
CHILD HEALTH STATUS IN THE UNITED ARAB EMIRATES: AN IN-DEPTH EXPLORATION OF CURRENT ISSUES AND CHALLENGES

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Abstract: *This study aims to investigate the current state of child health in the United Arab Emirates (UAE). The research is an in-depth exploration of the issues and challenges facing pediatric health in the country. Data was collected from multiple sources including government reports and academic literature, and published opinions of the healthcare professionals. The research investigates the various factors that contribute to poor child health in the UAE, including access to nutritious food, lack of physical activity, inadequate access to healthcare services, and insufficient vaccination coverage. The results of the study reveal that child health in the UAE is a matter of concern, with high rates of obesity, consumption of energy drinks and caffeine, and chronic diseases among children. Additionally, the study found that there are disparities in child health outcomes between different regions and socio-economic groups. The study highlights the need for a comprehensive and coordinated approach to addressing child health issues in the UAE. The research will also examine the existing policies and programs in place to address these issues and evaluate their effectiveness. The findings of this research will provide valuable insights into the current state of child health in the UAE and suggest potential solutions to improve the situation. This research will be valuable for policymakers, healthcare professionals, and the general public, in understanding the current state of child health in the UAE and the actions that need to be taken to improve it.*

Keywords: *United Arab Emirates, child health, child health services, child health issues and challenges*

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Introduction

Children in the United Arab Emirates (UAE) refer to individuals under the age of 18. The UAE has a diverse population, with children representing a significant portion of the population. According to data from the Global Media Insight (2023), children under the age of 14 years make up around 14.94% (1.52 million) and 15-24 years 12.36% (1.26 million) of the total population of the UAE. This includes both citizens and expatriates, who come from a variety of backgrounds and cultures. The majority of children in UAE are Arab, followed by South Asian and other ethnicities. The children of the UAE come from different nationalities, religions, and socio-economic backgrounds, which can affect their experiences and access to resources. In terms of socioeconomic status, a significant portion of children live in households with high income, due to UAE's strong economy, with a high standard of living, and the presence of a large expat community. Additionally, a growing number of children are being raised in nuclear families and have access to high-quality education and healthcare (Kanwal et al., 2017; Ward & Younis, 2013).

The UAE has a developed healthcare system that provides a variety of services for child health. The country has a number of well-equipped public and private hospitals that offer a wide range of pediatric services, including neonatal and intensive care units, as well as general pediatric care (Fares et al., 2014). Additionally, there are several primary healthcare clinics and specialized pediatric clinics that provide services such as vaccinations, check-ups, and treatment for common childhood illnesses (Yousef et al., 2022; Hasan et al., 2015). The UAE also provides a number of preventive health programs, such as campaigns and awareness programs, to promote healthy lifestyles among children.

Child health is important in the UAE for several reasons. First, children are the future of the country and their health and well-being are essential for the long-term development and prosperity of the UAE. When children are healthy, they are better equipped to learn, grow, and contribute to society. Investing in the health of children is therefore an investment in the future of the country. Secondly, child health is linked to the overall health and well-being of families and communities. Children are often seen as a vulnerable group, and their health and well-being can have a significant impact on the health and well-being of their families and communities (Kohrt et al., 2010; Poletto & Koller, 2011). When children are healthy, families are more likely to be healthy, and communities are more likely to be stable and resilient. Thirdly, addressing child health issues can also help to reduce healthcare costs in the long run (Daley et al., 2009; Geiling et al., 2012; WHO, 2018). Investing in preventative healthcare for children can help to reduce the likelihood of children developing chronic health conditions later in life, which can be expensive to treat and manage. Additionally, investing in the health of children can help to reduce the burden on the healthcare system, as children are less likely to require expensive medical treatments if they are healthy.

The importance of studying child health concerns in the UAE is two-fold. Firstly, understanding the current state of child health in the UAE is crucial for identifying areas where interventions and improvements are needed. This can help to ensure that children in the country have access to the necessary healthcare services and resources to

support their growth and development. Secondly, child health is an important indicator of a country's overall well-being, and as such, addressing child health concerns in the UAE is vital for the long-term development of the country. The study of child health concerns in the UAE can provide insight into the social, economic, and environmental factors that contribute to these concerns and inform the development of policies and programs that can address them. Additionally, the study can provide a benchmark for the progress in child health issues over time.

Research Methodology

The purpose of this article is to examine the look the possible interacting and casual factors of child health in UAE is a matter of concern. The article aims i) to assess why child health is a matter of concern in the UAE, and ii) find out the major limitations of health care and health services. The study utilized a content analysis of existing literature, adhering to the methods outlined by Islam (2023), Islam and Hossain (2014), and Islam and Ndungi (2016). A two-phase literature search was conducted to reduce researcher bias. The search began by utilizing various electronic databases such as Academic Search Premier, Academic Common, Aseline, Informit, Ingenconnect, ScienceDirect, Scopus, Social Science Citation Index, SSRN, and PsycARTICLES, using keywords related to “child health in UAE”, “child health problems and challenges in UAE”, and “child health services and care in UAE”.

Furthermore, the study employed the "snowball" method, which involved searching for journal articles, reports, and conference papers that were cited in already-read articles. By January 31, 2023, a total of 122 publications were examined, and 44 of them were discarded due to irrelevance to the research objectives. The final selection consisted of 78 publications (68 journal articles, 2 reports, 2 books, and 6 other sources), which were deemed most relevant for the study. The researchers also reviewed relevant published and unpublished national and international reports. These key sources are included in the reference section. The researchers did not simply summarize the findings of previous research, but critically analyzed the selected articles and documents to provide a comprehensive understanding about the causes of child health concern and limitations of child health and services in the UAE.

Why child health is a concern in UAE?

The country has made significant progress in terms of economic development, healthcare infrastructure, and overall standard of living. However, there are still concerns about the health and well-being of children in the UAE. Factors such as lack of access to healthcare, and unhealthy lifestyle habits have been identified as major contributors to child health issues in the country. The Sustainable Development Goal 3 (SDG3) aims to ensure healthy lives and promote well-being for all at all ages. One aspect of this goal is improving child health. The country has a high standard of healthcare and a strong focus on preventative measures, such as vaccination programs

and health education (Grivna et al., 2012). The infant mortality rate in the UAE is one of the lowest in the world, and the government has implemented several initiatives to further improve the health and well-being of children, such as the National Program for Early Childhood Development and the National Obesity Strategy.

While the UAE has made significant progress in child health, there are still areas of concern that need to be addressed to fully meet the targets of SDG3. One area is malnutrition, as the country has a high rate of overweight and obesity, which can lead to a range of health problems in children such as diabetes, and heart disease (notably cited in Sulaiman et al., 2017; Bawady et al., 2022; Abduelkarem et al., 2020; Ali et al., 2021). Another area of concern is access to healthcare for certain populations, such as children living in remote or rural areas, or those from low-income families. Ensuring that all children have access to high-quality healthcare, regardless of their socio-economic status or location, is crucial to achieving SDG3. Mental health is another area of concern in UAE, many studies have shown that rates of mental health disorders among children in the UAE are high and increasing (notably cited in Haque & Kindi, 2015; Al Marzouqi et al., 2022; Andrade et al., 2022; Thomas et al., 2020; Petkari & Ortiz-Tallo, 2018). This is likely due to several factors such as stress, lack of access to mental health services, and a lack of awareness about mental health.

One of the major concerns for child health in the UAE is malnutrition (Al Sabbah et al., 2023; Galal & Hulett, 2023; Cheikh Ismail et al., 2022; Nasreddine et al., 2018). According to Nasreddine et al., (2022), in UAE, 10% children among 0-4 years old were stunting. On the other hand, Al Sabbah et al., (2023) reported that according to UNICEF, the rate of low birth weight in the UAE increased from 6.9% in 2000 to 11.6% in 2015. The UAE Ministry of Health also reported a similar rate of 11.8% in 2019, while a study in Abu Dhabi found a rate of 9.4% in 2020. This can be attributed to a lack of access to nutritious food for some families and unhealthy eating habits among children. According to Abduelkarem et al. (2020), candy and fast-food consumption was significantly high (54.6%) and (47.8%) among male and female children in UAE. The fast-paced lifestyle and high pressure to succeed can take a toll on the emotional well-being of children (Lauwrens & Grunow, 2012). Moreover, cultural and social factors can also play a role in the mental health of children in the UAE, as some families may be less likely to seek help for mental health issues due to cultural or social stigmas (Chowdhury, 2016; Al-Krenawi et al., 2004; Al-Yateem et al., 2018; Said et al., 2021; Amiri et al., 2013; Al-Darmaki & Sayed, 2009). Overall, children in the UAE are diverse and have varied experiences and access to resources based on their background. They are facing many different challenges such as lack of access to healthcare, unhealthy lifestyle habits, and mental health issues.

The UAE is a rapidly developing country that has made significant progress in improving child health over the past few decades. However, there are still major problems that need to be addressed in order to ensure that all children in the UAE have access to the best possible health care. One of the major problems around child health in the UAE is access to healthcare. Despite the country's wealth and modern infrastructure, there are still many areas where access to healthcare is limited (Hashim et al., 2006; Al-Yateem et al., 2017; Elamin et al., 2021). This is particularly true for children in rural and remote areas, as well as for children from low-income families.

Another major problem that affects child health in the UAE is the high rate of childhood obesity. Approximately 4-7% of children in the UAE have been found to have obesity according to data from various studies (notably cited in Cheikh Ismail Ng et al., 2011; ALNohair, 2014; Abdulrakem et al., 2020; Moonesar & Hickman, 2017; Al Hammadi & Reilly, 2019). Obesity in early age has been linked to a variety of factors, including socioeconomic, geographical, and environmental factors, however, the most significant factors have been found to be individual and parental behaviors. A study of adolescent schoolchildren in Al Ain city also found that obesity in children and adolescents is associated with an increased prevalence of metabolic syndrome (Al Sabbah et al., 2023). This is a significant concern as obesity can lead to a range of health problems, including diabetes, heart disease, and other chronic conditions. Obesity among children in the UAE is primarily caused by poor dietary habits and lack of physical activity (Musaiger & Al-Hazzaa, 2012; Al-Sarraj et al., 2010; Rubio-Tomás et al., 2022). Many children in the UAE consume a diet that is high in processed foods and sugar, which can lead to weight gain and obesity. Additionally, many children spend a lot of time in front of screens and not enough time engaging in physical activity, which can also contribute to weight gain and obesity. The high rate of obesity among children (17.35% among children and adolescents aged between 5 and 17 years) (UAE Governmental Portal, 2023) in the UAE is also affected by the lack of education about healthy eating and physical activity. Many children in the UAE do not receive adequate education about how to maintain a healthy diet and how to engage in regular physical activity (Uddin et al., 2020; Yammine, 2017). This can lead to poor dietary habits and lack of physical activity, which in turn can contribute to the development of obesity.

Another major problem that affects child health in the UAE is the increasing consumption of energy drinks among children (notably cited in Almulla & Faris, 2020; Bhojaraja et al., 2016; Ghazayel et al., 2020; Almulla & Zoubeidi, 2022; Almulla et al., 2019). According to Kharaba et al. (2022), 16.3% of the children consumed energy drinks. Energy drinks contain high levels of caffeine and other stimulants, which can have negative effects on a child's health. Energy drinks can lead to caffeine addiction among children. Abdulle et al., (2013) found that on average, UAE students consume 264 mg of caffeine per day. A significant portion (nearly a third) reported consuming more than 400 mg daily, while over half reported consuming less than 199 mg. Many students (91.1%) reported consuming caffeinated beverages during or after meals, with 42.8% stating that this helped prevent acid reflux. They found that a significant number of participants (around one third) lacked knowledge about caffeine-containing medical products, which may have influenced their consumption levels. Caffeine is a stimulant that can affect a child's sleep, mood, and overall health (Owens et al., 2014). Almulla & Faris (2020) reported the prevalence of regular energy drink among UAE school children is 27%. Children who consume energy drinks regularly may develop a tolerance to caffeine, which can lead to addiction and the need to consume more caffeine to achieve the same effects (Temple, 2009; Owens et al., 2014; de Mejia et al., 2014). Energy drinks can also cause a range of health problems among children, such as headaches, high blood pressure, heart palpitations, and even heart attacks. Abdulle et al. (2014) found the prevalence of pre-hypertensions among below 18 years children was 10.5% and 11.4% and the prevalence of hypertension was 15.4% and 17.8% among boys and girls, respectively. In another study, Shah et al. (2020) found that 4.7% of the

study population had diabetes, 41.3% had impaired fasting glucose, 5.5% had hypercholesterolemia, 11.5% had hypertriglyceridemia, and 10.4% had hypertension.

A further problem that affects child health in the UAE is a lack of awareness about the importance of preventive care. According to World Bank (2022) data, 4% of the children ages 12-23 months is still out of DPT vaccination in 2021. Many parents and caregivers do not understand the importance of regular check-ups and vaccinations, and may not take their children for regular check-ups and vaccinations (Ghanim et al., 2016; Mahmoud et al., 2017; Elbarazi et al., 2021; Al Junaibi et al., 2013; El Batawi & Fakhrudin, 2017). This can lead to the development of serious health problems that could have been prevented with proper preventive care. A third problem that affects child health in the UAE is the lack of mental health services for children. Mental health is an important aspect of overall health and well-being, and children in the UAE often do not have access to the mental health services they need due to high cost that insurance does not cover (The National News, 2022). This can lead to a range of problems, including anxiety, depression, and behavioral problems. A fourth problem that affects child health in the UAE is the lack of access to safe and healthy food (Stott et al., 2013; Musaiger et al., 2013). Many children in the UAE eat a diet that is high in processed foods and sugar, which can lead to obesity and other health problems such as cholesterol, metabolic syndrome, etc. Shah et al., (2020) reported that 8.9% of children in UAE had metabolic syndrome. They found that the prevalence of metabolic syndrome increased with the severity of obesity, 4.5% in normal, 16.7% in overweight, and 30.0% in obese subjects. Additionally, many children do not have access to fresh fruits and vegetables, which are important for a healthy diet.

A fifth problem that affects child health in the UAE is the lack of physical activity (Yammine, 2017; Musaiger et al., 2013). Many children in the UAE spend a lot of time in front of screens and not enough time engaging in physical activity. This can lead to obesity and other health problems, as well as a lack of physical fitness and poor overall health. Again, the affects child health in the UAE is the lack of clean water and sanitation (Hussain & Qureshi, 2020; Al-Shahethi et al., 2018). Many children in the UAE do not have access to clean water, which can lead to the spread of waterborne illnesses. Additionally, many children do not have access to proper sanitation facilities, which can lead to the spread of diseases. A seventh problem that affects child health in the UAE is the lack of education about health and hygiene. Many children in the UAE do not receive adequate education about how to maintain good health and hygiene (Elamin et al., 2018; Ghanim et al., 2016). As preschool education is not mandatory in the UAE. This can lead to the spread of diseases and other health problems.

Limitations of child health services in UAE

One of the major problems that affects child health in the UAE is the limitations of child health services and care. Despite the UAE having a well-developed healthcare system, there are several limitations that affect the quality of child health services and care. One limitation is the shortage of pediatric specialists and healthcare professionals trained to provide care for children (Elbarazi et al., 2021; Al-Yateem et al., 2015). This

can lead to long wait times and difficulty in accessing specialized care for children. Additionally, the shortage of pediatric specialists can also lead to a lack of continuity of care for children, as they may be seen by different healthcare professionals at different stages of their treatment. Another limitation is the lack of access to specialized services and equipment for children. Many hospitals in the UAE do not have specialized equipment or facilities designed specifically for children, which can make it difficult to provide appropriate care for children (Khatib & Al-Nakeeb, 2021). This can also make it difficult for children to receive specialized treatments such as surgery or radiation therapy.

Another limitation is the lack of awareness and education about child health among parents and caregivers (Hussain et al., 2020). Many parents and caregivers in the UAE do not have adequate knowledge about child health and how to care for their children's health (Kowash et al., 2017; Al Salami et al., 2018). This can lead to a lack of early detection of health problems and a delay in seeking appropriate care for children. Another limitation is the lack of continuity of care for children, which is caused by the frequent movement of expatriates, who constitute a large proportion of the population in the UAE. This can make it difficult for children to establish a relationship with a primary care physician and can lead to a lack of continuity of care. Additionally, there is a lack of mental health services for children in the UAE, which can make it difficult for children to receive appropriate care for mental health problems. Furthermore, there is a lack of community-based services and programs that focus on child health, such as school health programs, which can make it difficult for children to receive appropriate care and support outside of the hospital setting.

Conclusion and Policy Implications

In conclusion, the health of children in the UAE is a matter of concern due to factors such as high obesity and chronic disease rates, limited access to healthcare, and cultural and societal factors that impact both physical and mental well-being. Addressing these challenges requires a multifaceted approach, combining education, policy changes, and increased healthcare access. The UAE government has made significant efforts and has a strong commitment to improving child health, but limitations remain. These limitations include a shortage of pediatric specialists, limited access to specialized services and equipment, a lack of health knowledge among parents and caregivers, a lack of continuity in care, inadequate mental health services, and a lack of community-based programs. To overcome these limitations, there needs to be a focus on increasing the number of pediatric specialists and healthcare professionals, improving access to specialized services and equipment, providing education and awareness to parents and caregivers, and offering more community-based programs focused on child health. Further research is needed to fully understand the challenges and develop effective solutions.

In the UAE, child health is a matter of concern due to several factors. One major issue that we mentioned is the high rates of obesity and chronic diseases among children. This is largely due to the sedentary lifestyle and unhealthy diet that are common in the

country. This puts children at risk for a variety of health issues such as diabetes, heart disease, and other chronic conditions. Another issue is limited access to healthcare for children. While the UAE has a relatively high standard of living and a well-developed healthcare system, access to healthcare can still be a challenge for some families, particularly those with lower incomes. This can make it difficult for children to receive the necessary medical care and treatments they need to maintain good health. We also mentioned that cultural and societal factors also play a role in child health in the UAE. In some cases, traditional gender roles may limit the physical activity and opportunities for girls, and some traditional practices such as female genital mutilation can negatively affect the physical and mental health of girls and young women. Furthermore, some families may be reluctant to seek medical help for mental health problems, which can lead to undiagnosed and untreated conditions.

It is important for the UAE to address these issues through a combination of education, policy changes, and increased access to healthcare. This may include promoting healthy lifestyles and nutrition, increasing access to healthcare for families with lower incomes, and implementing policies that support the physical and mental well-being of children. Furthermore, more research is needed to fully understand the specific challenges facing child health in the UAE and to develop effective solutions. The following are some policy suggestions:

- One potential suggestion to improve child health in the UAE could be to focus on increasing access to healthy food options for children. This could be achieved by promoting and supporting local farmers and food producers, as well as implementing educational programs for children and families about the importance of a balanced diet. Additionally, the government could work with schools and childcare facilities to ensure that nutritious meals are being served to children on a regular basis.
- Another suggestion could be to increase access to physical activity and outdoor recreation for children. This could be done by building more playgrounds and parks in urban areas, as well as investing in programs such as after-school sports teams and physical education classes in schools.
- Implementing a comprehensive, mandatory vaccination program for all children in UAE would be another effective way of improving child health. This could be done by making vaccinations easily accessible and affordable, as well as educating parents and caregivers about the importance of vaccinations in preventing serious and potentially deadly diseases.
- Increasing access to healthcare services for children would be an important step in improving child health. This could be done by expanding the number of clinics and hospitals in the UAE, as well as training more healthcare professionals to specialize in pediatrics.
- Including child health issues in the text of the school curriculums so that the children may get health knowledge, food pattern and importance of physical exercises. The parents should provide awareness and trainings about child health issues.

- Prohibiting the sale of energy drinks and fast food at primary and secondary schools would be an important initiative in promoting healthy habits and protecting children from negative health effects.
- Finally, improving child health in the UAE would require a multifaceted approach, with a focus on increasing access to healthy food and physical activity, preventing disease through vaccination, and increasing access to healthcare services.

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