

# Mig-HealthCare Roadmap & Toolbox

## Oral Health – Dental Care



## Oral Health – Dental Care

### 1. Magnitude of the problem

#### Prevalence of oral health problems

WHO defines oral health as “a state of being free from chronic mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual’s capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing” (WHO, 2003).

Oral diseases are the most common non communicable diseases (NCD) affecting half of the world’s population (GBD 2016) with seven oral diseases and conditions accounting for most of the oral disease burden (see below) led by dental caries being the most prevalent. This counts particularly for young ages (Benjamin, 2010).

The above mentioned WHO definition indicates that oral health has a huge impact on wellbeing in general and is associated with various psychological and social factors making it a key factor of overall health, wellbeing and quality of life. There is a strong and consistent association between socioeconomic status (income, occupation and educational level) and the prevalence and severity of oral diseases. Furthermore, as has been pointed out by Watt (2007) oral health must be seen as one aspect within a wider social determinants and health inequities picture. Thus a sole focus on a biomedical curative downstream perspective would tend to neglect important upstream factors relating to social determinants of health and inequities. Often vicious circular causality may be set in motion. Thus lack of income and cooking facilities may favour unhealthy diets rich in sugar and calories. These may lead to poor general and oral health, but poor dentition and oral health in its turn may lead to lack of mastication and poor unvaried diet and further dental problems linked to the lack of natural teeth cleansing. Such causalities associated with eating food are embedded within both individual lives and social rituals such as meals. These may also have great importance in terms of creating and maintaining social ties within a community with positive effects on general health and well-being.

Other NCDs like diabetes or obesity may share common modifiable risk factors (e.g. unhealthy diets, alcohol consumption and tobacco use) but also present bidirectional links with oral health. All in all, oral health should be regarded as a main health issue as far as care and prevention are concerned.

### 2. Reference to the problem concerning migrants/refugees

#### Oral health and dental care among migrants and refugees

The Mig-HealthCare survey has shown that the most frequent chronic health problem migrants/refugees face is caries (36,2 %) whereas in accordance the most frequent health issues found important by migrants is teeth problems (51%). In addition, various scientific studies have shown comparatively high prevalence rates in migrants, particularly migrant children. Generally, little is known about the dental health of migrants as well as about their oral health behaviour, particularly in the adult population.



Studies conducted up to date show that:

- migrants in many European countries tend to utilize preventive measures less frequently than the majority population;
- the prevalence of caries among children born to migrants is higher compared with children who did not have a migrant background;
- migrant children are more often affected by gingivitis and less likely to seek orthodontic treatment or counselling compared to other children of the same age group;
- that there is a strong link between migrant background and the usage of regular dental check-ups even regardless of socioeconomic and demographic status as well as place of residence and health insurance. It has been shown, that particularly younger migrants (between 18 and 29 years) make less use of preventive dental care and regular check-ups than non-migrants (Bodenwinkler, Kerschbaum & Sax, 2012; Erdsiek, Dorothee Waury & Patrick Brzoska, 2017; Arabi, Reissmann et al., 2018).

It is very likely that in the coming years as migrants/refugees are about to integrate into European host communities the need for oral and dental health care provision will increase and the pressure on dental care services across the EU will grow significantly.

### Risk factors

There are several behavioural risk factors for oral diseases shared with other major NCDs, such as:

- Unhealthy diet high in free sugars (particularly high exposure to soft drinks and/or juices)
- Tobacco use and harmful use of alcohol
- Additionally, poor oral hygiene and inadequate exposure to fluoride have negative effects on oral health.

There is generally a strong link between social determinants and oral health problems. Furthermore, health care systems in most low-and middle-income countries are often not able to meet the demands for adequate and regular dental care service provision.

Provision of dental/oral care is often associated with high costs and migrants – depending on their residence status – regularly face legal restrictions and high barriers at least in regards to full care and regular preventive check-ups.

In a survey of 1229 refugees and migrants conducted within the MIGHELTHCARE project in 8 EU countries, 17.4% of migrants consider their dental condition as poor and 26.6% fair. A total of 27.3% have visited a dentist during the last year, while 23.7% have never visited a dentist or a dentist's clinic in their lives. Overall, 10.4% said they do not brush their teeth on a daily basis and 29.4% of the responding migrants do not know where to go in case they need a dentist.

### Reference to issues of particular interest

According to the WHO (<https://www.who.int/news-room/fact-sheets/detail/oral-health>) the oral disease burden globally is attributable to seven oral diseases: dental carries also known as tooth decay, periodontal or gum disease,



oral cancers, HIV related oral problems, oro-dental trauma, cleft, lip and palate and noma. The majority of these conditions is preventable or has a very good prognosis if diagnosed and treated early.

### 3. Important steps for the Health care sector

Data on the health status and use of oral care provision is still scarce, but it is clear, that specific vulnerable migrant groups, especially refugees/asylum seekers, have no or restricted legal access to full oral care provision. Lowering access barriers to the care system and the expansion of specific programs for prophylactic and intervention for the migration population are necessary for long-term improvements of oral health. Besides legal barriers there are socioeconomic factors (unemployment and/or reduced income vs. high financial burden associated with dental care) limiting access for migrants to adequate oral care. It is crucial to implement effective monitoring tools to steer future targeted preventive programs.

### 4. Further considerations

Bearing in mind the paucity of peer-reviewed evidence and information at our disposal concerning access to dental care by migrants and refugees, we may draw upon models of health care access e.g. Levesque (2013). We may advance a number of hypotheses based on initial observations in the field and analogies with other marginal vulnerable groups. Levesque suggests that patients will need a set of skills to achieve good health care access. These include the ability to perceive needs and have the desire for care, to seek health care, to reach healthcare, to pay for healthcare, and to engage with the system and consequences. Obviously as with other users all these do not only depend on the patient but also on how the system is organised, run, provided, and funded. Thus in the case of migrants an important factor is not just the availability of care but also the availability of linguistic interpreters and cultural mediators. Different criteria such as approachability, availability of care, affordability, and appropriateness may be considered. Nevertheless, initial observations and analogies with other areas of healthcare push us to explore additional hypotheses concerning the provision of care itself and how providers themselves see and carry out their role. One may mention two such hypotheses.

There is a common perception that migrants will require more resources and time and for this greater perceived effort dentists will not receive additional payment. Even though this belief is not necessarily true, it may operate as a disincentive to take on migrant patients. This may lead to reduced dental care access.

If one draws an analogy with medical practice, one may not rule out that group categorisation may lead to poorer dental care access and provision through three different mechanisms: a) prejudice b) greater clinical uncertainties present when working with minority groups and c) stereotyping (Balsa & Mcguire, 2003)



## 5. General Recommendations

As outlined in the Mig-HealthCare report on prediction models (available from the project website) it is recommended among migrants/refugees to:

- monitor oral health status to identify community healthcare problems
- diagnose and analyse oral health risks in the community
- inform and educate the target population through health education campaigns, targeted and cultural sensitive information material, media involvement, community groups, partnerships etc.
- advocate to promote policy and law changes and enforcement
- conduct trainings in community oral health, consider geographical allocation of professionals and monitor activities

In addition, WHO points out the importance of promoting healthy settings such as healthy cities, healthy workplaces and health promoting schools to build comprehensive supporting environments for promoting oral health among migrants and refugees.

## 6. Prevention

WHO suggests reducing common risk factors through public health and policy interventions including:

- promotion of a well-balanced diet (a) low in free sugars to prevent development of dental caries, premature tooth loss and other diet-related NCDs (b) with adequate fruit and vegetable intake, which may have a protective role in oral cancer prevention
- reduction of smoking, the use of smokeless tobacco including chewing of areca nuts, and alcohol consumption to reduce the risk of oral cancers, periodontal disease and tooth loss; additionally
- encouraging use of protective equipment when doing sports and travelling in motor vehicles to reduce the risk of facial injuries.
- maintaining a constant low level of fluoride in the oral cavity (drinking water, salt, milk and toothpaste)
- regulation of the marketing and promotion of sugary foods to children and taxes on sugar-sweetened beverages.

## 7. Examples of best practices to improve migrant oral health and its access

The Mig-HealthCare project reviewed and evaluated relevant interventions offered to migrants and refugees. We include in this roadmap some examples that can be used in different settings based on the evaluation process of the systematic review that was conducted by the Mig-HealthCare partners. More information about these and other promising practices can be found on the project's website <http://www.mighealthcare.eu/> by accessing the report titled 'D5.1: Report on models of community health and social care and best practices'.



- **Usage of oral health assessment tools specific for the refugee/migrant population such as the Early Childhood Oral Health Impact Scale (ECOHIS)** (Pahel, Rozier, Slade, 2007; Farsi et al. 2017)

The effectiveness the usage has been validated with Arabic speaking population. This tool when accompanied by a clinical dental examination, preferably in a school-setting following the WHO caries diagnostic criteria (WHO 1997, Oral Health Surveys) helps to identify the key issues related to oral health care needs in the specific population and facilitates intervention.

- **Collaboration with local communities to raise the oral health levels** (Dimitropolous et al., 2018)

Use of the precede-proceed model to identify the needs of young school children 5-12 years, conduct an epidemiological assessment to identify the predisposing, reinforcing and enabling factors with regards to oral health, along with an educational and environmental assessment.

Children in Aboriginal communities consented to participate to dental screening, assessment, therapy and follow-up care by the local preventive services. Current oral hygiene practices were recorded, as well as prior dental problems, food consumption and food knowledge. Similar information was collected from their parents/guardians. Based on the results of the assessment, a tailor-made intervention was designed including regular community meetings, distribution of toothbrushes, sessions on how to use a toothbrush and on proper brushing. The results of the study were made known to the local community and discussed. The collaboration of local community members, local authority staff and health workers is crucial in ensuring success of the intervention.

- **The Louis Guilloux Network** (Réseau Louis Guilloux <https://rlg35.org/>)

Founded in 1991 this initiative is a cooperation of general and hospital doctors to assist the HIV positive patients in the city of Rennes France. Later this network was orientated towards the migrant population in the area following a multidisciplinary medical, psychological and social approach. Currently the network has 5 areas of activities:

- Area Migrants (since 2005) with DATASAM which facilitates migrant's access to care and prevention services
- Area Medico-Social Interpretation (since 2007) a service that facilitates the communication between migrants and medico-social professionals
- Area Tuberculosis (since 2006) facilitates epidemiological research and prevention of TB
- Area Sexual Health (since 2014) coordination of related activities in the region of Bretagne
- Departments of Therapeutical Coordination for the chronic disease patients to reinforce autonomy and social integration

Within this network, specific suggestions for good practice in initial check-up visits, diagnosis and referrals including dental care are made. Suggestions of good practice may be put forward in relation to unpublished observations of how a migrant health network, The Louis Guilloux network in Rennes in France, is run especially in relation to the referral of patients for treatment. The approach is based on providing an initial checkup by a dental practitioner for all migrant patients. This visit allows triage, customized advice and appropriate referrals to colleagues with experience of treating migrant patients and working with interpreters when necessary. Migrants may be schematically separated in two groups regarding their need for dental care: minor needs (routine treatments) and major needs (complex treatments)



**Minor needs:** One of the main issues for the minor needs patients to overcome is the appointment hurdle. Where only routine treatments are needed, this is taken into account through the dental secretary making the appointment with a dentist via internet on behalf of the migrant.

**Major needs:** Issues for major needs patients are more complex, and they require a trustful and understanding relationship with the care provider. They also require more time and several patient visits and habitually will require interpreters and cultural mediators. The following practice is promoted. The dentist carrying out the initial check-up contacts his or her colleagues to explain and discuss the case. An appointment or series of appointments is also fixed by the dentist on behalf of the migrant patient. This avoids any appointment hurdle and achieves good future care and level of treatment. These procedures offer substantial advantages since they:

- avoid any difficulties in obtaining an appointment, a very real obstacle for migrants with poor language and understanding of the health system.
- ensure continuity of care in complex cases through complementary explanations between colleagues.

## 8. Toolbox

Please access our toolbox for additional tools related to the management of oral/dental health issues among migrants and refugees.



## 9. References

- Aarabi, G., Reissmann, D. R., Seedorf, U., Becher, H., Heydecke, G., & Kofahl, C. (2018). Oral health and access to dental care—a comparison of elderly migrants and non-migrants in Germany. *Ethnicity and Health*, 23(7), 703–717. <https://doi.org/10.1080/13557858.2017.1294658>
- Balsa, A. I., & McGuire, T. G. (2003). Prejudice, clinical uncertainty and stereotyping as sources of health disparities. *Journal of Health Economics*, 22(1), 89-116. [https://doi.org/10.1016/S0167-6296\(02\)00098-X](https://doi.org/10.1016/S0167-6296(02)00098-X)
- Bodenwinkler, A., Kerschbaum, J., & Sax, G. (2012). Länder-Zahnstatuserhebung 2012 Zwölfjährige in Österreich. Zwölfjährige Kinder mit und ohne Migrationshintergrund. Retrieved from <http://www.hauptverband.at/cdscontent/load?contentid=10008.597921>
- Chapple, I. L. C., & Genco, R. (2013). Diabetes and periodontal diseases: Consensus report of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases. *Journal of Clinical Periodontology*, 45(2), 138-149. <https://doi.org/10.1111/jcpe.12077>
- Dimitropoulos, Y., Gunasekera, H., Blinkhorn, A., Byun, R., Binge, N., Gwynne, K., & Irving, M. (2018). Aboriginal communities in rural New South Wales, Australia to determine the oral health needs of their children develop a community-owned oral health promotion program. *Rural and Remote Health*, 18(2), 4453. <https://doi.org/10.22605/RRH4453>
- Erdsiek, F., Waury, D., & Brzoska, P. (2017). Oral health behaviour in migrant and non-migrant adults in Germany: The utilization of regular dental check-ups. *BMC Oral Health*, 17(1), 84. <https://doi.org/10.1186/s12903-017-0377-2>
- Farsi, N. J., El-Housseiny, A. A., Farsi, D. J., & Farsi, N. M. (2017). Validation of the Arabic Version of the Early Childhood Oral Health Impact Scale (ECOHIS). *BMC Oral Health*, 17(1), 60. <https://doi.org/10.1186/s12903-017-0353-x>
- Levesque, J. F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, 12(1), 18. <https://doi.org/10.1186/1475-9276-12-18>
- Pahel, B. T., Rozier, R. G., & Slade, G. D. (2007). Parental perceptions of children's oral health: The Early Childhood Oral Health Impact Scale (ECOHIS). *Health and Quality of Life Outcomes*, 5, 6. <https://doi.org/10.1186/1477-7525-5-6>
- Taylor, G. W., & Borgnakke, W. S. (2008). Periodontal disease: Associations with diabetes, glycemic control and complications. *Oral Diseases*, 4(3), 191-203. <https://doi.org/10.1111/j.1601-0825.2008.01442.x>
- Vos, T., Abajobir, A. A., Abbafati, C., Abbas, K. M., Abate, K. H., Abd-Allah, F., ... Murray, C. J. L. (2017). Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*, 390(10100), 1211–1259. [https://doi.org/10.1016/S0140-6736\(17\)32154-2](https://doi.org/10.1016/S0140-6736(17)32154-2)



Watt, R. G. (2007). From victim blaming to upstream action: tackling the social determinants of oral health inequalities. *Community Dentistry and Oral Epidemiology*, 35(1), 1-11. <https://doi.org/10.1111/j.1600-0528.2007.00348.x>

World Health Organization (2003). *The World Oral Health Report 2003. Continuous improvement of oral health in the 21st century – the approach of the WHO Global Oral Health Programme*. Retrieved from [https://www.who.int/oral\\_health/media/en/orh\\_report03\\_en.pdf](https://www.who.int/oral_health/media/en/orh_report03_en.pdf)

