Letter

Prevention of Childhood Blindness: Strengthening Primary Health Care

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Dear Editor,

Blindness is defined by the World Health Organization as visual acuity of less than 3/60 in the better eye. Overall, 39 million people are blind worldwide, out of which 1.4 million are children (less than 14 years of age).[1] Childhood blindness deserves public health attention as more than 50% of cases are avoidable, meaning that if effective measures are taken, quality of life can be improved by facilitating normal development and the economic burden on the individual, family, society and public health system can be reduced.[2,3]

In a survey performed in Botswana, 89% and 63% of unilateral and bilateral childhood blindness was avoidable, respectively.[4] In a community based survey in India on children ≤15 years of age, the prevalence of childhood blindness was 0.17%, of which 33.3% was due to treatable refractive errors while 66.6% was secondary to other preventable causes.[5] The prevalence of blindness is correlated with the socioeconomic status of the country, ranging from 3/10,000 in developed nations to 15/10,000 in poorer countries.[6] Similarly, causes of childhood blindness also vary in different societies: refractive errors and corneal blindness due to malnutrition or infections are more prevalent in low income countries,[7] retinopathy of prematurity and cataracts are more common in middle income countries,[8] and retinal and neurologic disorders prevail in high income countries.[9] A study in Bangladesh stressed the need for reinforcement of parental awareness about common eye diseases in children and the importance of seeking timely advice including treatment since close to 90% of parents were unaware of schooling systems for blind children and only 5% sought treatment from an ophthalmologist, reflecting poor health care utilization.[10]

Primary health care should be looked upon as the basic framework upon which other services should be built.[11] Primary health care programs should incorporate a wide range of cost-effective services such as eye examination at birth, eye screening for pre-school and school children, early management of congenital cataracts, vaccination for infectious diseases in children, and initiatives to train health workers.[11] However, despite the success of these initiatives in countries like Oman and Portugal, their coverage is limited especially in African regions.[11,12]

All of the above findings clearly reflect that a comprehensive integration into all levels of service delivery including primary, secondary, and tertiary is of high priority. The strategy to combat childhood blindness should comprise of elements such as sustained political commitment for promoting eye health as part of national health policies; active collaboration from all stakeholders including governmental and private or non-governmental organizations; adoption of appropriate technology to ensure that the greatest benefit accrues to the largest number of people (given the limited resources); strengthening human resources and infrastructures; operational research to determine the capacity of the existing infrastructure, level of utilization and barriers to utilization;[13] institutional capacity building for augmenting the training of ophthalmologists and allied health personnel for eye care including pediatric eye care; advocacy of education and community-based rehabilitation services; epidemiological assessments and priority setting on the basis

of evidence-based public health approach; fostering horizontal coordination of vitamin-A deficiency or rubella cataract with nutrition and immunization programs; and finally developing proper mechanisms for monitoring, evaluation and supervision of the quality of care offered to the community.

To conclude, strengthening of primary health care strategies with the help of a comprehensive and systematic approach involving all stakeholders is required for prevention and treatment of childhood blindness.

Conflicts of Interest

None.

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