An exploratory study of oral health issues among irregular migrants in Oslo.

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Abstract

Background: Oral diseases and disorders are viewed to be more extensive and severe among migrants from low income countries and refugees than medium or high income host population. Irregular migrants represent a distinct group of the migrant population who are exposed to higher health risks due to a marginalised living condition related to extreme limited legal rights in the host country.

Methods: The purpose of this study was exploring experiences of irregular migrants related to their oral health and their access to dental care. The study was based on twelve qualitative interviews as well as participant observation at a Health centre for irregular migrants in Oslo.

Results: Oral health conditions of irregular migrants varied and most of them described having multiple oral health problems. High cost of dental care was a primary barrier to access dental care. In addition the study notice a lack of knowledge on dental health care rights for irregular migrants' children with health care workers and patients, lack of knowledge of dental health care system, fear of being reported to the police and communication gaps. Poor doctor-patient communication caused dissatisfaction with dental treatment for the patient, creating doubts and distrust on the offered services. Poor oral health conditions and difficult life situations were causing signs of mental distress. Presence of a reliable social network often helped the irregular migrant in finding access to treatment. Self-medication was often practiced strategy to cope with oral health problems.

Conclusion: Recommended: Improvement on information outreach on dental care services at HPM, including information on dental health care rights for irregular migrants' children. It is recommended to train HPM staff with cultural orientation. Professional translation is important to improve on doctor/patient communication. Finally, consider a gradual upgrading of technical equipment and materials for dental treatment at HPM is recommended and in case of symptoms of mental stress the treatment should look for an interdisciplinary approach. The findings of this limited study of a sample at HPM, Oslo region in a short time may justify a broader study to address irregular migrants oral health needs.

Key word: oral health, irregular migrant, qualitative, interviews, participant observation

Acknowledgements

I have been writing this thesis in the context of my studies International Community Health at the University of Oslo. The subject came about in an almost natural way, as my first professional background is dentistry that I practised in Azerbaijan while my life experience has grown as migrant living in a variety of countries. It was Professor Heidi Fjeld, who recognized this interesting combination and brought me in contact with my supervisor Mr. Per Kristian Hilden. I like to thank him and my co-supervisor Mrs. Ann Catrin Høyvik who challenged me in a search to fill a vacuum of knowledge on oral health problems amongst irregular migrants living in Norway. I would like to thank the head of HPM (Health Centre for irregular migrants) Frode Eick for offering the necessary financial support. The staff of the HPM facilitated me generously to get in touch with visiting migrants. Above all, this study would not have been possible without voluntarily participation of the migrants who despite their insecure situation shared openly their experiences.

I am deeply grateful to my family who supported and encouraged me in shaping my academic reflection on a preoccupation to access ordinary life amongst vulnerable migrants.

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Abbreviations

HPM Health Centre For irregular migrants

IOM International Organization for Migration

NAV Social system

NPIS National Policy Immigration Service

PDHS Public Dental Health Service

UNHCR United Nations High Commissioner for Refugees

WHO World Health Organization

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1. Introduction

1.1. Background information

1.1.1. Study within HPM project

Health Centre for irregular migrants in Oslo provides a variety of health care services for irregular migrants. Since its establishment in 2009 it has been noticed that a number of patients who visited Health Centre had complaints about their oral health. This became the basis of the initiative to add a service for dental care.

The HPM has launched a project which aims to establish a dental health care service on voluntary basis for irregular migrants. One of the objectives includes generation of new knowledge about oral health problems among this population and defining some good methods based on this knowledge.

Patients with different oral health problems visited HPM. The number of the patients continues to rise with the development of the dental care service. Oral health problems among irregular migrants visiting the HPM include: tooth decay, gum disease (gingivitis, periodontitis), diseases of tongue, lip and oral mucosa (1).

This study makes part of the HPM project. The overall objective of the study is to gain knowledge on irregular migrants' oral health problems through analysing their experiences, perceptions and knowledge of oral health and dental health care system in Norway.

1.1.2. World trends on migration

Migration has always been a strategy for improvement of life of human beings, but the numbers and distance of migration today is unprecedented. The total number of international migrants in 2013 reached 232 million worldwide in comparison with 175 million in 2000 (2). Number of refugees, asylum-seekers and internally displaced people has reached more than 50 million people in 2013 worldwide (3).

First time in history, Europe is experiencing an enormous inflow of migrants and refugees. At least 1.200.000 (estimated by IOM) people crossed European's borders during 2015 compared

almost 563.000 in the whole year of 2014. And there are those who cross the borders undetected and thus are not included in the number of 1.200.000 (4).

In the beginning of 2015 an estimated number of over 669.000 registered migrants were living in Norway (5).

1.1.3. Current situation regarding irregular migration in Norway

The exact number of current irregular migrants in Norway is not available. It is estimated to be between 10.000 and 30.000 persons which constitute around 0.5 percent of the number of residents in Norway (6).

Entering Norway legally and illegally, mostly through internal Schengen borders, this diverse population can be categorized in four different groups:

1) Rejected asylum seekers

30.110 persons applied for asylum in 2015, compared to 9.100 in 2011(7).

According to the UDI annual report from 2011 the asylum seekers come from 115 different countries. Most applicants searching for protection come from the following seven countries: Somalia, Eritrea, Afghanistan, Iraq, Russia, Iran and Ethiopia. Today, due to the armed conflict in the Middle East the trend of migration with regards to asylum seekers is changing towards an increase of number of people coming from Syria and Eritrea (7).

Migrants who are seeking protection are entitled to stay in reception centres while awaiting a decision on their asylum claim.

According to the report of NPIS there is a relatively high number (not specified) of migrants who are leaving the reception centres each year with ongoing or rejected asylum application(6). Some of them will receive protection; others have to return back to their country of origin.

2) Visa over stayers

Persons who have entered Norway legally but then remain in the country after their visa has expired, or refuse to leave the country when the permission to stay has been denied (6).

3) Persons who have arrived in the country and stayed without registering (8).These persons can for example be people brought to the country by smugglers.

4) Persons who have received residence on fraudulent grounds (for example document fraud) (8).

1.1.4. Legal rights of irregular migrants in Norway

Due to lack of residency irregular migrants possess very few legal rights in Norway. Adults are denied the right to: work, housing, education, social and financial benefits.

Health care rights are restricted to emergency health care and "essential care that cannot wait."(8) The right for emergency dental health care is not included in the restricted health care rights.

1.1.5. Consequences of irregular status

Staying in Norway without regular status, irregular migrants experience hardship in their life in many ways. No access to regular work leads to inability to generate income and may drive those people into the hands of exploitative landlords, employers in the parallel labour market and criminals. Denial of access to social and health care services jeopardizes health of those individuals and develops public health risks. Lack of shelter and basic sanitary needs are detaching these migrants from the community (9).

All those deprivations are resulting in unprecedented vulnerability of irregular migrants and have inevitable impact on their physical and psychological well-being. Studies show that circumstances arising from living with restricted legal rights can be an independent risk factor for reduced physical and mental health (10, 11, 12).

1.1.6. Dental care system in Norway

The dental health care system in Norway consists of the Public Dental Health Service and private practice. Private practice is predominant in the country although a quarter of all dentists work in the public service. Financially PDHS are supported by the Government through the tax income scheme. Private dental care paid for through patient fees. Dentists are able to set their own fees for the services which means that prices for the dental care services vary in the private sector. All

dental care services provided in the private practices have to be paid for, including dental examinations.

There are five main groups of people who have priority to receive free of charge dental care provided by the PDHS.

Children under the age of 19; the mentally disabled; people who live in institutions, for example nursing homes or prisons, for a minimum period of three month or receive home care through institutions, vulnerable groups of people decided by county authorities as being in need of dental care, and young people under 21 years old (pay 25% of the cost) (13).

Adults over the age of 20 who do not belong to any of the groups specified above must pay full fees for regular dental care.

But people with certain types of diseases or specific dental treatment needs such as: periodontitis, maxillofacial surgery, orthodontic treatment, diseases of the temporomandibular jaw and soft tissues in the mouth are entitled to subsidised dental care in accordance to the national insurance Act (14). Emergency dental care is available and provided by dentists from both public and private sector, although not free of charge.

Nowadays there is a tendency in some parts of the world to see the health of the teeth as a luxury and not as being a primary part of the health care services. According to WHO "in some countries, oral diseases are the fourth most expensive diseases to treat". (15) Traditional treatment of oral diseases is expensive for adult in Norway. Norwegians spent around 3,775 NOK on dental care in 2008 according to the organisation Statistics Norway. The reason why dental care services are expensive in Norway compared to other country "is because Norway is a high-cost country with an equivalent high price level and wage levels" (16). Patients are not only paying for the dentist's competence, but also for expensive equipment, employee expenses, rent expenses, sanitation, repairs and maintenance of equipment, administration and accounting etc.(16) This may indicate that adults with low income and no legal rights through NAV will downplay their priority to attend dental care in Norway. A systematic review of socioeconomic indicators and dental caries with adults from 2012 shows those socioeconomic indicators such as: subjects' schooling, income, occupation and the Gini coefficient (evaluates the economic

determinants) are significantly associated with greater occurrence of dental caries (17). Five cross-sectional studies from Norway were included in this systematic review.

1.1.7. The relation between migration and physical, and mental health

The relation between migration and physical and mental health have long been acknowledged and is often subject for study.

Migrants are individuals who leave their legal country of origin and cross international borders. The health of migrant and non-migrant populations is equally determined by genetics and biological factors, socioeconomic conditions, individual behaviour and environmental exposure. Despite this similarity, migrant populations in general are considered to be more vulnerable than local population (18). Reasons for this vulnerability can be found in limited legal rights, socioeconomic conditions, and language barriers in the host country (8), but also in exposures prior to migration and during the migration process. Driving forces of migration today relate to unstable political, economic and social conditions in the country of origin and constitute so-called push factors such as: poverty, high unemployment, internal armed conflicts widespread violation of human rights, rapid growth of the population and naturel disasters. (19)

Complex issues regarding migration and its effect on migrants' health complimented by marginalized survival conditions of irregular migrants in the host country place them into a distinct group of the migrant population to be exposed to the higher health risks. A study from Denmark shows that irregular migrants experience specific barriers to access health care services for migrants' population such as: limited medical rights, fear of being reported to the migration authorities, and arbitrary behaviour in attitude of health care professionals. Those barriers additional to the poor language skill and poor socio-economic conditions induce alternative health seeking behaviour such as self-medication, endurance of pain and ignoring symptoms. (20) Non-urgent health care is often neglected causing risk of serious health complications at later stage. (21)

1.1.8. Role of oral health in human physical and psychological well-being

According to WHO definition of health" Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Oral health as an essential part of general health plays a pivotal role in human physical and psychological well-being. Known as the craniofacial complex, oral health means more than healthy teeth and includes "being free of chronic orofacial pain, oral and pharyngeal cancer, and oral soft tissue lesion, birth defect such as cleft lip and palate and scores of other diseases and disorders that affect oral dental and craniofacial tissues" (22). Good oral health is not only a key component in providing our body with essential nutrient but also has influence on social mobility, self-image and esteem, and speech (23).

Interaction between oral health and general health continues lifelong. A mouth as a "window" to the human body may provide signs of general health disorders. For instance: as a first symptom of some infectious diseases such as HIV(24), oral manifestation of Syphilis (25); blood disorders may manifest in pale and bleeding gums (26); aphthous stomatitis may be linked to systemic conditions such as: gastrointestinal disease (27), Bechet syndrome (28), auto-inflammatory syndromes (29); changes in the density of the bone (bone loss) of the lower jaw may be an early indicator of skeletal osteoporosis (30); changes in tooth appearance may be a sign of eating disorders such as bulimia and anorexia (31). Saliva as a part of oral environment may indicate the presence of different compounds in the body such as: alcohol, nicotine, hormones, drugs, environmental toxins and so forth.

Oral health conditions may have an impact on overall health just as systemic conditions may provoke diseases in the oral cavity. Poor oral health is associated with number of adverse medical conditions. For example studies show that periodontal disease "is a risk factor for poor glycaemic control and the development of other clinical complications of diabetes" (32). A systematic review from 2008 shows that periodontitis is a risk factor for coronary heart disease (33). Chronic respiratory diseases are other medical conditions which are associated with poor oral health (34). In its turn systemic conditions can have an impact on oral health. One of such examples is a dry mouth (reduced saliva flow), a symptom of different medical conditions (e.g. Sjogren syndrome (35), Lambert-Eaton syndrome (36)).

All those examples are indicating physical effect of oral health on human well-being but psychological impact of oral health plays equally a significant role. A severe toothache may be a woeful experience. Once toothache begins it can continue days if not treated. The intensity of the pain in some cases of the teeth diseases may be extraordinary strong. A painful tooth

provides little possibility to find comfortable position to avoid waves of discomfort. The reason of such increased pain sensitivity lies in the anatomical features of face, mouth and head. A tooth, for example, represents solid closed formation with dental pulp inside it which is a complex structure including nerve fibre and blood vessel. The blood supply is restricted in the teeth and is not flexible enough to cope with serious or deep damages of the tooth. If the damage of the tooth is not treated it generally leads to pulp necrosis and subsequent complications. It makes tooth structure "unique" in a sense of specific respond to the trauma compared to another parts of the body where rich blood supply helps the healing process. Professional dental care treatment may help people to overcome those harrowing experiences and provide psychological comfort.

Problems with teeth or mouth are found to affect quality of life of people through eating and enjoying food, speaking and pronouncing clearly, tooth cleaning, sleep and relaxation, smiling and showing teeth without being embarrassed, being emotionally stable, being social, performing daily work (Oral Impact on Daily Performance (OIDP) is an instrument developed to measure impact of poor oral health on eight daily tasks) (37). WHO defines quality of life "as an individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns."(38).

1.1.9. Burden of oral diseases worldwide

Oral diseases are considered a major public health problem. Despite great achievements in the treatment and prevention of oral diseases in several countries, dental caries and periodontal diseases belong to one of the most common and widespread pathologies among population in the high-income countries and the growing numbers of oral diseases in many low- and middle income countries is marked (39). The severity of dental caries is distributed differently between the countries worldwide, but also within the country in different regions. Such diversity of dental caries distribution relates to distinct risk factors across the countries and within. It relates to socioeconomic conditions and lifestyles of the population but also environmental exposures and prioritisation of preventive dental care treatment (39). According to a fact sheet of WHO from 20012 nearly 100% of adults worldwide have experienced dental caries. Severe periodontal disease, which can result in tooth loss, is found in 15-20% of middle-aged (35-44 years) adults. 30 % of people aged 65-74 have no natural teeth (40). Other oral health diseases and conditions

which contribute to the overall picture of major global oral health problems are: oral mucosal lesions, tooth loss, HIV/AIDS-related oral disease, oropharyngeal cancers, orodental trauma, developmental disorders, fluorosis of teeth, and dental erosion (39).

In industrialized countries the main focus of dental care services is directed to preventive and restorative dental care. In developing countries, on the other hand, there is little if any attention to this area. Many countries in Africa, Asia, and Latin America have inadequate number of dental care professional (the ratio of dentist to population constitute 1:150 000 in developing countries compared to 1:2000 in most industrialized countries) and the capacity of dental care services is generally restricted to emergency dental care and pain relief (39).

Problems related to the teeth and mouth makes children sleep less and having difficulties in concentration at school, limited productivity of adults at work and at home causing millions of school and working hours to be lost throughout each year (39).

Poor and disadvantaged population in both developed and developing countries draws particular attention in regards to poor oral health. The burden of oral diseases among this population is higher (41).

1.2.0. Higher prevalence of oral diseases among migrants and refugee population

Migrants and refugees from low income countries are viewed to have more oral health problems than medium or high income host population. Additionally, oral diseases and disorders are particularly extensive and severe among this disadvantaged group. Common oral health problems among refugees include: dental caries, periodontitis, oral cancer, missing teeth, malocclusion, and orofacial trauma (42).

Higher prevalence of oral diseases among migrants and refugees are explained by different determinants influencing oral health during the migration process - before, during and after migration. It is important to admit that oral health varies considerably among different migrant populations. The migration process consists of three stages: pre-migration, during migration and post migration. Each of the stages includes factors contributing to development of oral health problems. Issues prior to migration include: poverty, poor provision of dental care services, lack of dental care professionals, little attention to preventive dental care, limited access to water

fluoridation (43), poor oral health literacy, predominance of cultural values, traumatic experiences. Before arrival in Norway, the migrants often are making a long, difficult journey and slowly passing from one camp to another. About one third of refugee population is registered in camps (44). Others are living in the cities at private stay. During this travel, many experience new hardship contributing to the poor oral health. Days and weeks can be spend without any access to safe water and sanitation (45), tremendous prolonged stress and pressure, lack of appropriate food or its complete unavailability (46), and lack of dental care services (47). Living in anxiety and insecurity may worsen existing health conditions and develop new oral health problems such as bruxism and mucosal lesion (48). In the last stage of the migration process migrants are reaching their countries of destination. During this period migrants are going through an integration process in the new society. The level of successful integration of people will depend on the circumstances of the settlement. Those migrants who are marginalised and receive little support may become socially isolated which could lead to feeling of alienation and as a result may affect physical, mental and oral health. In the host country lack of language proficiency, cultural beliefs, exposure to different diet, and high cost of dental care service, low prioritization of dental health are main determinants to higher prevalence of oral health diseases among this population group (49, 50).

1.2.1. Torture and /or violence survivors

UNHCR estimates 15-17% of refugees are survivors of torture and /or violence (51). The information from UNHCR statistical report can be projected on my research target group. We can make an assumption that part of irregular migrants population in particular refugees and asylum seekers might have experienced torture and violence. Torture victims have unique physical and mental health problems (52), including oral health. The cause of injuries to the oral cavity, teeth and jaw can be application of electrical current, forcibly pushing of various objects into the moth, cutting the soft tissues in the mouth and the face (53). Additionally to the physical trauma there are psychological consequences of torture which can include post-traumatic stress disorder (54), depression and other anxiety conditions (55). Such mental health conditions may result in lack of desire and interest in maintaining oral and general health. After experienced torture some of the victims report that they developed a massive phobia for dental treatment. This can be recognized by “feeling fearful, anxious and panic if placed in prone position” (53)

during clinical examination. Some of the dental equipment, most of them sharp, can trigger awful memory of torture experiences. A study shows that "approximately 90% of the studied torture victims required immediate or near-immediate dental health care" (56).

Considering the effect of possible torture experiences is important when offering dental health care services for refugees, asylum seekers and irregular migrants.

1.2.2. Role of cultural beliefs and practices in oral health outcomes

There are differences in National health services and cultural traditions respect to health care prevention and treatment of disease between host and origin countries. Migrants are culturally diverse population in general and in particular in oral health perceptions, beliefs and practices. Such cultural diversity may represent challenges for the dental health professionals in the host country and have a significant influence on migrant's oral health outcomes. Differences in categories and concepts used by migrants to explain their oral health problems to health care personal with Western understanding might be considerable. Together with other cultural obstacles such as language and health literacy this can lead to complete misunderstanding and miscommunication during dental treatment resulting in unreasonable expectations and dissatisfaction of the patient.

Many ethnic minority groups show disproportionate levels of oral health problems (57). Studies show that underlying perceptions, cultural beliefs and practices may influence conditions of the teeth and oral cavity through diet, oral hygiene practices and oral health seeking behaviour or use of traditional remedies (58, 59).

Understanding of individuals' traditional beliefs and acculturation in the host country is very important to provide cultural appropriate oral health care (60).

1.2. Previous research. Justification for the study

Little is known about oral health among the most vulnerable irregular migrants in Norway.

There is worldwide a limited number of studies investigating oral health issues among this particular population.

Most of the studies we are aware of were exploring barriers to health care system and health seeking strategies in relation to general health among irregular migrants from Denmark, Germany, the Netherlands, US and Canada (references will follow).

Despite the fact that irregular migrants in these studies constitute ethnical, racially and culturally diverse population, they share common experiences in a complex varieties of factors: such as inability to pay due to the high cost of health care services, social isolation, in some cases poor language skills, lack of knowledge about health care system and fear of being reported to the police. All these factors very often lead to adverse effect on physical, mental and social well-being.

A scope literature review from Canada (61) summarise current academic and community based findings on health, access to services and working conditions of irregular migrants. From the review three qualitative studies relate to the health: 1) one study indicated how stress affected mental health of irregular migrants and refugees living with HIV/AIDS; 2) an explorative study on how being “irregular” affect mental well-being; 3) one study was exploring how lack of access to health care impacts health of irregular migrants.

The main issues in the research literature from the US in relation to irregular migrants and health were: access to health care, mental health, sexual health. (62, 63, 64)

A study from the Netherlands was looking at health care seeking among detained irregular migrants. One of the findings was that most care was sought for injuries and dental problems. Researchers did not specify what kind of dental conditions irregular migrants had nor how they seek dental care. (65)

A qualitative study from Denmark was exploring irregular migrants’ experiences to access Danish health care system and alternative health seeking strategies. (20)

Currently there are limited numbers of published studies in Norway on irregular migrants’ health issues.

There is one comprehensive survey about living condition of irregular migrants in Norway (8). In this study Øien and Sønsterudbråten reported that irregular migrants have limited access to health care. They also indicated link between irregular status of migrants and their health. In

some cases living as “irregular” may create or exacerbate health problems while in the same time poor health might be an obstacle in securing proper living conditions of irregular migrants.

Poor health among irregular migrants in Norway was observed by Hjelde (14). Self –reported stress related illnesses among study participants were: severe headaches, ulcers, pain in the neck, back, shoulders, knee, and asthma. All participants indicated mental health problems. Serious problems with the teeth were also reported.

In the case study “Irregular migrants’ structural vulnerability and survival strategies”, F. Gasana (67) examined factors and structures as a foundation for creating difficulties for irregular migrants in accessing basic needs, including health care.

Recently published study of E. Kvamme and S. Ytrehus (68) was exploring “irregular migrant women’s subjective experiences of their health conditions and access to the health care”. Researchers indicated the main barriers to access to health care which included: cost of health care services, lack of language proficiency, fear to be reported to the police. As a result of limited access to health care women postponed their treatment and used alternative health seeking strategies.

The PROVIR project by IMER (International Migration and Ethnic Relation research Unit Bergen) studied in a multi-disciplinary research the question “How *can welfare society best deal with issues of irregular migration*”. The project aimed to “investigate complex relationship between law, institutional practice and migrant’s lived experiences”, a thin line for modern welfare state on its principles of inclusion/exclusion (69).

This study was conducted because staff at HPM – through their contacts with visiting irregular migrant patient - identified a need of dental care services while no earlier research on oral health among irregular migrants was available. This study represents one of the first attempts to obtain information about oral health directly from irregular migrants. The gathered understanding of experiences from irregular migrants, their perceptions, coping strategies with oral health and practices used by the target group in dealing with oral health problems is most relevant to create awareness with professional service providers and with relevant public health authorities on existing dental care needs and challenges for irregular migrants. Optimistically the knowledge

derived from the study can be used for developing provision for the most essential dental care in HPM that may also be in the interest of the larger community.

1.3. Research objectives

During literature review four thematic areas have been identified from where the following objectives emerged:

1) Investigate participants' self-perceived oral health status
2) Gain knowledge about the significance of issues regarding access to dental care services among irregular migrants
3) Explore perceptions, cultural beliefs and knowledge of oral health of participants
4) Gain knowledge about the significance of past traumatic experiences for participants handing/ managements of oral health.

Research objective **number one** aimed to explore:

- How participants' viewed their own oral health through the following example questions:

What participant's thought about their oral health (healthy/ unhealthy), and why? Did they experience any problems in their teeth, mouth? If yes, what kind of problems?

- How existing oral health problems affected their daily life:

Did present oral health problems affect their eating, sleeping, speaking, being social, being emotionally stable and performance of daily work? What participants did to maintain their oral health?

- Whether or not our participants have been to a dentist recently or in the past:

If yes, what was the reason to seek dental care? What treatment has been given during those visits?

Research objectives **number two** aimed to explore:

- Issues related to participants' encounter with the Norwegian dental care system with particular attention to the significance of various potential barriers such as: cost of dental care, Norwegian language proficiency, understanding the Norwegian dental care system (how to find information about dental services, where to go to find dental health care, how to make an appointment), fear of being reported to the police during or after dental attendance, fear of denial of care from dental workers.
- Coping and compensation strategies in absence of formal dental care: self-medication (what kind of treatment they use, if any), neglecting symptoms (to what extend), postponement of treatment (how long), using informal network to find dental treatment (family members, friends, others)

Research objective **number three** aimed to explore the participants' beliefs, thoughts and habits with regard to:

- Preventive care and help seeking:

What is predominant reason for visiting a dentist? What dental problems are considered to be severe enough to initiate a dental visit?

- Oral hygiene practice:

How often and in what way participants were cleaning their teeth?   it important to clean teeth and why?

- Beliefs about teeth:

What was their view about importance of primary teeth? Is losing teeth in old age a regular matter? How important aesthetic appearance of teeth? Were participants satisfied with their teeth and why?

- Use of traditional remedies:

What kind of traditional remedies and treatments substituted biologically based medicine or supplemented it?

Research objective **number four** involved being sensitive to any kind of symptoms that could relay to traumatic past experiences in the participants' narratives and accounts. Such symptoms could have been communicated by participants when they spoke about physical noticed traumas to teeth, mouth or face and even other parts of the body. Torture, mistreatment could have been the cause of those physical traumas. The experiences of it may have resulted in the development of dental anxiety and fear towards dental care.

2. Methodology

2.1.1. Methodological choices within the theory of science framework

In informing and guiding this study qualitative research method was chosen. Choice of method was made on the basis of the purposes and circumstances of the research.

Long-established in the social science qualitative research method over the past two decades receives growing recognition in the health care research (70). With the development and progress in the contemporary health care medical professionals, policy makers and managers acknowledge the necessity of the development of the comprehensive approach to the study of understanding individuals' health behaviour, practice, organizations and society. Quantitative method alone fails to explain the question of why we humans do what we do. In this sense qualitative method gives us opportunity to explore how we organize our social relationship, how we communicate with each other, and how we construct the meaning of our life situation. Trying to find answers to the questions of "what", "how" and "why" of a phenomenon (71) qualitative research offers "an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured in terms of quantity, amount, intensity and frequency"(72). Qualitative health research concentrates on how social processes and practices are created in the health care and what do they mean for the people within specific context (73).It also explores experiences, perceptions, views and behaviour of both practitioners and patients with the aim of subsequent implementation of system change for improving quality of care (74).

Though qualitative research method was chosen for this study it cannot be seen as one unified category. “Different qualitative methodologies are useful for asking different sort of questions.” (75).

Preparation of relevant questions and the way to raise them and interpret the answers is important for the development of the quantitative study. Qualitative exploration may be needed before conducting any quantitative study to obtain clear knowledge on irregular migrants’ oral health situation.

Interpretive epistemology was thought to be the most suitable theoretical perspective for representation of the study research objectives. Understanding “our world foremost as a world of ideas weather about ourselves, society or nature” (76), an interpretive approach will allow understanding issues related to oral health through participants’ subjective meanings assigned to them. The knowledge we are looking in this study will arise from participants’ personal experience in particular life.

There are number different perspectives within the interpretive tradition. To mention some of the main variants: ethnomethodology (Harold Garfinkel), dramaturgical approach (Erving Goffman), phenomenology (Schutz), existential sociology (Kotarba and Fontana), exchange theory (Homans), and symbolic interactionism (Blumer and Hughes) (76).

The perspective of symbolic interactionism was guiding this qualitative research.

The ideas of symbolic interactionism belong to George Herbert Mead, social philosopher (76). In the end of 19th century, he argued that human beings differ from other living organism in reaction to stimuli in the surrounding environment. By comparing humans with other species, he suggested that people are using language and gestures to construct meanings and interpret stimuli what is not a simple mechanical reaction on stimuli in the environment. (76) The philosopher described three basic principles of symbolic interactionism: “1) Human beings act towards things (object, situation, people, and themselves) on the basis of the meanings that these things have for them. 2) The meaning of things arises out of interaction. 3) The meanings of the things are handled and modified through a process of interaction that individuals engage in as they deal with the things they encounter.”(76) In other words, according to the theory of symbolic interactionism, human beings create a social structure to live in; this social world requires an

interactive participation of persons and is not a fixed setting. People create those social structures through interaction with each other, allowing or changing them depending on the situation. In relation to this study we may say that most of the people need dental care at some point in their life but how each individual understand and manages their oral health problems is defined by the social context in which they live. Social view of being irregular migrant in Norway may shape the decisions individuals will make in solving their oral health problems.

2.1.2. Setting

Little research is known on oral health issues with irregular migrants. The difficult live situation of this vulnerable population in relation to their uncertainty, insecurity, and lack of trust makes research at some points complex and challenging. Irregular migrants may be hiding from the authorities and making them to avoid official institutions. The constant fear to be discovered can contribute to lack of trust in any unknown person, even more so for a researcher. For that reason building a good contact in a safe environment was essential to find good quality data to this study.

The study took place in the Health Centre for Irregular Migrants in Oslo. The Health Centre was opened in 2009 by joint efforts of the Oslo Church City Mission and the Red Cross. On voluntary basis health professionals such as nurses, general practitioners, psychologists, dentist, dental hygienist, physiotherapists, and others offer variety of professional health services. There are also a number of social workers who are working closely with the health professionals in providing elementary care from giving the patient an orientation, information, support, attention to the children, filling the forms and about every kind of help to the migrants. It is a drop-in service that has twice a week opening hours.

Dental care service in HPM has a limited capacity due to insufficient materials, limited standard equipment and no X-ray installations .The service is primarily treating oral pain and infection. Because of lack of sufficient equipment, advanced prosthetic treatment, root canal treatment and aesthetic dentistry is not offered. Dental care is a project, under development, and these were the conditions under which the project was provided with funding to start.

Dental care service is currently carried out once a week outside drop-in opening hours. All provided health services are free of charge.

2.1.3. Sample selection and size

The study is based on qualitative interviews of volunteering participants and observation in the operation of the dental care project.

The participants for qualitative interviews were irregular migrants recruited during clinical attendance of the HPM. The sample selection was not limited to patients presenting dental health problems or seeking dental treatment. To maximize variation of the sample following divisions were applied:

- Different language group/ cultural background were included: English, Russian, Somali, Arabic, and Tigrinya. The relevance of the language groups were determined in collaboration with Health Centre that has information from the clinical experience from the early phase of their dental health project and also from the general medical practice. Interviews in English and Russian were conducted by the researcher, interview in other languages were conducted with assistance of a qualified interpreter and were organized in accordance with everyday practice at the Health Centre.
- Gender: both male and female were included
- Age: adults age of 18 and above

This study targeted interviews with 10-20 participants.

For the first interviews the English or Russian speaking participants were chosen to confirm confidence that the questions were well understood and this would further secure continuation of the study. Following selection of participants was based on respective criteria mentioned above and described below.

Altogether twelve interviews took place and from this total of twelve people nine were male and three female. Another four persons first agreed to participate in this study but for different reasons they cancelled their appointment for the interview. The larger number of male population in the study can be explained to larger amount of man attending the HPM in comparison with women (approximately 70% to 30% respectively).The participants to the study were from Afghanistan, Rumania, Tunisia, Somali, Kirghizia, Iran, Iraq, Eritrea, and Sri Lanka. The

youngest participant was in his early twenties, the oldest was above 50. Four of the participants were in their late twenties and the remaining six were between 30-50 years old.

If we look to the marital status: four persons were married, four persons were not married, two had a partner, and one person was not married and one is unknown.

About the employment status of participants: eleven persons did not have a work, one had occasional work.

Six persons were patients who visited HPM to find help with oral health problems and six were patients who visited HPM for other medical conditions than oral health. From patients recruited during drop-in hours (with medical conditions in general health) four were not aware of the availability of dental health services in the HPM.

The majority of irregular migrants who visited HPM were asylum seekers (approximately 80% at the time of conducting the study). Ten of the participants were rejected asylum seekers; one irregular migrant was seeking family reunion, one was not willing to give information on this question. The intention was to recruit participants from different groups of irregular migrants' population. There were potential participants from the group of visa over stayers but all scheduled appointments were cancelled due to ever changing work related opportunities for the individuals.

The consequences on oral health problems are not specific related to the characteristics of asylum seekers, male population, and people from particular language group, marital status or employment. Irregular migrants are a heterogeneous group. We can assume that they have different understanding of oral health while also different options and resources are available to them when they are looking for oral health solutions. Despite their different background, experiences and situation (past and present), participants of the study provide good indication of difficulties and challenges they are facing on daily basis in relation to oral health.

The participant observation included any irregular migrant who visited HPM during drop-in hours and during dental treatment and after a verbal consent.

2.1.4 Participant recruitment

Recruitment of the participants for qualitative interview was carried out in the HPM. The location for recruitment was based on:

- The study is a part of the project of the HPM to implement the establishment of primary dental health care service in HPM
- It was the most feasible entry point for the researcher where to meet irregular migrants.

The use of HPM setting for recruitment was discussed with the health centre staff and specific days of the week and hours were agreed in advance. To maximize variation of the participants with and without complaints in oral cavity it was decided to recruit patients during drop-in hours and also during hours when dental care services were provided. An information poster had been designed as a first step to introduce the researcher to the participants. The information in the poster was written in five different languages and included a picture of the researcher, explanation about association of the researcher to HPM, research objectives, and purpose of the presence of the researcher in the centre. It was clearly mentioned that participation in the study is voluntarily and information shared will be kept strictly confidential. Finally participants were informed that should they like to have more detailed information about this study the reception at the Centre would make this available. Participants invited to the interview would receive this invitation from the staff in the Health Centre. There were several copies made of the poster and distributed around the tables where patients usually would sit while waiting for their turn to see a doctor. The researcher was present in the waiting room during drop-in hour and in the specialised room during dental treatment.

An arrangement was made with the health care staff to avoid undue influence from the researcher during recruitment of the participants. It was decided that one person from the staff will contact and speak to a potential participant. If participant after initial conversation with the staff member was interested to take part in the interview, than the researcher would be invited to continue the conversation to clarify further on the study and to make an appointment for the interview any other day regardless the official drop-in opening hours. To ensure that participants understood the nature of the study and researcher's role, they were given an information sheet (informed consent) simultaneous when the appointment was made. (It was noticed that

sometimes participants were confused about researcher's responsibilities in the process, some of them thought that researcher would provide dental care service alongside with the interviews). The information sheet was written in five different languages: Norwegian, English, Arabic, Somali, and Russian.

It is worth mentioning some challenges related to recruitment of irregular migrants for the interview. During the recruitment of the first participants the researcher did not ask their contact details while they received the personal phone number of the researcher. This ended up that no one participant came for the interview. In the second round of recruitment it was decided to ask their phone number and majority of the participants did not have any problem to share their contact information while some of them were reluctant (not surprising for the reason that some irregular migrants prefer to live in anonymity). Participants would be informed that the researcher would contact them the day before the interview to remind them about the meeting and also to get confirmation from the participants on the appointed day and time for the interview to take place. Later, it appeared that if the researcher called the participant most of them would not answer the phone call. The best way in communication for receiving a response was by sending a small text message. In the sms all was clearly indicated also who is sending the message and for what reason. Despite researcher's efforts it remained a continued uncertainty during the research process if the scheduled interview would take place.

There were also difficulties in recruiting female participants from particular ethnic background for the interviews. The reluctance to participate was not completely clear to the researcher. Language barriers might be one of the reasons, even though the presence of an interpreter during interviews was always mentioned. It might be a lack of trust to the unknown researcher despite the efforts made to be open and friendly to people. Some of the women during the conversation mentioned a lack of confidence that something can improve their life situation. The fear not to remain anonymous might be another reason.

Participant observation took place with the help of HPM staff members, who would inform visitors about researcher's observation. All participants received information about the research verbally upon what they gave a verbal consent to participate.

2.1.5. Ethical considerations

The study was approved by the Regional Committees for medical and health research Ethics (clearance letter in annex). Permission was granted on the condition that all irregular migrants involved in observation have given their consent. The amendment appeared in connection with undefined description in the protocol of informed consent process during observation. The interviews were not recorded and notes on the interview were taken and rewritten afterwards.

A qualitative study, which involves qualitative interview and observation, requires careful evaluation of the harm the research can impose on the participants. Irregular migrants might be vulnerable because of their situational characteristics and increased exposure to psychological stress. Even though the study did not involve any physical interventions, mental well-being of the participants was taken in consideration with highest care. During interviews the researcher was always aware of what questions were asked. Participants' reactions on the questions were observed. If some issues were sensitive for the participants, space and time was given to decide whether they would like to share the information. The researcher was open and polite and did not restrict responses.

Informed consent was provided before interviews and during participant observation. The document contained information about the study objectives, risks and benefits for the individuals. Additionally the participants were informed that participation in the study was based entirely on their free will and without any outside influence. It was emphasised that they can withdraw themselves anytime and at any stage from the research. It was made clear that the study had no link to the police or immigration authority and obtained information will be used only by the researcher and her supervisors.

To assure optimal anonymity and confidentiality full names were not asked. For each participant an alias were created. Replacements were used to anonymise distinctive events or places. Collected data (interview notes) were stored in the locked storage in the researcher's private house. Nobody had access to the storage except the researcher.

Considering physical safety of the researcher, conducted interviews and observations took place in controlled and safe setting of the Health Centre. There were always members of the staff in the health centre during researcher's activities.

2.1.6. Data collection methods

Additional dimension and accuracy to the data was obtained by using two different methods for collecting qualitative data: interviews and participant observation. The combination of both methods enriched the data with additional information; this provided a broader understanding on how issues arise and how this influences behaviour.

Semi-structured interviews

A qualitative research technique such as in-depth, semi-structured interviews was chosen as one of the most appropriate qualitative techniques to be used in this explorative study. This technique is especially useful when researcher explore topic where little information is available, where subject to be explored is sensitive in nature and anonymity for the participants is playing a major role. One of the main advantages of in-depth interviews is that they can provide detailed, nuanced information through participants' perceptions, feelings, point of views, and experiences. It gives fair degree of freedom to the participant what to talk about, how to expresses and how much to say (77). It offers relaxed atmosphere for the participants where they may feel comfortable to share their honest feelings, thoughts, and emotions in a face to face conversation with the researcher.

The results of the method are not guaranteed and they depend on many factors. For example, weak relationship created between the researcher and the participant may result in unwillingness of the participant to provide adequate information. Reliable quality of data will also depend on the professionality of the interpreter.

Semi-structured interviews were carried out at the premises of the HPM. Interviews took place during the days outside drop-in hours. HPM staff was informed about day and time of the planned interviews in advance. There were always enough empty rooms available outside drop-in hours in the Centre and in general only HPM staff was in the building during interviews. Those days it was quiet in the Centre, undisturbed and thus providing a comfortable and relaxed atmosphere for the respondents during interviews. Tea, coffee and sometimes some food was available in the kitchen at HPM for the migrants. The participants always appreciated when drinks or food were offered before interview. This time was very beneficial to build initial contact with interviewee and to get feeling on how the participant tuned for the interview.

Altogether twelve individual interviews were conducted. Most of the interviews continued approximately one hour and only two of them lasted longer (one and a half and two hours). Ten interviews were carried out only by the researcher. This was with the English and Russian speaking people. Participants with other languages were interviewed with the help of the interpreter. There were two interpreters helping during those interviews. One was a professional qualified interpreter. He was invited from TolkeNett, - an organization in Oslo which provides interpretation services. The other one was a friend of the person who was interviewed. The choice of the second interpreter was made by the interviewee as he was to him a trusted person who spoke fluent English. His friend developed proficiency in English language during study English at the University. The researcher and interpreter together reviewed technical terminology and sense of questions from the interview guide 15 minutes ahead of the interview, to avoid misunderstandings during the interview.

Working together with two different interpreters demonstrated different experiences. In the situation with the qualified interpreter, the participant had in the beginning of the interview very short responses on the questions and mentioned no oral health problems to be concerned about. It might be that participant was not comfortable or ashamed to leave bad impressions when talking about his/her oral health problems. Some oral health issues can be very personal and only to be discussed with the dentist. Researcher decided to ask questions that were not direct related to oral health. This resulted in uncovering issues which were relevant for the study. For the other interview where the interpreter who was the friend of the participant it had very positive influence on the interview process. The participant appeared honest, open and very confident. In the end of the interview he asked if the interviewer could demonstrate how to clean ones teeth in a proper way. Small demonstration on this subject was given.

In the beginning of each interview informed consent were signed by participants.

A semi-structured interview guide was developed and used to be followed during the interview (cf. attached). It consisted of a list of questions related to the themes identified to be covered during the conversation. In line with the investigative structure of this study, the interview guide was a living document, revised at time to articulate on topics when earlier interviews revealed its importance. The researcher would abandon the strict line from the interview guide when it was appropriate to deepen some topical paths during the interviews. By using open ended questions,

irregular migrants had the opportunity to express themselves freely and discuss issues which were significant to them. In some cases it was difficult to limit the conversation only focussed on objectives and topics relevant to the study. Some of the participants used the interview as a moment to express concerns about their current situation; they wanted to be heard on more than oral health issues. The comforting setting of the interview was created to possible trigger participants on an open mind expression not only limited to answering the questions. In a study like this, the balance should be found between discovering necessary information to reach study objectives and to listen to the issues which were significantly important for the interviewee.

All questions were administered orally. Written notes were taken during interview and usually completed immediately after the interview. To ensure good communication, focus was made on following: to be tactful and sensitive, to listen actively, to ask follow up questions and clarification, to explore sensitive issues in a respectful manner, to avoid leading questions, to not interrupt, to make participant feel comfortable by addressing some of the issues using indirect questions.

The interviews started with asking irregular migrants to share some of their thoughts about oral health in general. This was deliberately done to break the "ice" during the first few minutes. After a short introductory conversation the interview took direction towards exploring questions related to the study objectives. In particular, irregular migrants were asked about their perceptions, experiences, beliefs, and knowledge of oral health (this is in more detail explained in the previous chapter "Research Objectives"). During the interview no disturbances from outside the room were noticed. Respondents could share in-depth their experiences and concerns without interferences. Most of the persons would talk open and freely short after the start of the conversation; some would give relatively short answers during entire interview. The interview never ended abruptly. Time was given to the respondents to express their wishes, interests, and worries after an interview. Some of them would ask questions related to their oral health and possibilities to be referred to the dentist at HPM.

Participant observation

Participant observation was chosen as the second data collection method for this study.

Observation, in social science, involves systematic watching of people and events to explore individuals' interaction and behaviour in natural setting. In this sense, observation represents "the idea of the researcher as the research instrument" (78). The researcher engages in listening, watching, joining in and talking in order to obtain information. The involvement of the researcher in the study varies depending on the research question and the nature of the setting. To minimise influence on the environment being studied the researcher often takes a" participant observer" role (78). In this case, the researcher carries two functions in the setting: as an observer and other than researcher. In qualitative research such method of study names participant observation. It is widely used method for collecting qualitative data in many disciplines but mostly in cultural anthropology and sociology. In relation to health care research there is a growing tendency to adopt participant observation strategies in the health care settings concerning health-related beliefs and behaviour (79).

The important advantage of observational method is that it can help to overcome the inconsistences between what people do and what they say (78). Instead of depending on your participants this research method enables a researcher to see yourself what happens, often in intimate interaction between individuals which happening in the places closed from the outsider view.

How open the observer role during observation is also varies (even though it is participatory). It can be covert and overt. Covert observation involves ethical aspects, spatially with vulnerable population in regards to informed consent (80). Overt observation presents fewer ethical issues but there is a risk to change people's behaviour if they know they are observed (81).

The participant observation method in this study provides possibility to observe irregular migrants' nonverbal expressions of emotions, their interaction with each other, with dentist and other health personnel. It enables to learn understanding of their experiences during a visit of the health centre, their behaviour and attitude towards oral health and dental treatment.

Observation was carried out by the researcher. Total time spend for observation was 50 hours. It included attendance during opening hours for dental examination and care, drop-in hours for general patients. During the time of this study project group staff meetings were also attended. Since observations were arranged at two different times, they will be presented separately.

Participant observation during opening hours for dental care

During open hours for dental care patients were coming one by one at the appointment time. The researcher was in the dental care operation room to observe the participants. During most of the observation time, the researcher was sitting in the chair in front of the dental chair and sometimes she was standing close to it. This was the most ideal position for observation as it offered the possibility to watch the patient in his/her full appearance. Consistent with the objectives of the study spatial attention was given to the conversation between dentist and patient, nonverbal expressions of the informants, their behaviour during the dental treatment and in relation to oral health. Occasionally (when appropriate) the researcher spoke to the patient and asked questions related to the oral health and gave recommendations on this subject if participants were asking for it. It was a friendly and relaxed interaction and this happened mostly outside the dental office (in the waiting room). The researcher made handwritten notes to document the observation. They were primarily covering the relevant notions from what patient, dentist, and other persons at the observation location were talking about; some special facial expression by the informants, gestures, reactions (physical and emotional) and unusual types of behaviour.

Participant observation of general patients during drop-in hours

During drop-in hours there is a constant flow of patients. Some of them were coming for the first time, some for the follow up appointments. Observation of participants' activity took place in the waiting room. As mentioned before the observation took place in an open atmosphere thus people were informed and aware about the presence of the researcher. There was no dedicated space for this observation. Sometimes the researcher was sitting around the table with the participants, and then the observation was in the space designed for children, or in the corner of the room where the kitchen located or the observer was standing in the different areas of the waiting room. During all observations the researcher was active participating in the events. The activities were similar to those of social workers: providing patient with information about health centre (dental care), offering them tea or coffee, caring for the children when the parent was being treated with the health care services, giving support by talking to them, sometimes mediating between patients and HPM staff members in clarification of unanswered questions. All this time the room, its furniture, the arrangements in the room before opening time for visitors were inspected; the actions from HPM staff in charge of services was followed; irregular

migrants who came to receive health care were surveyed; and the researcher took note of how the health care service was organized. In regards to patients, the focus was on observing what people do while waiting. Did they interact - and to what extent - with each other, with Health Centre personal, with the researcher? How comfortable did they feel being in the waiting room, what was the influence of its atmosphere? What were the nonverbal expressions? During the informal dialogues with participants, special attention was paid to the issues with importance to the migrants, to their interests and willingness to talk about oral health (their perceptions, beliefs, experiences and problems).

The researcher was always ready to help and to talk to the people, kindly approaching them, listening attentively.

Hand written notes were taken to record the observations. Occasionally they were taken at the spot during the observation and sometimes in the other room (away from irregular migrants' view). They mainly contained a description of: activities in the HPM; conversations with informants and HPM workers; non-verbal expressions, appearance of the irregular migrants and finally reflections from the researcher during the observation process. The field notes were written up earliest after the observations took place, most of the time still on the same day.

Participation in the project group meetings during study

Researcher highly valued her participation in the project group discussion as it introduced her to the HPM staff and its purpose. She learned about the project and could follow its developments. During the meetings, she was able to contribute and express with her thoughts and experiences. It was most interesting to hear the opinions of the staff on the direction the project was taking shape.

2.1.7. Fieldwork relation and rapport

HPM could offer an atmosphere where participants felt relaxed and safe. The recruitment was done with the help of the HPM staff who could introduce the researcher to participants. They could comfort the migrant with confirming that the researcher does not represent any threat. Most participants were regular visitors to HPM and were very familiar to the HPM staff. The trust building between the unknown researcher and the informant was challenging for both;

however, this way of recruiting participants was opening doors and facilitated the researcher in initial contacting people. Furthermore, the Azeri origin of researcher - herself being a migrant – as well as being a dentist might have contributed to building interpersonal trust. It seemed that many participants respected the researcher as “one of them” making it easier for participants to be open in sharing their perspectives and experiences with oral health as well as their difficult personal life situation. The professional training of the researcher as dentist apparently had also contributed to collaboration. Participants were eager to express worries about their oral health. It seemed that participants talked in confidence about their oral health with the researcher as she could understand their oral health problems; talking in detail without shame and showing the health conditions in their mouth. Apparently they took this as an opportunity to discuss problems in search for advice and solutions to their dental problem.

Since this study made part of the HPM project, the researcher had possibility to participate in discussions of staff meetings. Prior to the start of the research she could visit the centre to learn how dental care service was provided. This gave valuable insight, creating a deeper understanding of the present dental care situation at HPM and its visitors. As mentioned the good collaboration with the staff contributed to a relaxed and safe environment during interview. The researcher received training in qualitative research methodology and interview technics; together with relevant communication materials it helped her feeling comfortable to conduct the interviews independent.

The knowledge in dentistry and the migrant background of researcher gave some notion of life for irregular migrants and their oral health issues. This might have increased the researcher ability to accurately understand, interpret and contextualize the data collected. Meanwhile researcher remained reflecting on her role to critical exploring the case for an objective understanding without bias of interpretations or inaccurate understandings. My two experienced supervisors challenged and supported me in this research process.

2.1.8. Limitations of the study

The recruitment of participants to this study was limited to the Health Centre. All of them had various health conditions (general or oral heath) that have brought them to the health centre. This

could mean that they are not a representative sample of irregular migrants, those who not sick or seeking health care in the Health Centre.

It was a challenge to narrate a rich description of data without using tape recorder and without previous experiences in taking notes while conducting an interview. Though a registration of the interview was written immediately after the session, some valuable data were likely lost due to absence of proper recording during the conversation.

Lack of Norwegian language proficiency was a barrier for the researcher to understand communication between participants and health care providers in the Health Centre, especially during the dental treatment. Additional information might have disclosed new insights to the problem or deepen the understanding.

Some interviews were conducted in English despite what turned out to be clear limitation in the participant's English proficiency. Sometimes participants experienced difficulties in expressing themselves; this could have led to misunderstandings during the conversation.

Two interviews were conducted with the assistance of an interpreter. One was a professional interpreter the other was not. The lay-interpreter was a friend of the informant who did not seem to have difficulties with his role – however, he could have summarized the information that was given by the participant not giving all the details. This lay-interpreter might have influenced the data by including his subjective opinion to the answer.

Participants may have taken this opportunity of the interview with the researcher to strongly present their frustration with the difficult situation in life to them, which could further echo in the way they reflected on other topics. They might have seen this study as a possibility to present their case to a higher authoritative level such as an academic report. It may impact on the data collected in this study.

2.1.9. Data analysis

A method of thematic analysis was used to develop themes and linking them together under sub-themes. The method included six phases of analysis: 1) familiarising yourself with the data 2) generating initial codes 3) searching for sub-themes 4) themes identification 5) defining and naming themes 6) producing a report. (82)

Report of the interviews was written during or shortly after the meeting. All these collected data were then processed in Word-documents. Analysis was done manually from the printed documents to enable easy comparing the different interviews and observations.

Stage one. To ensure familiarity with the depth and the breadth of the content of the written texts, the entire data set had been read at least twice before beginning with coding. The first time reading gave an overall impression. Rereading was useful for identifying some patterns, meanings, events, activities, practices, constrains, and so forth. While reading, initial ideas about what was in the data were notified. For example: “participant concerned about high cost of dental care” or “aesthetic appearance of the teeth seemed to be important for participant”

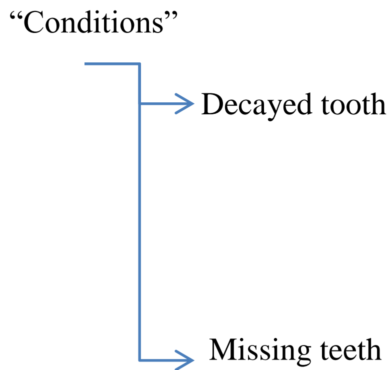
Stage two involved careful reading and identifying meaningful (related to oral health issues) key words and phrases of the content of the text of each interviews and observation. Questions like “What is going on? What is a person saying? What are people doing?”(83) were asked while undertaking the reading. A brief note of the code name was written in the margin of the paper. Table 1 shows an example of open coding from the written notes of interview.

Table 1. Example of open coding

He said that he had difficulties to eat solid food; especially he could not eat meat anymore. When he ate meat he experienced pain in the tooth. When pain appeared he did not know how to stop it, than he was very scared. Part of the food stacked in the tooth with a large cavity. He was using tooth stick to clean the teeth. He carried tooth stick with him so that he could use it anytime and anywhere. Lack of teeth made it difficult to chew. He said that he did not enjoy eating food anymore.	Poorer diet Pain Very scared Decayed tooth Use of tooth stick Missing teeth Chewing problem Did not enjoy

Initial codes were mainly descriptive.Written memos notified the nature of the codes and the thinking behind it. Codes highlighted in the same colour if they were about the same thing.

Stage three. When all data sat initially had been coded, list of different codes were examined and sorted. Codes which represented similar kinds of things were gathered together under the same sub-theme. For example following codes were divided into two branches (representing two kinds of things) and collected into one sub-theme entitled:



To sort long list of codes into a hierarchy helped to tidy up things, prevented duplication of the codes and helped to develop better understanding of participants’ perspectives and view of the world. Not all codes were used to build hierarchy. Sometimes use of tables were more revealing. Papers with tables and code hierarchies were pinned on a wall to give better overview of the material. Visual presentation of all data simultaneously made it easier to play around with organising them into possible themes.

Stage four. It took some time to understand the link between the sub-themes, how they fit together to form an initial themes. After candidate themes were identified the material was send to the supervisors. A list of themes and sub-themes and how do they fit together were discussed.

Stage five. The names of the themes and developed sub-themes within a theme were defined and further refined and the final outcomes discussed with the supervisors.

Stage six. Each coded section of the interviews, fully developed themes and sub-themes were collected together and the report was written.

3. Findings and discussion

This chapter includes outcomes of thematic analysis of irregular migrants' experiences and perspectives of issues related to oral health. The findings of this analysis will be presented through an introduction of the current oral health status of the participants and will follow three themes: 1) Access to dental care 2) Mental distress and oral health 3) Self-management strategies.

3.1 Introduction of current oral health status of the participants

To give some impression of what kind of oral health problems participants experienced it was thought to be meaningful to introduce them one by one.

Self-reported oral health

When participants talked about their oral health they pointed variety of symptoms and conditions in their mouth. Very often it referred to presence of cavities, swollen and bleeding gums, loose teeth, missing teeth.

Some participants mentioned dental aesthetic appearance when they talked about satisfaction with their oral health. Complications relating to poor oral health such as pain, difficulties with chewing, swallowing and bad breath also noted.

Ahmed

Ahmed was a young man. When he talked about his oral health he said: *"When I clean my teeth blood come. But I do not have any pain in my teeth… I do not like to see blood."* Seeing blood coming from the gums make Ahmed worried. He said: *"I am afraid my all teeth will fall out…"* Ahmed also mentioned that he had bad breath*: "Some of my friends said that I have smell from my mouth.*" Ahmed had undergone dental hygiene procedure in the Health Centre. He was very happy with the procedure because for the first time in his life he felt how air flow between his teeth. It gave him a feeling of cleanliness. When I asked Ahmed about satisfaction with his oral health he said: *"Not 100 %, just 80%, but before I visited health Centre it was 50%"* because his gums were still bleeding after received treatment in the Health Centre (HPM).

Sarah

Sarah was a young woman. When she talked about her oral health problems she pointed out that before she moved away from her home country she did not have any problem with her teeth. During her stay in Norway four of her teeth were affected, as she said. *"During half a year I have pain and unpleasant feeling in four of my teeth…."* One tooth was particularly painful. Pain was very disturbing and had some negative influence on everyday life (will be presented and discussed in the following chapter). Sarah also said that she is not very happy about her dental appearance because she had overcrowded teeth. She remembered when she was at school children teased her by saying *"vampire".* Sarah received dental treatment in HPM.

Marat

Marat was a middle aged man. When Marat was asked to speak about his oral health, he was very descriptive and tried to elaborate on all his problems. He said that during last six month he experienced spontaneous moderate pain in one of his teeth on the lower jaw on the right side. Another tooth on the upper jaw had very sharp throbbing pain. When he was spitting in the morning he saw very often traces of blood. From both sides of the jaws (up and down) he had missing teeth. He also experienced bad breath. Problems in the mouth caused pain and discomfort (how Marat experienced pain will be illustrated further). In relation to discomfort he said that:*" Part of the food stuck in my teeth with big hole. I am using tooth sticks to clean my teeth. It is always with me (tooth sticks)… I do not enjoy food anymore."* When Marat was asked if he satisfied with his teeth he said that he was not, because from Marat's view he did not have beautiful healthy teeth:*" Many people today have beautiful teeth. You are more confident when you have good teeth. You will see them on the photo. You can smile without shame. I wish I could take more care of my teeth."*

Bushra

Bushra belonged to the young group of participant. He reported having two teeth missing. During conversation he mentioned that he was very unhappy to lose his teeth because without teeth it became difficult to chew and swallow the food, as he said*"… the food stuck in my throat".* Though he did not mention any other oral health problems apparently he might have had one. After the extraction of his last teeth he was searching for the dental care and with the help of others he could find HPM.

Kirill

Kirill was a man of middle age. He said that some time ago he noticed that the gums on the left side of his lower jaw were swollen and he discovered a small lump. The participant also complained about missing teeth, grinding his teeth and pain. He said that pain in the teeth was the biggest oral problem for him and he experienced a number of difficulties related to the toothache (will be presented in one of the following themes). Kirill also mentioned a problem with his non removable denture. He took it out from his teeth to show to the researcher that it was not fixed anymore. On the question:" Do you use your denture?" he said*: "Yes, when it falls out I put it back…"*

Medina

Medina was a young woman. When she talked about her oral health she began with the description of different life events which brought her to the current oral health status. From her story it could be understood that she lost two of her teeth while staying in Norway. She also had undergone tooth extraction before coming to Norway. When she talked about treatment options for her dental problems she said that she was not happy with the tooth extraction. Missing front teeth changed her way of smiling and talking to people (will be presented in one of the following themes).

When I asked her if she was satisfied with her oral health she said that she thinks if her teeth would have had whiter colour they would look better. She also said that she was concerned that one of her teeth which standing alone (due to extraction of neighbouring teeth) would become loose. She had noticed that some of the teeth began to shift and she worried that it could cause a problem in the future: *"…I think they (dentist) have to grind the teeth too much to be able to put prosthesis."* Medina received dental treatment at HPM.

Fouad

Fouad was a middle aged man. His answer on the question "tell me about your oral health" began with description of his current difficult life situation related to staying in Norway as irregular migrant. While talking about it he mentioned that he grind his teeth: *"I am grinding my teeth many years."* He did not say more about his current oral health situation. It was known by

the researcher that he had an appointment for dental treatment at HPM thus he was asked what the reason for visiting a dentist was. Then he said: *"At the moment I have two decayed teeth."* Fouad received dental treatment at HPM.

Arthur

When a young man, Arthur, talked about his oral health he said: *"When I clean my mouth with my finger, blood comes…Three teeth I took out"* and two teeth had fillings. When Arthur was asked about satisfaction with his oral health he said that he is not happy with his teeth because he had missing and decayed teeth. Arthur expressed his desire to look good and fresh. Beautiful teeth were part of that image: *"I like good cloth, I like to feel fresh, I like to have white teeth."*

Ali

Ali was a young man, he said*: "When I eat sweets I have "hard" pain".* He began to experience three months prior to our meeting. He noted that inhaled cold air provoked tooth pain. During eating solid food: *"It is like hard stick into my tooth. It goes to my brain. I am afraid it (tooth) will break before I fix it."*

Ali also mentioned that he experienced bleeding from his gums: *"When I brush I have blood. I like when I see blood, I think "o, today it is clean", but I know it is not good."* Another problem Ali talked about was bad breath. It seemed that it was his one of the biggest concern (example will be demonstrated in the following chapter).

Ali felt that his teeth were not white enough to look good. It was important for him to have white teeth, he said: *"Because when you smile you see white teeth. Half of the face is smile. People will not see another part of your face when you have beautiful (teeth) smile."*

Farah

Farah, a young man, experienced recurring periodic sores in the mouth. He had this problem for a long time. One of the symptoms he mentioned was burning: *"When I drink water I feel burning, sometimes I feel it when I use mouthwash. It continues three four days then it goes away".* Overcrowded teeth on the lower jaw were the reason of discomfort in the mouth*:" Sometimes my tongue touch it I feel unpleasant."* Other problem mentioned by Farah was:

"When I wash my teeth every time it bleeding. It is not good. You think it is something wrong." He also said that he had missing and decayed teeth and therefor: *"You cannot eat without good teeth."*

Zakir

A following young man, Zakir, expressed that his main problem was pain and discomfort in one of his teeth. Sometime pain was very intensive leaving for Zakir little possibility to do anything during the day and disturbing his rest during the night (example will be presented in the following chapter). He also noted that he had bleeding from his gums and bad breath. He said that he was ashamed to have bad breath. When he visited a dentist (in HPM) he was told that he has two decayed teeth. He was surprised about affected teeth: *"I did not know until mentioned (by a dentist). I did not have any pain in those teeth."*

Sally

When a middle aged woman, Sally, talked about her oral health she said: *"While staying in the reception centre I lost two of my teeth…I think I have a hole now."* The tooth she mentioned:" *…is very painful but it is not constant pain."* Toothache provoked headaches (example will be presented later). She also had a denture.

All participants in the study perceived their oral health as currently being poor and had unsatisfactory oral health needs. Most of the participants expressed having multiple oral health issues. The impact of a combination of poor oral health conditions appeared to result in different experiences amongst the participants. Despite symptomatic effect, negative psychosocial influence of poor oral health could be recognized in the replies of participants (will be presented and discussed in the subtheme "Poor oral health").

3.2 Access to dental care

This chapter explores the difficulties participants faced in regards to access dental care.

Some of the participants had experiences in accessing private and public dental care in Norway. Almost all of them went to see dental care services while waiting for the decision of their asylum application. While living in the Reception centre some participants had a job and could pay for

their dental care services. For a few persons who did not have a job the dental care was payed for by UDI but organized through the management of the Reception Centre (only emergency dental care was included in the payment from UDI). Others had an income through work and paid for the dental treatment themselves. For irregular migrants, the work permit was revoked after their asylum application was finally rejected. Only the few who had support from their informal network could access dental care.

3.2.1. Cost of dental care

As was presented earlier in the introduction chapter, all (with a few exceptions, indicated in the introduction) adults in Norway must pay a full fee for their dental care. Although prices in the private sector for the dental care services can vary, dental treatments for instance such as fillings, root canal treatment, tooth extraction, scale and polish (dental hygiene), bridges and crowns will easily amount to prices for example from 500 NOK for dental hygiene and up to 4.500 NOK for root canal treatment and 6.000 NOK for a crown. Taking into consideration that many participants in this study had multiple advanced (acute and chronic) forms of oral health conditions, many of them required complex forms of treatment for what they would have to pay a significant amount of money, insuperable in relation to their low income if at all any resources available. All but one of the participants had a job. Other irregular migrants financially depended on their family and friends (will be discussed later in this section). The statement like: *"In my situation (restricted rights to work)… I have no source of income"* (Bushra) very often occurred when participants talked about their possibility to access dental care when needed. For that reason, it might not be surprising that cost of dental care was a primary barrier to access dental care. In the following examples participants are well illustrating some consequences of high cost of dental treatment.

Cancellation of dental treatment

Some participants reported that they cancelled their dental treatment appointments with the dentist.

When I asked Sarah about her possibility to get dental care she needed, she said that when she felt pain in one of her teeth she decided to go to the dentist. It was a private clinic. During consultation a dentist told her that she needed to have filling. She also informed her about a price

for upcoming treatment. Cost of dental service was too high for Sarah to afford the treatment. She made decision to postpone the therapy. It lasted several months before she could find HPM and applied to see a dentist there.

Another participant Marat, on the question "Could you get the dental care you needed?" reported, that in March 2015 he had pain in one of his teeth. He decided to visit a dentist. He used the internet to find information about dental care in Oslo. He said that he was trying to find cheapest possible price for dental care service in Oslo. He found three possibilities and made appointments with all three dentist. Even though appointments had been made he never visited a dentist because he found out that he had to pay for the consultation (meaning examination of orofacial area without treatment).He was surprised and very upset with the fact that he had to pay even only to be examined. He had experiences of obtaining dental examination free of charge in other countries. He said it would be too expensive for him to pay first for the examination and then for the treatment (this particular issue will be discussed below). He never tried to find dental care service since then.

Cost and avoidance of dental visiting

Some participant reported that they did not visit any dental clinic except HPM.

Medina began to talk about her difficulties in accessing dental care due to the cost when I asked her the question "Tell me about your oral health." She began her narrative from the description of the oral health symptoms and related them to the experiences of accessing dental care. When she was living in the Reception centre for asylum seeker she saw that one of her teeth had black small cavity. Over time the decayed tooth formed a sharp edge which caused discomfort in the mouth. The discomfort manifested in damaging lips, tongue, food jammed in the tooth. *"It was not beautiful, black tooth"* she said. There was a dental clinic in the neighbourhood where she lived. Knowing that dental care is expensive in Norway she decided to have a dental examination first. The dentist examined the tooth and sent his recommendation for the treatment to the administration of the Reception Centre. The administration of the Reception Centre concluded that dental condition of Medina was *"Not so urgent"*. The administration did not pay for Medina's dental treatment. Having no money to pay Medina did not apply for dental treatment. Over time (some years) she felt that another tooth had decay. She said that there was no option

for her to go to the private clinic because: *"We are in "suspended state" (in Norway). We even do not buy anything. We are here without any rights. I do not have any income. I do not have possibility to pay for dental service. My husband works very hard. Doing any job he could possibly find, sometimes working the nights through."*

When I asked Farah to tell me about his oral health he mentioned different oral health symptoms he experienced on that moment. He said that some time ago (before our interview) he was violently attacked by a group of strangers: *"Some guys bit me; one of them punched me in my teeth. I did not understand. I had blood. My lip cut from inside. I did not know my tooth broken."* He could not go to see a dentist because he did not have money. He was waiting twenty days before somebody told him about HPM. He made an appointment with a dentist at HPM. Then he said that when he received treatment in the HPM the tooth filling was not polished:*" It is bothering me from inside (his upper lip) it hurts. But I cannot go to another doctor because he will charge me!"*

One of Sally's expressions on the question "Tell me about your oral health" was the following: *"I think I have a hole now (in one of her teeth). I did not have income. I was not able to go to the dentist. Now I have pain."*

When Ali talked about satisfaction with his teeth he said*:" I feel so bad; I never went here (In Norway to a dental hygienist). They cost a lot I cannot afford it!"*

Fouad's reply on the question "During your stay in Norway, was there a time you needed dental care?" was the following. When Fouad was waiting for his permission to stay he experienced tooth decay. He visited one of dental clinics and received necessary treatment. His family supported him financially. When his permission to stay was rejected he did not have possibility to find a job. His family continued sending him money, but it was just enough to buy some food and clothes. At that time he has got tooth decay, he said: *"I stop go to the dentist, no money…I did not have enough to eat. I do not have money…How can I care about me (about my teeth). How can I."*

<u>*Support from others*</u>

One participant reported that other people paid for his dental treatment.

This was the case of Arthur. On the question "Could you get dental care you needed then?" Arthur said it was difficult for him to go to the dentist because he did not work and did not have money, he asked his friends to help him, and they did: *"Norwegian people paid for me!"*

Except for one, all participants in these examples were financially dependent on their family or friends.

Some of the participants in this study had relatives or a partner of Norwegian origin or a foreigner with resident permit in Norway. It seemed that financial support from those people was limited. This may indicate that these persons had limited resources themselves or they were not willing to pay for the high costs of dental treatment of the participants. It could also be that participants felt being a burden that constantly depends on the goodwill of others and for that reason did not ask for this help (or asked it once like in the case of Arthur).

Some participants were receiving food, clothes and shelter from their relatives who themselves were living as "irregular in Norway" while having an occasional job.

Marat was the only participant who mentioned in the interview that he had a job. In the literature (8) we can find information on how people without regular stay find an earning with casual work. Most of the time it is occasional low payed work (below low wages applied in that particularly industry) with little chance on continuity in the field such as: agriculture, unskilled labour in construction, partly industry and housekeeping (84).The money irregular migrants receive for such kind of work often just enough to pay rent and food. Unreliable low income of Marat could leave him little possibility to pay for expensive dental treatment.

It seems that participants from this study did not see any other option for their dental care needs then applying to the HPM as it offers free of charge dental care. The limited capacity in dental services (indicated in the section "Settings") has to be accepted by the participants. Farah's expression during interview: *"It is bothering me (unpolished filling)… But I cannot go to another doctor because he will charge me"* may indicate a little dissatisfaction about the uncompleted treatment. But to him there was no other choice for dental care because of his difficult financial situation.

Without access to the regular labour market, most of the participants had no job making them financial dependent on their family or friends. Only one participant reported having an occasional job. Accessing dental care services became problematic due to lack of finances. Cancellation of a dental care appointment, avoidance of dental treatments, limited choice of affordable dental care and oral health is not prioritised were negative consequences of the failure to pay for dental care of irregular migrant.

The literature review of comparative studies on access of irregular migrant population to oral health care offered no results. There are studies among other immigrant groups where cost of dental care seems to be an important barrier. For example study from Canada (85) indicates cost of dental care as one of the barriers in accessing dental care among Chinese immigrants. Though participants in the study were eligible for public dental care insurance, provided by government welfare program, most of them did not have dental coverage and could not pay for dental treatment. Refusal of considering welfare was related to the participants' denial to be labelled as economically disadvantageous.

Prioritization amid poverty

Financial constraints could also influence participants´ decision not to prioritize oral health. For instance when Fouad said (in the example above)*" I did not have enough to eat"* could indicate that there were other more urgent needs like food and clothes for what to spend the little available money.

Untreated oral health conditions of the participants due to unaffordable costs could have disrupted their physical, psychological and social well-being (86).

Expectation about what is worth paying for

Following examples highlight not only the high cost of care but also unexpected payment for dental care consultation for the participants.

When Bushra talked about his experiences of accessing dental clinic in Oslo he said that after dental examination he was asked to pay for the examination. He did not understand why he had to pay money if he did not received treatment. The health worker explained him that a dentist spent time to consult the participant. Bushra said*: "I was charged 500 NOK! I was very*

surprised. Fear… (He sighed). It was too expensive for me, having no source of income. Luckily I had that amount of money so I could pay."

An example of a similar case arose during participant observation. A patient with acute pain in the tooth applied for dental care in HPM. When he complained about dental symptoms he said, that he went to the emergency dental clinic before he found HPM. In the emergency clinic he warned the receptionist that he had no money to pay for the service. The dentist examined his teeth. The patient was asked to pay for the consultation. The patient said*:" I did not expect to pay for the consultation. They asked me 560 NOK. It was too expensive. I said that I do not have money!"*

Being surprised to pay for dental care consultation was also mentioned by Marat in example above (cancellation of dental treatment).

Participants' were being surprised to pay for dental care consultation may demonstrate irregular migrants' unfamiliarity with the dental health care system in Norway. Apparently there were some expectations that dental care consultations are free of charge in Norway. Such expectation may be a result of participants past experiences (mentioned by one participant in the interview, from my own experience as a migrant from Azerbaijan living in Norway) in accessing dental care in other countries then Norway. It could also be result of the overall image of the country Norway to be rich and full of care for human well-being. Or it may indicate cultural differences in seeking prophylactic dental treatment. The majority of Norwegian people seek dental care before feeling symptoms in oral cavity, and are conditioned by regular, publicly funded dental care throughout childhood and adolescence to think prophylactically about seeking dental care services. Therefore patients are used to paying for check-ups and include in it a variety of diagnostic techniques (for example x-ray). Whereas in many countries it is a common practice to wait until "excessive" or "severe" pain that person could no longer tolerate (87).

As payment for dental consultations was not calculated for, it may influence participants' readiness to pay for dental care. This is a self-imposed limitation for access to oral health care. A study from Finland has been showed that socioeconomic status affect willingness to pay for urgent dental care and utilization of dental care services (88).

3.2.2. Rejected patients

A few participants in the study reported that they were not able to obtain dental care because they could not provide necessary information they were asked in different health care institutions.

This was the case for Bushra, who said that when he experienced periodic pain in one of his teeth one and a half year ago, he decided to visit a public hospital for dental treatment. In the hospital he was asked by a health care worker to provide his ID number (Norwegian Personal Number). Bushra said to the receptionist that he does not have an ID number. The attending person told him that he was not allowed to receive dental service in the hospital without the ID-number.

The welfare state Norway issues ID-number to all citizens and persons with a regular status that allows people access to public health services. These services rely on this digitalized administration system to identify individual patients, for secure patient data recordings and administering the financial coverage and others. Only in emergency cases health personnel will attend to patients without an ID number. It is nevertheless has been a problem, that irregular migrants have experienced that their lack of such a number becomes an obstacle to accessing services (67). As Bushra's status in Norway was irregular, he could not show such ID number.

This example may indicate that participant was not familiar with Norwegian national dental health care system. He did now know where to go to obtain dental care. He went to the public hospital where healthy adults in Norway in general are no eligible to receive dental treatment. A receptionist may have asked the patient' ID number for simple administrative reasons (identification and address of a patient). Asking participant to provide personal information might have had negative reaction (fear) of the participant for risk of being reported to the police. It might also have created the impressions that everywhere in Norway he had to have ID number for getting access to dental care. Lack of information with the migrant in this study on where and what is required to access dental care becomes in this way a deterrent to look for help.

Another example emerged during the observation of dental patients. A woman asked for help in the Health Centre for her child who had multiple tooth decay and needed urgent dental treatment. She said that in the public dental care clinic her child was refused to be treated.

Norwegian law allows access to public dental care system for children of irregular migrants'. Example above may indicate that this health care provider had lack of information on the rights of irregular migrants' children (the child was not officially registered as resident in a municipality). To the other side, it also illustrates the participant's unawareness of her child's right to dental health care and a lack of knowledge of dental care system. All children are entitled to public dental care. Some parents choose a private dental care that is however not free of charge. As this participant did not get the help in the public hospital she stayed without help until she was referred to the Health Centre. Lack of information on where dental care for child could be found and limited information on children rights both from health professional and participant became apparently an obstacle to find dental care. The lack of information on health care rights with both health care providers and patients has been identified as an important limitation to access health care in relevant literature (68, 89). At the time of participant observation, the woman received information from the HPM about the rights of her child later had been referred to the public dental clinic for treatment.

3.2.3. Fear of being reported to the police

Some participants reported that they experienced fear of being reported to the police while visiting health care institutions other than HPM and being caught by the police during traveling to HPM. Consider following example.

When Zakir talked about his experiences with visiting dental health care he noted*:" I am afraid to go outside. I cannot go to another house. I just stay at home. I was afraid to come for the interview".* When he suffered from a toothache he said that he was very worried as he was afraid to go out and see a dentist. He also said that his friends advised him to go to HPM.

One more example came from participant observation when during casual conversation one of the patients mentioned that he was afraid to come to the HPM because of the risk to be noticed by police.

The case of Zakir indicates that fear of being reported to the police was the main reason why he did not seek dental care. He was staying at home and did not know what to do where to go until he found information about HPM from his informal network. During the interview Zakir expressed his gratitude to the health centre staff for giving him an opportunity to obtain dental

care without a feeling of being at risk. Though participants felt safe inside HPM it seems that they have had fear to be stopped by the police whilst traveling or when attending the HPM. (They may think that the police are monitoring who enters and leaves the facility).

Fear of being reported to the police as one of the barriers to access health care was previously reported by the researchers in different studies. (20, 68)

3.2.4. Role of language and cultural differences

Several participants reported that they preferred to visit dentists who could speak the same language and came from the same country of origin as the participants. Consider following examples.

When Sarah talked about her experiences to go to the dentist in Norway she emphasised that before she made an appointment with the dentist she wanted to be sure that the specialist spoke the same language. She was happy to find a dentist in the private dental clinic who was from the same country of origin as Sarah. When I asked her if she had any difficulties to express her concerns she said: *"No, no, no… I did not have any difficulties to explain my problems. It was good…"*

Another Participant Farah when he was talking about his experiences to go to the dentist in Norway he mentioned that the dentist he visited was from the same country of origin. He said: *"Because of language I went there. It is easier to understand…."*

These examples indicate that participants were worried about any misunderstanding during dental visit due to the language. Though language might be the main reason why participant visited dentist with the same ethnic origin, shared cultural background apparently also have played a role in choosing a dentist. Both participants could communicate in elementary English. Glenn Flores (90) in his article indicates that Spanish-speaking Latinos found very important to have a physician who speaks Spanish and understands Hispanics' cultural values. Another study from Canada (88) reported that Chinese people preferred Chinese speaking dentist to avoid any misunderstanding especially dental terms in English or French.

One participant informed that he was embarrassed to ask dentist a question during dental visit.

This was the case of Zakir. He did not speak English or Norwegian. He came to the interview with his friend who assisted with interpretation. When Zakir talked about his oral health he mentioned that he was worried about bad breath. When I asked him why he did not ask a dentist to examine the problem he said: *"I was ashamed to ask more than one tooth which gave me a pain".* Then the researcher asked him why he was ashamed he said: *"I do not speak language….",* and also he said that he did not know if it is appropriate to ask the questions to the dentist.

This example illustrates how participant's oral health needs went unnoticed because Zakir felt insecure to express his dental problems to the dentist. Insecurity to ask questions might have been related to the lack of language skills (91) but also, participant might have felt that it was impolite to ask questions to the dentist. In some cultures it is considered impolite and not done to ask questions to the doctor (92).

Lack of language skills was observed by the researcher during dental treatment of the patients. This was particularly relevant for participants from Somalia and Eritrea. Women made up the largest group of patients who had lack of Norwegian and English language proficiency. Very often patient had a person with him/ her to be able to explain what kind of dental problem they experienced. If came alone participant could not express their dental problems. In this case the interpreter help was needed. In HPM interpretation service was available.

This signifies that without the assistance of an interpreter there was no verbal communication between dentist and the patient possible.

Inability and insecurity with participants how to express their dental problem because of a lack of Norwegian and English vocabulary (where the communication gap might also be bridged with efforts from the dentist- see later in the section doctor-patient communication) may create an extra vulnerable position thus limiting access to dental health care. There are a number of studies indicating the lack of common language as a major factor hindering access to health care among ethnic minority patients. (91) In relation to irregular migrants, Eli Kvamme and Siri Ytrehus (68) in their study "Barriers to health care access among undocumented migrant women in Norway" reported that poor language skills were one of the reasons why participants in the study did not seek health care.

3.2.5. Doctor patient communication

<u>*Negative experiences with dental care in Norway*</u>

Some participants expressed disappointment with their use of dental care services in Norway. They felt that dental health professionals lacked empathy, disrespected patient, provided insufficient clarifying information, and were greedy. Following are examples.

Kirill response to the question" Tell me your experiences to go to the dentist in Norway" began with his decision made to replace his missing tooth. This happened three years ago since that time he never went to see a dentist again. One of his friends made recommendation where he could find a dentist. Kirill said:*" I was working at that time so I could pay for the dentist".* He explained to the dentist that he would like to have his missing tooth replaced. During the interview, he showed to me with two fingers where the artificial tooth was supposed to be placed. To Kirill's great surprise, the dentist he consulted that time did not say what he is going to do! First he made local anaesthesia and then began his operations. Kirill said that he could not see and feel what the dentist was doing. When he came home he thought that the new tooth is in place, but there was nothing. During the second visit he received denture (frame holding one or more artificial teeth). Three-four months before our interview took place; the denture became loose and eventually fell out from its place. Kirill was very surprised when he saw a small remnant of grind tooth. He was very upset and disappointed that his healthy tooth was used for the denture. Later in the same year when he received a denture he decided to make a new visit to a dentist because "*I had a broken tooth"*. He did not want to go to the same dentist who made the denture. He asked his brother if he knew another dentist. This dentist proposed to extract the tooth. Kirill said that the dentist did not speak to him: *"He took the tooth out and let me go… he (dentist) was like a machine"*. He also added that the first thing dentists ask in Norway*:" How are you going to pay... they all want to see cash…"*

This example illustrates on the first place that the participant was dissatisfied with the lack of explanation and communication received by the patient from the dentist on the treatment. Further is the participant very unhappy with the result of the treatment. The treatment offered to Kirill was different from his expectations. Kirill was expecting to receive an artificial stand-alone tooth instead he had received a denture that was attached through a frame to his healthy tooth. The

dentist may not have understood what the participant was expecting while he apparently did not manage to clarify the wish of the patient who explained that the dentist did not speak any word before the operation started. The dentist did not spend time to explain the patient about his dental problem (patient had little understanding of the problem) and the treatment options. The patient was upset that the dentist began his work without communication on what treatment would be performed, how the procedure would be and why this solution was chosen. The relation patient – dentist was further impeded by the single communication from the dentist on the payment of the treatment. The expression from Kirill that: *"They all want to see cash*", conveys his impression of the dentist's lack of interested in him as a patient.

Another participant Farah expressed his experience to go to the dentist as follow:

"*She was a good doctor but she was alone (working without assistant)… Five times I went there. She worked and she talked on the phone. I did not like it, only making money. They want to make much money. She gave me little price but not good service. I don't want somebody look at me like I am poor person. She did not give me full respect… I paid cash. I did not get receipt."*

For Farah the absence of a dental care assistant meant that a dentist is trying to save money on the service provided to a patient. Paying cash without receipts can be seen as a way for dentist to make money without declaring it. Farah felt that the dentist was not sufficiently paying attention to the treatment she had to do, when she was all the time talking on the phone. Absence of assistant and frequent phone calls during the treatment left with Farah the feeling that he did not receive a quality service. He then concludes that the discount price (when he said " *she gave me little prise"* may indicate that he agreed to be treated on the discount) he had to pay equals to the poor service; Farah might have considered as a simple consequence not knowing that full paying patients could receive exact the same treatment. Association of "little prise and poor quality" could come from participant's negative experiences in his home country that have a low standard in public dental health services and where corruption is endemic and most applied to receive adequate treatment. Farah was talking about it in his past experiences. As researcher I can confirm that similar situations occurred in my country of origin where corruption is widespread in all types of health care systems. Papers from the "The 9th International Anti-Corruption Conference" indicate that high incident of corruption is valid for many developing countries; moreover "corruption develops a disgruntled community which is dissatisfied with health

workers" (93). This example describes a disappointment in patients' expectation of Norwegian standards offered in dental care compared to migrants' experiences in his home country.

In the case of Arthur, he visited a dentist in HPM. He had two decayed teeth. After performed dental examination the dentist filled the cavity of both teeth with the filling. Arthur noted that in the end of the treatment the dentist said: *"Ok, you are finished, have a nice day. Bye, bye." Arthur said; "He did not ask me how I feel!?"*

Arthur's main disappointment was that the dentist did not spend time to find out how participant felt after the treatment. It could have made an impression that the dentist was not interested in patient. This feeling may negatively impact Arthur's satisfaction with the treatment.

During participant observation in the dental clinic it was noticed that some participants expressed disagreement with the proposed dental treatment and refused to follow it. It was mainly related to the tooth extraction. This was particularly relevant for participants from Somalia. Consider following examples.

A young man entered the dental health room. The patient was invited to sit in the chair. The dentist asked what the problems were. Participant complained about decayed teeth and bleeding gums. After examination by the dentist he informed the patient that some of the teeth should be extracted. The patient did not agree with the suggestion of the dentist. He said that he would like that all his teeth would be treated and not extracted. The patient stood up from the chair and left the dental office without any further treatment.

Another illustrative example came with a young Somali woman. The researcher was sitting in front of the dental chair when the patient stood up after dental examination, came to the researcher and without speaking a word showed with both her hands how her face would look like after extraction of the teeth (expressing the hollow look of a skeleton). She looked anxious and upset. *"Money!"* she said.

These examples may indicate that the patients did not expect to have a tooth extraction but to receive a different treatment to their dental problem. The recommended option from the dentist was related to limited capacity in the clinic due to insufficient equipment and materials (described in introduction) for another treatment instead of teeth extraction. Alternative options

may be available in private clinics at high cost for the patient. The described examples might result from a mismatch between expectations with the patient that oral health service is unlimited at HPM. When participant said “Money” at the departure, it could be an expression of disappointment for the offered solution and feeling of being poor related to her migrant status (without money). The communication from the dentist to the patient may not have been sufficient to create a good understanding why tooth extraction was the only treatment option and should be performed (unless the patient could pay for an alternative (in the private clinic) to treat their dental problem). It could be that the dentist assumed that the participants were informed about the limited capacity available at the dental care services of HPM. The dentist may have ended he consult –when the patient left the place without the treatment- in the belief it not to be appropriate insisting on his professional opinion and that the patient had decided for his/her well-being.

Misunderstanding between participants and the dentist could also been arisen from the language barrier (94). Neither of the participants described in the above two cases spoke Norwegian or English (which were the only languages commanded by dentist). Insufficient interpretation (interpretation was provided by other people than professional interpreter) might have been a reason for not understanding why the tooth extraction should have been performed. Researchers (91) indicated that professional interpreter can improve the quality of conversation and give clearer explanations of patient’s specific situation through enhancing dialog and building rapport between doctor and a patient.

It could also be that the dentist might work under a time-pressure for what reason spending more time to better understanding the situation- even with the presence of an professional interpreter- does not take place.

In many of the countries of origin for migrants, there is a lack of trust in authorities and institutions due to corruption and lack of professionality (95). The participants may also become suspicious towards Norwegians as result of earlier negative experiences in particular when it concerns a rejection of stay in Norway by the authorities (feeling of untrusted, unwanted migrant). In an informal conversation, one health centre worker told during participant observation that some of irregular migrants from Somalia show their unwillingness to communicate. The health care worker assumed it could be related to the lack of trust to the health

centre workers. Sometimes participants had to wait hours for their turn to see a doctor. They may be thinking that a health centre worker specially delay their visit to the doctor.

Trust is an important component for successful patient-dentist relationship and determines patient satisfaction with the received treatment (96). Participants in this study visited dental health care in the expectation to receive professional help. They therefore laid their confidence with the dentist to be treated for an acute problem. Examples given in this study illustrate that the confidence amongst participants is negatively affected through their experiences in poor communication. Dentists did not provide sufficient information to participants on their dental problems, on what the treatment options could be, and on the actual treatment procedure. In view of the participants they did not spend time to talk to the patient to identify their feeling, their situations, wishes, and motives. It seems there is also negligence of dentist to explain the payment procedure. Negative experiences undermined participants' trust in the dentist. Lack of trust affected participants satisfaction with the treatment and in some cases left participants with untreated oral health conditions.

3.3 Mental distress and oral health

Most of the participants during interview mentioned a feeling of stress and anxiety in their everyday life due to different reasons. Stress and anxiety experienced by participants was a response on different questions related to oral health. Some of them talked about their poor oral health condition while others began to talk about the difficulties they experience in the day-to-day life.

3.3.1. Poor oral health

The orofacial region seemed to play an important role in participants' life. Many participants expressed how oral health problems were contributing causes of worries and anxiety. Negative impacts of poor oral health manifested in different ways and below are some accounts given by the participants when they talked about their oral health problems.

Pain

Most of the participants experienced toothache pain. Different pain intensity in the teeth was reported. For some participants it was prolonged sharp and throbbing pain, for another mild brief pain provoked from cold or hot stimuli. When talking about pain participants very often used expressions such as: *"I worry too much", "I am in panic"*, and *"it stresses me too much"*. Consider the following examples.

When Sarah was describing how she experienced dental pain she said that three of her teeth had periodic moderate pain but one tooth was very painful. "*When pain comes I worry too much"* said Sarah. She had experienced pain for many months. It made her tired because sometimes pain was so intensive that she could not sleep at night. Sometimes it was only three or four hours of rest she had in the night. She also said that when she experience pain she cannot clean the place where she was staying, cook, and take care of her child.

Another participant Ahmed said that he was so exhausted by severe toothache that: "*I hit my head against the wall"*. He thought the pain from hitting his head would overcome the toothache.

When Kirill talked about his oral health he said: *"My biggest problem is pain. I cannot bite it hurts"*. He said that he had been living with the pain for a long time (minimum a year).When he experienced tooth pain he could not bear it. Always happy to provide some help in the church when the pain came, he would not go there because he felt completely down. He began to drink alcohol systematically. He said that he did not care what people thought about him when they smelled alcohol from him. The only thing that mattered was to kill the pain.

When Marat was asked to tell about his oral health he said that during last six month he had experienced spontaneous moderate pain in one of his teeth a sharp and throbbing pain in another. Marat said *"When pain comes I do not know how to stop it, then I am very scared… stressed…*" He sadly admitted that he had to learn to live with the pain, but it was very difficult. Especially it was difficult for him to manage the pain during his work*:" If I am working, when pain comes I have to stop, sometimes one or two hours I wait."* Then he said: *"I cannot eat meat anymore… When I eat meat it hurts".*

Zakir expressed his feelings this way*:" Pain stresses me too much…"* When he experienced pain he could not do anything even: *"I do not go to play football when I have pain."*

Another participant Sally said the following: *"…tooth is very pain full… I become sick… I have headaches (suffering from migraine)… when (tooth) pain comes I have headaches."*

Poor oral health conditions seemed to result in different experiences amongst the participants. Of the eight common oral impacts on daily performants (see OIDP in the introduction) the most prominent among the participants seemed to be relaxation at night, performing their work, enjoying their food and socializing with other people.

The examples described above indicate that the pain mentioned to be experienced by the participants was related to anxiety, lack of sleep, fear and lack of motivation – all signs of mental distress.

For some participants toothache pain affected their ability to participate in social activity such as playing football or going to the church. This seems to indicate an emotional state in which there is little enjoyment. For some participants anxiety over the "irregular status" may have reduced social contacts for example in the case of Zakir who told to be afraid to speak with any unknown person about his irregular situation. In this way, withdrawal from playing football may reduce participants' access to valuable contacts that can give support and could have contributed to a feeling of social isolation. Besides loosing relevant contacts, it may result in absence of spending quality time through participation in social life. For instance Kirill's participation in different activities in the church could have helped him to reduce problems associated with lack of personal motivation (he depended on alcohol to create some psychological relief from stress), and give him some direction. Research shows that undocumented migrants without work of other engagement that contribute to a meaning of life are more likely (vulnerable) to health problems compared to those who have an opportunity to work (97).

In Marat's example tooth pain might influence his ability to do a job. When Marat said "I had to wait two three hours" it could mean that he could not perform his work he was supposed to do. Unfinished work could have resulted for participant not to receive his money. We can assume that in the grey zone of the labour market, completed work is the only thing that counts; any absence due to health problems is not compensated for. This could have resulted in longer working hours to finish Marat's work which in turn can be more exhaustive and have negative impact on psychological and physical well-being.

One participant (Sarah) noted that she could not clean her house, cook and take care of her child when she experienced throbbing intense toothache. Though participant did not mention how pain affected her ability to do a house work we can assume that irritation and distress from the pain could have made physical activities very difficult. Initiation of physical activities could have make pain worse.

Eating became difficult for some participants and causing a change in diet, as Kirill mentioned in the interview when he experienced intensive tooth pain, yogurt became the main staple food to him, while in the case of Marat he had to exclude meat from his diet. Not being able to eat what they liked may reduce participants quality of life because, as Marat said*: "I do not enjoy food anymore…"* Moreover it may impact participants' social life where eating is an important part of the socializing. To explain to someone why you cannot eat may not be always comfortable

Self-mutilation to other parts of the body that can better absorb the pain in the example of Ahmed became a way to distract the pain from the mouth. Such behaviour could be harmful for other parts of the body.

Toothache also triggered headache (migraine) in one participant. Her feeling" I become sick" may mean that headache may compromise her physical and mental status (98).

These findings echo the findings of Cohen LA at.al (99), who explored impact of toothache on quality of life of people from low-income families and minorities. The researches indicated that toothache pain affected the participants' "ability to perform normal activities, such as their job, housework, social activities, sleeping, talking, and eating, as well as making them depressed and affecting their social interactions".

Toothache is a woeful experience (mentioned in introduction). Most people may admit that this is one of the worth kind of physical pain possible. It may be hard to understand for many people why a person cannot receive free of charge treatment for oral pain at the emergency clinics of hospitals whereas for example the treatment of a broken leg would be provided for free.

Toothache pain was the most frequently presented oral symptom among participants in this study. Due to different reasons and mainly lack of access to dental care, there was an apparent

common practice of neglect of symptoms and postponement of tooth decay treatment among participants in this study.

Halitosis (bad breath)

Halitosis is defined as noticeable unpleasant odour that occurs from the mouth that is noticeable to others. Nearly more than 50% of general population experience halitosis at some time. (100) Although there are different factors plays a role in the origin of halitosis (for example respiratory tract infections, can originate from lower parts of the gastrointestinal system) the oral cavity is a source in 90% of the cases. Risk factor can be: gum diseases, poor oral hygiene, unclear dentures, defective restoration, food impact, oral cancer (101).

Some participants in this study reported bad breath while it was also noted during observation in the dental office (at HPM). In the interviews participants mentioned the condition when they talked about their oral health. During observation it was part of patients' oral health complains.

Most participants would mention bad breath briefly in their conversation without pointing its consequences, for example like Arthur expressed:

"When I wake up in the night, I have bad breath even though I clean my teeth every day!"

Some participants expressed how direct communication with people became difficult:

Zakir said: *"I cannot freely talk to the people I close my mouth (with hand) when I talk. I also use chewing gum."*

Marat reported: *"When I talk to somebody I keep a little distance and my head is always away from (direct) look, I do not want that people smell me from the mouth."*

In another example participant was very concerned about his problem as it touched his closest relationship:

Ali on the question "Tell me about your oral health" began his conversation from this issue. He was almost crying when he talked about it*: "I cannot talk to anybody in the morning because I have bad breath, I even cannot speak to my wife…"* He also said that he was very unhappy when his wife made a remark about bad smell from his mouth during day time (not even in the

evening!). He desperately tried to find a reason for his problem*:" When I brush my teeth I use hard brush, I am not smoking so where is it coming from!?... Bad breath makes me sick!"*

Some participant did not feel comfortable to talk to others. For example when Marat said "*I keep a little distance"* or *"my head is always away from direct look"* may indicate that participant was ashamed that person will notice unpleasant odour.

When Ali talked about bad breath his eyes were filled with tears. This may indicate that he was very emotional; it might be a response to negative feelings. When he said that his wife noticed unpleasant odour from his mouth not only in the morning but also in the day time could mean for Ali that the process (bad breath) was progressing. The fact that his partner mentioned bad breath may also mean for participant that she might struggle to accept his odour. Ali might develop a fear of being less lovable or less worthy. Living with such feelings could compromise his emotional stability. Additionally, when Ali said *"I cannot talk to anybody in the morning"* may mean that he avoided talking to people in the morning.

We have also seen from another study that oral malodour had a strong emotional impact on quality of life of people. (101)

Aesthetic appearance of the teeth

Some of the participants expressed their dissatisfaction with the dental aesthetic appearance when they spoke about their oral health problems and in particular their teeth.

Some had a strong desire for clean, white teeth and expressed discontent with the colour of their teeth. This can be illustrated with the following examples:

During the period Zakir was invited to participate in this study, he received dental treatment in the Health centre. Despite the different oral health problems he experienced, the first thing he mentioned when asked about his satisfaction with his oral health was: *"…when I see some people have clean and white teeth I am jealous. I feel my teeth are not good…I would like to have a treatment to whiten my teeth".*

Arthur expressed his desire to look smart and fresh. White teeth were making part of that image: *"I like good clothes, I like to feel fresh, and I like to have white teeth."*

Ali was another participant, who was not satisfied with the appearance of his teeth. He felt they were not white enough to look good. When he was asked why it is so important for him to have white teeth he said: *"Because when you smile you see white teeth. Half of the face is smile. People will not see another part of your face when you have beautiful (teeth) smile."*

One participant, Sarah, mentioned that she had overcrowded teeth when she talked about her oral health. She said that she did not like her teeth because they did not look good. She said that she never smiles in public or when somebody would make a picture of her. One of her expression was: *"I am jealous of my sister because she has nice straight teeth".*

In the case of Medina, missing a front tooth was one of the items in the conversation on her oral health she talked about. She said that when she was talking with someone she had a feeling that the person started looking at *"black hole"* in her mouth. She normally covered *"the hole"* with her hand during conversation. Medina mentioned that she was embarrassed by her husband because she thought that she: *"... look like an old woman".*

Importance of aesthetics of orofacial area may also explain why some participants from Somalia - who were being observed for the study - rejected the treatment of teeth extraction as resolving method. One illustrative example was when a young Somali woman left the dental office without any treatment. When leaving the room she showed to the researcher with her both hands how her face would look like after extraction of the teeth (this example was presented in the previous chapter "Access to dental care").

The importance of having white and straight teeth was particularly emphasized by the young adult participants. White teeth and straight teeth as part of their personal appearance seemed to be crucial, as participants continued speaking about this when the conversation focused on their satisfaction with oral health. Romantic relationship and establishing new social contacts could be nonexclusive reasoning for such importance, as Ahmed said: "*It is cool to have good teeth and smile. When a girl comes and your teeth are looking nice she says "I wanna be with you.""*
Study of Van der Geld at.al (102) demonstrated that an attractive smile has impact on the psychological well-being of an individual. Colour of teeth was one of the critical factors in satisfaction with smile appearance. Nowadays, if we look at tooth-paste advertisements in the

media, they always show a happy face that is smiling and showing beautiful white, straight teeth. This suggests a general and common opinion of people on how teeth should look like.

Some participants were apparently concerned about people's judgment of their dental appearance because they seemed to change their way of smiling and talking to people. This was the example of Sarah when she said that she never smiles in public (she was pestered at school as "*vampire*"), or in the case of Medina when she said that she covers "*the hole*" with her hand when she talks to people after losing her front tooth. Moreover when Medina said that she was embarrassed of her husband because *"I look like and old women"* may indicate, that tooth loss associated with the old age what in her view might not be attractive to her husband and could have negative influences on their relationship. Shame, fear of judgment and fear of relationship problems (cannot be loved or are not attractive) might be instances of experienced emotional distress. These adverse emotional feelings may impact participants' self-esteem what in turns may reduce quality of their life in different ways. Some negative consequences could be: inducing negative feelings, avoiding activities that involve other people, relationship problems.

Tooth loss

As described earlier, some participants had multiple oral health problems, examples were given of the aggressive effect of toothache in combination with other conditions. Two participants indicated negative effect of tooth loss on their ability to chew.

When Marat was asked to tell about his oral health, he said that the lack of teeth made it difficult to chew. All together (with other oral health problems) he said: *"I do not enjoy eating my food anymore"*.

When Bushra talked about his oral health he mentioned that he had difficulties to chew and swallow food (presented in introduction of participants).

These examples may indicate that participants experienced discomfort during eating as Bushra expressed *"food stuck in my throat"*. It seems that participant did not enjoy food as before. M. C. Bortoluzzi at.al (101) observed "that the chewing disability produces a significant and negative impact over oral-health related quality of life."

3.3.2. Difficult life situation as a source of oral health problems

During the interview, some participants when they were asked "Tell me about your oral health" started talking about difficulties they experienced in their life in the past and in the current situation. While talking about difficult life situation they reflected on how its consequences negatively impact their oral health. Only a few of them were able to talk freely about their difficult life situation. The following two examples can illustrate more in detail how stressful experiences in life had a negative impact on the emotional status of participants which in turn may negatively influence their oral health.

The first example is of Medina, who had been living in Norway for the past four years. When she came to Norway she stayed in the Reception Centre in the distant part of Norway. She was pregnant and was living alone. At that time she said: *"Because of the stress, pregnancy and different thoughts I used to constant little aches in my head, mouth and different part of the body. Different country, different climate..."* She could not sleep because of long dark winter days and a lot of sun light in the summer. She felt tired. She very often went to see a doctor because of the pain. Constant thoughts were: *"I must endure. I must hold on. There were no friends, nobody with whom I could talk. Then I could find internet and it helped me to find some people with whom I could communicate. In the North it is very difficult to get used to the place. Boring, very boring! I save some money to go and visit my friends in the city. I asked so many times to send me to the city but instead they send me further north. When I went out of the system (asylum application was rejected) I moved to Oslo. Here is lively, many shops especially you can buy "halal" products".* Medina got married and had her second child. *"Our life is very difficult. We do not know what we can expect tomorrow. When my husband comes home from the work (he was working in the night) I and the children go outside and spend the whole day outside so that he can rest for the next working night."* She said that pain in her head and gums continue to persist.

This example indicates that when Medina came to Norway she went through a stressful life situation. Medina was a Muslim; she came to Norway alone while she was pregnant at that time. Language barrier it could have been a reason why she had difficulties to build contacts with people around her, thus making her to feel alone. To adapt to the Norwegian climate in the Northern part of the country seemed to be very difficult for Medina. Lack of sleep and tiredness

are some of the negative consequences Medina experienced due to this maladaptation. Despite some positive changes in her life through her marriage and changing of home (currently in Oslo), the worries and anxiety in Medina's life seems still to be present. When she mentioned"...*Me and the children go outside and spend the whole day outside*" while her husband was taking a rest for the next working night, it could be an indication of the difficult life situation she was in. Probably poor living condition and young children leave little possibility to offer the rest her husband was looking for. To spend the whole day with her little children outside could have been very tiring. Moreover when her remark "*We do not know what we can expect tomorrow*" may mean worries about uncertain future. All those stressful life events could have had negative impact on her mental state. (Possible impact of mental distress on oral health will be discussed further in this section)

When I asked Fouad to tell me about his oral health he began to talk about his past experiences in his country of origin, he said*: "…they could kill me or torture! I could not sleep. I slept two, three hours per night, nightmares! It came to my health. I started grinding my teeth."* Three years: *"I was always scared! It is hard to be always scared".* He left his home country and came to Norway. While waiting for asylum application in Norway he tried to build a contact with Norwegian people. He said that he could not find people who would understand him, more than that he felt sometimes being avoided by them. He said that he felt lonely; he tried to keep his mood by doing some work. He said that rejection of his application (around three years ago) was bad news*: "I am underclass social. I came to Breivik's (A.B) ideology land with double moral, always talk about human rights but it is not real… You are not welcome in this country. They abuse my case and subject. Every refugee must to be stupid and fundamental. They consider profoundly that Asian asylum seekers must be almost non alphabetical. I am here and I am alive but this is the only difference (comparing with the country he came from). I am not complaining about Norway's normal people… as good as ordinary people in the world. I had a chance…"* He said that he wanted to kill himself but*:" I am living now, my partner support me… It is hard feeling not to be accepted (in Norway)… I still have problem with sleeping and grinding my teeth. I never know what will happen with me after three days."*

This example shows that participant experienced some negative life events such as: living with fear for his life in his home country, rejection in Norway (discriminated) because of his non-

western origin, being misunderstood by some Norwegians because of different values and the way of doing things. He gave the example, when he talked about differences in the way how visitors are received in his home country compared to Norway, sharing food was a sign of hospitality and he always tried to do so when he invited Norwegian people to his house whereas he did not receive the same hospitality from them. In another example he expressed his lack of understanding of the Norwegian way to spend time together sitting in front of the television without exchanging even a few words during the whole evening. The rejection of his asylum application left him the feeling that the system has no trust in him. Now he also experiences insecurity for the future to come. All together this resulted in feeling of loneliness, anxiety, sadness and lack of sleep.

Some participants expressed their stress in life as the following.

When Kirill was talking about his current life situation he said: *"I am angry. I drink. Nobody cares about me. I do not understand why they do not give me (permission to stay)... I am grinding my teeth all the time!"*

Anxiety, insecurity uncertainty about the future and loneliness seemed to be the main indicators of stress in this example. It also shows that the participant made himself dependent of alcohol to create some psychological relief from stress.

Ali during our conversation about his oral health status suddenly stopped talking. His eyes filled with tears. I gave him time to calm down. After sometime he said: *"All my problems came little by little but now became big (life situation)… When I came to Norway I was not smoking so much only one (cigarette) a day. From… I do not take even one. I do not like smoke, I don't drink and I like sport… So where it come from (bleeding gums)!?"* He said that all his oral health problems come from stress.

Though Ali did not specify his problems, this example indicates that participant worried about his current life situation. "Almost crying" is suggesting the emotional feeling, a response to negative events, a sign that participant may be suffering from symptoms of fear, uncertainty and anxiety to the extent that it can take over his life.

It seems that Ali was aware about negative influence of smoking and alcohol on oral health when he was trying to find a reason for his oral health problems. But when he was talking about his oral hygiene practices he mentioned that he does not clean his teeth systematically twice a day. It seems that Ali was aware about negative influence of smoking and alcohol on oral health. But when he was talking about his oral hygiene practices, he mentioned that he does not clean his teeth systematically twice a day. The potential risk for damages (bleeding gums) by neglect of personal oral care seemed to be accepted by Ali. It could be that experienced difficulties in his life made him less eager to spend time brushing his teeth.

Farah was a participant who mentioned stress issue when he was talking about satisfaction with his oral health. On the question "Are you satisfied with your oral health?" he said: *"I am not satisfied…No… How can I be? How can I clean it (teeth) every day!? I wash my teeth and then I eat. I am stressed… I do not sleep till 02.00, 03.00 sometimes 05.00 (o'clock)... I have so many problems. I feel sad…"*

Despite feelings of anxiety, sadness and having lack of sleep Farah's example also indicates a depressive symptom such as loss of interest in cleaning teeth and taking care of himself in general (eating food late in the night). As this process continues over time poor hygiene may lead to bad breath, aggravate existing dental diseases and develop new one (for example gum disease).

Stress is a known risk factor for oral disease (104). It is known from primary research that life as an "irregular migrant" is associated with high level of psychological stress and increased risk of mental disorder (11). Stories from participants to this study illustrate an accumulation of stress first in negative life experiences in the home country and in addition stress accumulated through their irregular status. Some of the interviewed migrants in this study experienced threat for life, social isolation, financial strains, discrimination and stress from rejection of the asylum application and may have been living for an extended period with symptoms of mental distress.

Persistent psychological distress was likely to impact on participants' oral health. Some of the participants mentioned symptoms of poor oral health that could be related to prolonged mental distress. For example when Medina talked about her difficult situation in life she also brought up

some minor pain in her head and her mouth (105). In the case of Fouad and Kirill talked about grinding teeth (106) while Ali mentioned the bleeding of his gums (107, 108).

Though none of the participants specified any theory of the detailed mechanism through which their oral health problems developed due to the stress, some verbal and nonverbal expressions could indicate participants "feeling of a correlation". For example when Kirill was talking about his experienced stress, he demonstrated to the researcher how he grinds his teeth at times when he is nervous. In Fouad's case, when he said*: "…they could kill me or torture! ... I started grinding my teeth",* possible indicative for participant's reaction at moments of fear and anxiety to start grinding his teeth. When Medina explained her difficulties in current daily life, she also told that she did not have any oral health problem before arriving in Norway. Her first signs of mouth pain appeared when she felt stress from loneliness, lack of sleep, and fear for an uncertain future. Sometimes she had to visit a doctor to receive medication against the pain.

While stress is considered an independent risk factor in developing poor oral health conditions, one example illustrates that it can also have a negative impact on oral health behaviour of a person (109). (Example of Farah indicates a depressive symptom such as loss of interest in cleaning teeth. He did not clean his teeth regularly).

Stories by some of the participants express an overwhelming frustration with unwelcome response, rejection, and mistrust from society about their struggle with an improvement in their life. It could be that participants felt triggered by the questions during the interview to express their frustrations and disappointments. The setting of the interview – in an environment they trusted, with the researcher also being a migrant - might have created for them an opportunity "to be heard without being judged". Some of the questions raised by the researcher could have triggered those feelings. For example in the case of Farah when he said that he was not satisfied with his teeth, it could also mean that he was not satisfied with his difficult life situation. Similar may be for the concerns raised by Fouad about human rights violation and discrimination for him an expression of his struggles in the day-to-day life.

If psychosocial stressors exist but are not addressed some oral health conditions may become chronic and impact individuals' quality of life (110).

3.4 Self-management strategies

The majority of irregular migrants experienced poor oral health and problems with accessing dental care. In order to get through difficult situation many of them used different coping, compensation strategies.

3.4.1. Use of social network

When exploring how irregular migrants operated their arising challenges in solving their oral health problems it was found that social network played a significant role. Many participants relied on the assistance of the friends or acquaintances to solve their oral health problems.

There were different ways the connection between irregular migrants had been made in the study. Some of the people knew each other from the country of origin or met during migration process. Many irregular migrants made new relationships with people while staying in Norway. Most of those contacts made in Norway were with the people of the same nationality. There were also migrants who lived with Norwegian families or had a Norwegian partner.

Provide information

For some participants in the study the possibilities opening a door for dental care clinics to find information about possible treatment might be limited for apparent reasons such as fear of being found irregular, lacking money to pay for the treatment, communication problems due to a language barrier and unfamiliarity with the complex health care system. It was observed during interviews that most irregular migrants was depending on an informal social network such as friends, acquaintances and family members to get information or find direction to HPM or other affordable dental care services. One of the participants expressed his search for dental health care as follows.

Ahmed decided that he needed dental care when he noticed his gums were bleeding. Due to the high cost he was not able to visit a private dental clinic. He asked one of his friends if he knew who can help him with his dental problem. The friend was familiar with the HPM and gave Ahmed the phone number of HPM explaining how to get to the place: “My friend said I have to take a bus, he also gave me a number of the bus.” Ahmed visited a dentist in HPM and received necessary treatment.

Another participant Sally explained her way to find dental care services; she said that when she left the reception centre she was able to find herself a job. With the small income she earned, she decided to look for repairs to her teeth. She did not know where to find affordable dental care service. She asked her friend, who recommended her to visit a university dental clinic where dental care students practiced. Sally was satisfied with dental service by saying: "Prices for dental care are not high there."

Both examples indicate difficulties participants experienced to identify affordable dental care. With the help of friends information reached participants about where they could find dental clinics they would be able to pay for, or HPM.

For few participants who are recent arrivals to Norway (newcomers) understanding and navigating in the complex health care system may present serious difficulties.

This was the case with Bushra. Rejected from the public hospital he experienced: "Persistent fear about pain. I did not know where to go and find help. I did not know what to do! "When pain became unbearable Bushra decided to search for information. He said: *"I asked some people for help, they said there is …house, it works 24 hours. I was very keen to go there." In that clinic, he was able to receive dental treatment.*

This case illustrates how advice and information from friends who are familiar to the system provided participant with valuable orientation on the different options available on dental care in Norway. By using information participant was able to obtain dental care.

For one participant the informal network from closest friends and a family member represented the only source of information about dental care.

Zakir said that any contact with unknown persons could ultimately result in being caught by the police: *"I worried (about being caught) and asked my (family member) to help me. When people (close friends) saw me in pain they said me where to go to find help."*

With the help of closest friends and family Zakir was able to find HPM and received dental treatment.

Advice from others about self-treatment

Some participants without options for professional help accepted an advice from others, how to treat an oral health problem by themselves. The following examples illustrate how participants practiced self-treatment as suggested by their friends who were not dentists.

Ali was concerned about dental appearance of his teeth. He was occasionally smoking and felt that his teeth should be cleaned. He did not have a possibility to visit a dentist due to the cost. Upon arrival in Norway he met one person who became his friend. The friend was a medical student though without oral health knowledge. Ali asked him if he could help to get bright teeth again. The friend offered to show him something special. Ahmed could not explain what kind of thing it was, he said: "Something to make my teeth clean and nice. It was plastic with a chemical like thing inside, to put it in the night. My friend did it (device) for me." The friend made the device (bleach guard) for him and explained how it should be used. Ali used the device until he was not able to buy materials anymore to fix it.

When Ahmed talked about his coping strategies with oral health problems he said that he never used medication if symptoms appear. He had bleeding gums. He worried about it very much. He asked his friend if he knows how he can improve the health of his gums. A friend told Ahmed that he should clean his teeth with the finger and not use toothbrush.

These examples demonstrate how participants in search for dental care struggled and turned to unprofessional solutions. Though advice and self-treatment in some cases might be useful it could also pose potential harm. For example in case of Ali using device for whitening the teeth without professional supervision could have resulted in damaging teeth, for example if any of Ali's teeth had cavities he was not aware of. Adding bleach remedies to carious teeth can be harmful to the nerves of the teeth. Bleaching of teeth is allowed in Norway only if supervised by the dentist or the dental hygienist (Helsedirectorated).

In relation to Ahmed, cleaning teeth with the finger could not have been sufficient to maintain adequate oral hygiene (according to common opinion in dentistry). Poor dental hygiene could have led to intensification of already existing inflammation in the gums.

Provide transport

The vulnerability of participants was not only relating to the lack of knowledge of the dental care services in Norway for what they rely on information from their social environment. One participant also reported depending on the person for logistic needs as she had insufficient money.

This was Medina's example, having no money to obtain dental care in private clinic found HPM through her husband's informal network connection. To her big regret HPM could not provide the dental treatment she needed and she was referred to the dentist who practiced in a region which was distant from Oslo. Medina said that to get to the destination became a big problem for her due to the price for the public transport she could not afford. One of her acquaintance had a car and as she said "he was very kind" to bring her to the dentist.

This example shows that high price participant had to pay for the public transport became an obstacle to access dental care. With the help of a person from her husband's social network she could obtain necessary dental care.

Provide medicine

To eliminate painful, unpleasant disturbance in the mouth some participants without options for professional help turned to the help of their family and friends who could provide them with the medicines. Examples and discussion on this matter will be followed in the subtheme "Self-medication".

People with knowledge about dental care system

Some participants maintain a social network with the local population. Their friends may give them support, may guide them to find the way how to access the Norwegian dental care system. Some of these connections also offered financial support to visit the dentist. The account by Arthur illustrates the relevance building a trust on social networks. However, it cannot be assumed that all Norwegians are familiar with the limitations of the dental care system for irregular migrants.

After Arthurs´ permission to stay in the Reception Centre, he also lost his work and became completely dependent on a Norwegian family. He was offered shelter and food. When he got

pain in his tooth he decided to inform the family about the problem. The members of the family found a dentist for Arthur and his tooth was treated.

The escorts of patients

The diaspora of nationals from the same country of origin played an important role for participants in this study and have contributed to the proper dental care for irregular migrants. This was particular relevant for Eritrean and Somali participants. During observations it was noted that most participants did not feel comfortable to come alone to visit a dentist. The reasons for such inconvenience could have been fear of dental treatment, language barrier and cultural differences (for example in my home country, Azerbaijan, to avoid any form of harassment (particularly sexual) it is very common that women accompanied by family members or friends when visit a doctor especially if a doctor is a male). The escorts of patients were most of the time from the same ethnic origin. Emotional support during dental treatment among women was very often observed. Holding a hand of the participant, talking when she was anxious calming the patient down thus enabling the dentist to complete the treatment. Additional to psychological support companions were very often the "bridge" between the doctor and the patient, providing language interpretation and explanation of the dental procedure.

Non-governmental organizations

Several participants used non-governmental institutions to find information about affordable dental health care. Consider following examples.

In example described above, Bushra was able to obtain dental care followed advice of his acquaintance in one of the city dental clinic. The participant said that having no money to return to the same dental clinic for further treatment, he: "…went to organization dealing with asylum seekers. I discussed my case with women. They gave me an address. I came to the Health Centre (HPM) and got introduction. I met with the doctor. (The doctor said) You can book a dentist."

Similarity with Bushra situation can be seen in Sarah's experiences. High price for dental treatment in private clinic prompted participant visit one of the organizations "….." where she could discuss her current health situation, she said: "I complained about my teeth problems." Sarah received information about HPM from one of the organization's employees. The officer

did not guaranty the existence of dental care in HPM. Sarah decided to visit HPM. She could make an appointment with a dentist and undergone dental treatment.

Examples above newly illustrated difficulties participants experienced to find affordable dental care. It seems that when all the sources of information used to find affordable dental care were exhausted they turned to formal organizations in the expectation that these organizations could offer advice or solution to solve their health problems including oral health. With the help of formal organization irregular migrants could find information and access dental care for free in HPM.

3.4.2. Self- medication

Many irregular migrants in the study gave an account of the situations where they used medicines at their own discretion in order to alleviate oral health problems. There were different substances mentioned by the participants in the interview and during observation which were used to eliminate poor oral health symptoms. Choice of remedies and its use was mainly guided by self-decision.

Majority of the participants reported using painkiller to reduce toothache. Consider following examples.

When Bushra talked about his experiences to access dental care he reported that when he was rejected from the Public hospital for dental treatment he had: *"...periodic pain in the tooth"*. With the time the pain become more persistent, Bushra said that he began to use painkiller to eliminate toothache*:"... before I go to sleep I took one tablet of "Paracetamol..."*When pain did not go away (he took) four times a day. He thought that: *"It is not good to take paracetamol so often. I changed for "Ibuprofen"*. He said that he continued to use medicine until he found access to emergency dental clinic.

In the reply on the question *"Tell me about your oral health"* Sally said: *"...Sometimes I take pain killer...sometimes I have to bear the pain."*

When I asked Sarah *"What did you do when you could not obtain dental treatment you needed?"* She said that when she visited private clinic: *"...the tooth pain was not so bad"* but then when

she decided to postpone the treatment: *"it became so strong, I took "Ketanol". I used it every day three, four tablets. I had stomach ache (from using the medicine so often)…"*

Zakir said: "I took medicine (painkiller) before I knew about Health Centre (HPM)."

One participant reported drinking alcohol to reduce tooth pain. This was the case of Kirill. His example was given within the previous theme "Mental distress and oral health" in the subtheme "Poor oral health".

Some participants noted that they used not only pharmaceutical substances but also "unconventional" methods (folk remedies).

When Farah talked about his oral health he said sometimes he was using salt water to reduce irritation in the gums.

Ali used similar method. When he talked about his regret not to be able to access dental care he noted: *"I am using salty water when I feel like itching and see blood coming from my gums."*

A few participants mentioned using antibiotics to treat their oral health problem.

One participant, during observation in dental office, complained about pain in the tooth which was under the denture. He said that he went to emergency dental care clinic but could not pay for the treatment. The tooth was very painful. He said: *"I used antibiotics; my friend gave it to me."*

One participant indicated that she was using ready-made medicine (solution) from the drug store.

This was the case of Medina, when she talked about her oral health she said that she did not know how to reduce irritation in her periodically swollen gums without being able to visit a dentist. She said: *"One of acquaintance was going to (other country)... I asked her to bring me something to relive my gums from the pain. She brought me ready made for use liquid (solution) for rinsing my mouth. She bought it in the drug store. I rinsed ten days and pain disappeared."*

Provided examples indicate that due to inability to find affordable dental care many participants neglected revealed oral health symptoms. With the time pain and irritation became more persistent as a result of deterioration of oral health conditions and lead participants to take

measures to reduce painful, unpleasant feelings in the mouth by using biological based medicine or “unconventional” methods. (111)

Toothache was the main cause for self-medication (111).

Analgesics were the most frequently used substance for treating oral health problems (112) following by antibiotics (112) ready-made medicine from the drug store, salty water and alcohol. Frequent use of analgesics by participants in this study is not surprising because, as mentioned earlier, tooth pain was the most often presented symptom among participants.

Antibiotics were used by a few participants for oral health problems. Using antibiotics without a prescription seems to be a common practice among participants. It may relate to the participants past experiences of using antibiotics without prescription in their home countries. Over the counter sale of antibiotics without prescription are still common practice in some developing countries despite the practice is not legal (113). It could also be that participants have no access to ordinary primary health care to receive appropriate treatment; the use of readily available antibiotics might be the only option. A possible lack of risk awareness by using antibiotics without prescription and the possible experience of positive result with use of antibiotics might be reasons why participants used the drug. Antibiotics were acquired through social network of participants mainly friends and family members. It may not be surprising that participants used their network to find antibiotics because large majority of medicine in Norway are restricted to prescription only medicine (114).

For a few participants to treat miner illness such as itching in the gums with salt water seems to be a customary practice. It was traditionally used for reducing pain and irritation in the mouth in their home counties since they were children. Use of salt water to reduce pain and swelling in the oral cavity and also for preventing gum disease was previously reported in another studies (115).

Use of alcohol to alleviate pain in various oral health conditions indicated in the relevant literature (113). Unlike in this study, where participant was drinking alcohol, participants in another studies used cotton balls soaked in alcohol and applied to the affected area in the mouth. Alcohol dependency might be one of the reasons why participant in this study used alcohol against pain. He received treatment for alcohol abuse. Negative consequences of using alcohol for oral health discussed in the previous theme.

One participant asked person from her network to bring medicine from the drug store from another country. It seems that participant was aware about potentially harmful effect of a medicine if used without prescription. Without any options to receive professional help, she has put her trust in the pharmacist that other country to select the medicine that could when treat her gum disease. High price for the necessary medicine or prescription requirement to be able to buy medicine in the drug store in Norway could have been some of the reasons why participant ordered medicine from abroad.

Self-medication if used appropriately can have benefits for the individuals; this might be the case of Medina when she mentioned that her pain in the gums disappeared after using medicine for ten days. Some advantages indicated in the study of self-medication for oral health problem from Cameroon (116). However in dentistry self-medication does not always address oral health problem and often professional help is needed. Moreover it may hold potential risks such as: adverse reactions, improper dosage, incorrect drug selection, and dangerous drug interactions.

One participant (Sarah) mentioned having pain in the stomach and related it to the systematic and prolonged use of painkiller. Sarah suggests that the long use of the pain killer is causing stomach problems, although this is not a professional diagnosis, it might be assumed that the self-medication by Sarah created additional health issue. Previous study indicates negative consequences of systematic use for a long time self- medication. (116). some of them include: antibiotic resistance, bleeding tendencies, analgesics nephropathy. (116)

4. Conclusions and recommendations

This chapter concludes the study and presents possible recommendations.

4.4.1. Conclusions

This study identifies different challenges and responses with irregular migrants in connection to their oral dental health issues.

The current oral health situation among participants varied and in most cases represented multiple oral health conditions such as cavities, swollen and bleeding gums, loose teeth, missing teeth. Irregular migrants expressed unsatisfactory oral health needs.

The study showed that irregular migrants experienced significant difficulties in accessing dental care services. Different obstacles were identified:

1. Cost of dental care was one of the primary barriers for participants to access dental care. Absence of free-of-charge dental services for adults combined with the high cost of dental care at private clinics defers search for examination and dental treatment.

Study established that HPM is offering an exclusive dental care services in Oslo as all other dental care services are not accessible to study participants who lack sufficient money.

2. Some participants were dissatisfied with the received treatment or did not receive the expected counselling on the treatment from the dental health professionals due to an apparent lack of preparedness (willingness) by the dental health worker to prioritize communication. Absence of language proficiency in addition contributes to a communication gap.
3. Lack of information with the participants where and what are options to access dental care.
4. The lack of information on health care rights with both health care providers and patients were another important limitation to access dental care.
5. Fear of being reported to the immigration police while visiting a dentist in dental health care clinics other than HPM or fear to be caught by the police during traveling to HPM.

The study reveals that many participants were neglecting oral health symptoms and avoiding to access dental care due to different barriers. As a result the already poor oral health condition was further deteriorating.

The study established that most participants experienced a certain degree of mental distress. Different reasons for this mental distress could be recognized. Most participants complained about oral health problems causing stress. Participants mentioned in particular tooth pain and bad

breath. This study suggests that poor oral health had a negative effect on the day to day activities as eating, sleeping, doing housework, job, social activities and participation.

Some participants described living under mental stress related to their situation of isolation, insecurity, discrimination and stress from being rejected. They believed that this difficult life situation had negative consequences on their oral health. Oral health conditions such as mouth pain, grinding teeth and bleeding gums were mentioned. Prolonged mental distress could have had impact on oral health of participants.

Many participants searched for self-medication to reduce painful unpleasant feelings related to the oral cavity. These were often pharmaceutical substances such as analgesics, but also antibiotics and ready-made medicine were mentioned. Self-medication also included "unconventional" methods such as salty water and alcohol. The uncontrolled use of medicines might give individual relief, however such self-medication can be harmful by extensive use. It is certainly not without risks from the public health perspectives as the drug may become ineffective to treat infection due to growing resistance by bacteria.

Furthermore this study underlines the important role of a social network for irregular migrants in coping with their poor oral health. Participants asked active and often with success for help from their networks: to find information about affordable dental care and more specific about HPM, on medication, transport and for advice on self-treatment/self-medication; how to access dental care; as emotional support when visiting a dentist; and as communication intermediate to dental health care providers at HPM.

4.4.2. Recommendations

Based on the results of this study the following recommendations for HPM can be considered:

1. For strengthening access to the dental care services for the target group HPM may improve its information outreach on the existence of the dental care service in HPM and the importance of oral health, first to all visitors of HPM and further to NGO organizations that deal with this group of irregular migrants.

2. In general visitors of HPM may be provided with information on dental health care rights for children of irregular migrants.

3. To promote oral health: provide information about oral health hygiene practices, about risks of non-prescription use of medicine (antibiotics).

4. In cooperation with natives from migrant countries, develop some basic cultural orientation specific on oral health beliefs, oral hygiene and dental care as practised in the home countries and offer training on this to HPM-staff.

4. Secure a competent interpreter service to improve on communication between health worker and patient; graphic pictograms on posters can be considered in case of limited understanding of some specific oral health terms, conditions.

5. Consider for a gradual upgrading of technical equipment and materials in the dental clinic of HPM (root channel treatment, dental prosthesis, x-ray)

6. To ensure patient satisfaction of the dental care services: engage in active listening to the patient by the health care worker to understand the expectations, emotions, worries and goals for the dental treatment; provide information and explanation about their oral health status, treatment option, treatment procedure, give dental health advice.

7. Be sensitive to the potential of mental stress with the patients, recognize symptoms of mental distress and provide interdisciplinary approach to dental treatment (psychologist). Teach staff trauma sensitive care.

8. This study was explorative amongst a small sample, restricted to Oslo region and in limited time; the findings of the study may justify a wider study to address the needs on oral health care in the interest of Norwegian public dental health.

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Interview guide

1) Example Questions Regarding Participant Self-perceived Oral Health

Tell me about your oral health.

Probes: 1) Do you have any oral health problem?

Specific: During the past six months have you noticed a tooth that doesn't look right? (Brown/black spot, cavities). Have you noticed any changes in your gums? (Swollen, sore, receding gums or loose teeth). Do you have any missing teeth?

2) Please describe how any oral health problems may have affected your quality of life

Specific: Have oral health problems caused physical or emotional pain? Please describe

3) Have oral health problems affected your participation in any activities? (Such as: employment, social activities, daily living). Please give examples.

Specific: Have concerns or worries about your personal appearance affected your participation? Tell me how?

Tell me about your experiences and history of going to the dentist

Probes: 1) What are the reasons you have gone in the past?

Specific: Did you go for regular check-ups (preventive care)? Did you go to the dentist when you had a problem or experienced pain? Were you concerned with your personal appearance?

What type of dental treatment have you received in the past? (Fillings, extractions, aesthetic crowns/bridges, cleaning, dentures, root canal….)

2) How important has oral health care been to you? (Taking care of your teeth)

2) Example Questions Regarding Significance of Practical Issues to Access Dental Care

Access to care

Probes: 1) During your stay in Norway, was there a time when you needed dental care?

Specific: Could you get dental care you needed then?

-If yes, tell me your experience. What did you do to find a dentist/dental clinic? How did you make an appointment? Is there anybody who helped you to find/obtain dental services?

-If not, what were the reasons that you could not get dental care you needed? (Cost, fear of being reported to the police, proficiency in Norwegian language, understanding Norwegian dental health system, not prioritized, others)

Coping and compensation strategies

1) When someone is suffering from oral health problems, what kinds of things can help him or her? (doctor, medication, healers, herbs, other)

2) What do you do if you need dental treatment and for some reason cannot obtain it? (self-medication, neglecting symptoms, delay treatment, using informal network to find dental help)

Specific: -If using medication, what kind?

-If neglecting the symptoms, how severe the symptoms were before you decide to find medical help, if any?

-If treatment is delayed, to what extent did you wait before you decide to find medical help, if any?

-Do you ask somebody to help you to find solution for your oral problem? If yes, who are those people?

3) Example Questions Regarding Perceptions, cultural beliefs and knowledge of oral health

Help seeking and preventive care

1) Tell me what is predominate reason to visit a dentist? (regular 3-6 month check-up, painful tooth, loose teeth, red or swollen gums, receding gums, painful chewing, missing teeth, tooth decay, cavity, other)

Oral hygiene practice

1) Please describe your current personal oral health care practices. (How do you currently take care of your teeth, mouth?)

Specific: How often do you clean your teeth? What do you use for clearing of your teeth, mouth? Do you use dental floss or other device to clean between your teeth? Do you use mouthwash or other dental rinse product? Do you think keeping your teeth, mouth clean is important? If yes, explain why.

2) Has anyone ever demonstrated to you how to take care of your teeth?

Beliefs about teeth

1) Are you satisfied with your own teeth? Explain why?

Specific: How important the aesthetic appearance of your teeth to you?

2) What do you think about primary teeth? Do you think it is necessary to keep them clean and healthy?
3) Do you think loss of teeth with advancing age is normal? If yes, explain why.

Traditional remedies

1) Do you know/use any traditional remedies/cures for treatment of oral health problems? If yes, what kind?

4) Example Questions Regarding Post Traumatic Experiences in Orofacial Area

1) Have you experience violence against your teeth, moth or face? Is this something you would like to tell me more about?

REK
REGIONALE KOMITEER FOR MEDISINSK OG HELSEFAGLIG FORSKNINGSETIKK

Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK sør-øst	Jakob Elster	22845530	25.09.2015	2015/1260 REK sør-øst B
			Deres dato:	Deres referanse:
			16.06.2015	

Vår referanse må oppgis ved alle henvendelser

Per Kristian Hilden
Universitetet i Oslo

2015/1260 Oral helse blant irregulære migranter i Oslo

Forskningsansvarlig: Universitetet i Oslo
Prosjektleder: Per Kristian Hilden

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk (REK sør-øst) i møtet 19.08.2015. Vurderingen er gjort med hjemmel i helseforskningsloven (hfl.) § 10, jf. forskningsetikkloven § 4.

Prosjektleders prosjektbeskrivelse
Frivillige helsearbeidere ved Helsesenteret for papirløse migranter i Oslo opplever regelmessig at pasienter som kommer på grunn av andre plager også forteller om smerte i munn og tenner, og Helsesenteret ønsker nå å utvide sitt tannhelsetilbud. Formålet med dette prosjektet er å få ny kunnskap om oral helse hos illegale migranter i Norge. Kvalitativ metode vil bli benyttet, i form av semi-strukturerte intervjuer supplert med observasjoner. Prosjektet har som mål, blant illegale migranter i Norge å: 1) Undersøke selvopplevd oral helse 2) Få kunnskap om opplevde utfordringer i forbindelse med tilgjengeligheten av tannhelsetjenester, og om hvordan deltakerne takler problemer i munn og tenner i situasjoner hvor de ikke har mulighet til å oppsøke profesjonell hjelp 3) Utforske deltakernes oppfatninger og kunnskap relatert til oral helse 4) Undersøke hvordan eventuelle tidligere traumatiske opplevelser har hatt innvirkning på selvopplevd oral helse.

Komiteens vurdering
Deltakere i prosjektet rekrutteres blant illegale immigranter i Norge som oppsøker Helsesenteret for papirløse immigranter i Oslo. Det skal rekrutteres 10-20 deltakere. Man vil først rekruttere deltakere som snakker engelsk eller russisk, men det kan bli aktuelt å inkludere deltakere som snakker andre språk. Tolk vil være tilgjengelig når det er nødvendig. Deltakelse innebærer at man er med på et kvalitativt semi-strukturert intervju om selvopplevd oral helse, erfaring med tannhelsetjenester og tilgang på tannhelsehjelp, og oppfatninger om oral helse.

Prosjektet innebærer også at det gjøres en observasjonsstudie i lokalene til Helsesenteret. Denne innebærer deltagende observasjon i senterets åpningstider for tannhelsehjelp og i prosjektgruppemøter.

Komiteen har ingen forskningsetiske innvendinger til studien som sådan.

Komiteen har imidlertid en kommentar til informasjonen som gis deltakerne. Det skal innhentes skriftlig informert samtykke for deltakerne som skal intervjues. Det står imidlertid ingenting i søknaden om informasjon til deltakerne i observasjonsstudien, eller om man skal innhente samtykke fra dem. Komiteen

anser at det ikke er hensiktsmessig med skriftlig samtykke fra deltakerne som skal observeres, men at de må informeres om observasjonsstudien og at man må innhente muntlig samtykke.

Ut fra dette sette komiteen følgende vilkår for prosjektet:

1. Deltakerne i observasjonsstudien må informeres om denne og muntlig samtykke må innhentes.

Vedtak
Komiteen godkjenner prosjektet i henhold til helseforskningsloven § 9 og § 33 under forutsetning av at ovennevnte vilkår oppfylles.

I tillegg til ovennevnte vilkår, er godkjenningen gitt under forutsetning av at prosjektet gjennomføres slik det er beskrevet i søknaden.

Tillatelsen gjelder til 30.11.2016. Av dokumentasjonshensyn skal opplysningene likevel bevares inntil 30.11.2021. Opplysningene skal lagres avidentifisert, dvs. atskilt i en nøkkel- og en opplysningsfil. Opplysningene skal deretter slettes eller anonymiseres, senest innen et halvt år fra denne dato.

Forskningsprosjektets data skal oppbevares forsvarlig, se personopplysningsforskriften kapittel 2, og Helsedirektoratets veileder "*Personvern og informasjonssikkerhet i forskningsprosjekter innenfor helse- og omsorgssektoren*"

Sluttmelding og søknad om prosjektendring
Dersom det skal gjøres endringer i prosjektet i forhold til de opplysninger som er gitt i søknaden, må prosjektleder sende endringsmelding til REK. Prosjektet skal sende sluttmelding på eget skjema, se helseforskningsloven § 12, senest et halvt år etter prosjektslutt.

Klageadgang
Du kan klage på komiteens vedtak, jf. forvaltningslovens § 28 flg. Klagen sendes til REK sør-øst B. Klagefristen er tre uker fra du mottar dette brevet. Dersom vedtaket opprettholdes av REK sør-øst B, sendes klagen videre til Den nasjonale forskningsetiske komité for medisin og helsefag for endelig vurdering.

Komiteens avgjørelse var enstemmig.

Med vennlig hilsen

Grete Dyb
førsteamanuensis dr. med.
leder REK sør-øst B

Jakob Elster
Seniorrådgiver

Kopi til:
- *Universitetet i Oslo ved øverste administrative ledelse*
- *Universitetet i Oslo, medisinsk fakultet ved øverste administrative ledelse*