International Journal of Current Research in Life Sciences
Vol. 4, No. 09, pp. 380-382, September, 2015

www.ijcrls.com

Full Length Research Article

MORBIDITY PROFILE OF PATIENTS ATTENDING HEALTH CAMP AT MAHAMASTHAKABHISHEKA FESTIVAL AT KARKALA, KARNATAKA

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Accepted 27th August 2015; Published Online 30th September 2015

ABSTRACT

One of the important means to cater to the health needs of people in developing countries is free health check-up camps. The objective of this study was to assess the morbidities of patients attending the free health camp at Mahamasthakabhisheka festival at Karkala, Karnataka. A total of 593 patients visited the health camp and 62.7% of them were males. It was observed that diseases of circulatory system and gastrointestinal system were reported among 29.4% and 30.8% of the attendees respectively. Based on the findings, it was concluded that the free health camp services was utilized more by the males and more burden of disease was found among circulatory and digestive system.

Key words: Free Health Check-up, Morbidity, Karnataka.

INTRODUCTION

The World Health Organisation defines health as a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity. But recently this criteria has been extended to include the ability to lead a socially and economically productive life also (WHO, 1978). A direct relationship has been observed between the health of an individual and human resources development and economic development of a nation. To improve the health of the people both in urban and rural areas lot of planning, effort and public expenditure has been devoted in India. Throughout the country the spread and accessibility of medical care has improved substantially. Still a high level of morbidity has been seen in India, despite of huge efforts to improve health care (Deshpande, 1998).

A few states in India like Kerala and Tamil Nadu has done relatively well in terms of health care but the situation in most of the states in India is dismal. The target set by Millennium Development Goals is unlikely to be achieved by India if it is progressing at this rate with regards to health care (Mukherjee and Karmakar, 2008). Health services should not be restricted to curative services and should include preventive, rehabilitative, palliative and should be sufficient to meet the health needs both in quality and quantity (WHO, 2015). Free health camps provides adequate health personnel to provide integrated health services at community level.

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It also provides data for planning, monitoring and policy making at community level. It also helps to improve health by counselling and raising awareness programs at community level. It also helps to encourage health utilization at health institutions; referral for complicated cases addressing and integrating health issues of minorities and indigenous people in the general health programme. This health camp was conducted by the Department of Community Medicine, KS Hegde Medical Academy, Mangalore at Karkala during the month of Jan, 2015 for ten days, near the place where the Jain festival Mahamasthakabhisheka was taking place, which is an event occurring once in 12 years and attended by thousands of people daily from all over the state and outside. The main aim of the study was to find out the morbidity pattern of patients attending free health camp at the site of Mahamasthakabhisheka festival, Karkala.

MATERIALS AND METHODS

The present study was a cross-sectional study conducted among the subjects attending the free health check-up camp at the site of Mahamasthakabhisheka festival organised by the Department of Community Medicine, KS Hegde medical Academy (KSHEMA), Mangalore during the month of Jan, 2015 for a period of ten days. The faculties, post-graduate students and interns from the Department of Community Medicine, KSHEMA participated as medical officers in the health camp and provided primary health care to the patients. Patients requiring referral were referred to Gajaria hospital, Karkala which is a sister concern hospital of KSHEMA hospital.

All the subjects who attended the health camp were included in the study. Data was collected from a total of 593 subjects who attended the camp, after obtaining their informed consent. The provisional diagnosis made by the medical officers were coded using International Classification of Diseases (ICD-10, 2010; Ajitha *et al.,* 2011; Gopalakrishnan *et al.,* 2015; Rayamajhi *et al.,* 2013). Data collected were entered into Microsoft Excel spread sheet and analyzed using SPSS version 16 software. In order to elaborate the findings descriptive data tables were generated. To explain the distribution of morbidity profile among the study population appropriate statistical tests were used.

RESULTS

A total of 593 subjects attended the health camp. Out of that 372 (62.7%) were males and 221 (37.3%) females. Data showed that subjects above 60 years comprised the highest number of study population. Distribution of the study subjects according to age is depicted in Table 1

Table 1. Distribution of study subjects according to the age

Age group (in years)	Number (%)
0-15	24 (4.3)
16-30	74 (12.4)
31-45	101 (17.0)
46-60	125 (21.0)
60	269 (45.3)

On the basis of ICD-10 classification diseases of circulatory system (33.9%), ie Hypertension constituted majority of the cases among men and disease of the digestive system (27.6), mostly gastritis constituted majority of cases among females (Table 2).

Table 2. Distribution of health problems on the basis of basic diagnosis (ICD-10) classification (n=593)

Diagnosis - ICD 10	Male- n (%)	Female- n (%)	Total- n (%)
Diseases of Digestive system (K00-K93)	122 (32.8)	61 (27.6)	183 (30.8)
Diseases of Respiratory system (J00-J99)	36 (9.7)	27 (12.2)	63 (10.7)
Diseases of Circulatory system (I00-I99)	126 (33.9)	48 (21.8)	174 (29.4)
Diseases of Skin and Subcutaneous tissue (L00-L99)	17 (4.6)	23 (10.4)	40 (6.8)
Diseases of Musculoskeletal and Connective tissue (M00-M99)	53 (14.2)	32 (14.5)	85 (14.3)
Others	18 (4.8)	30 (13.5)	48 (8.0)
Total	372 (100.0)	221 (100.0)	593 (100.0)

DISCUSSION

This study shows that morbidity among geriatric population is very high and should not be neglected. The diseases of circulatory system predominantly hypertension was found to be more among males which clearly indicates the shift in epidemiological transition in most of the developing countries. The transition occurred at different paces depending on the rate of fertility changes, the distribution of risk factors that contributed to the incidence of disease and the health system's ability to respond to the changing epidemiological profile (Epidemiological transition, 1993). According to a study in 2008 the leading cause of non-communicable deaths were cardiovascular diseases (48% of NCD deaths); cancers (21% of NCD deaths) and respiratory diseases including asthma and chronic obstructive pulmonary disease (16% of non-communicable disease deaths). Tobacco use, lack of physical activity, and unhealthy diet were some of the behavioural risk factors reported in 80% of coronary heart disease and cerebrovascular disease (http://www.who.int/nmh/publications/ncd_report_chapter1.pdf). The impact of public health intervention is evident due to secular trend of the global burden of diarrhoeal diseases compared over time periods (Jackson *et al.,* 2007). About 33 studies done in developed countries showed on systematic review that incidence and prevalence of acute gastrointestinal illness ranged from 0.1 to 3.5 episodes per person-year (Roy *et al.,* 2006). In our study there was a predominance of males (62.7%) attending the health camp. Studies done in India and several other countries have showed female predominance in the health camps (Rayamajhi *et al.,* 2013). A study done in Kerala to identify morbidity patterns showed that females had higher risk for diseases of bones and joints, and hypertension than males; females being two times prone for these diseases when compared to the males (Navaneetham *et al.,* 2009).

A marginally higher risk of reporting ill was found among females when compared to males in another study in Kerala which varied from 16% in adolescents to 58% in the elderly (Aparajita *et al.,* 2005). In this study compared to female children a larger number of male children were falling sick. When compared to males a greater vulnerability to illness begin with the early-working-age group, peaked in the late working ages and diminished in older ages and health in females deteriorated earlier than males. The likelihood of illness was 3.6 times more among the elderly than among children and gender differences were in significant. Regarding morbidity pattern in different age groups, in our study it was found that the highest burden was in the age group above 60 years. Studies done elsewhere have shown different results. A study done in Soweto showed that the majority of patients were in the 20 to 50 year age group, followed by those under ten years of age (Hoosain, 2009).

Another study conducted in Sousse, Tunisia revealed that there was a predominance of females (62%) and a relatively young population attending the primary health care settings as 50% was aged less than 25 years (Gataa *et al.,* 2009). In the present study the highest burden was found regarding the diseases of circulatory system that is hypertension among males and in females it was disease of digestive system mainly gastritis. Results from the study done in Tamil Nadu showed that majority of the people screened had illness affecting the respiratory system, symptoms and signs, musculo-skeletal system and digestive system in the order of the proportion affected[7]. More male patients were affected with respiratory, digestive illnesses and with signs and symptoms category when compared to women, while more women were affected with musculo-skeletal problems when compared to males. 19% of the people were found to be suffering from non-specific illness which were not been classified under any other system where as in our study it was 8%.

Conclusion

Studying the morbidity pattern in a health camp helps us to know regarding the common cases attending health camps in general and plan for the logistics in terms of drug supply. The patterns of morbidity by different strata, demographic, socioeconomic, and household environment characteristics in rural area which will in turn help the planners and policy makers while implementing appropriate health programmes to reduce morbidity and also achieve the target of "Health for All by 21st century".

Acknowledgements: Nil

Source of funding: Nil

Conflict of interest: Nil

Ethical clearance: Institutional ethics committee KSHEMA

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