Addressing Civic Health Literacy for the Sustainability of Tuberculosis Treatment: A Case of India

Yin-Leng Theng, Lynette Y.Q. Goh, Shalini Chandra
May O. Lwin & Schubert Foo
Nanyang Technological University, Singapore

Background

Ground Reality

Tuberculosis (TB) is an airborne disease that accounts for nearly 15% of 2010 deaths in Mumbai and has killed 1.4 million people in 2011 worldwide. Left untreated, the person with active TB infects 10-15 people a year (WHO, 2012).

Need Gaps

The recent 2012 TB situation in India has highlighted these salient problems:

- TB patients are not completing the TB treatment regime and developing resistance to current TB drugs
- Challenges faced by health authorities in caring for and curbing the spread of TB from patients to their surroundings
- Lack of proper information catered personally to individuals (patient, caregiver, health workers & general public) regarding TB

Civic Health Literacy

Civic literacy, as defined by Zarcadoolas et al. (2005), is present when people are aware of public issues and are involved in the decision-making process. Categories in this domain include:

- Media literacy skills,
- Knowledge of civic and governmental processes, and
- Awareness that individual health decisions impact public health.

People have to become aware about how their choices to adhere to medication to prevent developing drug resistance can affect their community and thus overall public health.

Design & Method

Participants (n=238)

Lower MOP (<7000 rupees per month) - 48 males and 59 females (age: M = 32.39, SD = 10.75)

Upper MOP (>7000 rupees per month) - 80 males and 51 females (age: M = 39.57, SD = 11.73)

Materials

An exploratory paper-based survey was conducted comparing the two MOP groups’ (upper & lower) knowledge and perceptions on vaccination myths, literacy, competency and media trust. The survey also examined the media usage, sources trusted and preferred in obtaining information about TB and its symptoms, vaccinations, treatment and diagnosis.

Procedure

The survey was orally administered to a convenience sample in Mumbai, India using English, Hindi or Marathi. The interviewers targeted places where the lower MOP and upper MOP were frequently located at using an understanding of the typical jobs each MOP group have and the types of neighbourhood. Each survey took approximately 45 minutes to complete.

Table 1. Common occupations for each MOP group.

Results

Data was analysed using descriptive statistics and frequencies. Some participants were removed from analysis due to missing values. T-tests were run to check for significant differences between the two MOP groups. TB constantly came up as the disease both MOP groups wanted to learn more about.

The upper MOP know more about health issues in general. The lower MOP’s perception of their overall health information literacy level was significantly lower compared to the upper MOP, $t(231) = -4.68, p < .01$.

Although the difference between the two MOP groups was not significant for the overall civic health literacy, the lower MOP seemed to have a greater sense of civic health literacy such as encouraging other people to take BCG vaccination and feeling that immunization is important for family. But when it comes to further intentions to find out more about TB symptoms, the upper MOP was significantly more willing.

Conclusion & Recommendations

Overview of ACE-TB

With high ownership of mobile phones in India, we propose the development of mobile solutions specific to various Indian MOP communities (as each have different needs) that foster and empower peoples’ civic health literacy and the ability to make decisions with increased awareness of how a personal decision may contribute to a whole. On-going research investigates integrating factors of civic health literacy into the development of sustainable healthcare technologies for the treatment of TB in alerts, care and education.

References


Acknowledgements

We would like to acknowledge the following people for their help in our project:

Ravi Pooviah (IITB)
Ajanta Sen (IITB)

Supported by

This research is supported by the Singapore National Research Foundation under its International Research Centre @ Singapore Funding Initiative and administered by the IDM Programme Office.

Supports

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