professionals and data managers will play a vital role in ensuring valid and reliable data collection. As coordinators of data quality, the role of health information management professionals will gain increasing importance with these new tasks.
Key words: health information management, quality indicator, quality management.
Disclosure of Interest: None declared.

MALNUTRITION AWARENESS AMONG UNIVERSITY STUDENTS FROM MUMBAI, INDIA, AND HANNOVER, GERMANY

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Background: Malnutrition is the condition in which the body does not get the right amount of proteins, vitamins, or other nutrients.[1] The global prevalence of malnutrition was reported as 13% in 2015.[2] The subregion of South Asia is especially known as a critical area for severe wasted children aged <5 years.[3] In India, 38.4% of children aged <3 years are stunted, and 46% are underweight.[4] Malnutrition can lead to mortality as well as disabilities and long-term consequences such as cognitive disabilities, less economic productivity, or diseases.[5]
Objectives: The present study explored the awareness of malnutrition among university students from Mumbai, India, and Hannover, Germany.
Methods: This prospective cross-sectional study was conducted at Faculty III, The University of Applied Science and Arts, Hannover, Germany, and the Institute of Chemical Technology, Mumbai, India. An online validated questionnaire was designed and sent to Mumbai and Hannover students. Fifty students from Mumbai and 52 students from Hannover completed the online questionnaire. Collected data were analyzed by using Microsoft Excel and are represented as frequencies and percentages.
Results: The average (SD) age was 20.9 (1.7) years for Mumbai students and 24.5 (2.2) years for Hannover students. Six (12%) and 48 (92.3%) students from Mumbai and Hannover, respectively, were aware of symptoms of malnutrition. Twenty-nine (58%) and 26 (50%) of students from Mumbai and Hannover, respectively, were not sure about the treatment of malnourished children. Fifteen (30%) and 44 (84.6%) students from Mumbai and Hannover were aware of the consequences of malnutrition.
Discussion: The Hannover cohort showed a high awareness, whereas the Mumbai cohort had a low awareness about malnutrition. Introducing university courses to optimize the nutrition awareness level of Mumbai students can be helpful for the Indian community. It can help to tackle malnutrition and associated problems of mortality, as well as disabilities and long-term consequences such as cognitive disabilities, less economic productivity, or diseases.
Key words: malnutrition, children, awareness, Mumbai, Hannover.

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INFLUENCE OF SOCIOECONOMIC FACTORS ON NUTRITION DURING CHILDHOOD IN GERMANY AND INDIA

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Background: Malnutrition, nutritional deficiency, or undernutrition is an imbalanced nutritional status resulting from insufficient intake of nutrients to meet normal physiologic requirements.[1] Malnutrition in childhood has both short-term consequences and long-term consequences on mental and physical health as well as the overall health development of children.[2] Of all regions in the world, the Asia and the Pacific region has achieved the fastest rate of economic growth.[3] There is no evidence that this rapid economic growth translates into a decline in malnutrition of children in Asian countries such as India.[4] It has long been recognized that socioeconomic factors, such as income, education, and occupation of parents, are important determinants of health outcomes in children.[5]
Objectives: The present study explored the possible relation between parental socioeconomic parameters and nutritional status of children in India and Germany.
Methods: This prospective cross-sectional study was conducted at the Institute of Chemical Technology, Mumbai, India, and Faculty III, The University of Applied Science and Arts, Hannover, Germany. Students were contacted by a trained study team member, and the study outline was explained in brief. The study was conducted with a paper-based questionnaire on family socioeconomic parameters and their own childhood nutritional status with 104 students (50 Mumbai and 54 Hannover) in the age group of 18 to 30 years.
Results: The average (SD) age was 20.8 (1.8) years and 23.2 (3.1) years for the Mumbai and Hannover cohorts, respectively. All respondents from Mumbai had parents with a graduate degree; for Hannover respondents, 25 (46%) and 15 (28%) respondents had father and mother with a graduate degree, respectively. Thirty-eight (76%) and 10 (20%) Mumbai respondent's father and mother had a full-time job; in the Hannover respondents, it was 39 (72%) and 22 (41%) for the father and mother. All respondents from Mumbai belonged to high-income class[6] group of >100,000 Indian rupees/month. Nineteen (76%) respondents from Hannover belonged to the middle-class income group[7] of 2100 to 7000 euros/month, while 6 (24%) belonged to the lower income group[7] of <2100 euros/month. Twenty-one (42%) and 3 (6%) respondents from Mumbai and Hannover reported to have very balanced diet during childhood. Seven (13%) and 4 (7%) respondents from Mumbai and Hannover had suffered from nutritional deficiency in their childhood that was either an iron or vitamin deficiency. Four (8%) respondents from Mumbai reported to be frequently ill during their childhood had shared a single room with >3 people during their childhood. Two (4%) respondents from Hannover reported to be frequently ill during their childhood.

Conclusions: The Mumbai cohort belonged to high family income group and both parents with graduate degree education. The majority (76%) of the Hannover respondents belonged to middle family income group, and >40% of parents (72% father and 41% mother) had a full-time job. These socioeconomic conditions may have supported good nutrition and better child development, resulting in a minor percentage of Mumbai and Hannover respondents with nutritional problems during their childhood.

Key words: childhood, Germany, India, malnutrition, socioeconomic demographic determinants.

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PREVALENCE OF MUSCULOSKELETAL DISORDERS AMONG DENTISTS FROM MUMBAI, INDIA

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Background: The world health organization defines musculoskeletal disorder (MSD) as "a disorder of muscles, tendons, peripheral vascular system not directly resulting from an acute or instantaneous event.[1] Work related MSDs are one of the most important occupational hazards.[1] Among many other occupations, dentistry is a highly demanding profession that requires good visual acuity, hearing, depth perception, psychomotor skills, manual dexterity, and ability to maintain occupational postures over long periods.[2] Literature reviews across the world have shown a high prevalence of MSD among dentists.[3-6] It has been observed among dentists worldwide that low back problems are the most common, followed by problems of the hand and wrist, neck, and shoulders with more than one third requiring medical care for MSDs and also requiring extended leave from their practice.[7,8]

Objective: The global prevalence of MSD has been reported to be between 60% and 90% for dental practitioners,[9] but it is not well documented in India.[10] The present study was undertaken to determine the prevalence of MSDs and its effect on daily activities among dental practitioners in Mumbai, India.

Methods: This descriptive study was conducted from January to March 2015 to assess the prevalence of MSDs amongst dental practitioners in Mumbai, India. A brief information explaining the study was sent to 100 dental practitioners from Mumbai. Of these, 74 dentists were interested to participate in the study and gave their written consent to the researchers via emails. The survey instrument consisted of two parts: the demographic data and the data on work related MSDs. A pilot study was carried out among a 10 dentists from Mumbai. These dentists were not included in the final study. Study researchers took the prior appointments with 74 dentists (45 males, 39 females), and data collection was done by face to face interviews.

Results: The response rate for this study was 74%. The main reason for non-participation was the busy schedule, lack of time and lack of interest. Majority of the practitioners had a bachelor degree in Dentistry (63.51%) and 36.49% had completed a master degree in dentistry. Most of the practitioners (77.02%) were working for 4 to 8 hours per day. Twenty-six (35.1%) practitioners were attending 20 to 40 patients per day in their clinic. There was high prevalence of MSDs (77.03%) among these dental practitioners and the prevalence was higher in male practitioners (86.6%) as compared to that in female practitioners (62%). The top three areas affected with MSD were lower back (37; 50%), neck (32; 43.2%) and shoulders (26; 35.1%). It was also seen that MSD affected daily activities of the practitioners. Twenty-four (32.4%) practitioners reported alteration of duties, 22 (29.73%) had taken sick leaves, and 20 (27.02%) reported reduction in leisure activity.

Conclusions: High prevalence of MSD (77%) existed among dental practitioner cohort from Mumbai also affecting the daily activities in one third of the practitioners. There is need to provide education about ergonomics as well as health and safety measures in dental practice and it should be imparted professionally during dental education.

Key words: Dentist, musculoskeletal disorders, occupational disorders, Mumbai, India.

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