

## Health Literacy: Intervention and Outcome in Child Healthcare in Bangladesh

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### Abstract

Bangladesh made significant improvements in child healthcare and achieved its Millennium Development Goal (MDG) 4 (to reduce child mortality). In 2010, the United Nations recognized Bangladesh for its exceptional progress towards MDG 4 to reduce child and maternal mortality in the face of many socioeconomic challenges. We are also committed to achieve our Sustainable Development Goal (SDG) by 2030. Health education department of Government of Bangladesh prioritized several essential health interventions over the past decades. There were focuses on expanding immunization, tackling diarrhoea and pneumonia, vitamin A campaign, prevention of blindness, iodine deficiency, and improving adolescent health. These programmes and strategies were scaled-up nationwide. The government along with its stakeholders promoted widespread availability and affordability of those health literacy interventions with an emphasis on community-based approaches. As a result, inequities in coverage of specific interventions declined; this may explain the improvements seen amongst even the most disadvantaged populations of the country. Media campaigns played a great role, which were undertaken in Bangladesh for decades and involved a nationally broadcast television supported by radio, television, newspaper, and billboard advertisements and local promotion activities. We expect that ongoing public private partnerships (PPPs) in which the government contracts NGOs and the private sector will enable us greater success and coverage of health information and literacy services throughout the country.

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### Introduction

In the 20th century, declines in mortality were attributed largely to technological advances and the growth and expansion of public health and medical care services. Health interventions were viewed as improving health status independent of economic level.<sup>1</sup> Health literacy is a revolutionary health intervention that has changed the health status in different countries across the globe.<sup>2</sup> The term health literacy was introduced in 1974 in a paper calling for minimum health education standards for all grade-school levels in the United States.<sup>3</sup> The World Health Organization (WHO) later defined health literacy as “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways that promote and maintain good health”.<sup>4</sup>

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Research showed that differences in health literacy level are consistently associated with increased hospitalizations, greater emergency care use, lower use of screening facilities, lower receipt of childhood vaccines, poorer ability to demonstrate taking medications appropriately, poorer ability to interpret labels and health messages, and, above all, poorer health status and higher mortality in children.

Health literacy level potentially mediates disparities between different administrative zones and ethnicities in the country.<sup>5</sup> There are five health outcomes of low health literacy, which are health knowledge, health behaviours, use of healthcare resources, intermediate markers of disease status, and measures of morbidity or mortality.<sup>6</sup>

Bangladesh made significant improvements in child healthcare and achieved its Millennium Development Goal (MDG) 4 (to reduce child mortality). In 2010, the United Nations recognized Bangladesh for its exceptional progress towards MDG 4 to reduce child and maternal mortality in the face of many socioeconomic challenges.<sup>7,8</sup> We are also committed to achieve our Sustainable Development Goal (SDG) by 2030. The drive force behind the success is partially attributable to increased health literacy which is an essential and valuable human competency to achieve health. This paper aims to discuss the recent success of Bangladesh in its improvements in child healthcare and strategies of health literacy as intervention and achieved outcomes.

### Interventions

Health education department of Government of Bangladesh prioritized several essential health interventions over the past decades. There were focuses on expanding immunization, tackling

diarrhoea and pneumonia, vitamin A campaign, prevention of blindness, iodine deficiency, and improving adolescent health. These programmes and strategies were scaled-up nationwide. The Government promoted widespread availability and affordability of those health literacy interventions with an emphasis on community-based approaches. As a result, inequities in coverage of specific interventions declined; this may explain the improvements seen amongst even the most disadvantaged populations in the country.<sup>7,9</sup> Media campaigns played a great role, which were undertaken in Bangladesh for decades and involved a nationally broadcast television supported by radio, television, newspaper, and billboard advertisements and local promotion activities.<sup>7,10</sup> For an example, we all know about 'Meena'. 'Meena' is a fictional character who stars in the South Asian children's television show Meena and Friends created by UNICEF, along with her brother 'Raju' and her pet parrot 'Mithu'. The show is broadcast in English, Bengali, Hindi, Nepali, and Urdu.<sup>11</sup> Meena educates the children of South Asia on issues of gender, health, and social inequality through her stories in comic books, animated films (Meena Cartoon), and radio series (affiliated with the BBC).<sup>12</sup> The first Meena episode was then launched in 1993 on Bangladesh Television. In the episode of "Saving a Life", Meena saved baby Rani when she had dehydration due to diarrhoea. In another episode named "Meena's Three Wishes", Meena dreams of a genie out of a magic lamp who grants her three wishes about hygiene and sanitation of her village people. As she wakes up, she decides to fulfil those wishes herself, as there is no magic lamp holding a genie for real. She then tackles the issues of hygiene and sanitation with the help of Raju, Mithu and all her friends.

Another one titled "Seeing in the Dark" conveyed message on Vitamin A deficiency and prevention, while "Baby Rani's Four Visits" taught the importance of EPI (immunization) and many more.<sup>13</sup> Besides, health education from community clinics, upazila and district hospitals as well as tertiary level hospitals played important roles.<sup>14</sup> Community meeting, health visit from door-to-door, awareness campaigns in rural markets, hard-to-reach areas and train-bus-launch stations are also helpful measures taken by the government.<sup>15</sup> However, it is note-worthy that the lack of proper and adequate communication led to decrease trust in providers and eventually led to a poor implementation outcome. Authenticating a change in knowledge is critical for proving that there was some improvement in attitude and behaviour, which shows that their actions resulted in a positive impact on disease prevention.<sup>16</sup> Moreover, it is argued that the public policies should not just focus on health education alone, but also consider other factors, such as access to health facilities and quality of services. Health awareness campaign should be strengthened as part of the public health promotion efforts.<sup>17</sup>

The integration of social media like facebook, twitter, instagram or other networks, in health literacy program content depends on the use with best evidence health literacy strategies, such as the use of plain language techniques.<sup>18</sup> Strategy and technical considerations for the implementation and integration of social media within a health literate health communications models are discussed in different literature.<sup>19-21</sup>

### Outcomes

Between 1993 and 2014, under five mortalities decreased from 133 per 1000 to 46 per 1000 live

births. During the same period the infant mortality rate fell by 56%, from 87 to 38 deaths per 1000 live births.<sup>7</sup> WHO agreed that health education along with different child healthcare programmes to ensure high coverage of vaccine, awareness and treatment of diarrhoea and ARIs, implementation of IMCI and to deliver newborn health interventions, have been crucial to those reductions.<sup>7</sup> However, studies directly assessing child health status indicate that children with chronic illness may be at greater risk for poor health outcomes, if their caregiver has limited literacy skills.<sup>22</sup> Even in the developed country, it has been observed that for families with limited health literacy, the complexity of health information may present significant barriers to accessing child health care, threats to child safety, and hurdles to effective management of special health care needs. For developing countries in Asia, South America and Africa, the situation could be graver.<sup>23</sup> Children with low literacy generally had worse health behaviours. Parents with low literacy had less health knowledge and had behaviors that were less advantageous for their children's health compared with parents with higher literacy. Children whose parents had low literacy often had worse health outcomes.<sup>24,25</sup>

Social media is crucial for health literacy in modern times. Information communication and media use are well suited to achieve this goal by providing the public with professional information, decreasing public panic, disseminating health knowledge, and expressing appreciation to the public for their cooperation; however, in recent times, misinformation has become critical for achieving the goals.<sup>26</sup> It creates confusion, and mistrust, which could then lead individuals to disengage from health information seeking, avoid

health care, or make decisions that are detrimental to their health.<sup>27</sup>

## Conclusion

Health education department should focus on creating and providing information and services in a way that people can understand easily and use those most effectively with the skills they have. We should work along with health educators and others to help people become more familiar with health information and services and build their health literacy skills over time. Besides, we should build our own skills as communicators of health information. Moreover, we expect that ongoing public private partnerships (PPPs) in which the government contracts NGOs and the private sector will enable us greater success and coverage of health information and literacy services throughout the country.

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