, lip and oral cavity cancer, compared to males. Although females are largely at risk of death from breast, colorectal and cervical cancer, the incidence of these causes of death increases with age.

Violent deaths make a significant contribution to avoidable mortality. Therefore, they contributed to the decrease in life expectancy by 2.8 years in males and 0.7 years in females in the analysed period. To a large extent, this differentiation is caused by a different level of risk exposure depending on age and sex.

Deaths caused by road accidents are mostly associated with males and contribute to a decrease in life expectancy by 0.5 years. Traffic accidents mostly affect age groups 15−19, 20−24, and 25−29, with ages 30−49 having a slightly lower incidence and registering a constant decrease starting with the age of 50.

In the case of females, road accidents are mostly associated with earlier ages and contributed to a decrease in life expectancy by about 0.1 years, in the 2014−2016 period.

Even though car manufacturers have increased the safety of their products (cars) over time, in Moldova some related factors lead to maintaining the degree of exposure to the risk of death resulting from road accidents. It derives from the dynamic increase in the number of cars, suburbanization, but also of the more accentuated road traffic between the localities, which leads to the increase in the number of hours spent in traffic.

Pedestrians also have a high degree of involvement in traffic accidents. This is largely due to a lack of safety-oriented traffic infrastructure, especially within localities. Trauma resulting from traffic accidents also makes an indirect contribution to mortality, with either the injured person acquiring a degree of disability or death resulting from acquired trauma.

Accidental injuries reduced life expectancy by 1.3 years for males and 0.4 years for females, which is a significant proportion in the number of violent deaths. The difference in the number of deaths caused by accidents in males and females derives primarily from professional activities, but also from a different degree of exposure to risk. Most deaths due to accidental injuries, in both males and females, are concentrated between the ages of 35 and early retirement. Among the main causes of death caused by accidental injuries are accidents related to professional activity (specific to males); accidental poisoning by carbon monoxide; exposure to

natural cold (specific to homeless people); exposure to smoke, fire, and flame; obstruction of the respiratory tract with food, gastric contents or other objects (in adulthood, it may be the result of alcohol or drug use); drowning; and accidental poisoning.

Deaths caused by self-harm, especially those in rural areas are mostly attributed to males. About 90% of the deaths due to intentional self-harm in males and 70% in females are attributed to hanging, strangulation and suffocation, while the other deaths are caused by intentional self-harm by jumping from a high place and intentional self-harm by a sharp object (especially in men). Exposure to the risk of death caused by self-harm, in both sexes, starts in adolescence and increases with the advancing age until the retirement age. Avoiding these causes of death would have contributed to an increase in life expectancy by 0.6 years in males and 0.1 years in females.

Victims of assaults are predominantly males aged 25−54 who suffered from the bodily force, strangulation and sharp object attacks. Assaults contributed to an overall reduction in life expectancy by 0.18 and 0.07 years among males and females, respectively.

Alcohol-related deaths, besides other external causes of death, emphasize a pronounced contribution to the overall mortality, and mostly affect the working-age population, in both sexes, where a peak is highlighted among the age group 55−59. Thus, alcohol-related causes of death reduced life expectancy in the analysed period by 1.9 years in males and 1.4 in females. Compared to other causes of death, the gap between alcohol-related mortality incidence in males and females is less pronounced. Even though the average annual amount of alcohol consumed among the adult population is extremely high (WHO, 2017), particular drinking behaviour (popularity of homemade wine consumption) is associated with a less harmful effect on consumers' health (Penina, 2017). It is obvious that alcohol consumption also affects the incidence of other causes of death, such as those of the circulatory/ digestive system diseases, as well as the exposure to the risk of violence or involvement in risk situations, including drunk driving.

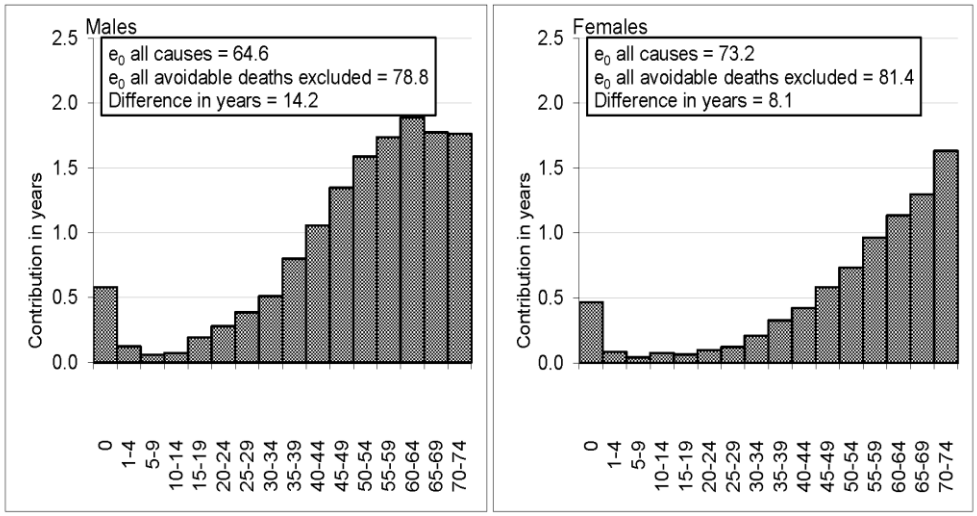
The incidence of mortality associated with drug use is insignificant in both males and females. This could be explained by a high degree of alcohol popularity, but also by the general attitude in society towards drug use, especially injectable. The potential increase in life expectancy, as a result of declining in mortality caused by deaths associated with drug use, is between 0.01−0.02 years for both sexes.

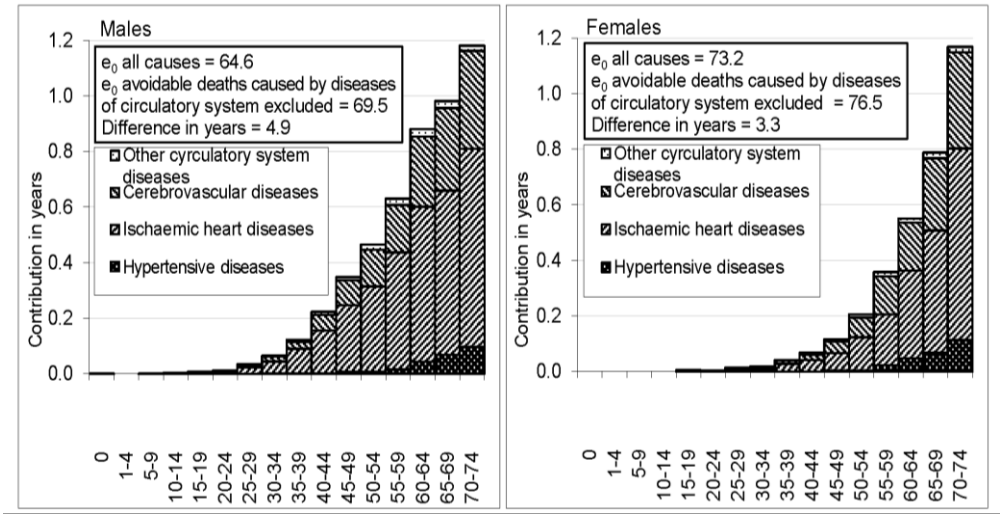
Avoidable mortality caused by respiratory system diseases highlights a higher incidence in males compared to females, and contributes to a decrease in life expectancy by 1.1 years. In females, the prevention and treatment of deaths caused by respiratory system diseases would influence the increase in life expectancy by about 0.4 years. In infancy, both sexes show an increased incidence of pneumonia-related mortality. In adulthood, deaths from pneumonia are more specific to males,

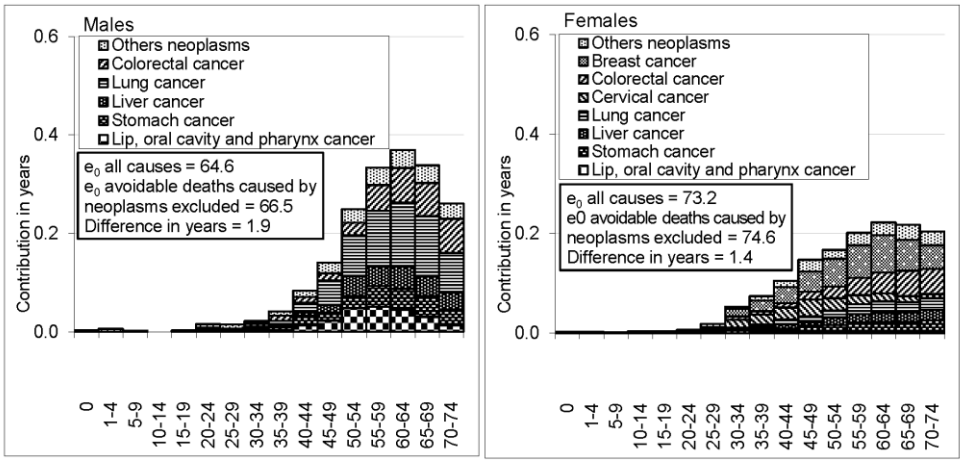
which consequently decreases life expectancy by about 0.6 years. In females, the incidence of mortality caused by respiratory system diseases is very low starting with adolescence, with insignificant values being underlined starting with age 30.

Figure 2

Age- and cause-specific components of the life expectancy changes in Moldova, all causes of death and excluded avoidable causes of death, by sex, 2014−2016 (continued in the *Annexes*)







Source: Author's calculations based on NBS and WHO mortality database data.

The main contributor to avoidable deaths from infectious diseases is tuberculosis and HIV/AIDS. These causes of death are accentuated starting with ages 20−24 years, and have an ascending increase until the ages of 40−44, after which registering a continuous decrease. The increased incidence of HIV/AIDS mortality at young ages could be explained by the cohort effect given the exposure to the risk of infection (injecting drug use, unprotected sex, etc.). Excluding deaths caused by tuberculosis and HIV/AIDS would have contributed to an increase in male life expectancy by 0.3 years and female life expectancy by 0.1 years. Even though the tuberculosis incidence is still registering relatively high rates, especially compared to OECD countries, the actual situation improved significantly over the last decade.

Persons diagnosed with tuberculosis or HIV/AIDS are guaranteed by law with a wide range of services, including antiretroviral treatment, and their expenses are covered by the National Health Insurance Company. National programs focus on the policy of preventing infectious diseases (tuberculosis and HIV/AIDS), where great attention is paid to populations at risk, especially those in detention.

Treatment and prevention of deaths related to the digestive system, during 2014−2016, would have contributed to an increase in life expectancy by 0.3 years in males, and 0.1 years in females. In this context, a higher incidence of mortality in both sexes is attributed to acute pancreatitis, as well as gastric and duodenal ulcer, that affects mostly population aged above 35 years, and reaches the peak in age groups 45−49 in males and 55−59 in females.

Even though the presented results refer to the entire country, we have to assume that there are different trends in mortality rates depending on the population's residence. There is an accentuated shortage in the various factors, such as access to the social and healthcare system, living conditions, level of

income, access to the public infrastructure, and environmental factors that persist among regions and rural – urban areas. Besides these, the current government's interventions on public health may lead, in perspective, to the structural changes in general mortality, that will require continuous adaptation in the policy agenda and indirectly increase the burden on the public budget (Aburto, Riffe, and Canudas-Romo, 2018).

It should be noted that in the context of the territorial distribution of the population, patients face discrimination in terms of accessibility to some medical services (especially in cases where rapid transportation is required), given that certain surgeries are performed in a limited number of medical institutions. This situation, in the context of an emergency, is partially alleviated due to the medical aviation service, but its capacity must not be overestimated.

CONCLUSIONS

The model used in this article assumes the complete exclusion of preventable and treatable causes of death from general mortality. Such a situation assumes an ideal scenario, and has a purely theoretical character. The results present the contribution of avoidable mortality in the total number of deaths, as well as identify the most vulnerable age groups dependent on causes of death. Even though the scenario is purely hypothetical, it does not exceed the values recorded in the countries with the lowest mortality levels (*Figure 1*).

The results suggest that a considerable proportion of the total number of deaths is due to treatable or preventable mortality. A large part of the contribution of avoidable causes of death is associated with circulatory system diseases, cancer, respiratory diseases, external causes of death − especially in road traffic accidents. The total exclusion of avoidable deaths would contribute to an increase in life expectancy of 14.2 years in males and 8.1 years in females, for the years 2014−2016.

Age-distribution of the avoidable causes of death emphasizes different patterns in males and females. Males highlight a great loss in the working-age population, while females have a higher incidence in avoidable mortality since age 55. Both sexes lose approximately 0.5 years in life expectancy due to deaths in infancy, that should not occur.

A great proportion of avoidable deaths could have been avoided as a result of the population's behavioural and lifestyle adjustment, infrastructure investment, improving the socioeconomic conditions of the population, also a result of the population's health-oriented policy and health care services. Furthermore, preventive policies aimed at reducing mortality associated with lifestyle-related factors may have a different impact on population groups depending on some socioeconomic characteristics, which could increase the discrepancy in the mortality level of the population depending on education, income, residence, etc.

Existing documents, reports, and laws indicate that the government has an understanding of human losses associated with premature mortality. In this connection, plans have been developed to reduce the consumption of alcohol and tobacco, in order to diminish the incidence of cardiovascular diseases, tuberculosis, cancer, and other chronic diseases. The government takes into account the experience of other countries regarding the reduction of mortality due to external causes. Increasing spending on the health system from 3% of GDP in 2000 to 5.3% of GDP in 2014, accentuates the government's raised attention to population health. At the same time, some policies that are oriented towards mortality reduction may lead to lower results than those expected, considering population aging, which creates pressure on the medical system. National Health Insurance Company totally/ partially covers a wide range of medical services and medicines for the persons who are diagnosed with diseases of the circulatory system, neoplasms, HIV/AIDS, tuberculosis, diabetes, etc., which favourably affects the reduction in risk exposure. Generally, the national health system works based on the *pay as you go* principle and offers the population equal access to a whole range of medical services.

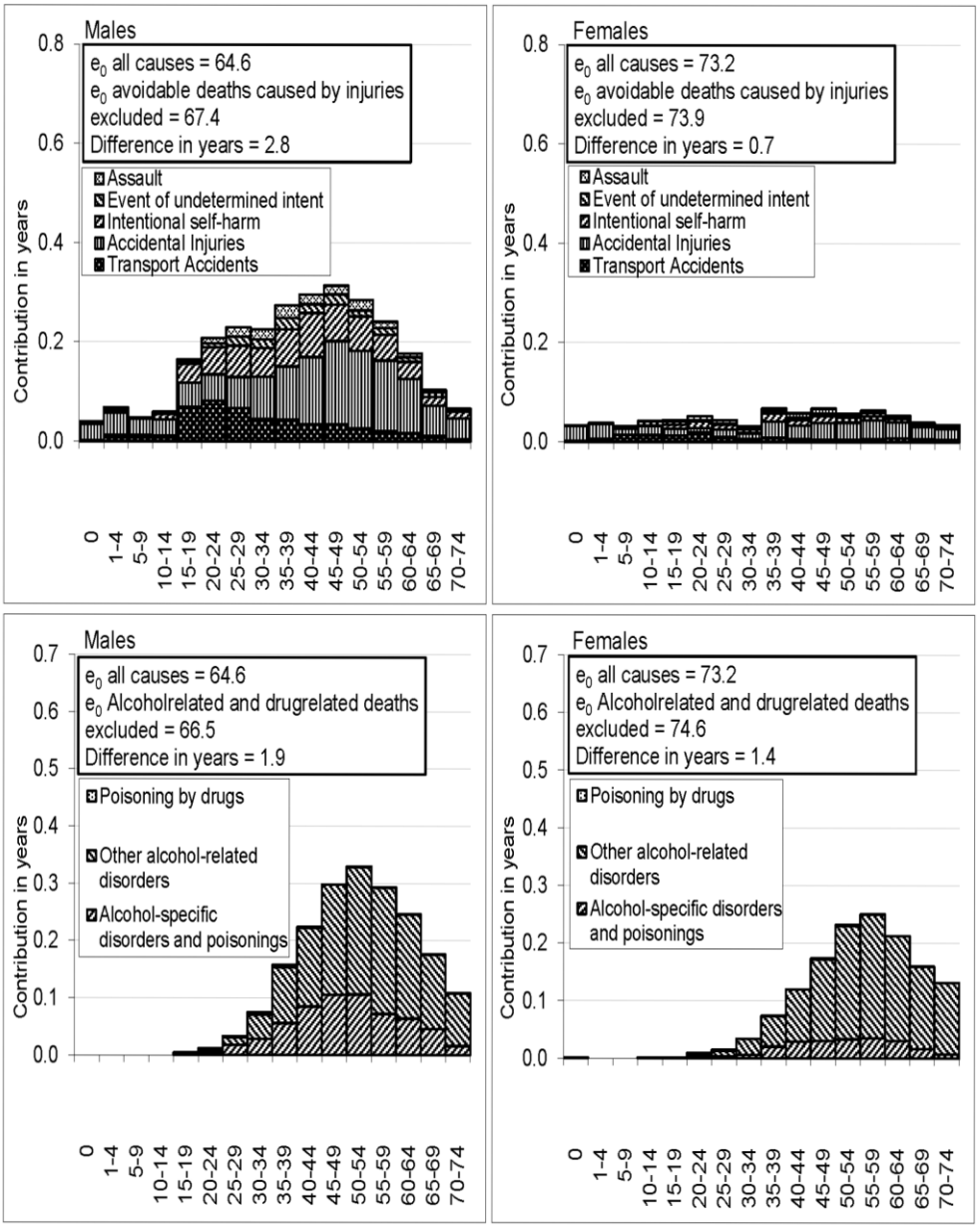
The results of this article provide a country-level overview. At the regional level, population has a different risk exposure due to some behavioural, professional, and socioeconomic characteristics, but also in terms of accessibility to the medical system and medical services, especially in emergencies.

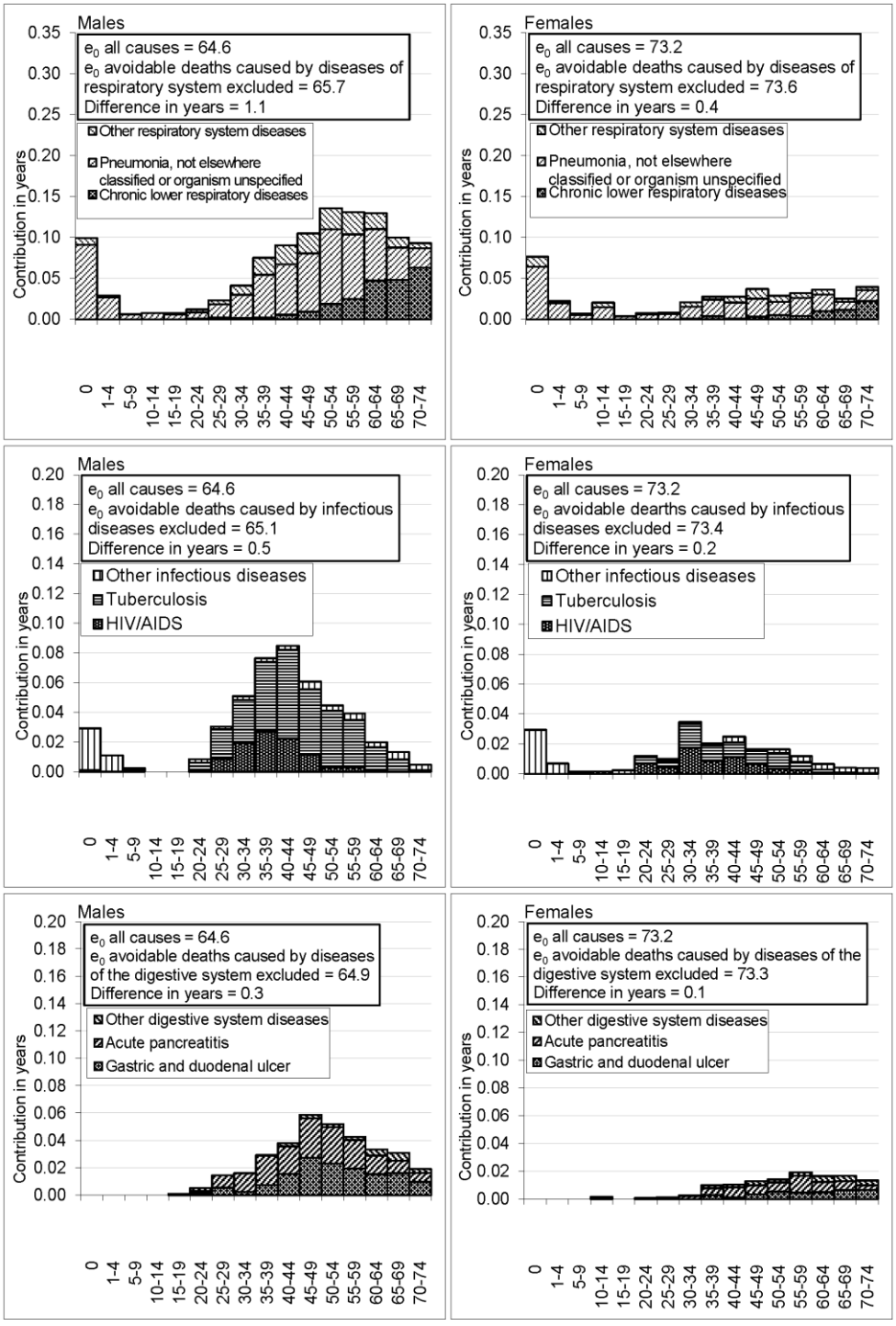
Presented results aim to point out the potential resources for increasing life expectancy as a result of the avoidable mortality diminution, considering the medical potential, available knowledge, infrastructure improvement, as well policies are oriented towards population health, etc.

Annexes

Figure 1

Age- and cause-specific components of the life expectancy changes in Moldova, all causes of death and excluded avoidable causes of death, by sex, 2014−2016 (continuation).




Males
e0 all causes = 64.6
e0 avoidable deaths caused by diseases of respiratory system excluded = 65.7
Difference in years = 1.1
Other respiratory system diseases
Pneumonia, not elsewhere classified or organism unspecified
Chronic lower respiratory diseases
Females
e0 all causes = 73.2
e0 avoidable deaths caused by diseases of respiratory system excluded = 73.6
Difference in years = 0.4
Other respiratory system diseases
Pneumonia, not elsewhere classified or organism unspecified
Chronic lower respiratory diseases
Males
e0 all causes = 64.6
e0 avoidable deaths caused by infectious diseases excluded = 65.1
Difference in years = 0.5
Other infectious diseases
Tuberculosis
HIV/AIDS
Females
e0 all causes = 73.2
e0 avoidable dearths caused by infectious diseases excluded = 73.4
Difference in years = 0.2
Other infectious diseases
Tuberculosis
HIV/AIDS
Males
e0 all causes = 64.6
e0 avoidable deaths caused by diseases of the digestive system excluded = 64.9
Difference in years = 0.3
Other digestive system diseases
Acute pancreatitis
Gastric and duodenal ulcer
Females
e0 all causes = 73.2
e0 avoidable deaths caused by diseases of the digestive system excluded = 73.3
Difference in years = 0.1
Other digestive system diseases
Acute pancreatitis
Gastric and duodenal ulcer
Contribution in years
0 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74

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Acest articol evidențiază resursele de creștere a speranței de viață ca rezultat al diminuării mortalității evitabile, și are rolul să identifice grupurile de vârstă vulnerabile față de decesele ce pot fi prevenite sau tratate. În acest sens au fost aplicate metodele de eliminare a deceselor și decompoziția mortalității (modelul decompoziției mortalității). Rezultatele evidențiază un potențial semnificativ de creștere a speranței de viață, cu 14,2 ani la bărbați și 8,1 ani la femei, ce ar putea fi valorificat în urma diminuării deceselor evitabile. Se constată că decesele ale căror cauze ar putea fi tratate sau prevenite aduc pierderi semnificative în rândul populației în vârsta aptă de muncă. O incidență semnificativă a mortalității evitabile este cauzată de decesele cauzate de bolile sistemului circulator, cancer, cauze externe și decesele legate de consumul de alcool.

Cuvinte-cheie: *mortalitatea evitabilă; speranța de viață; sănătatea populației.*

Primit: 15.05.2020 *Acceptat: 09.10.2020*