

Training packages for health professionals to improve access and quality of health services for migrants and ethnic minorities, including the Roma

MODULE 2: KNOWLEDGE ABOUT MIGRANTS, ETHNIC MINORITIES AND THEIR HEALTH

Unit 1: Migrants' and ethnic minorities' health problems and health determinants

Elaborated by:

Olga Leralta, Andalusian School of Public Health, 2015

Outline of contents

- Presentation: Social context of migrants and ethnic minorities
- Presentation: Social determinants of health
- Presentation: Needs and frequent types of health problems of migrants and ethnic minorities

Social context of migrants and ethnic minorities

- Migrants in the EU27: 10.1% of the total population in 2013, 30% of them from other EU countries.
- Asylum claims: increasing since 2010 and reached in 2013 the highest level in Europe for a decade. Main countries of origin: Syria, Russian Federation, Afghanistan, Iraq and Serbia/Kosovo.
- Numbers of "irregular" migrants hard to estimate: approx. 1% of the population of the EU (5 to 8 million).
- Women make up approx. half of the migrants in Europe; in some countries, female migrants outnumber males

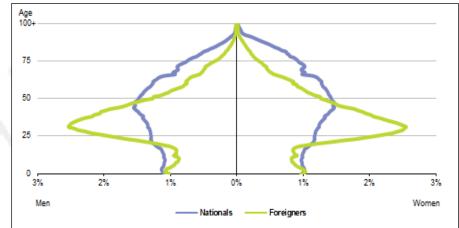
• Different terminology and definitions used when referring to ethnic minorities.

• Data collection not always disaggregated by ethnicity

•SES of MEM is lower and more likely to live in poverty than non-migrants and the majority population.

• Worsening conditions in some regions have led to an increase in asylum seekers and migrants. More restrictions on migration lead to increase in number of "irregular" migrants.

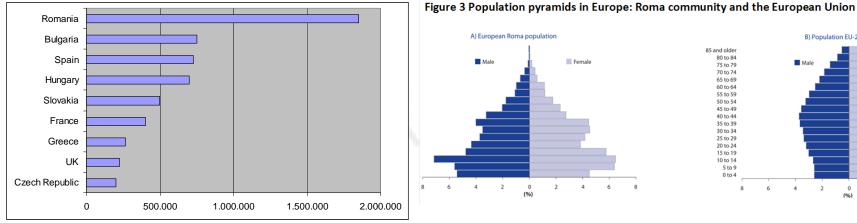
• Migrants tend to be younger than the native population.



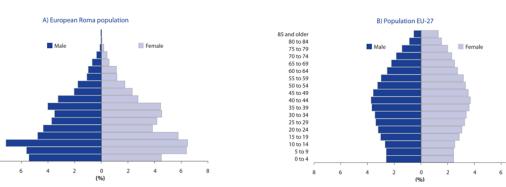
(Eurostat, <u>http://bit.ly/1qfH8dC)</u>

Roma is Europe's largest ethnic minority (approx. 11 million). Most Roma live in Central Eastern Europe. Less than 20% are nomadic.

Most migrant European Roma come from Eastern EU countries.



OSF, 2010. No Data—No Progress. Country Findings. Data Collection in Countries Participating in the Decade of Roma Inclusion, 2005–2015. http://osf.to/1uvswGX

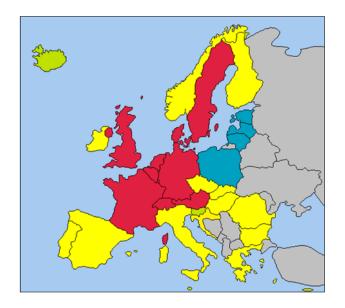


Roma Health Report. European Commission, Health and Consumers. http://ec.europa.eu/chafea/documents/health/roma-health-report-2014_en.pdf (accessed on 25th of November, 2014) In red: countries with rapid economic growth and net immigration in the 1950's and 1960's.

 In yellow: countries with increasing immigration during the 1980's and 1990's.

In green: countries with increasingly positive migration balance since 2000.

In blue: countries whose balance has remained (or become) negative. Figure 4: Economic growth and immigration in Europe after 2000



 2007 Economic crisis: policies have weakened the social position of migrants and limited their access to health care. Anti-immigration feeling has increased, health and social services have been cut.

Social determinants of health relevant for migrants and ethnic minorities

Making The Connections: Our City, Our Society, Our Health

•Many factors combine together to affect the health of migrants and communities. The determinants of health include:

the social and economic environment,

the physical environment, and

the person's individual characteristics and behaviours

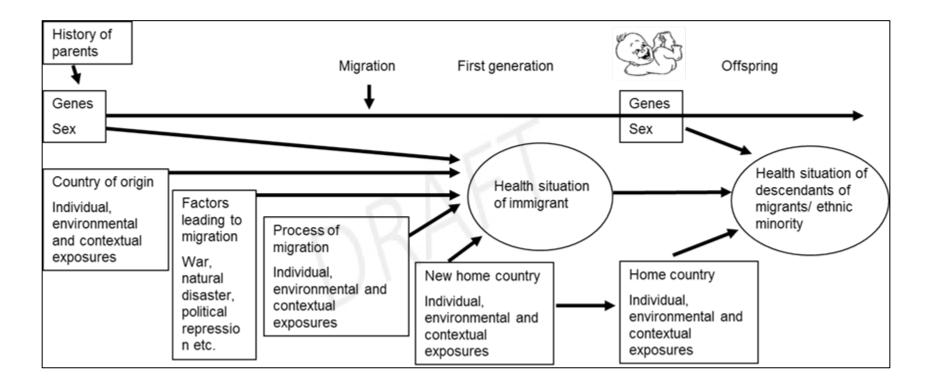
•Origin of health problems may lie in the **country of origin**, the **journey**, or in the **host country**.

•Life-course' considers highly complex interactions between all factors.

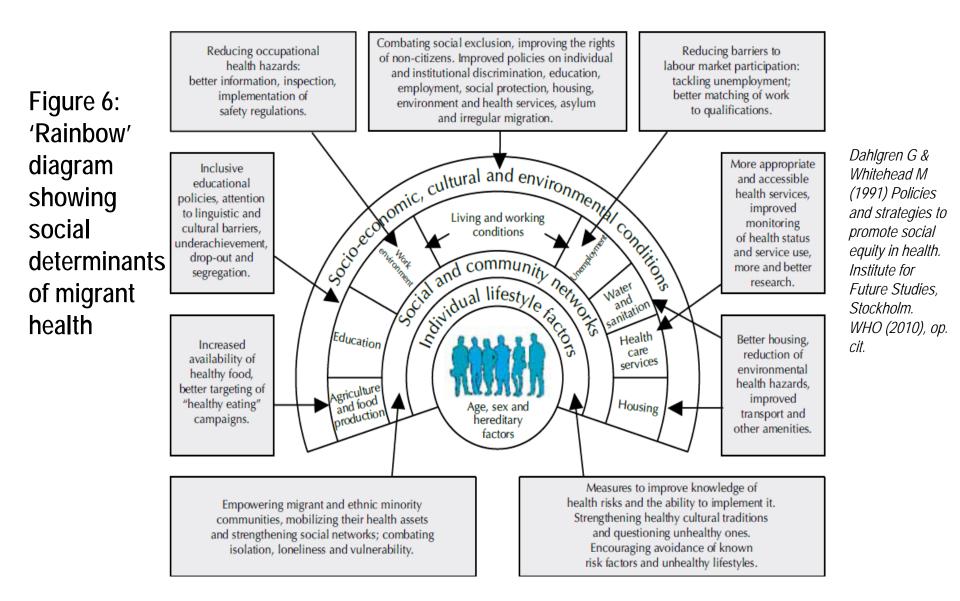
• "Healthy migrant effect"

Scarce data is available on descendants of migrants' Health

Figure 5: Different exposures during the life course on the health of migrants

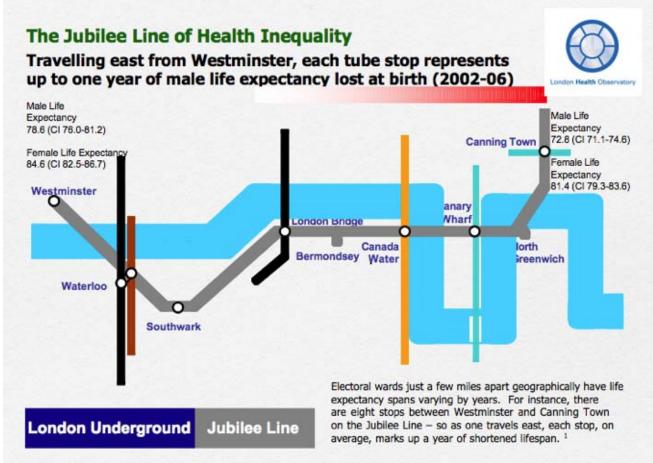


Reeske, A. and Spallek, J. (2012) Obesity among migrant children and adolescents: a life-course perspective on obesity development. In: Ingleby, D., Krasnik, A., Lorant, V. & Razum, O. (Eds.) Health inequalities and risk factors among migrants and ethnic minorities. COST Series on Health and Diversity, Volume I (pp. 237-256). Antwerp/Apeldoorn: Garant



		Direct determinants	Indirect determinants	
Figure 7: Risk factors for migrants' health	Nutrition	Lack of targeted health promotion,	Healthy food unavailable, unaffordable,	Ingleby, J.D. (2014) Social determinants of migrants' health. Presentation at workshop entitled "Health Impact Assessment: a tool to support healthier decision-making." EUPHA 5th European Conference on Migrant and Ethnic Minority Health, April 2014.
		unawareness of dangers of Western food, too little variation in diet.	or too time-consuming: necessity of relying on processed and ready-made food	
	Education	Non-recognition of qualifications, inequities in education system (e.g. unfair assessments, lack of opportunity for newcomers to catch up)	Barriers to good education (schooling and training) for the less well-off.	
	Work environment	Lack of targeted safety measures at work (e.g. bilingual instructions and warnings). Discrimination on the work floor.	Low-paid jobs often dangerous as well as poorly regulated and inspected	
	Living and working conditions	Diverse forms of social exclusion based on ethnicity or migrant status. Some connected with immigration policy, e.g. detention (which is a health threat in itself) or difficult family reunion.	Diverse forms of social exclusion based on low socioeconomic status	
	Employment	Discrimination in hiring and promotion, non-recognition of qualifications	Precarious work, long hours, strenuous and stressful work, poor working conditions	
	Water, sanitation, housing	Discrimination in allocation of housing, fewer rights for non-citizens	Poorer neighbourhoods are unhealthy ones	
	Health services	Fewer entitlements, poorer accessibility of services, lower quality (lack of 'difference sensitivity'). Inadequate screening and vaccination programmes.	Health services insufficiently adapted to those with low language ability, 'health literacy' and social capital	
	Social and community networks	Networks may be weakened by uprooting. Segregation helps social contact but makes upward social mobility harder	Lack of leisure time, low participation in community activities, less social capital	
	Individual lifestyle factors	Lack of effectively targeted health promotion. Cultural habits may undermine but also support health	Lack of effectively targeted health promotion. 'Unhealthy lifestyles' have determinants further upstream.	

Social determinants of health and the influence of SES



¹ Source: Analysis by London Health Observatory using Office for National Statistics data revised for 2002-06. Diagram produced by Department of Health

WHO Europe:

• "access to employment is a major aspect of social and economic inclusion. Levels of poverty are noted to be higher in the unemployed and other inactive members of society (...)

• Rates of unemployment vary by country, but there is evidence to indicate that employment income is reduced in migrant populations, particularly those of irregular migrants (...)

• Working people whose income is less than 60% of the median national income are at greater risk of poverty-associated outcomes (...)

• Some migrant populations are at particular risk of poverty (...) migrants in an *irregular situation; asylum seekers; single-parent migrant families,* specifically those headed by women; those traumatized or tortured during the migratory process; and the victims of human trafficking'

• Health risks correlated with migrant' and ethnic minorities' social conditions:

- poverty related to social exclusion;
- ✓lack of appropriate housing/accommodation;

✓ poor diet;

✓ **low level of income** associated to low education level or to employments not commensurate with their education.

Some of these factors are shared with other groups affected by poverty
 + factors specifically associated with the migratory process and the ethnic minority condition like barriers to access health care and discrimination and racism

Needs and frequent types of health problems of migrants

• Few generalizations can be made (depending on health problem, origin and host countries, sex and age, reason for migration, legal status and SES.

• "Healthy migrant effect" affected by factors before and during migration.

•Negative impact of migration when comparing health outcomes between migrants and host country populations.

• Mortality rates underestimated (tendency to return to their country of origin at old age). Causes of death oversimplified.

Self-reported health status subject to cross-cultural differences in the interpretation of wellbeing.

Non-communicable diseases

Cardiovascular diseases

The risk of mortality varies according to the migrants' country of origin.

✓ Complex interaction of factors which may underlie the higher risks of CVD among certain migrant and ethnic minority groups

Diabetes

Age-standardised diabetes prevalence is higher in migrant populations regardless of the country of origin of migrants.

Cancer

Cancer risk seems to be lower in migrant populations.

Screening programmes play an important role in the detection and early treatment

✓ Data is scarce.

Communicable diseases

 Implementation of screening programmes varies and the practices are different among countries

•HIV

✓ Certain groups of migrants have a higher risk of HIV infection. This may be connected with prevalence of HIV in the countries of origin but infections may also be contracted in the host country.

Tuberculosis

✓ TB notifications rate are **higher in foreign born** population than in native born population in Europe

- Other infectious diseases
 - ✓ Higher risk of hepatitis B, malaria and Chagas.
 - ✓ EU focus on vaccinations to hard to reach groups

Mental health

- Depression and anxiety disorders
 - Social disadvantage and lower SES are associated.
 - Perceived discrimination or racism can increase rates of common mental disorders
- Schizophrenia and related psychotic disorders
 - Overall prevalence is low (around 1%), but raised levels are found in some migrant groups
- Post-traumatic stress disorder (PTSD) and refugee mental health problems
 Mental health problems among refugees are not simply a matter of posttraumatic stress reactions. Origin may lie not in the country of origin, but in experiences endured during the journey and the asylum application procedure

Maternal and child health

- Higher risk of maternal mortality, low birth weight, premature birth, perinatal mortality and morbidity and congenital malformations
- The obstetric complications associated with FGM present challenges to health service providers.

Occupational health and safety

- MEM exposed to increased health risks while working in "3D jobs"
- High prevalence of overtime work and related risks for accidents and ill health among migrant workers
- Unreported and untreated work-related illnesses.
- Language-related barriers to communication and training in OHS

Needs and frequent types of health problems of ethnic minorities

- Roma in Europe suffer significant health inequalities when compared to the majority non-Roma population.
- Roma are estimated to live approx. 10 years less than non-Roma
- Social and environmental determinants: lower income, poor living conditions, discrimination and racism, and barriers to accessing health services.
- Research on other national ethnic minorities is limited. Sami population (Norway, Finland and Sweden) reported to be in worse health specially Sami women. They experience discrimination and language barriers when accessing to health services

Non-communicable diseases

✓ Higher prevalence of cardiovascular disease, diabetes and obesity

✓ Roma women experience higher prevalence of some of these health problems than Roma men

✓ Influence of **lifestyle related factors** (smoking, limited physical activity and inadequate diet)



Communicable diseases and Mental health

✓ Negative impact of low SES, discrimination, racism, poverty, and marginalisation; higher rates of certain communicable diseases



Pictures: Andalusian Childhood Observatory (OIA, Observatorio de la Infancia de Andalucía) 2014; Josefa Marín Vega 2014; RedIsir 2014; Morguefile 2014.

Ingleby D. Ethnicity, Migration and the 'Social Determinants of Health' Agenda. Psychosocial Intervention 2012;21(3):331-341.

Marmot M, Allan J, Bell R, Bloomer E, Goldblatt P, on behalf of the Consortium for the European Review of Social Determinants of Health and the Health Divide. WHO European review of social determinants of health and the health divide. Lancet 2012;380(15):1011-1029.

ECDC (2014) Assessing the burden of key infectious diseases affecting migrant populations in the EU/EEA. European Centre for Disease Prevention and Control.

Roma Health Report. European Commission, Health and Consumers. <u>http://ec.europa.eu/chafea/documents/health/roma-health-report-</u> <u>2014_en.pdf</u> (accessed 25th November, 2014).

Newland, K. (2009). Circular Migration and Human Development, Human development research paper 2209/42, UNDP

Vertovec, S. (2010). Towards post-multiculturalism? Changing communities, conditions and contexts of diversity. International Social Science Journal, 61: 83–95.

IOM (2008) World migration 2008, Managing labour mobility in the evolving global economy. Geneva, IOM.

UNHCR (2014), Asylum Trends 2013. Levels and Trends in Industrialized Countries. New York: United Nations High Commissioner for Refugees.

Gushulak B, Pace P, Weekers J (2010). Migration and health of migrants. In: Poverty and social exclusion in the WHO European Region: health systems respond. Copenhagen, WHO Regional Office for Europe.

http://picum.org/en/our-work/who-are-undocumented-migrants/

Düvell F (2009). Irregular migration in northern Europe: overview and comparison. Oxford, University of Oxford Centre on Migration, Policy and Society

Flanders, O.A. (2011). Immigration to EU Member States down by 6% and emigration up by 13% in 2008. Eurostat, available at http://bit.ly/1tRsWGm

Kouta, C., Kaite, C. (2012). Health issues among female migrant domestic workers.In: Ingleby, D., et al (eds). Health inequalities and risk factors among migrants and ethnic minorities, Vol. 1. COST Series on Health and Diversity. Antwerp: Garant Publishers.

Yamamoto, D.H. (2013). Health Care Costs – From Birth to Death. Schaumburg, Illinois: Society of Actuaries. Sjölander, P. (2009). What is known about the health and living conditions of the indigenous people of northern Scandinavia, the Sami? Global health Action 4.

Agudelo-Suárez, A.A., Ronda-Pérez, E. & Benavides, F.G. (2011). Occupational health. In: Rechel et al., op cit., 155-168.

Voko, Z. et al. (2009) Does socioeconomic status fully mediate the effect of ethnicity on the health of Roma people in Hungary? J Epidemiol Community Health; 63: 455-460.

Masseria, C., Mladovsky, P., Hernández-Quevedo, C. (2009) The socio-economic determinants of the health status of Roma in comparison with non-Roma in Bulgaria, Hungary and Romania. European Journal of Public Health, Vol. 20, No. 5: 549-554.

Eurofound (2013). Impacts of the crisis on access to healthcare services in the EU, Dublin.

Gushulak B, Pace P, Weekers J (2010). Migration and health of migrants. In: Poverty and social exclusion in the WHO European Region: health systems respond. Copenhagen, WHO Regional Office for Europe.

Gimeno-Feliu LA, Calderon-Larranaga A, Diaz E, Poblador-Plou B, Macipe-Costa R, Prados-Torres A. The healthy migrant effect in primary care. Gac Sanit. 2014.

Reeske, A. and Spallek, J. (2012) Obesity among migrant children and adolescents: a life-course perspective on obesity development. In: Ingleby, D., Krasnik, A., Lorant, V. & Razum, O. (Eds.) Health inequalities and risk factors among migrants and ethnic minorities. COST Series on Health and Diversity, Volume I (pp. 237-256). Antwerp/Apeldoorn: Garant

Jack, R.H., Davies, E.A. & 1 Møller, H. (2011) Lung cancer incidence and survival in different ethnic groups in South East England. British Journal of Cancer 105, 1049–1053.

Singh, S.P. and Burns, T. (2006) Race and mental health: there is more to race than racism. British Medical Journal, 333(7569): 648–651.

CSDH (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on the Social Determinants of Health. Geneva, World Health Organization

Dahlgren G & Whitehead M (1991) Policies and strategies to promote social equity in health. Institute for Future Studies, Stockholm. Ingleby, J.D. (2014) Social determinants of migrants' health. Presentation at workshop entitled "Health Impact Assessment: a tool to support healthier decision-making." EUPHA 5th European Conference on Migrant and Ethnic Minority Health, April 2014

Sainsbury, D. (2012) Welfare States and Immigrant Rights: The Politics of Inclusion and Exclusion. Oxford: Oxford University Press.Centre for Maternal and Child Enquiries (2011). Saving Mothers' Lives: Reviewing deaths to make motherhood safer: 2006–2008. BJOG, 118(s1):1–203. Migrant and Ethnic Health Observatory (MEHO). Website: http://www.meho.eu.com/ (temporarily unavailable)

Vandenheede, H. et al. (2012). Migrant mortality from diabetes mellitus across Europe: the importance of socio-economic change. European Journal of Epidemiology 27, 109–117.

Devillé W et al. (2006). Perceived health and consultation of GPs among ethnic minorities compared to the general population in the Netherlands. In: Westert GP, Jabaaij L, François G, eds. Morbidity, performance and quality in primary care. Oxford, Radcliffe Publishing Ltd:85–96.

Kunst, A., Stronks, K. and Agyemang, C. (2011) Non-communicable diseases. In: Rechel et al. (2011), op. cit., 101-120; Carballo. M. (2009a). Non-communicable diseases. In: Fernandes, A., Pereira Miguel, J., eds. (2009). Health and migration in the European Union: better health for all in an inclusive society. Lisbon, Instituto Nacional de Saúde Doutor Ricardo Jorge:71–81

Ujcic-Voortman, J.K., Baan, C.A., Seidell, J.C., Verhoeff, A.P. (2012). Obesity and cardiovascular disease risk among Turkish and Moroccan migrant groups in Europe: a systematic review. Obesity Reviews 13, 2–16.

Bhopal RS, Rafnsson SB, Agyemang C, et al. (2011). Mortality from circulatory diseases by specific country of birth across six European countries: test of concept. Eur J Public Health 22:353-9.

Rafnsson, S.B., Bhopal, R.S., Agyemang, C., Fagot-Campagna, A., Harding, S., Hammar, N., Kunst, A.E. et al. (2013). Sizable variations in circulatory disease mortality by region and country of birth in six European countries. Eur J Public Health, 23 (4) 594 - 605.

Vandenheede, H. et al. (2012). Migrant mortality from diabetes mellitus across Europe: the importance of socio-economic change. European Journal of Epidemiology 27, 109–117.

Nørredam, M., Nielsen, S. and Krasnik, A. (2010). Migrants' utilization of somatic healthcare services in Europe – a systematic review. European Journal of Public Health, 20(5): 555–63.

Berens, E-M, Spallek, J. and Razum, O, (2012). Breast cancer screening among immigrant women: do we need specific approaches in risk communication? In Ingleby, D., Krasnik, A., Lorant, V. & Razum, O. (Eds.) Health inequalities and risk factors among migrants and ethnic minorities. COST Series on Health and Diversity, Volume I (pp. 304-318). Antwerp/Apeldoorn: Garant.

Bateman-House, A., Fairchild, A. (2008). Medical Examination of Immigrants at Ellis Island. Virtual Mentor 10(4), 235-241.

Kärki T, Napoli C, Riccardo F, Fabiani M, Dente MG, Carballo M, Noori T, Declich S. Screening for Infectious Diseases among Newly Arrived Migrants in EU/EEA Countries-Varying Practices but Consensus on the Utility of Screening. Int J Environ Res Public Health. 2014 Oct 21;11(10):11004-14. available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4211019/ (retrieved Janueary 23, 2015)

Kärki T, Napoli C, Riccardo F, Fabiani M, Dente MG, Carballo M, Noori T, Declich S. Screening for Infectious Diseases among Newly Arrived Migrants in EU/EEA Countries-Varying Practices but Consensus on the Utility of Screening. Int J Environ Res Public Health. 2014 Oct 21;11(10):11004-14. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4211019/

F. Riccardo, M.G.Dente, M.Kojouharova, M.Fabiani, V.Alfonsi, A.Kurchatova, N.Vladimirova, S. Declich. Migrant's access to immunization in Mediterranean Countries. Health Policy 2012; 105:17–24.

Wörmann, T., Krämer, A. (2011). Communicable diseases. In: Rechel, B. et al (eds.). Migration and health in the European Union. European observatory on health systems and policies. Open University Press.

Bhugra, D., Gupta, S. (eds.) (2006). Migration and Mental Health. London and New York: Cambridge University Press

Horwitz, A.V., Wakefield, J.C. (2006). The epidemic in mental illness: clinical fact or survey artifact? Contexts, 5(1): 19-23.

Karlsen, S. et al. (2005). Racism, psychosis and common mental disorder among ethnic minority groups in England. Psychological Medicine, 35:12:1795–1803

Ingleby, D. (2008). New perspectives on migration, ethnicity and schizophrenia. Willy Brandt Series of Working Papers in International Migration and Ethnic Relations 1/08, IMER/MIM, Malmö University, Sweden.

Fazel, M., Wheeler, J., Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. The Lancet, 365:9467:1309–1314.

Lindert, J. et al. (2009). Depression and anxiety in labor migrants and refugees – a systematic review and meta-analysis. Social Science & Medicine, 69:2:246–257.

Ingleby, D. (ed.) (2005) Forced migration and mental health: rethinking the care of refugees and displaced persons. New York: Springer.

Pedersen, G.S., Grøntved, A., Mortensen, L.H., Andersen, A.-M.N., Rich-Edwards, J. (2013). Maternal Mortality Among Migrants in Western Europe: A Meta-Analysis. Matern Child Health J 1–11.

Bollini, P., Pampallona, S., Wanner, P., Kupelnick, B., (2009). Pregnancy outcome of migrant women and integration policy: A systematic review of the international literature. Social Science & Medicine 68, 452–4

Reeske, A., Razum, O. (2011). Maternal and child health – from conception to first birthday. In Rechel et al. (2011), op. cit., 139-144 Villadsen, S.F., et al (2010). Cross-country variation in stillbirth and neonatal mortality in offspring of Turkish migrants in northern Europe. European Journal of Public Health, 20(5):530–535.

McCauley, L.A. (2005) Immigrant workers in the United States: recent trends, vulnerable populations, and challenges for occupational health. Journal of the American Association of Occupational Health Nurses, 53(7), 313–19.

Skodova, Z. et al (2010) Psychosocial factors of coronary heart disease and quality of life among Roma coronary patients: a study matched by socioeconomic position. International Journal of Public Health; 55(5): 373-80

Monteiro, A.P. et al (2013) Promotion of mental health in Roma people: social representations of mental health and wellbeing in a Roma community. European Psychiatry: Abstracts of the 21th European Congress of Psychiatry.

Smith, D., Ruston, A. (2013) 'If you feel that nobody wants you you'll withdraw into your own': Gypsies/Travellers, networks and healthcare utilisation. Sociology of Health and Illness, Vol. 35; 8:1196-1210.

Casals, M. et al (2011) Incidence of infectious diseases and survival among Roma population: a longitudinal cohort study. The European Journal of Public Health, 1-6.

Kallayova, D., Bosak, L. (2012). Improvements of health services for Roma communities in Slovakia. In: Ingleby, D. et al (eds.) Inequalities in Health Care for Migrants and Ethnic Minorities. COST Series on Health and Diversity. Antwerpen: Garant Publishers.

Rechel, B. et al (2009). Access to health care for Roma children in Central and Eastern Europe: findings from a qualitative study in Bulgaria. International Journal for Equity in Health, 8: 24.

Hansen, K., Melhus, M., Lund, E. (2010). Ethnicity, self-reported health, discrimination and socioeconomic status: a study of Sami and non-Sami Norwegian populations. International Journal of Circumpolar Health, North America, 69.

Zeljko, H.M. et al (2013) Age trends in prevalence of cardiovascular risk factors in Roma minority population of Croatia. Economics and Human Biology 11: 326-336.

Qureshi A, Collazos F, Sobradiel N, Eiroa-Orosa FJ, Febrel M, Revollo-Escudero HW, et al. Epidemiology of psychiatric morbidity among migrants compared to native born population in Spain: a controlled study. Gen Hosp Psychiatry. 2013;35(1):93-9.

Razum O. Commentary: of salmon and time travellers--musing on the mystery of migrant mortality. Int J Epidemiol. 2006;35(4):919-21.

Razum O, Zeeb H, Akgun HS, Yilmaz S. Low overall mortality of Turkish residents in Germany persists and extends into a second generation: merely a healthy migrant effect? Trop Med Int Health. 1998;3(4):297-303.

Norredam M, Olsbjerg M, Petersen JH, Juel K, Krasnik A. Inequalities in mortality among refugees and immigrants compared to native Danes--a historical prospective cohort study. BMC Public Health. 2012;12:757.

Boulogne R, Jougla E, Breem Y, Kunst AE, Rey G. Mortality differences between the foreign-born and locally-born population in France (2004-2007). Soc Sci Med. 2012;74(8):1213-23.

Salway, S., et al (2011). Contributions and challenges of cross-national comparative research in migration, ethnicity and health: insights from a study of maternity experiences and outcomes. BMC Public Health, 11:514.

The lancet Commission Culture and Health (2014) Lancet 2014; 384: 1607–39 available at http://dx.doi.org/10.1016/S0140-6736(14)61603-2 (retrieved December 19, 2015)

Kallayova, D., Bosak, L. (2012) Improvement of health services for Roma communities in Slovakia. In: Ingleby, D. et al (eds.) Inequalities in Health Care for Migrants and Ethnic Minorities. COST Series on Health and Diversity. Antwerpen: Garant Publishers.

OSF, 2010. No Data—No Progress. Country Findings. Data Collection in Countries Participating in the Decade of Roma Inclusion, 2005–2015. Dinca, I. (2011) Vaccine preventable diseases and the Roma. European Centre for Disease Prevention and Control.

Muscat, MD (2011). Who Gets Measles in Europe?. The Journal of Infectious Diseases 2011;204:S353–S36 Orlikova H, Rogalska J, Kazanowska-Zielinska E, Jankowski T, Slodzinski J, Kess B, Stefanoff P. Spotlight on measles 2010: A measles outbreak in a Roma population in Pulawy, eastern Poland, June to August 2009. Euro Surveill. 2010;15(17):pii=19550.

Hellenic Center for Disease Control and Prevention (2014)

Mellou K, et al. (2015) Considerations on the Current Universal Vaccination Policy against Hepatitis A in Greece after Recent Out-breaks. PLoS ONE 10(1): e0116939. doi:10.1371/journal.pone.0116939.

© European Union, 2015

For any reproduction of textual and multimedia information which are not under the © of the European Union, permission must be sought directly from the copyright holders.

© Cover Illustrations: Observatorio de la Infancia de Andalucía, Escuela Andaluza de Salud Pública. Junta de Andalucía.



Funded by the European Union in the framework of the EU Health Programme (2008-2013) in the frame of a service contract with the Consumer, Health, Agriculture and Food Executive Agency (Chafea) acting under the mandate from the European Commission. The content of this report represents the views of the Andalusian School of Public Health (EASP) and is its sole responsibility; it can in no way be taken to reflect the views of the European Commission and/or Chafea or any other body in the European Union. The European Commission and/or Chafea do not guarantee the accuracy of the data included in this report, nor do they accept responsibility for any use made by third parties thereof.