# **Letter to the Editor** AMJ 2010, 3, 13, 970-973

# Immunization Coverage in an urban slum- South

India

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#### Dear Editor,

Health of the migrant population staying in urban slums is very important from public health point of view. Slum population face many health related problems particularly the vulnerable groups like pregnant women, nursing mothers, and children. The access to health care facilities for Ante-natal care (ANC), immunization, counselling and general health check-up is not adequate for the migrant population. The children become susceptible to various vaccine preventable diseases like tuberculosis, measles, polio and tetanus. The reason is mainly due to lack of awareness, poverty, illiteracy and lack of access to health care facilities. Poor nutritional status among children makes them more vulnerable for infections. These factors will lead to increase in infant mortality rate and under-five mortality rate. In a study conducted by Swain et al<sup>1</sup> and Yadav et al<sup>2</sup> the immunization coverage is inadequate among the urban slum children. The health authority tends to neglect the migrant population as they constitute small numbers compared to the district. It is also difficult for the health system to track the mobile population. To address the issues of migration with respect to health needs, health care utilization and immunization, a collective effort from government, private health sector and non-governmental organisation is required.

A cross-sectional study was conducted among the slum children to assess immunization coverage according to National immunization schedule for Oral polio vaccine (OPV), Bacillus Calmette-Guerin (BCG), Diphtheria, Pertusis, Tetanus (DPT) and Measles in the age group of 0 to 5 years. A predesigned semi-structured questionnaire was used to collect the data. House to house survey was conducted and parents were asked about immunization status of their children. Data were analysed using SPSS version 11.5. The total children in the age group of 0-5 years were 27. Almost 55% of the parents were illiterate. About 67 % of the study group received BCG at birth. The coverage of OPV at birth was good, however the coverage for subsequent dose was very low. Only 29.6% of the children received Measles vaccine. Vitamin A coverage was only 25.9% at 9<sup>th</sup> month and at 1 and half years the coverage reduced to 22.2%. OPV/DPT booster coverage was 18.5%. About 60 % of the study populations are partially immunized, 14.8% are unimmunized. In a study conducted by Swain et al<sup>1</sup> only 59% of the children had received BCG vaccine at birth which is low compared to our study. However in a study conducted by Yadav et al the coverage of BCG vaccination was more than national statistics.<sup>2</sup> In Swain et al study the vaccination for measles and Vitamin A was low<sup>1</sup> which is similar to study conducted by Yadav et al<sup>2</sup> and our study. Ignorance (25.9%) and lack of awareness (29.6%) were the most common cause for low immunization coverage in our study, however in the study conducted by Yadav et al ignorance (80.36%) was the main reason for low coverage.<sup>2</sup> As per the World Health Organization (WHO) fact sheet 2008, the national immunization coverage for BCG, OPV3, DPT3 and Measles was 87%, 67%, 66% and 70% respectively.<sup>3</sup> This suggest that the Immunization coverage at the national level is much better compared to our study. However, there are few pockets like urban slums which have inadequate coverage especially for measles vaccine. The district health authority should conduct frequent outreach camps in underserved areas and give emphasis on immunization of eligible population. The Information, Education and Communication (IEC) department should educate the parents about importance of immunization. The main limitation of this study was small sample size. However, the study highlights the importance of immunization in slums. The few pockets of un-immunized children are responsible for maintaining infection in the community and sporadic outbreaks.

#### Sincerely,

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## **Obesity – a call for watchful awareness**

## **Corresponding Author:**

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## Dear Editor,

In the Vol 3 No: 10 (2010) issue of the Australasian Medical Journal, Dr Ramesh K. published a paper entitled "Prevalence of overweight and obesity among high school students Thiruvananthapuram City Corporation, Kerala, India". He had mentioned about the high prevalence of obesity in his study sample and the repercussions obesity can have on the general health of the population. We have noticed that numerous studies of similar structure have been conducted in this state but not much significance has been given to a related but way more significant dimension to the problem of this modern day "epidemic" – obesity.

A cross-sectional study on prevalence of obesity in Kerala held in 2009 among 497 female college students suggested a similar prevalence (14.7) of obesity among the population as quoted by Dr Ramesh  $K^{(1)}$ . But a way more disturbing finding was that of weight perceptions among these female college students. 38.3% of the sample overestimated their weight and 31.3% underestimated their weight. 41.6% of normal weight and 46.7% of underweight subjects overestimated their weight, while 51.5% of the obese subjects underestimated their weight. These results clearly depict the need for appropriate awareness regarding ideal weight. Overestimating weight among under-weight and normal-weight students is disturbingly followed by weight-losing practices that are religiously adhered to, under no professional supervision. A majority of 84% of the girls resorted to dieting practices and only 15% resorted to exercise as a means to lose

weight. This further highlights the unhealthy practices being followed for weight control.

In today's world of fashion, appeal and glamour, the population most easily influenced includes the teenage and college students. The fear of being over-weight and physical appearances matter most among this age group as has been already explained in numerous studies <sup>(2)</sup>. It has also been established by Martin Fisher et al (1991) that this age group is most susceptible to anxiety and eating disorders in addition to other unhealthy practices such as substance abuse due to a low self-esteem. Unfortunately, we overlook that this population comprises the mothers of tomorrow. Unhealthy eating practices and under nutrition can severely affect not only the health of one individual but also her progeny <sup>(3)</sup>.

Hence, until awareness programmes are held regarding ideal-weight and healthy weight control practices, educating the population about the risk of obesity might target the wrong population triggering a rise in ill-health rather than promoting healthy and risk-free living.

Sincerely,

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# Problem of Breast cancer in South India-A Record based study

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Dear Editor,

Breast cancer is the top cancer in women both in the developed and the developing world. As mentioned by World health organization, the incidence of breast cancer is increasing in the developing world due to increase in life expectancy, increased urbanization and adoption of western lifestyles. In a study conducted by Coleman MP et al, the breast cancer survival rates vary greatly worldwide, ranging from 80% or over in North America, Sweden and Japan to around 60% in middle-income countries and below 40% in low-income countries.<sup>1</sup> A record based study was conducted in a 300 bed cancer hospital attached to tertiary care teaching hospital located in Karnataka state, south India from August 2010 to September 2010. Consent was taken from the officer incharge of Medical records department in tertiary care hospital to access the data. Data was collected on all newly diagnosed breast cancer cases. Data was analysed using SPSS version 11.5. The objective of the study was to analyze the age group affected with breast cancer. Our study shows 19.8% of the cases are in the age group of 31-40 years, 27.3% cases are in the age group of 41-50 years, 31.7% cases are in the age group of 51-60 years and 10.1% are in the age group of 61-70 years. In a study conducted by Smigal the trends in incidence of breast cancer are substantially higher for women age 50 and older (375.0 per 100,000 females) compared with women younger than 50 years (42.5 per 100,000 females), approximately 23% of breast cancers are diagnosed in women younger than 50 years.<sup>2</sup> In a study conducted by Jha et al the majority of the breast cancer cases were in the age group of 41-50 years.<sup>3</sup> In a study conducted by Muhammad Naeem the majority (56.4%) of the breast cancer cases are in the age group of 41 to 60 years.4 In our study the 78.8% of the patients were below the age of 60 years. The evidence suggests that the number of cases occurring below the age of 50 years is approximately 50 % which leads to an important conclusion of screening for breast cancer at the earliest. The health awareness campaigns should be conducted efficiently in the villages, schools, and colleges with women in the reproductive age group as the major beneficiaries. Local administrative bodies like village panchayat should organize

monthly camp for early detection of breast cancer cases with the help of district health society. This emphasis on information, education, communication and early detection of breast cancer lesion will go a long way in controlling the incidence of breast cancer in the community.

Sincerely,

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# A study on awareness regarding Hepatitis B infection and vaccination among medical students

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## Dear Editor,

Hepatitis B virus (HBV) infection has become a major public health problem particularly in developing



countries. According to the World Health Organisation fact sheets almost two billion people have been infected with HBV, and reported chronic infection among the infected is more than 350 million. The vaccine against Hepatitis B is 95% effective in preventing HBV infection and its chronic complications.<sup>1</sup> A cross-sectional study was conducted to assess the awareness regarding hepatitis B infection and vaccination among 620 medical students. A total of 598 students responded to the questionnaire. Data was collected during January 2010-March 2010. A pre-designed semistructured questionnaire was distributed after explaining the purpose of the study. Data was analyzed using SPSS version 11.5. Almost 97.0% students knew that hepatitis B was transmitted by a virus. Most of the students said that transmission of Hepatitis B infection is mainly through blood transfusion (95%), needle stick injury (86%) and sexual contact (86%). Almost 67% of the students were aware of their high risk status, being the health care personnel. Out of 570 students who revealed about their vaccination status, 452(79%) were vaccinated with hepatitis B vaccine. Among these students, 84.5% (382/452) received the vaccine before starting of their clinical rotations. However, only 336(74.3%) were vaccinated according to the adult three dose schedule. In a study conducted by Daud S et al., 66% of students admitted to have been vaccinated against Hepatitis B, while 34% were not vaccinated.<sup>2</sup> In a study conducted by Seddige et al., 86.8% of the health care workers had been vaccinated against hepatitis B however complete vaccination had been performed in only 71.7% of them.<sup>3</sup> In our study, overall knowledge of students regarding hepatitis B was found to be satisfactory. However, considering the incomplete coverage of vaccination among medical students, we recommend that hepatitis B vaccination should be made mandatory before the start of clinical rotations as this may be the best strategy for prevention of hepatitis B infection.

Sincerely,

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