



## **IMPROVING THE HEALTH OF THE BLACK ASIAN MINORITY ETHNIC (BAME) PEDIATRIC POPULATION BY TARGETED HEALTH SURVEILLANCE IN THE UNITED KINGDOM (UK),**

### **A COMPARISON TO THE SCREENING PROGRAMMES CONDUCTED IN THE STATE OF QATAR.**

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#### **ABSTRACT**

The authors of this article are doctors who trained in the NHS and subsequently relocated to Qatar to continue their professional careers in family medicine and pediatrics respectively. The UK and Qatar have a large population of Black Asian Minority Ethnic community (BAME) who experience a high incidence of chronic disease like diabetes mellitus, hypertension, and coronary artery disease.

We would like to reflect on how screening for common health conditions from early childhood and establishing healthy behaviors early on in life may help to prevent chronic disease in adult life and also help to reduce the disease burden in the BAME population. The article aims to highlight some of the possible reasons why there are health inequalities between the BAME community and the White British Population and what measures could be implemented in the UK to optimize the health of the BAME population from birth. We draw on our experiences from both the UK and Qatar health models and screening programmes to make recommendations on how to reduce the gap in these inequalities.

The article highlights what Qatar is doing to help promote positive health outcomes in their BAME pediatric population through a structured screening programme. It is hoped that early screening and intervention with the management of common childhood conditions will eventually translate into better health outcomes in this population throughout their lives.

The UK has a similar screening programme but overlooks a lot of the conditions more prevalent in the BAME community such as iron and vitamin d deficiency. We feel it is prudent to provide the BAME community with additional screening and health education early on in life to prevent the onset of chronic health problems later which will eventually lead to a reduced burden on the NHS services.

**KEYWORDS:** Child Health, Health Promotion, Health Inequalities, Healthy Lifestyle.



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## المخلص:

مؤلفو هذا المقال هم أطباء تدربوا في NHS وانتقلوا بعد ذلك إلى قطر مواصلة حياتهم المهنية في طب الأسرة وطب الأطفال على التوالي. المملكة المتحدة وقطر لديها عدد كبير من السكان السود من الأقليات العرقية الآسيوية (BAME) الذين يعانون من ارتفاع الإصابة بأمراض مزمنة مثل داء السكري وارتفاع ضغط الدم وأمراض الشريان التاجي.

نود أن نفكر في كيفية فحص الحالات الصحية الشائعة منذ الطفولة المبكرة و قد يساعد إنشاء سلوكيات صحية في وقت مبكر من الحياة في منع الأمراض المزمنة في حياة البالغين وأيضًا تساعد في تقليل عبء المرض في السكان BAME. تهدف المقالة إلى تسليط الضوء على بعض الأسباب المحتملة لوجود تفاوتات صحية بين مجتمع BAME والبريطانيين البيض السكان وما هي التدابير التي يمكن تنفيذها في المملكة المتحدة لتحسين صحة BAME السكان منذ الولادة. نعتمد على تجاربنا من كل من النماذج الصحية في المملكة المتحدة وقطر فحص المبرمجين لتقديم توصيات على القوس لتقليل الفجوة في هذه التفاوتات.

يسلط المقال الضوء على ما تفعله قطر للمساعدة في تعزيز النتائج الصحية الإيجابية في BAME الأطفال من خلال برنامج فحص منظم.

ومن المأمول أن يتم الفحص المبكر و التدخل في إدارة حالات الطفولة الشائعة سوف يترجم في النهاية إلى أفضل

النتائج الصحية في هذه الفئة من السكان طوال حياتهم. لدى المملكة المتحدة برنامج فحص مشابه ولكنه يتجاهل الكثير من الظروف الأكثر

انتشارًا في الولايات المتحدة المجتمع BAME مثل نقص الحديد وفيتامين د. نشعر أنه من الحكمة توفير BAME المجتمع مع المزيد من

الفحص والتثقيف الصحي في وقت مبكر من الحياة لمنع ظهور المشاكل الصحية المزمنة في وقت لاحق والتي ستؤدي في النهاية إلى

تخفيف العبء على خدمات NHS

**الكلمات المفتاحية:** صحة الطفل ، تعزيز الصحة ، أسلوب حياة صحي ، عدم المساواة الصحية.



## INTRODUCTION

The COVID 19 had a disproportionate impact on the BAME (Black Asian Minority Ethnic) community with higher mortality compared to the White British population. There is now a growing desire to understand the reasons for this and address them. As per the 2011 census, the ethnic minorities accounted for 14% of the UK population. Health inequalities are seen among the BAME groups. They have a high prevalence of chronic diseases like diabetes mellitus, hypertension, and coronary artery disease. The disability free life expectancy (DFLE) in these groups is lower compared to the White British Population. Compared to White British men (61.7 years) and women (64.1 years), the lowest DFLE observed was for Bangladeshi men (54.3 years) and Pakistani women (55.1 years).

## COMMON HEALTH PROBLEMS IN THE BAME GROUPS/CHILDHOOD PREVENTION OF ADULT HEALTH PROBLEMS

It is hoped that going forward, more effort will be put in to improve the health of the adult BAME population. Diabetes, Hypertension, Obesity and Chronic airways disease have been associated with increased mortality from the Coronavirus. Testing for these conditions and treating them would certainly help to improve the health of the BAME groups and reduce disease burden in the society. Giving children the best start in life is important to ensure that they become healthy adults. Hence improving the health of the pediatric population must be given a priority as much as improving the health of the adult and the older population. We feel that it is equally important to focus on the health of the pediatric BAME population since childhood health problems usually translate into chronic health problems in adult life. We would like to draw from our current experience of working with the predominantly BAME population in Qatar to reflect on common pediatric problems in BAME groups and how to possibly address them in the UK.

## PAEDIATRIC SERVICES AND COMMON CONDITIONS IN THE BAME POPULATION ASSESSED IN WELL BABY CLINICS IN QATAR

Qatar is pragmatic about the health surveillance of its pediatric population. The pediatric vaccination and health review/screening is accomplished through a dedicated Family Physician led Well Baby Clinic (WBC). At each appointment for the vaccination, the child is assessed by a family physician. There is a dedicated Maternal child health (MCH) counsellor attached to the WBC who advises mothers on the importance of breastfeeding, options for infant feeding, baby safety, basics of childcare, developmental stages, vaccinations, weaning, exercise and any other related information. The WBC focuses on early diagnosis in infants of any delay in developmental milestones, failure to thrive, visual and hearing problems, undescended testicles, and heart murmurs.



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In older children it actively screens for autism (at 18 and 30 months) and ADHD, which can otherwise be easily missed at home or at school. Emphasis is laid on screening and treating common conditions prevalent in the BAME population like anemia, obesity, and vitamin d deficiency. These conditions are prevalent in the BAME population in the UK and the wider world as well. There are currently no guidelines and policies specific to the BAME groups. We would like to highlight the following conditions.

### IRON DEFICIENCY ANAEMIA

Anemia is a very common condition seen in children of South Asia. According to a prevalence survey conducted by WHO between 1993 and 2005, the prevalence of anemia in preschool children in South East Asia was 85.1% while in Europe it was 26.5%. Anemia is associated with slow somatic growth, adverse neurodevelopment, and an increased risk of infections amongst its other ill effects. Iron deficiency anemia is one of the commonest forms of anemia seen in South Asian/BAME children. Children are more likely to experience symptoms of iron deficiency anemia at around 1 year of age as the neonatal iron reserves will have been depleted. They could have earlier symptoms if the mother had poor iron reserves during pregnancy.

There are several reasons for this occurrence. Commonly, these children live in a joint family with grandparents. The grandmother has great influence on the diet of the child. Some of these children are fed with cow's milk in the first year of life which contains very little iron. Some parents cannot afford the cost of formula milk and hence cow's milk becomes the main source of nutrition for these children. They erroneously associate milk with a healthy body, therefore in the first 2 years of life children are mostly fed cow's milk with minimal solid intake which exacerbates the anemia. In Qatar, all children are screened for anemia at the 1- and 4-years WBC appointment. Early detection of anemia helps in treating the condition early and improving the long-term outcome of these patients.

The UK National screening committee does not recommend screening for anemia in the under 5 age group. One of the reasons they cite for this is that the number of children affected in the UK is currently not known. It is understandable that health resources in the NHS are stretched and it might not be practical to do screening for anemia for all the pediatric population given the different prevalence of anemia in UKs diverse population. We believe that there should be a discussion about the merits of doing a full blood count at 1 year of age in the BAME pediatric population due to the high prevalence of iron deficiency anemia.

We recommend that studies should be undertaken in the BAME pediatric population with full blood count at 1 year to study prevalence of iron deficiency anemia and what proportion of these anemic children are symptomatic. Following treatment and correction of the anemia, it can be assessed if it helps to improve the long-term health in these children, like better growth rates and school performance, less incidence of infections etc. These studies can then help decide if screening for anemia at 1 year should be rolled out for all the BAME children at a national level.

### CHILDHOOD OBESITY



Obesity is an increasing health problem worldwide and an important public health challenge of our times. Obese children are more likely to stay obese into adult life, develop diabetes mellitus and its complications early in their life and have premature death and disability. Unlike the White British groups, the BAME population is prone to truncal obesity which is associated with insulin resistance, diabetes mellitus, dyslipidemia, and cardiovascular disease. Childhood obesity levels in the UK are highest among South Asian children, according to researchers at St George's, University of London, and University College London, funded by the British Heart Foundation and the National Institute of Health Research (NIHR). They report that more than half of all South Asian boys – and two out of five girls – were overweight or obese by the time they left primary school.

Childhood obesity among the BAME population is culturally not viewed as a serious health problem and in fact, some parents associate obesity with healthiness and overeating is encouraged. In Qatar, during each WBC appointment, the weight of the child is charted and screened for obesity. Overweight children are assessed by the MCH counsellor and parents educated about healthy eating habits. If obesity persists over the next few consultations, the child is referred to the community pediatrician.

In the UK, childhood obesity should be viewed as a significant health hazard akin to children who are underweight or fail to thrive. Overweight children should be seen by GPs and managed in community-based services. Educating families and clearing misconceptions regarding obesity and its risks in the BAME population can help to improve both short and long-term outcomes for the child.

#### VITAMIN D DEFICIENCY

Vitamin d deficiency is more common in the BAME population in the UK, particularly in women. This could be due to increased melanin, low exposure to sunlight due to full body covering and women staying at home. Children born to mothers deficient in vitamin d are more likely to have vitamin d deficiency and experience poor fetal growth, rickets, and eczema. In Qatar, all children in WBC are prescribed 400 IU vitamin d and the importance of its administration to the child is reinforced. There is increasing awareness among the Qatari population about benefits of vitamin d supplementation and a high percentage of children take vitamin d.

There are public health guidelines in the UK on supplementing children from birth to four years of age (unless receiving >500ml of formula milk), with vitamin d. The guidelines lay emphasis on special groups (people of African, African–Caribbean and South Asian origin) who are at greater risk of vitamin d deficiency and its adverse effects. Although there is currently more awareness of vitamin d deficiency among GPs and more children are prescribed vitamin d than before, national guidelines on vitamin d supplementation for children are not consistently followed by GPs across various trusts and vitamin d uptake is still very low.

According to a population-based cohort study from UK primary care practices published in BMJ in 2019, among 2 million children, the crude annual incidence of vitamin D prescribing increased by 26-fold between 2008 and 2016 rising from 10.8 (95% CI: 8.9 to 13.1) to 276.8 (95% CI: 264.3 to 289.9) per 100 000 person-years. Vitamin D should be prescribed at birth to all newborns, particularly the at risk BAME



population. Parents should be advised to continue supplements until the age of 4 years and possibly longer. Parents should be educated about the benefits of vitamin d supplementation. Any child with signs or symptoms of vitamin d deficiency should have levels measured and if deficient, given treatment doses. After the normal vitamin d levels are attained, prophylactic doses should be continued.

## CONCLUSION

Iron deficiency anemia, childhood obesity and vitamin d deficiency are some of the common health problems BAME children face and identifying them early in their life can help to treat them sooner and improve patient outcomes. Engaging with the BAME population and educating them about healthy living can play a big role in decreasing the chronic disease burden and building a healthy nation. The health of every group of society is directly linked to the health of the nation and more needs to be done to uplift the health of the society.

Pandemics do not discriminate based on an individual's race, gender, or social standing. The Covid-19 pandemic may have affected the BAME community more than the White British population in terms of mortality, but it has placed a huge burden on the health services and the economy of the nation. The pandemic has been an unwelcome reminder that more needs to be done to improve the health of the people at large. It has laid bare the reality that the economy of the nation is directly related to the health of its population and it is time to put more resources into the health of its citizens.

We cannot ignore the health needs of the minority BAME community and more needs to be done to optimize their health. We need to put in more resources and conduct pragmatic screening programs to identify any conditions early on to prevent these from becoming established health conditions later in life. Medical schools and GP/Hospital training curriculum should incorporate topics related to BAME health. E-learning modules focusing on health care inequalities should be made easily available to doctors.

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