

THE DEVELOPMENT OF HEALTH BEHAVIOR, PHYSICAL ACTIVITY, AND SPORTS HABITS IN THE DISADVANTAGED ROMA ADULT AND CHILD POPULATION

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Abstract

Studies examining the relationship between health and sports show an increasing interest in uncovering the connections between health behavior and lifestyle. This article reviews factors determining individuals' physical and mental well-being, with particular focus on the situation of the Roma minority in Europe. Drawing from multiple sources, the analysis presents the health status, lifestyle habits, and factors influencing sports habits among Roma populations. Additionally, the study highlights projects supporting the integration of Roma communities through sports. Findings from the research indicate that Roma communities are more likely to face health issues and often have lower levels of physical activity. The abstract sheds light on various factors limiting sports opportunities for Roma children, including economic hardships, cultural norms, and discrimination. Nevertheless, it emphasizes the crucial role of sports and physical activity in maintaining health and social integration.

1 Introduction

The examination of the relationship between human health and sports has seen increasing attention towards uncovering the connections between health behavior and lifestyle. Among the benefits of a healthy lifestyle, numerous studies emphasize the importance of regular physical activity. However, it is important to understand that this relationship has significant impacts not only at an individual level but also at a societal level. Different social groups are connected to sports and health habits to varying degrees and in different ways.

Disadvantaged Roma communities often suffer from health inequalities, partly as a result of low physical activity and unhealthy lifestyles. Recognizing and understanding such inequalities is essential to plan and implement effective interventions aimed at reducing health disparities.

Sporting opportunities and physical activity can promote social inclusion and participation within Roma communities. Sport serves not only as a means of health preservation but also as a platform for building social connections and strengthening positive identity [31][13].

Due to their unique cultural background, Roma communities encompass specific perspectives and needs in terms of sports and physical activity [6]. Understanding these cultural characteristics is crucial for designing and implementing appropriate and effective interventions.

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Health systems and policymakers have the opportunity to take public health measures to prevent diseases and promote healthy lifestyles by understanding and supporting the physical activity and sports habits of disadvantaged Roma populations.

For these reasons, research examining overall health status and sports habits among disadvantaged Roma adults and children is exceptionally important in terms of social justice and health equality. We review the health status of the Roma minority in Europe and shed light on how lifestyle factors, including sports habits, influence this. Furthermore, we discuss previous research findings in this area and emphasize the importance of sporting opportunities available to the Roma community for health preservation and social inclusion, with particular emphasis on the child population. We will delve further into the topic to better understand the relationship between sports and health in the context of the Roma minority.

2 Literary review

2.1 Health Inequalities

Various factors determine an individual's physical and mental state, among which external (natural environment, social environment, healthcare system) and internal factors (lifestyle, genetics, physical activity, nutrition, harmful habits, stress) play a role [35]. The role of individual behavior, lifestyle, and attitudes towards health appears to be increasingly emphasized in health-related literature and research, which have gained momentum in recent decades [10][2][37][7][1].

The quantitative and qualitative indicators of physical activity and sports can be found in the WHO recommendations [49]. The health benefits of regular exercise and physical activity are well-known and undisputed, as they can reduce the prevalence of lifestyle-related diseases [21][48][47][22][27][3][33]. The lack of exercise and low levels of physical activity have resulted in the global health issue of obesity in Europe as well [39][9], not only among adult populations but also among children [26]. Research on various physical activities and sports habits confirms the low levels of sports and physical activity among disadvantaged populations [36][32].

Roma people are generally characterized by unhealthy lifestyles – for example, unhealthy diet, heavy smoking, frequent alcohol consumption, and lack of physical activity and sports [8][42][14][5]. It is crucial to examine the health behavior of this disadvantaged target group, including their sports habits, as their numbers are increasing, and significant health deficits can be observed among them.

The Roma population in Europe is also significant, estimated at about 5-7 million. In Hungary, they represent about 6-7% of the population, which quantified could be around 600-700 thousand individuals [30], making them the largest ethnic group whose health status is significantly worse compared to the majority population [18]. They can be characterized by health disadvantages compared to the average population. In the case of Roma, life expectancy at birth is estimated to be 10-16 years less than that of non-Roma EU citizens EU framework for national Roma integration strategies: [40]). Additionally, the percentage of smokers among them is much higher, ranging from 50-75%, compared to the normal population (24-45%). The problems arising from drug and alcohol consumption among Roma are also higher, with 16-18% in the Roma population compared to a lower rate of 11% in the normal population [23].

2.2 Findings from Health Behavior Research

Fónai et. al. [17] examined 500 Roma households in Northeast Hungary regarding the Roma's subjective health indicators. They confirmed the high rates of substance use among Roma. Smoking was higher among both Roma women (36.3%) and men (47.6%) compared to the North Hungarian average, where 25% of Roma women and 40% of Roma men smoked. Their mental health was particularly poor, with frequent headaches (52.4%), strong heart palpitations (52.6%), feelings of exhaustion (52.2%), worry about health conditions, and anxiety. The study confirmed that the majority of Roma involved in the study had unfavorable socio-economic backgrounds, as most of them lived below the subsistence level, coupled with low education and high unemployment. Disadvantaged situations determine health behavior, including sports activity.

Gara [20] compared publications from the past decade and found that the life expectancy of the Hungarian Roma is about ten years lower than that of the total population. Roma experience particularly high rates of depression (75%), cardiovascular diseases (70.45%), diabetes, and cancer mortality. High blood pressure affects 57% of the Roma population, compared to 32% of the majority Hungarian population. The prevalence of diabetes is 12.5% among Roma, while it is only 8% in the normal population. A significant portion (77.4%) of Roma smoke regularly, while this rate is only 32.5% in the majority population. Obesity affects 35% of Roma, compared to only 20% of the Hungarian population. These diseases are partly due to a sedentary lifestyle, lack of physical activity, absence of sports, and the presence of harmful habits, as these are lifestyle-dependent diseases [19][7].

The results of the Vokó et al. [45] study confirmed that the health status of people living in Roma-populated settlements is worse than that of the average population. The research also examined social and economic differences, where differing socio-economic status explained the differences in health and self-esteem. They found that the Roma's unhealthy health behavior was related to their unfavorable socio-economic situation. The study showed that the Roma's unhealthy health behavior is only partially explained by their socio-economic situation. Therefore, improving the health status of Roma requires focusing on cultural differences, not just their general situation.

Hüse-Pénzes [23] examined the health behavior of 154 adult Roma individuals. 48.6% of adults were overweight according to BMI calculations. 55.8% of respondents smoked, and 80% of smokers started before the age of 20. 50% of the respondents never engaged in sports, and 20% did so only occasionally, less than once a week, which the Eurobarometer also categorizes as non-sporting, as it does not provide health benefits. Therefore, 70% of the sample falls into the category of non-sporting individuals. However, 46.85% reported engaging in physical activity several times a week, resulting in sweating, while 20% said they never engage in such physical activity. They also examined the amount of time spent watching TV and sitting, finding that they spend an average of 3.6 hours per day, 3.4 hours on weekdays, and 4 hours on weekends [23].

A Hungarian Case Study presents the project of the "BAGázs" Public Benefit Association, founded in 2011 in the village of Bag, aimed at integrating the Roma minority through sports and promoting their social inclusion [25][46]. Their methods encompassed micro-level Roma settlements, local village communities representing the meso-level, and the macro-level, where sensitizing the majority society was also targeted. The sports component of the program was implemented through "BAGázs FC," where they aimed to achieve social and economic integration of the Roma in Bag through sports activities. Football training sessions, based on volunteer work, were held for Roma individuals, with the primary goal not being sports performance improvement but the development of positive personality traits such as discipline, willpower, perseverance, and team spirit. The association fighting deep poverty and segregation concluded, based on their experience, that one barrier to Roma integration is the helplessness of Roma living in settlements, which characterizes their attitude towards their own fate. This stems from inadequate socialization, poor communication patterns, and the lack of basic moral values, resulting in low education, early school dropout, high unemployment, and early childbearing. Another reason is societal prejudice. According to several studies, sport can aid inclusion and social acceptance [15][16][31][13].

The "BAGázs" association motivated Roma children to participate in running and football competitions, often reaching and engaging Roma families and parents with their programs. The association created an activity map, specifying the effects of adult and child programs (sports, education, development) on labor market success, reduced crime rates, decreased substance abuse, and improved physical and mental health, quantifying the economic benefits of these, stating that every 1 HUF invested in Roma youth and adults results in 6 HUF of social benefit within 10 years [25].

Ember [12] conducted focus group research among Roma young women (aged 19-29) living in Nyíregyháza under conditions of high social deprivation, regarding health behavior and quality of life. They found that sports, as a possible stress-relieving method, was not considered feasible by the participants. All respondents rejected it, stating that mothers perform exhausting household chores all day, while men support the family through physical work. This research confirms that activity exists but is fulfilled not through sports but through work, as confirmed by research conducted in the majority society [6]. Children are recommended to engage in sports as a possible leisure

activity, with dance as a program for preserving Roma traditions. However, they spend hours on smartphones, computers, and online games, increasing sedentary time. Substance use is common in the settlement, confirming the increase in harmful habits.

A study in Slovakia analyzed the appearance of health-damaging behaviors and the frequency of physical activity and sports among Slovak Roma adolescents, comparing data with non-Roma groups. Roma adolescents (n=330; mean age 14.50 years; interviews) and non-Roma adolescents (n=722; mean age 14.86 years; questionnaires) from segregated communities in eastern Slovakia were surveyed regarding smoking, alcohol consumption, drug use, and physical activity, using logistic regression for boys and girls. The study found that among girls, Roma adolescents had lower rates of smoking, drunkenness, and drug use compared to non-Roma, but higher rates of physical inactivity and lower intensity of sports. Among boys, drug use was less common among Roma adolescents, with no significant differences found in other health-endangering behaviors. They concluded that the rate of substance use was lower among Roma, especially among girls. Only physical inactivity and avoidance of sports were higher among Roma girls. A challenge in Roma health promotion is maintaining relatively low substance use and promoting physical activity [29].

2.3 Research Findings on Physical Activity and Sports

A Slovakian study [4] examined the health behavior and physical activity of one of the most disadvantaged groups, the Roma minority (N=452), comparing it with the results of a non-Roma group (N=403). The study found that leisure-time physical activity, such as walking, hiking, or other sports activities, is significantly lower among Roma women compared to non-Roma women. Roma men and women smoke more frequently than non-Roma, with no difference in alcohol consumption. The higher frequency of unhealthy lifestyle activities among Roma results in a higher prevalence of cardiovascular diseases among Slovak Roma compared to the majority population. Another Slovak study examining the health behavior of adolescents in Roma and non-Roma groups found similar results, with Roma girls showing lower levels of sports and physical activity compared to non-Roma girls [29].

Similarly, a study among adult Spanish Roma women found a higher level of physical inactivity compared to non-Roma adult women [14].

Szabó et al. [43] investigated the physical activity patterns of two different Roma populations (Gabor Roma N=231, Băieși Roma N=111) in Romania compared to the non-Roma population (N=183) using the IPAQ short questionnaire. Physical activity was lowest among Gabor Roma, and both Roma groups had lower activity levels than non-Roma individuals (Gabor Roma 118.6 ± 91.1 minutes/day, Băieși Roma 207.55 ± 172.1 minutes/day, and non-Roma 234.12 ± 167.3 minutes/day). Gardening and sports activities were significantly less frequent in both Roma groups compared to non-Roma. Among women, daily physical activity was higher in the Gabor Roma population compared to men (144.22 ± 109.4 minutes/day vs. 79.71 ± 58.2 minutes/day, $p = 0.001$). There were no statistically significant gender differences in the other two groups.

Sanz-Remacha et al. [41] examined the factors limiting physical activity in 11 disadvantaged adult women, including 7 Roma women, through interviews. They identified factors limiting or inhibiting physical activity, categorizing them into three categories: personal (e.g., economic status, work, physical limitations, illness, and psychological characteristics), social (e.g., culture, lack of social support, and family), and environmental categories. The most common inhibiting factor identified among disadvantaged adult women was family.

Differences were also observed among adult Roma and non-Roma women regarding factors hindering physical activity: while Roma women perceived culture, physical limitations, and lack of social support as obstacles, non-Roma women perceived work-related obstacles as the most significant hindrance to physical activity and sports participation [41].

2.4 Factors Influencing Sports Participation Among Roma Children

The factors influencing sports participation among Roma children are diverse and complex, reflecting individual, familial, and societal environments. These factors can significantly differ from the sports opportunities and habits of children belonging to the majority society.

Table 1. Factors affecting Sports habits

<i>Factors affecting Sports habits</i>	<i>Effect</i>	<i>Literatures</i>
Accessibility Barriers	Roma children often face accessibility barriers in terms of sports opportunities, which can be attributed to the lack of infrastructure available in their residential areas, financial constraints, or the distance to sports facilities. These barriers hinder their participation in regular physical activity or sports activities.	[28] [34]
Financial Constraints	The higher prevalence of poverty in Roma communities often means that families do not have the financial means for sports equipment, travel expenses, or sports club fees, limiting children's opportunities for sports participation.	[38] [3]
Social and Cultural Factors	The sports habits of Roma children can be influenced by social and cultural norms, values within the community, as well as attitudes towards sports and physical activity. In some cases, the sense of community cohesion and identification may be stronger than the desire to participate in sports activities dominated by sports clubs or other ethnic groups.	[44]
Discrimination and Prejudice	Roma children may also face discrimination and prejudice in the realm of sports opportunities, which can hinder their full participation in sports. This may include perceived or actual discrimination from peers or coaches, which can reduce willingness to participate and self-confidence.	[13][24]
Health Status	Children from lower socioeconomic backgrounds, including many Roma children, are more likely to face health issues that can affect their ability to engage in sports. These issues may include nutritional deficiencies, obesity, or chronic illnesses.	[31]

Despite the listed characteristics, it is important to emphasize that the positive effects of sports and physical activity, such as improving health, strengthening the sense of community, and supporting personal development, are equally applicable to Roma children. Therefore, it is critical to develop and support inclusive and accessible sports programs that take into account the aforementioned barriers and provide opportunities for all children to participate in sports and enjoy its benefits.

3 Conclusion

The combined impact of the listed factors illustrates the numerous challenges that Roma communities face in terms of adopting a healthy lifestyle and engaging in sports. Financial constraints, accessibility issues, societal and cultural norms, as well as potential discrimination, are all obstacles that hinder physical activity and sports participation. These challenges are particularly pronounced in Roma communities with low socioeconomic status, where health problems are more common, and efforts for health preservation are harder to implement.

However, it is important to note that research and interventions also indicate that sports and physical activity can be crucial tools in improving the health and well-being of Roma communities. Initiatives such as the project carried out by the BAGázs public benefit association in Bag municipality, and other similar programs aimed at promoting social integration through sports and fostering healthier lifestyles, can be valuable steps in this field.

Based on research and practical experience, it appears that a comprehensive approach to health promotion is necessary, taking into account the complexity of various factors and the

importance of individual-level changes. Initiatives that address both infrastructural, financial, and cultural barriers, as well as increasing community participation and support, offer promising opportunities for improving the health and well-being of Roma communities.

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