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TITLE

HEATH STATUS OF ROMA PEOPLE

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CONTENTS

ABSTRACT

Background: Roma population, originated from India, is amongst the most deprived social groups worldwide, suffering profound discrimination for centuries. Aim: The purpose of this review is to provide an up to date report regarding the health status of Roma in the European Union as well as to highlight the best practices that should be adopted from health care services in order to eliminate the existing health inequalities that affect this vulnerable group. Method: literature searches were performed regarding the Roma population and their health issues, using the key words "Roma" or "Gypsies" in combination with the keywords "health status" or "healthcare". A search was also conducted at the references of selected papers in order to identify relevant articles that could have been missed with the previous mentioned methods. Results: A great amount of studies and reports were retrieved focusing on Roma's health status. Health issues, regarding communicable and non-communicable diseases, reproductive and child health, vaccination, nutrition, lifestyle and access to health care were categorized so as to have an overall view of the health status of Roma. Conclusions/recommendations: There is a huge gap between the health status of Roma people and the rest of the population. Best practices, such as engagement of health mediators, integrated programs, co-operation of health and social workers and outreach services should be given emphasis.

ΠΕΡΙΛΗΨΗ

Εισαγωγή: Οι Ρομά, οι οποίοι έχουν τις ρίζες τους στην Ινδία, είναι από τους πιο στερημένους πληθυσμούς στον κόσμο εξαιτίας του έντονου ρατσιστικού μένους που υφίστανται εδώ και αιώνες. Σκοπός: Ο σκοπός αυτής της βιβλιογραφικής ανασκόπησης είναι να παρουσιάσει μια τελευταία έκθεση σχετικά με την κατάσταση της υγείας των Ρομά στην Ευρωπαϊκή Ένωση, καθώς και να προβάλει τις καλές πρακτικές οι οποίες θα πρέπει να υιοθετηθούν από τις υπηρεσίες υγείας, με στόχο την εξάλειψη της κοινωνικής ανισότητας σε θέματα υγείας στην συγκεκριμένη ευπαθή ομάδα. Μεθοδολογία: Πραγματοποιήθηκε βιβλιογραφική ανασκόπηση σχετικά με τους Ρομά και τα θέματα που αφορούν την υγεία τους, χρησιμοποιώντας τις λέξεις-κλειδιά «Ρομά» ή «Γύφτοι» σε συνδυασμό με τις λέξεις-κλειδιά «κατάσταση υγείας» και «ιατρική περίθαλψη». Επίσης, εξετάστηκε η βιβλιογραφία επιλεγμένων κειμένων με στόχο τον εντοπισμό άρθρων τα οποία μπορεί να μην είχαν ευρεθεί με την πρώτη μέθοδο. Αποτελέσματα: Θέματα υγείας σχετικά με τις μεταδοτικές και μη-μεταδοτικές ασθένειες, την αναπαραγωγική και την παιδική υγεία, τον εμβολιασμό, τη διατροφή, τη στάση ζωής και την πρόσβαση στις υπηρεσίες υγείας κατηγοριοποιήθηκαν ώστε να δοθεί μια ολοκληρωμένη εικόνα που αφορά τα θέματα υγείας των Ρομά. Συμπεράσματα/Προτάσεις: Υπάρχει ένα τεράστιο κενό σε θέματα υγείας ανάμεσα στους Ρομά και τον υπόλοιπο πληθυσμό. Θα πρέπει να δοθεί έμφαση στην υιοθέτηση καλών πρακτικών, όπως η εμπλοκή πολιτισμικών διαμεσολαβητών, τα ολοκληρωμένα προγράμματα, η συνεργασία μεταξύ ιατρικού προσωπικού και κοινωνικών λειτουργών και η παροχή υπηρεσιών υγείας εκτός των προκαθορισμένων δομών.

PREFACE

The improvement of Roma's situation constitutes one of the main priorities in various countries around the world. However, even though several efforts have been realized so as to break the cycle of their exclusion, as also seen in this report, little has been acquitted so far. Taking for granted that in the democratic societies, the right to health and dignity is considered acquired, we are obliged in the years coming to intensify our attempts regarding the elimination of health inequalities among vulnerable groups, such as Roma, and the rest of the world.

1. INTRODUCTION

Roma population is amongst the most deprived social groups worldwide, suffering profound discrimination for centuries, often living in extreme poverty, almost always isolated due to deep-seated prejudices and hence excluded from the normal life that other people take for granted, such as going to school, seeing the doctor, applying for a job or having access to decent housing. However, not only have the implemented measures produced very limited resources so far, but, particularly during the current period of economic crisis, this vulnerable social group presents an easy target and is used as a scapegoat.(1, 2)

For the comprehension of the current situation of the Roma population, a general introduction on linguistic as well as on historic facts regarding their oppression, is considered necessary. The word "Roma" means "man of the Roma ethnic group" or "husband" and is only one of the terms that is being used worldwide.(3) The encompassing term Roma is often used to describe various communities who identify themselves as Sinti, Ashkalia, gens de voyage, Yenish, Kale, Gypsies and Manouch. Together, they comprise an "ethnic" population that is made up predominantly of communities of commercial and nomadic groups from India.(4)Roma's origin form India is proven according to the findings of linguistics, cultural anthropology, science of history and population genetic. However, the period that their ancestors started migrating to Europe as well as the reasons for this transit are still open to assumptions.(5)

Roma, reached the Byzantine Empire (modern Greece and Turkey) around 1.000 AD and had their first recorded transaction as slaves in Romania in 1385. Following the fall of Byzantium, they were dispersed throughout Europe. After the 14th century, a great number of countries passed their first anti-Gypsy laws (i.e. Switzerland-1471, Spain-1492, Holland-1526, Denmark-1536) according to which their death penalty was ordered without a trial (i.e. Denmark-1589, Sweden-1637, Prussia-1734), marriages to Roma were prohibited (i.e. Moldavia-1776), Roma were not allowed to enter any public washing or recreational facilities (i.e. Germany-1920) and Roma children were taken from their parents without their consent in order to raise with "proper" families **(**i.e. Switzerland-1926, Czechoslovakia-1927). (6) During the Second World War, gypsies who were defined as a *"problem", "asocials"* and *"racially inferior",* were arrested and murdered during the German Reich in the German-occupied territories. Even though it is still unknown how many Roma fell victim to the Nazi persecution during the holocaust (1939-1945), it is estimated that between 220.000–1.500.000 were murdered.(7-9)

With reference to Roma communities, in 1939, the first association of gypsies was formed in Greece ("Pan-Hellenic Cultural Association of Greek Gypsies") while by the end of the World War II other association in several European countries were established (i.e. 1945, In Bulgaria- "Romani Organization for the Fight against Fascism and Racism", 1962, in France- "National Association of Gypsies", 1967, in Finland- "Association of Gypsies", etc). In 1972 the "International Romani Union" becomes a member of The Council of Europe and in 1986 of the United Nations Children's Fund (UNICEF).The collapse of Communism in Europe marks the beginning of the Third European Diaspora of the Roma, a period which the racially-motivated violence against Roma increases.(6) The fight for their human rights continues until today.

Concerning the population of Roma worldwide, it is extremely difficult to obtain an exact number since they are not recorded on most official census counts and many of them do not admit their ethnic origins due to social and personal reasons. However, estimates indicate that some 8-15 million Roma live in Europe where 70% of them residing in Central and Eastern Europe and the Balkans.(10, 11) Within the Roma population, there is as a consensus that they should be confronted as a "minority group" by governmental and non-governmental organizations, with the exception of Greece, where to be referred as "vulnerable social group".(12)

The direct and indirect discrimination that Roma are facing for centuries has affected their health status which is considered to have had a serious gap towards the Non-Roma in many European countries. The health disparities among Roma and Non-Roma are attributed to socioeconomic reasons, such as overrepresentation of Roma in the lowest economic strata, overrepresentation in the categories of the unemployed and uneducated or poorly-educated and a higher exposure to health-related risks.(4, 13)Although health promotion of Roma is among the main priorities for the European Union and a great number of health related activities are actualized, a substantial effort from the health stakeholders is still greatly needed since, besides the appalling rise of violence against Roma, the process of Roma integration has not reached its objectives for the last 20 years.(2, 14)

The purpose of this review is to provide an up to date report regarding the health status of Roma in the European Union as well as to highlight the best practices that should be adopted from health care services in order to eliminate the existing health inequalities that affect Roma.

2. METHODS

For the purpose of the current review, literature searches were performed for the period 1960 to May 2012, using the U.S.A National Library of Medicine PubMed/MEDLINE databases as well as official WebPages regarding the Roma population and their health issues, (i.e. The European Roma Rights Center, the World Health Organization, etc.). The key words “Roma” or “Gypsies” in combination with the keywords “health status” or “healthcare” were used with limitations taken for free full texts in English. A search was also conducted at the references of selected papers in order to identify relevant articles that could have been missed with the previous mentioned method.

3. RESULTS

A great number of articles related to the purpose of this study were retrieved. For this reason an attempt was made to categorize the health status related issues into groups so as to have an overall view of the Roma's health status.

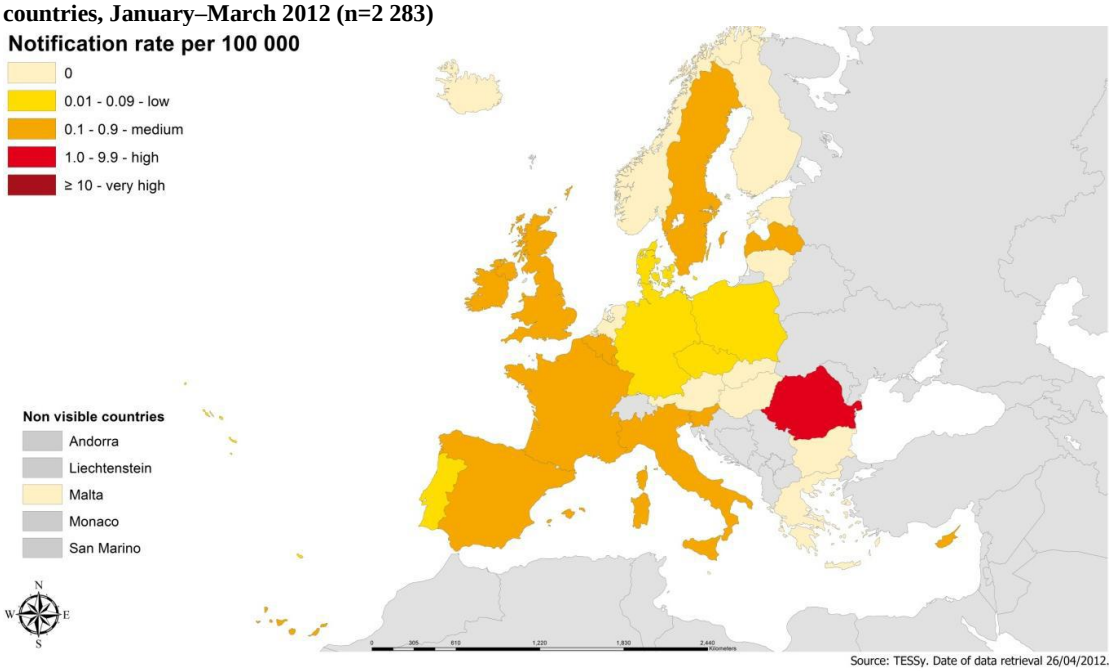
3.1. Communicable diseases

The communicable diseases among vulnerable populations, such as Roma, have attracted a lot of attention. The perception that they are responsible for the spreading of epidemics is due to the fact that they are more exposed to infections. However, health issues related to the social condition of Roma, such as the communicable diseases, must be regarded as a matter of public health and not as exclusive responsibility of Roma people.

Many studies have shown that the prevalence of several diseases is higher in comparison to the rest of the population. According to a small study in Hungary that was held in 2008, the prevalence of Hepatitis B infection among Roma was 27% and syphilis prevalence was 2%, while they were also more likely than non-Romas to have HAV antibodies (80% vs. 43%).(15) However, even though the same study concludes that the risk conditions for a potentially explosive HIV epidemic were present, none of the Roma was found to be HIV positive. A high prevalence of antibodies to hepatitis A virus was also found in a Spanish study that was held among children. Among the gypsy children, 82 % had antibodies to HAV compared with 9,3 % of the children in the control group.(16) In the last few years, despite the commitment by countries within the European Region of the World Health Organization, including the EU and EEA/EFTA countries, to eliminate measles by 2015, measles outbreaks have occurred among Roma populations in different countries (see figure 1).(17)

Following an eight–year period without indigenous measles transmission, an outbreak of measles was detected in Bulgaria during 2009, where most of the 957 measles cases that were reported were identified among Roma communities.(18) During the summer of the same year, another outbreak occurred in Poland at a susceptible Roma community. Of 41 registered cases, 35 (85%) were of Roma ethnicity.(19) Since January 2010, a measles outbreak has also been noted in Greece, which originally was found to be related to the recent outbreak in Bulgaria. Most of the cases were unvaccinated and were found to belong to 3 social groups: Roma population of Bulgarian nationality, Greek Roma population, and Greek general population.(20) The reasons for the measles outbreak might be due to limited or inhibited access to services for vulnerable or high-risk populations, cultural or religious beliefs, and to vaccine hesitancy due to vaccine safety concerns.(21)

Figure 1. Distribution of notification rates (cases per 100 000 population) by country, EU and EEA countries, January–March 2012 (n=2 283)



Source: TESSy. Notification rate calculated as (cases/population)*100 000

With reference to poliomyelitis, an Italian study that examined the implications for the eradication of this disease in Europe, suggested that even thought the high level of immunity which was found in the Roma community may have been due to secondary spread of vaccine virus, the possibility of unrecognized circulation of wild polioviruses should not be excluded.(22) Regarding the communicable diseases that are not preventable through vaccination, lice, salmonella as well as dysentery (flux) are also apparent among Roma. For example, *Shigella Enteritis* is much more frequent in the Roma population than in the majority population.(23)

3.2. Non-Communicable diseases

Studies regarding the non-communicable diseases among Roma were not in the scope of the health scientist for many decades. Only recently, a number of studies have revealed the main non-communicable diseases that affect this social group. According to the morbidity structure in Serbia, the most common causes of death in the Roma population were cardiovascular diseases, neoplasms, and respiratory system diseases (24) while in Hungary the most frequent respiratory diseases seem to be emphysema and chronic bronchitis (primarily a consequence of very heavy smoking).(23)

The high prevalence of cardiovascular related diseases seems to be a substantial health burden for the Roma population also. In Slovakia, high prevalence of obesity, low levels of HDL-cholesterol, high concentration of triglycerides and very high values of atherogenic index have been reported, (25) while the greater occurrence of dyslipidemia, obesity and insulin resistance in young Gypsies has been shown to be influenced by lifestyle (unhealthy nutrition, smoking, low physical activity) as well as low educational status.(26)The results of

hyperinsulinemia, hypertriacylglycerolemia, hypo-HDL-cholesterolemia, hypertension and obesity, indicate that the Gipsy population is at higher risk for cardiovascular disease.(27)

A study that was held in Spain, regarding 222 gypsy youths (92% boys) who were admitted to a juvenile correctional facility, showed that the most frequent non-communicable health problems were smoking habit (99%), drug/ alcohol abuse (58.2%), dental illness (52.2%), high-risk sexual behavior (36%) and psychological disorders (15.8%). Secondary health problems were visual (9.9%), dermatologic (6.3%), respiratory (5.8%), malnutrition (5.8%), growth delay (4.5%), obesity (4%), otic (3.6%), iron deficiency anaemia (3.1%), digestive (2.7%), orthopaedic (2.2%) and cardiovascular (2.2%).(28)

Another study revealed that in Croatia the most commonly reported health problems among Bayash Roma were headaches (20.3%), stomach pain (16.3%), anxiety or insomnia (13.1%), hypertension (9.3%), and chronic obstructive pulmonary disease (8.6%).(29)Regarding phycological health, a study that used validated measures to compare the health status of traditional Gypsy Travellers with norms from the UK population showed that the proportion of Travellers reporting any problems with "nerves" and "feeling fed up" was significantly greater than the matched urban deprived group (35% vs 19%).(30)

3.3. Reproductive health

The access to information and services regarding reproductive health of Roma women is an issue that the OSCE States should give special attention to.(31) Particularly, in the light of statements revealing that in various periods in the past, Roma women were induced to accept sterilization,(32-34) it is extremely important that they receive relevant information and appropriate training which will allow them to organize themselves and to enhance their capacity as intermediaries among their own communities and health care providers.

Roma women seem not to visit their gynaecologists very often. According to a study held in Spain, only 44.4% of Roma women go for periodical gynaecological check-ups while the respective percentage in the general population is 74.9%.(35) A peer review of the integrated program for the social inclusion of Roma, reports that in Greece, only 4 out of 10 Roma women admit that they know about the Pap test, 1 in 2 know about the mammography test and 80% of women do not use any method of contraception. Moreover, 1 in 4 women were not monitored at all during their pregnancy and only 3 in 10 Roma women breastfed their children until the 6th month.(36) The above mentioned results regarding Greek Roma women and their reproductive health are similar to those published one year later in another Greek study according to which 90,8% do not use any method of contraception, 32,4% do not know about the pap test, 54,3% know about the mammography test and 1 in 4 is not monitored at all during pregnancy.(37)

Miscarriage is also a serious reproductive health issue that occurs very often among Roma women. A study in England shows that significantly more Gypsies and Travellers experienced one or more miscarriages compared to the control group (29% vs 16%) while in Greece 1 in 10 women state that at least one of their children died; most of these infants died before they completed their 10th month of life.(36)

Regarding the unfavorable birth outcomes of the Roma women, in Czech Republic Roma infants were 373 g lighter at birth and their gestational age was 0.92 weeks shorter than of non-Roma babies. The potential explanations for these outcomes was maternal education which "explained" more than one third of the difference in birth weight and more than one fifth of the difference in gestational age. Gender, district, maternal age and number of pregnancies contributed only marginally to these differences.(38) Significantly decreased vitamin C levels were observed in GypsyCzech mothers and their babies which could be attributed to unfavourable diet and smoking habits during pregnancy.(39)

3.4. Child health

As with all children, investment in the health status during the early years is also crucial for Roma children in order to reduce the existing health inequalities. Some research has provided evidence suggesting that the most vulnerable age groups within Roma are children 9-16 year old, due to the fact that they may be addicted to solvent and alcohol abuse.(40) The main causes of infant death according to a Greek study are pathological, accidents and unidentified causes.(41) Even though the morbidity of Roma groups in two Baltic countries, Latvia and Lithuania, did not differ from the reference group, essential discrepancy was found in health self-assessment , since more Roma children considered their health as poor and very poor.(42)In Spain, Roma children appear to have a higher frequency of some illnesses, such as asthma, bronchitis, emphysema and severe headaches, than in the general population.(35)

An Italian study that was designed to go with community-based participatory research approaches and to meet specific local needs, showed that in the 15 days prior to the survey, 32% of the children had suffered diarrhoea, 55% had a cough and 17% had experienced respiratory difficulties during the past year.(43) A research conducted by Oxfam found that more than 10% of Roma children had respiratory infections (four times higher than the national average) and that 30% of Roma children suffered from diarrhea (3 times higher than in the general population). Moreover, skin diseases and asthma were more common among Roma children.(44)

Regarding the birth weight, Hungarian Roma infants had a significant excess of births under 2500 g at most gestational ages and they were twice as likely to be born prematurely.(45) Significant differences were also noticed between Bulgarian Roma and non-Roma children with regard to anthropometric parameters, including stature, lung function indices, and perception of exertion.(46)

3.5. Vaccination

Vaccination is still considered a public health priority due to the fact that the coverage of the vaccine-preventable diseases is not satisfactory. (47, 48) According to the Multiple Indicator Cluster Survey (MICS) of Unicef, only 1 in 4 Roma children is receiving all recommended vaccines on time, while in FYR Macedonia, the World Health Organization estimates that only 50% of Roma children are fully immunized compared to the national rate of 94%.(49) In

a study that was based on the collection of current, first-hand information obtained through a survey given to members of Europe's Roma population, Romania appeared to be the country where the largest proportion of minors did not properly follow the child vaccination program (46%), followed by Greece (35%) and Bulgaria (29%). The reasons for the non proper vaccination as claimed by the parents are: i) they forgot (42%),ii) they lacked information (14%), iii) had limited economic resources (12%), iv) regarded vaccinations are worthless and could be dangerous (7%) and v) that it was difficult to gain access to the vaccination clinic (3%).(50)

In a sample of Traveller Gypsy children who visited primary care services in an inner city area of London, the completion rate for the diphtheria/tetanus and poliomyelitis vaccines was poor, with an even lower rate for the pertussis and measles vaccines.(51) A pediatric study undertaken in Alicante in 2002 similarly revealed that a significant percentage (18.8%) of Roma children aged 2 years had not received any vaccination, whereas all non-Roma children at the same age group had already been vaccinated.(40)

3.6. Nutrition

Of immediate concern is the need to address the high incidence of malnutrition among Roma communities since it is regarded as a part of a wider concern for public health.(31) Anthropometric and sociodemographic measures that were obtained for 1.192 Roma children under five from the 2005 Serbia Multiple Indicator Cluster Survey showed that the prevalence of stunting, wasting, and underweight was 20.1%, 4.3%, and 8.0%, respectively.(52)Stunting is a reflection of chronic malnutrition due to inadequate nutrition over a long period and the existence or chronic illness.(49)

A cross sectional study regarding anthropometric parameters that was held in Bulgaria revealed that Roma children were significantly shorter (142±7 vs 145±7 cm) and lighter (35±8 kg vs 39±9) than Bulgarian children.(46) Roma children in Romania have been found to suffer from vitamin deficiencies, malnutrition and anaemia to a greater degree than non-Roma, while 51% of women aged 16-50 in settlements near Belgrade were found to be undernourished.(53) The United Nation Development Program (UNDP) survey in South East Europe in September 2004 showed that the majority of Roma (53%) reported going hungry in the previous month, compared with only 9% of average non-Roma.(54)

Significantly decreased levels of vitamin C and other antioxidant vitamins were found in Roma minority groups in the Czech and Slovak Republics, which were attributable to unfavorable diet and smoking habits.(39, 55) In Greece, only 1 in 10 Roma state that they include fresh food and vegetables in their daily diet, 7 in 10 eat fish less that once a week, 1 in 5 consume daily fruits and vegetables while in addition lack of electricity, most families do not have any running water within their residential districts.(36, 37)

Another study that examined the anthropometrically assessed nutritional status of the Bayash, the Roma population from the eastern Croatian region found that despite their diminutive size, they appear to have adequate nutritional status until the age of 35years after which their average Body Mass Index (BMI) exceeds the value of 25 kg/m(2) and falls in the overweight category. However, 8% of Bayash are considered underweight (BMI<18.5) in contrast to 1%

of the majority population in the region. The underweight rates are higher in women compared to men (11% vs 4%). The same study concludes that the overall unsatisfactory nutritional status of the Bayash appears to be the product of unhealthy dietary habits and their socio-economic deprivation that results from poor education and extremely high unemployment.(56)

However, under-nourishing is not the only issue related to malnutrition of Roma. Obesity, which is an endemic problem of Western societies, seems also to affect the Roma community, especially women. According to the comparative study of the National Health Surveys in Roma population and the general population in Spain, 15.2% of women in the general population are obese, a rate that goes up to 26.4% among Roma women. Similar patterns are noted in girls aged less that 18 years: 22.9% of Roma girls are obese vs 10.2% girls within the general population.(35) With reference to eating habits, the same study observed that in the adult population as well as in children and teenagers, there was a higher presence of non recommended eating habits in the Roma population, with a lower daily consumption of fruits and vegetables plus a higher consumption of sugar and animal fat.

3.7. Lifestyle

Alcohol and tobacco are two of the most severe risk factors related to various health problems. Smoking, as a part of traditional Roma lifestyle, was recorded in 70% of the examinees regardless of sex in Croatia(29) while in Spain the tobacco consumption in the Roma community varies enormously depending on gender: 54.9% of men smoke compared with 14.7% of women.(35)

According to a Comparative Health Survey of the Inhabitants of Roma Settlements in Hungary, the prevalence of smoking more than 20 cigarettes per day was 2 to 5 times higher among the Roma population than in the general population. Moreover, the prevalence of smoking was considerably higher among the Roma people older than 30 years than in the lowest income quartile of the general population.(57)

A qualitative Slovenian study that focused on attitudes of Roma,(58) reported that smoking is a strong part of their cultural, ethnic, and individual identity. One of the explanations that the doctor's advice to quit smoking is usually not followed, is probably due to the fact that Roma held a tenacious belief that the harmful effects of smoking were in the hands of destiny and did not associate the smoking-related illness with the habit. The same authors refer that education is quite insufficient and it seems that only the people close to them, such as peer educators or their permanent primary care physician, have a chance of influencing their attitudes.

Regarding the alcohol consumption, varying degrees of awareness about alcohol abuse among Roma communities exist. Some Romani women tend to believe that it is normal to have alcoholic husbands; this belief shows that many men and women may be unaware of the potential harms of alcohol abuse and, due to that, it is probable that only a few individuals may know where to seek help.(53)

3.8. Access to Health Care Services

According to the International Convention on the Elimination of All Forms of Racial Discrimination of the EU, "State Parties must guarantee the right of everyone, without distinction as to race or ethnicity, to equality before the law in the enjoyment of economic, social and cultural rights is obligation applies expressly to the right to public health, medical care, social security and social services".(59)

However, the above mentioned statement does not always stand in reality. Roma are facing a systemic exclusion from access to health care due to the exclusion from health insurance, the lack of citizenship and personal documents, the lack of information about access to health care and other various reasons. Furthermore, Roma almost always confront direct racial discrimination in their efforts to access health care provision and face extreme forms of human rights deprivation, such us the abuse of Roma patients by medical professionals, the coercive sterilization of Roma women, the denial of emergency aid and the refusal to treat Roma patients, as well as the absence of medical professionals during birth delivery by Roma women.(13)

A study in England found that 80% of travelling families on a specialist health visitor's caseload had been refused health treatment of some kind.(60) During the health reforms in Bulgaria in 1999, where general practitioners were given the right to choose clients. a refusal to register Roma patients occurred, due to the unwillingness of the doctors to visit Roma neighborhoods or take on the burden of dealing with the severe health conditions faced by poorer Roma communities.(53)

In Greece, many Roma lack basic identity papers which is a serious obstacle to their receiving basic or emergency health care. A research study refers that hospital authorities and hospital-based social workers are, moreover, unwilling to assist Roma in applying for such documents.(61) Additionally, poor road conditions or a lack of telephone service inhibit many Romani communities from receiving emergency care while the distance to health care centers, makes access to regular services impracticable due to a lack of economic resources or transport means.(53)

4. CONCLUSIONS AND RECOMMENDATIONS

There is a huge gap between the health status of Roma and non-Roma people. For the elimination of the health inequalities that exist between Roma and the rest of the population, the engagement of health mediators has been proven to be fundamentally essential. A health mediator, is defined as the person that provides the liaison between Roma individuals/families/communities and mainstream public health services.(13) Specifically, the health mediator improves community health through: i) mediating between Roma patients and physicians during medical consultations, ii) communicating with Roma communities on behalf of the public health system, iii) providing basic health education, and, iv) assisting Roma in obtaining the health insurance or identity documents necessary to visit the doctor.(10) An additionally effective parameter for the improvement of the Roma's health status, may be achieved through integrated programs, since the coordination between the healthcare sector and other sectors –particularly education, housing, employment and anti-discrimination is considered as a key challenge.(13, 36, 62)

In the context of integrated programs which allow the combination of health and education, it is extremely important to ensure that Roma women will receive appropriate information and training; this will give them the capability to organize themselves, train and assist others, while at the same time it will enhance their capacity as intermediaries between their communities and the health-care providers.(31) Furthermore, in order to allow the targeting of public health programs and also to contribute to the understanding of population structure and demographic history of the Roma, future studies of the epidemiology of single gene disorders should take social organization and cultural anthropology into consideration, so as to be more productive.(63)

Regarding health and social professionals, the overall health situation of the Gypsies have been, by most accounts, proven to be most successful when there is a co-operation among them and when they, as a team, visit Roma communities. For example, the most successful health programs in Spain included doctors and other medical professionals who were physically going to Roma communities and neighborhoods so as to conduct vaccination campaigns and various health educational programs.(13)

Outreach services from health and social professionals have been proven to be positive not because they provided a special service for communities with special needs, but because they provided the opportunity for medical professionals to improve their knowledge and understanding of Roma culture, community and living conditions which impact the health situation of Roma.(13, 36, 51) Hence, the training for these professionals is considered essential and any health or preventive initiative should be based on close consultation with the local health mediators.(64)

Regarding the general practitioners that could be engaged in such outreached services, it has been proposed that they should be freed from financial concerns in meeting targets and that they should have the opportunity to choose their involvement as a means of building up a patient practitioner trusting relationship while concurrently acquiring culturally sensitive

competencies in dealing appropriately with this socially and culturally vulnerable group. In this context, continuity of care will be more likely because of the trust engendered and preventative services will be more accepted because the doctor's surgery will be less likely to be seen as a "crisis only" venue.(65)

Finally, since Roma health inequalities are a common factor among other vulnerable population groups or other underprivileged minorities, preferably policy developments should be applied in a broader context of anti-discrimination legislation and institution building, rather than narrow targeting of one specific ethnic minority groups.(66)

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