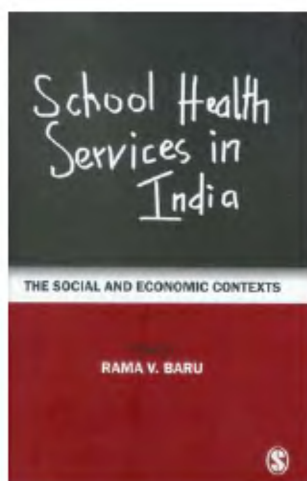


given in each chapter and these problems have a practical touch. Various design and operating parameters have been clearly spelt out and several engineering problems have been included at the end of every chapter as unsolved problems.

After reading the book it appears that the author expects that membrane materials and membranes should be obtained from commercial sources only. Earlier literature on membranes consisted of papers which mostly reported results from commercial membranes. However, currently the trend has changed and various journals on membranes discourage such publications and encourage those which report membrane preparation and their modifications. One can easily find publications with a simple procedure of making reverse osmosis, nano and ultra filtration membranes. On including such procedures as simple experiments in subsequent editions, the quality of the book will improve several folds and, in addition, will popularize the membrane processes in general.

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School Health Services in India. The Social and Economic Contexts. Rama V. Baru (ed.). Sage Publications India (Pvt) Ltd, B1/I-1 Mohan Cooperative Industrial Area, Mathura Road, New Delhi 110 044. 2008. 210 pp. Price: Rs 550.

There are several important domains of interaction between schools and health. First, a school is a key location for edu-

cating children about health, hygiene and nutrition, and for putting in place interventions to promote the health of children. At the same time, poor health, poor nutrition and disability can be barriers to attending school and to learning. The level of education is a predictor of a range of adult health outcomes, and maternal education is associated with the health outcomes of infants and young children. The school is also potentially a location for contracting infections or diseases. Finally, childhood health behaviour habits such as diet and physical activity are influenced by the school setting and often track into adulthood. Well-formulated school health policies and programmes have the potential to improving health, increasing access to education, and reducing social inequity.

In 2005, the Indian Government launched the National Rural Health Mission (NRHM) to address weaknesses in the health system and improve the basic delivery of health services. One of the mandates of the NRHM is to strengthen the school health programme. Analysis of national and sub-national data indicates that there are significant inter and intra-state variations in the quality of school health programmes in India. Social and economic factors such as gender, caste, religion, household income and neighbourhood characteristics may play a role in determining access to, acceptability and delivery of school health programmes. A review of the scope and impact of these programmes is a critical component of building a dialogue on how to improve the health of young people. This book makes a useful contribution in this respect by drawing together research and debate about the role of school programmes in promoting health in India.

The first chapter uses a life-cycle approach to describe how social and environmental factors affect the health of children from birth to adolescence. The authors have conducted a qualitative study in three states, which provides important insights into the delivery, quality and acceptability of various programmes, including the Mid Day Meal (MDM) Scheme and the Integrated Child Development Scheme. However, presentation of statistics from a primarily qualitative study is at times inappropriate and confusing. An alternative way to structure this analysis would have been to highlight key findings from representative

secondary data, and utilize the study data to illustrate the processes and dynamics that lie behind poor programme implementation and poor health outcomes.

The three chapters focusing on the MDM Scheme present a valuable analysis of the history, strengths and limitations of the programme. They also put forward policy recommendations to attain an acceptable standard of delivery across all states. The MDM programme provides hot, cooked meal to primary school children and was adopted by all states following a 2001 Supreme Court order. It has made significant contributions to reducing classroom hunger and increasing school attendance, especially of girl children. It has also advanced social equity by providing an opportunity for children from different castes and religions to eat together, and by creating employment opportunities for the poor and lower caste women in some states. The evidence makes a strong case for continuing and adequately resourcing the programme. However, there is wide variation in the implementation and nutritional quality of the MDM schemes across states. There is also little evidence about the extent to which the programme has reduced chronic hunger in children and how this could affect health and educational outcomes.

Unfortunately, few states have taken the opportunity to use the MDM programme as a platform for wider health programmes. Tamil Nadu is an important exception, having linked the MDM activities with annual deworming and vitamin-A supplementation. The chapter by Rama Baru discusses the potential scope of school health services and suggests factors that may affect their functionality. Baru touches on how the Gujarat and Tamil Nadu systems have built inter-sectoral partnerships between primary health centres and schools; a review of the initiatives and performance of the other states would be a useful addition to this analysis.

Health education is another important issue, and is considered within the context of NGO initiatives in the last chapter of the book. Anu Gupta provides a thoughtful account of how health education could be made more interesting and relevant to children. Health education should teach children how to care for their bodies, from basic issues of hygiene to more sensitive questions of sexual and reproductive health. Health education

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can also be an arena for sensitizing children to the needs of persons with disabilities and to gender inequities. Two other NGO case-studies discuss successful models of partnership for providing health services in government schools. A lingering question, however, is how to encourage and foster partnerships while ensuring that areas not served by a strong NGO also receive a minimum standard of health education and health services.

This book is likely to be of interest to policy-makers, researchers and practitioners of health and education. The book draws on primary and secondary qualita-

tive and quantitative data to make some important observations and recommendations with regard to the social and economic contexts of school health in India. However, while there is significant overlap and repetition in the three chapters that discuss the school MDM programme, other issues are either addressed superficially or not at all. These include environmental factors such as access to clean water, sanitation, physical environment and safety; access to education for children with disabilities and diseases; the nature and quality of school health education for health, hygiene and nutrition;

the role of schools in imparting life skills linked to positive health behaviours, and physical education programmes and their effects on health. The limited discussion of these key concerns indicates the scope for further research and analysis, and the potential for a second volume on this important subject.

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