INTRODUCTION

India has been gaining success in eliminating Tuberculosis (TB) but this disease still kills 1000 people every day. TB has been primarily known as a disease of poverty, but because it is airborne, even the rich are at risk of infection.

This baseline study initially focused on the middle-of-the-pyramid (MOP) population segment in India (based on parameters like income, occupation, socio-economic status, and education), which was facing health situations on a variety of fronts, that relate to vaccination participation, completion and knowledge.

Several studies show that socioeconomic status affects awareness and knowledge of TB. It could be because of the differing access to education and media usage. Other sociodemographic factors which are the risk of TB infection and disease such as crowding, urbanization, access to health care and nutrition can also be related to which MOP population segment people are in.

AIM

To explore the media usage, health needs of India and their knowledge and perception about vaccination.

METHODS

Participants:
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:
A 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.

RESULTS

Data was analysed using descriptive statistics and frequencies. 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.

Figure 1. Telecommunication ownership. The upper MOP generally has more access to different types of media and the Internet. Mobile phone usage is more prevalent in the lower MOP compared to the other media types.

Figure 2. Comparison of lower and upper MOP about vaccination myths. Both groups believe in vaccination myths. For one of the myths surveyed, the upper MOP has a higher percentage (25.0%) compared to the lower MOP (16.8%) in believing that once someone gets vaccinated as a baby, he or she is protected for life. This difference was significant (t(122.91) = -3.65, p<0.05).

Figure 3. Comparison of lower and upper MOP on health competency. The upper MOP fared better when tested for their competency in understanding health information. There was a significant difference between the upper (41.2% correct) and lower MOP (30.8% correct) when it came to reading the immunisation card and knowing when their next vaccination appointment was, (t(146.80) = -3.26, p<0.05). However, there were no significant differences for the other competencies.

Figure 4. Comparison of lower and upper MOP on trust sources. When it came to using and trusting newer media sources like the Internet, there was a greater significant disparity. The upper MOP (28.2%) significantly perceived more that Internet websites (that contain patient testimonials) had balanced, accurate and complete health information compared to the lower MOP (6.5%), (t(210.62) = 4.48, p<0.05).

The upper MOP (63.3%) are significantly more able to know about health issues in general compared to the lower MOP (32.7%), (t(204.85) = -5.2, p<0.05. However, the lower MOP were more willing to encourage the people they know to take their vaccinations, (t(207.29) = 2.38, p<0.05.

DISCUSSION

Our results showed significant differences between the upper and lower MOP on perceptions of vaccination against TB, sources trusted and preferred, treatment and diagnosis. The lower MOP had a lack of access to technology while the upper MOP suffered from ill-literacy due to unreliable information access.

The digital divide is a reality as evidenced by this exploratory study in India. Those with lesser income, socioeconomic status and education will not gain understanding and knowledge of TB if the modes and content of communication remain inaccessible or incomprehensible to them.

Awareness and education about TB needs to be disseminated through the appropriate channels in order to reach the appropriate group of people. Factors such as education and literacy plays an important role in helping the people understand what is being communicated.

However as institutionalized education takes a long time to develop, by studying how the lower MOP gathers and process the information around them via community or technological networks, perhaps more innovative ways can be used to target TB information to them. Same goes for the upper MOP, we need to find out how they use their media technologies which may differ from the Western world and innovate how to reach out to them regarding TB and their health.

Further studies:
Examine factors like education, family background and socioeconomic status that may contribute to such differences, and ameliorating problems in current practices in the fight against TB.

CONCLUSION

We argue from our initial findings that appropriate strategies, should be developed targeting different population segments within the MOP.

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TB Health Campaign efforts on awareness of maternal, child (pp$30.9% for COSMIC)