

Eradicating Polio, Preventing Tuberculosis, Cataract, Infant Mortality through Social Marketing

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Abstract

Original Research Article

This paper discusses the threats of Polio, Tuberculosis, Cataract and Infant mortality on the health of the society that hampers in the way as weak indicator of country's development. The situation is quite challenging, however, it is being tackled by meticulous planning with an aim and target through various programmes, projects and campaigns by the organizations and the government. Moreover, it required social mobilization, education and awareness in coordination of agencies for improvement in health infrastructure. The government is facilitating free check-up camps and supplying free medicines. The organizations are undertaking the projects successfully and health workers are reaching out to every single person in the remotest place in the country. It resulted into eradication of Polio, Prevention of Tuberculosis and treatment of Cataract and reduction in infant mortality with nutrition to infants and mothers to overcome malnutrition. Hence, a comprehensive change of improvised health and hygiene has been seen in India.

Keywords: Infant Mortality, Development Indicator, Meticulous Planning, Social Mobilization, Eradication, Prevention

OBJECTIVES OF THE STUDY

- To explore the significance of social marketing
- To find the impact of social marketing on preventing diseases
- To reflect the past and present status of diseases
- To describe the role of health workers, NGOs and organizations in social mobilization

RESEARCH METHODOLOGY

Primary and secondary data from NGO, organizations and the government agencies have been collected and the descriptive research is made.

LITERATURE REVIEW

Khan Z, Khalique N, Amir A, Shah MS (2011) discuss the causes of infant mortality in rural

Aligarh. There is poor health facility and the child care specially below one year infant. The lack of nutrition for the infant and malnutrition of mothers due to poverty result into the death of infants.

M. Athar Ansari, Z. Khan, S. Mehnaz Shah, A.J. Abdi, A. Ahmad (2014) observed the need for social mobilization through convincing facts about polio immunization, misconception about the side effect of polio drop and inappropriate connection of polio drops with the religious faith as well as social awareness and education through programs and organizing camps can lead to polio eradication.

Jasper Hajoprtdal (2024) discusses the trends of refractive and the cataract surgery. The medical science and technology have evolved various latest techniques of cataract surgery beyond laser technology and operation. Nano technolog and AI

have brought revolution and can perform within the fraction of seconds even in the remote rural areas and provide improvised Eye contact lenses.

Gargi Mathur, Shalvi Thakur and Harshad Thakur (2020) highlight the status of tuberculosis control in India that the rate of patient is declining in India over the global tuberculosis rate. Various projects campaigns awareness programs are conducted, still some challenges are in the way like lack of infrastructure high rate of poverty, population in slums lack of hygiene, unawareness of the people, poor social and economic conditions.

INTRODUCTION

India is a fast growing nation. It holds the fifth rank in economy of the world. It is endeavouring to become the third largest economy by 2030 and developed country by 2047. Unlike other development indicator such as per capita income and education, health and life expectancy are equally significant for development of the country. The better health and life expectancy, the better development of the country. The health conditions cannot be improved merely by disease treatment and supply of free medicines but also by changing the mind set of the people through educating them making them aware and washing out their minds of the wrong misconceptions about medicine doses and diseases prevention measures. India is putting in efforts to improvised the health conditions in collaboration with organization through projects programs, camps, schemes and social mobilization. There are some NGOs which are concerned about social wellbeing and contribute to the betterment of the society. India has divided health into social segments demographically and tackle the situation all over the country's geography and topography. The inclusive efforts have proved a comprehensive result in eradicating polio, preventing tuberculosis and other diseases to a great extent.

The diseases covered up in this paper are polio tuberculosis, cataract and infant mortality. The result of eradication of polio is 100% successful by 2021 whereas prevention of tuberculosis around 200 per lac people compare to the global tuberculosis control was satisfactory by 2023. The number of patients are declining every year. Infant mortality reduced in the

rural areas through adequate efforts and improved health infrastructure. Cataract treatment is provided at a large scale constantly. Various projects are successfully completed. Regular check up camps, awareness programs, free medicine supply etc. are facilitated and mind set of the people are being moulded. The social education and awareness played a key role through social marketing for social mobilization which helped to eradicate polio and prevent tuberculosis and other diseases.

DISCUSSION

Polio Eradication

Polio eradication was a big challenge for India millions of polio cases were reported during 1970s. The government had to start initiative of eradicating polio in 1979. During 1988- 1999 India set a target to reduce the polio cases and therefore in December 1995 it launched a campaign to eradicate polio by 2005. Despite lack of infrastructure in primary health, India prepared and trained primary health workers as a source who could visit the remotest place to make people aware about the life long disability of the infants to 5 years of age caused by polio, however polio drops could prevent them from being disabled. Initially, the people had misconception about the side effect of the polio drops. The health workers had to face many challenges. The people also connected the polio drops with religiously unethical. They did not allow to consume polio drop. They needed brainwash of these wrong concepts for the sake of wellbeing of infants top save them from disability at tender age. It was a matter of life for them. Any how they have to stay healthy and fit being free from disability for the development of the nation. The health workers had to educate them through various reasons and counselling. They had also to experiment demonstration on the children whose parents were not convince and did not allow their children to take polio drops. The entire process was left to them when they were satisfied with the safety of the children and the good result of the polio drops. They slowly changed their mind set. Every year dozens of polio immunization campaigns were followed and they reached out to the last child. Every parents was made to prepare their mind by educating and making them aware about polio vaccination. Ultimately it was

completely successful and by 2011 polio was completely eradicated from the country and WHO granted India the certificate of “POLIO FREE COUNTRY” in 2014 organizations like AMU worked on projects of polio eradication. A collaborative effort of AMU with UNICEF in marginalized population in Aligarh did project on prevalence of refractive errors and colour blindness among the school children in different places in Aligarh District.

Rural Health Training Centre (RHTC) & Urban Health Training Centre (UHTC)

Training Centres are situated , one in Rural Area, Jawan, 17 Km from Aligarh on Anoopshahar

Road and the other in a per urban area at No.-1 Qila Road, PuraniChungi.

The following services & facilities are provided in both the centres: -

OPDs:

General OPD, ANC OPD, Under 5 OPD, Psychiatry OPD, Ophthalmology OPD, Dental OPD, DOTs Centre etc.

Screening & Diagnostic Test:

CBC, GBP, M.P. Smear, Blood Sugar, VDRL, Widal Test, LFT, RFT, Lipid Profile, Pregnancy Test, Urine R/M, Stool Ova/ Cyst, Montoux Test & Sputum for AFB etc.

Medicine:

Medicines are provided free of cost to all the registered patients

Table 1.1: Polio Eradication in India

Year	Cases of Polio	Number of District
2005	66	35
2006	676	114
2007	874	99
2008	559	90
2009	741	56
2010	42	17
2011	01	1
2012	00	00
2013	00	00
2014	00	00
2015	00	00

Source: Pulse Polio Program

T.B. Prevention

Awareness of the people about tuberculosis diseases, it causes and prevention is very important. In the rural areas people are ignorant about the causes of cough suffering and infections. They seldom consult a doctor or take any precaution, therefore, it infects the numbers of family and friends and the cases of T.B. patients spread. The health workers are educating them by organizing camps and routine check up. They make them aware of the causes and do’s and dont’s of the disease after diagnosis. The health centre and NGOs supply them free medicines. The patients are advised what they don’t have to consume and what they need to take to resist and build up their immunity. They are told how to change

their life style so that other people living around them or not effected. They are also educated about hygiene and intake of medicine doses during the course of time for speedy recovery.

India has launched T.B. elimination program and set a target to minimize T.B. patients to 65 people per lac by 2025 compared to more than 200 patients per lac T.B. patients reported by 2021. This will contribute to the development of India as India has a vision of becoming the third largest economy by 2030. Health is a very important indicator of the country’s development. The better health influences the life expectancy or longevity of age and of course by improvement in health. Life expectancy has

reached 67.2 years as compared to 62.5 years. In order to spread health education, the government a lots various projects like “Drug Abuse Prevention Program under the National Action Plan for Drug Demand Reduction by AMU” to the organizations and NGOs which organize camps like “No Tobacco”, health and hygiene Swachh Bharat Campaigns in Anganwadi Schools and Colleges etc. organized from time to time, which influence the people and children to prevent them from indulging in bad habits of consuming liquor tobacco and other toxic substances. Keeping the environment hygienic and clean leads to prevent diseases like T.B.

The government is supporting health infrastructure and health workers in private sectors unorganized and informal sectors to labourers and poor people by creating healthy work place in factories and plants. The condition of government hospitals and rural health centres are improved with better hygiene and health services. The environment pollution is reduced by the use of CNG and reduction in greenhouse gases such as CO (carbon monoxide) affects respiratory system and interfere oxygen, CO₂ (carbon dioxide), CH₄ (Methane), N₂O (Nitrogen oxide), O₃ (Ozone), CFCs, which direct affect lung and respiratory system.

Table 1.2: Comparison of trend in T.B. burden between global T.B. report 2022 (interim) and in country model for India

Estimated	2018			2019			2020			2021			2022		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	
Incidence (per 1,00,000) in GTB report 2022 interim WHO	151	224	310	146	214	295	179	204	231	178	210	244			
Incidence (per 1,00,000) in country model	182	206	233	177	201	228	169	194	226	172	197	227	171	196	228
Mortality (per 1,00,000) in GTB report 2022 interim WHO	30	32	35	30	32	34	31	34	37	31	35	40			
Mortality (per 1,00,000) in country model	18	24	33	17	23	32	17	23	32	17	24	34	16	23	33

Source: Global Tuberculosis Report 2022 (Geneva, World Health Organization, 2022, License CCB\$-NC-SA 3.01 G.O.)

Table 1.3: IMI (Imamia Medics International Trust, Aligarh U.P.) Report on Cataract and other Diseases

Health services	No. Of patients benefited / no. Of blood donors	Year	Places
Cataract	151	2021	Barabanki (U.P.)
	182	2021	Siwan (Bihar)
	35	2022	Lucknow
	30	2023	Lucknow
	42	2023	Varanasi
	65	2023	Mau U.P.
	650	2023	Bihar, Jharkhand, MP, U.P.
Kidney, sugar, B/P	45	2022	Jalali, U.P.

	147	2023	Jalali
	180	2024	Jalali
Blood Donation	95	2022	Aligarh

Source: IMI, Aligarh, 2023

CONCLUSION

National Revised National T.B. Control Programme, National Polio Eradication Programme, National Polio Drop Programme, National Immunization Programme, Maternal and Child Health Program, and Blindness Control Program etc. have performed well to decrease no. of patients.

Community Health training gives a clear picture of socio-cultural, economic and other multiple factors associated with health and disease, and concepts about planning and management of programs for

preventing disease and improving health of the community as a whole. Public Health Specialist, and human resource are very important for the country, in several public health domains at national and international level.

High quality education, ethical values and services for the Community with the spirit of Scientific enquiry and empathy are the needs of the hour as community physicians can provide comprehensive health care to the community with a sense of social responsibility and sensibility to sensitize and nurture the aptitude for work.

REFERENCES

1. **Khan Z**, Khalique N, Amir AS, Shah MS (2011), *A community based study of infant mortality in rural Aligarh*. Australasian Medical Journal **2011**: 4(1):22-25. 2
2. **F Khan, MS Shah** (2013) *Teaching: Learning Humanities in a new perspective*. International Journal of Use Driven Health Care (IJUDH) 2013: 3(4),74-80.
3. **M. Athar Ansari, Z. Khan, S. Mehnaz, M. S. Shah, A. J. Abedi, A. Ahmad** (2014) *Role of Social Mobilization in tackling the resistance to polio eradication program in underserved communities of Aligarh, India*. South East Asia Journal of Public Health 2014;3(2):23-29.
4. Amir A. Khan Z, Khalique N, Shah MS (2010) *Verbal autopsy to determine causes of deaths among under-five children*. Curr Pediat Res **2010**: 14(1):51-53.
5. Khalique N, Khan Z. Shah MS, Verbal Autopsy(2011) - *A blessing in disguise for countries with poor registration of deaths*. Medico legal Update **2011**: 11(2):81-82.
6. **Ali Amir, Zulfia Khan, Najam Khalique, M. Salman Shah** (2011) *Causes of death among infants of rural cluster- a research based on verbal*

- autopsy*. Curr Pediatr Res **2011**:15(1): 43-46.
7. **M. Salman Shah (2011).***Dilemma in Immunization?* Indian Journal of Community Medicine: **2011**: 36 (4): 308.
 8. Zulfia Khan, Najam Khalique, Salman Shah **(2012)** *Determinants of Childhood mortality*. Journal of Preventive and Social Medicine **2012**: 14(2):118-122.
 9. Anees Ahmad, Riyaz Ahmad S, Najam Khalique **M. Salman Shah, M. Athar Ansari (2015]** *Emerging Antibiotic Resistance: A Reflection of Actual Practice among Doctors at Tertiary Care Hospitals*. International Journal of Current Microbiology and Applied Science **2015**: 127-133
 10. Najam Khalique, Zulfia Khan, Anees Ahmad, M. Athar Ansari, **M. Salman Shah (2015).** *Perinatal Mortality: An Analysis of Causes and Determinants of Deaths*. Indian Journal of Public Health Research and Development **2015**: 6(1):125-33.
 11. Lal Sunder **(2024)** *India's whole of the Government and whole of the society Approach for Behaviour change Communication (BCC) Strategy – An Opportunity to Learn BCC in a Real life situation* Indian J. Community Med. 2024 Jan -Feb : 49(1) : 1-4 PMC10900458
 12. K. Yadav Arun, Patil Rutiga, Javekar Sanjay **(2023)** *The Indian Health and Demographic Surveillance System Network: Opportunity to Generate Evidence for Public Health Policy* Indian J Community Med. 2023 Nov-Dec : 48(6): 808-810 PMC10795874
 13. Jasper Hajortdal **(2024)** *Refractive and Cataract Surgery Beyond Vision 2020* Indian J Ophthalmol. 2024 Jan 72(1) : 3-5 PMC 10841810
 14. K Grover, Ashok **(2023)** *Ophthalmic trauma: Are we doing enough?* Indian J Ophthalmol. 2023 Dec: 72(12) : 3581-3583 PMC 10788738
 15. Sethi Yashandra, Kaka Niraj, Chopra Hitesh, Aggrawal Navidha, Arora Sonia, Talha Bin Emran **(2022)** *Recent Poliovirus Outbreaks and Vaccination: A perspective* Ann Med. Surg. Lond. 2022 Dec : 84: 104970 PMC9682333
 16. Amie Baston, Amanda Glassman, Awi Federgmen, Judith Dent, Nimar Kumar Ganguly, Simba Makoni, Stanley Plotkin **(2022)** *The World needs to prepare now to prevent Polio resurgence post eradication* BMJ Global Health 2022: 7(12): e011485 PMC9806073
 17. Rajendra Prasad, Nikhil Gupta, and Amitabh Banka **(2017)** *2025 too short time to eliminate tuberculosis from India* Lung India 2017 Sep-Oct. 34(5): 409-410 PMC5592749
 18. Gargi Thakur, Shalvi Thakur and Harshad Thakur **(2020)** *Status and Challenges for tuberculosis control in India- stakeholders perspective* Indian Tuberc 2020 Oct 12 PMC7550054