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# Accessibility of migrants to health care services and their vulnerability for tuberculosis

***Objective*** — was the assessment of accessibility and adressability of labour migrants to health care services and the identification of risk factors causing the TB morbidity.

***Materials and methods.*** 1207 labour migrants including 98 with pulmonary TB were investigated.

***Results and discussion.*** Republic of Moldova reports the biggest incidence of tuberculosis and the biggest rate of migrants among European Region countries. «Hard-to-reach features» of migrants were confirmed by the low aviability for health care, low awareness about their health state. TB vulnerability of migrants was confirmed by the association of multiple exogenous conditions worsened by TB contact.

***Conclusions.*** Migration is a specific risk factor that damaged the health state of the moldova population, necessiting the implementation of urgent TB screening procedures for ensuring a high accessibility to health care serive of this hard to reach group.

## Key words

Tuberculosis, migration, risk factors, health care.

**Labor market — vector of the mobility and migration.** There are an estimated one billion migrants in the world today, which include 232 million international migrants and 740 million internal migrants. TB particularly affects poor and vulnerable populations, migrants being assessed as key affected population [1—3]. In the frame of 61st the World Health Assembly of the WHO, approved a resolution (61.17 from 2008) regarding the health of migrants, asking Member States to promote health care policies and practices aiming migrant population [2]. The strategy aimed to end the global TB epidemic with specific benchmarks and targets till to 2035. It is built on a «know-your epidemic» approach and focuses particularly on serving those not reached/hard-to-reach as well as most vulnerable and marginalized populations. That strategy highlighted the needs of migrants and the necessity of the cross-border collaboration regarding the health of migrants. It was established that migrants' vulnerability to TB is caused by discriminatory policies in non-health sectors such as immigration service, labor and social protection departments. Absence of collaboration with this institutions and the absence of targeted TB prevention and control strategies regarding migrants create significant barriers in reaching TB elimination targets [1, 2, 4].

Migration is a big challenge, especially for the epidemiological security. Massive migration automatically involves the reducing of the public health actions for providing the epidemiological security goals. If the epidemiological security of the population immigrated from the country of origin is lower than the epidemiological security of the host country, migrants will bring with them infections and will be defined as public threat for the hosting population. This phenomen is well established for UE countries, where massive migration of groups originary from high burden for TB, especially MDR-TB countries, such as CSI countries, decreased the epidemiological security [1, 5]. If the epidemiological security in the hosting country is low, migrants when will cross the bordres in not security epidemiological conditions, put themselves in a doubtful safety being the first to contact the infectious diseases. Even within the state there are epidemiological security oscillations between different

regions according to its economical, climatic, epidemiological particularities that are reflected on the epidemiological indicators of internal migrant workers.

**Objective** was the assessment of accessibility and adressability of labour migrants to health care services and the identification of risk factors causing the TB morbidity among migrants population.

## Materials and methods

A retrospective, selective snd descriptive study of 1207 moldovan labour migrants returned home, including 98 with pulmonary TB were investigated according national protocoles during the period 2012–2013.

## Results and discussion

**Hard to reach group for health care services – labour migrants.** *A*ssessing total number of investigated migrants it was established the slight predominance of male sex *vs* femal ((52.5 ± 1.43) % and (47.5 ± 1.43) %). Resident provenience was more rural (58.5 ± 1.41) % than urban (41.5 ± 1,41) % ($p < 0.05$). Civic state was more frequently married (45.4 ± 1.43) % and concubinage (26.6 ± 1.27) %, than single persons (unmarried (24.3 ± 1.23) %, divorced (3.6 ± 0.53) %, widow (0.1 ± 0.09) %. Two third of migrants let children at home during their migration period (74.0 ± 1.26) %. Assessing the cause of health care seeking in R. of Moldova it was established that the majority of them accused clinical signs (73.8 ± 1.26) % and only a little part of migrants was asking prophylactic medical procedures (22.6 ± 1.20) %. Appreciating how much times they accessed screening procedures in the past, it was established that one thrid of migrants (32.7 ± 1.35) %) accessed 1 time/year, one thrid (30.2 ± 1.32) % – 1 time in 2 years, less individuals (22.0 ± 1.19) % more rarely, and the rest of them – never. Medical staff involved in medical procedures was general practitioner in (66.3 ± 1.36) % of cases, specialist in (13.7 ± 0.98) % of cases and 20 % of cases seek other health workers. Assessing the cause of non-addressability to health care services in R. of Moldova, was established that the health state was not so disturbed to seek health care in 24.41 % cases, had no time (21.98 % cases), had no money (18.65 % cases) and other causes were involved in 13.32 % cases. Assessing the medical staff implicated in the migration country, it was established that emergency care was involved in 27.42 % cases, public general practitioner in 21.32 % cases, private practitioner in 21.15 % cases, other health workers in 30.11 % cases.

**Why are migrants vulnerable to TB.** Assessing exogenous predisposing conditions for TB morbidity among labour migrants was determined the predomination of males *vs* females ((70.83 ± 4.63) % and (29.16 ± 4.63) %, $p < 0.001$), with male/female rate 2.6/1, charactarising the TB morbidity. Distribution in age groups established that predominated males from young age group 18–44 years old ((46.87 ± 5.09) %) due to complexity of social environment and females from 16–24 years old ((39.28 ± 9.23)%) due to physiological. Professional cathegories involved in labour migration were unqualified workers ((57.29 ± 5.04) %), qualified workers ((7.29 ± 2.65) %), other profesional cathegories (students, retired) were (19.41 ± 3.11) % pacients. Life conditions in the migration country was appreciated as good in (52.08 ± 5.09) % cases, and low in (47.92 ± 5.09) % cases. One third of them ((37.50 ± 4.94) %) had no a stable resident place ((37.50 ± 4.94) %). Single civic status had (41.66 ± 5.03) % in comparision with (58.33 ± ± 5.03) % patients were married&concubinage. History of imprisonment had (10.41 ± 3.11) % migrants. The most important epidemiological risk factor for TB morbidity is TB contact, documented in (44.79 ± 5.07) %, and (23.25 ± 6.44) % of them being from MDR-TB clusters. All mentioned data permited the hierarchy of exogenous risk factors predisposing TB development in labour migrants: male sex, low life conditions, young age, single civic state, TB contact, low professional qualification.

## Conclusions

TB is a big challenge for the public health of the R. Moldova, migrants being as 15.5 % from the total number TB patients. «Hard-to-reach features» of labour migrants were confirmed by the low seeking for health care, low awareness about thealth state and the necessity of medical examination, stigma. Vulnerability of migrants to TB morbidity was confirmed by the association of multiple exogenous conditions and not so much expressed TB contact. Discussions Radiological screening in pre-departure phase is the most important procedure for decreasing of TB rates among migrants. Raising awareness about TB, emphasizing that diagnosis and treatment is free of charge and independent regarding migration status are important TB control actions performed in this hard-to-reach population.

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# Доступність мігрантів до медичних послуг та їх вразливість для туберкульозу

***Мета роботи*** — оцінка доступності мігрантів до послуг охорони здоров'я і виявлення факторів, що викликають захворюваність на туберкульоз.

***Матеріали та методи.*** У Молдові реєструють високу захворюваність на туберкульоз і дуже високий показник міграції порівняно з країнами європейського регіону. Обстежено 1207 трудових мігрантів. Виявлено 98 хворих на туберкульоз легень.

***Результати та обговорення.*** Встановлено, що особливостями мігрантів є тяжкодоступність контактів, недоступність до послуг охорони здоров'я, низький рівень інформованості про власний стан здоров'я. Уразливість мігрантів щодо туберкульозу підтверджена сукупністю кількох екзогенних умов, які ускладнювалися туберкульозним контактом.

***Висновки.*** Міграція є специфічним фактором ризику для громадського здоров'я населення Молдови. Необхідні умови для здійснення скринінгових заходів з метою виявлення хворих на туберкульоз. Забезпечення високого рівня доступності до медичної допомоги є мірою оптимізації громадського здоров'я цієї тяжкодоступної для контролю групи.

***Ключові слова:*** туберкульоз, міграція, фактори ризику, охорона здоров'я.

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# Доступность мигрантов к медицинским услугам и их уязвимость для туберкулеза

***Цель работы*** — оценка доступности мигрантов к услугам здравоохранения и выявление факторов, вызывающих заболеваемость туберкулезом.

***Материалы и методы.*** В Молдове регистрируют высокую заболеваемость туберкулезом и очень высокий показатель миграции по сравнению со странами европейского региона. Обследованы 1207 трудовых мигрантов. Выявлены 98 больных туберкулезом легких.

***Результаты и обсуждение.*** Установлено, что особенностями мигрантов является труднодоступность контактов, недоступность к услугам здравоохранения, низкий уровень информированности о собственном состоянии здоровья. Уязвимость мигрантов относительно туберкулеза подтверждена совокупностью нескольких экзогенных условий, которые осложнялись туберкулезным контактом.

***Выводы.*** Миграция является специфическим фактором риска для общественного здоровья населения Молдовы. Необходимы условия для осуществления скрининговых мер в целях выявления больных туберкулезом. Обеспечение высокого уровня доступности к медицинской помощи является мерой оптимизации общественного здоровья этой труднодоступной для контроля группы.

***Ключевые слова:*** туберкулез, миграция, факторы риска, здравоохранение.

***Контактна інформація:***

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