Increasing acceptance and use of recommended treatment for childhood diarrhea with Sehat Mitras (bicycle doctors) in rural Uttar Pradesh, India

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INTRODUCTION

BACKGROUND

- Diarrhea is the second leading cause of childhood mortality in India
- More than 80% of households in Uttar Pradesh seek health care in the private sector
- Informal, for profit rural health providers (RHPs) who lack medical qualifications are numerous and widely trusted by community members for health needs
- Many RHPs are mobile, traveling on bicycle or motorbike to treat patients, typically covering 3-5 deep rural villages daily
- Childhood diarrhea is optimally treated through a short course of ORS and zinc. However, RHPs routinely dispense unnecessary anti-diarrheals and antibiotics
- The Diarrhea Through ORS and Zinc (DAZT) project aims to increase demand and supply of zinc and ORS by improving prescription and treatment practices and increasing availability of and access to zinc and ORS

OBJECTIVES

- The Sehat Mitra program was created to train mobile RHPs on use and benefits of zinc and ORS, and to reach caregivers in the deep interior with messaging and products for management of childhood diarrhea
- Sehat Mitr (literally “Health Friends”) was first conceptualized and piloted in 2012 with 10 Sehat Mitras in 1 Tehsil
- In 2014, program was extended through 2 community NGOs to 17 Tehsils in 4 districts with an estimated population of 1.4 million children under 5 years of age
- Training covered diarrhea, health hygiene, ORS and zinc dosage, and its merits relative to antibiotics and anti-diarrheals
- Sehat Mitra (SM) kept a log of current diarrhea cases and treatment dispensed, reporting results weekly to the supervising NGO
- Supervisors made rounds with SMs daily to check caregivers’ knowledge of ORS mixing, and correct dose and course of zinc and ORS
- NGOs organized monthly meetings with SM to reinforce key messages on ORS and zinc and to discuss challenges in the field

RESULTS

- 265 Sehat Mitras were recruited, trained, mobilized, and supervised
- Each visited household received a sticker with information on diarrhea, how to treat, and mixing, dose, and course of ORS and zinc
- 96.5% of 57,069 children visited by the SMs who were suffering from diarrhea were dispensed a course of ORS and zinc
- Barriers to dispensing ORS and zinc to children with diarrhea included number of products (2) vs antibiotic or anti-diarrheal (1), cost, and desire for “quick” results when care seeking is delayed
- Reasons for dispensing additional zinc and ORS included use as an immunity booster, for children older than 5 and adults for diarrhea, and for advance purchase as a precaution

APPROACH AND METHODS

• Sehat Mitra can improve treatment of childhood diarrhea in the deep interior where there are few formal providers by: 1. Influencing caregivers’ choice of proper diarrhea treatment over potentially harmful alternatives such as antibiotics and anti-diarrheals
- 2. Facilitating access to ORS and zinc by ensuring product availability
- The SM approach allowed for follow up visits to monitor adherence, promote simple disease prevention messages, and to reinforce correct knowledge of diarrhea management to the entire household
- Acceptance and trust of community NGOs by Sehat Mitras was key for implementation of this model

DISCUSSION

- The high proportion of children with diarrhea receiving ORS and zinc indicates that Sehat Mitras are effective at ensuring appropriate treatment in impoverished and hard to reach communities
- The Sehat Mitra approach shows potential to expand coverage and use of lifesaving treatment for childhood diarrhea
- Leveraging an established and trusted health delivery platform (mobile RHPs) offers a promising approach that may be expanded to provide basic public health prevention and care to the poorest and remotest rural areas

CONCLUSIONS

- What other health promotion, treatment, and support activities could this model be adapted to in deep rural interiors? In India? In other cultures and settings where indigenous and informal health systems in deep rural settings are relied upon and access to formal health care is limited?

SOURCES

- District Level Household and Facility Survey, 2007-08
- National Family Health Survey (NFHS-3), 2005-06

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