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Water & Sanitation Infrastructure in Developing Countries

Policy Memo #1

Posted March 1, 2007

Hard copy due in class March 6, 2007

You have been contracted by the Bangalore Water Supply and Sewerage Board (BWSSB) as a Water & Sanitation expert to provide advice as to the specific direction of a new program intended to reduce the incidence of diarrheal diseases in children under five years of age living in three slum neighborhoods: Anandapuram, Byapanhalli, Momimpura, where children's diarrheal rates are as high as 25%. As you are aware, BWSSB's role is to provide water supply, sewerage networks and sewage disposal to the metropolitan area, where an estimated 37% of the population is classified as urban poor. BWSSB's income derives from water tariffs and sanitary charges, as well as donations and loans, but is not sufficient to cover all the necessary infrastructure and human resource needs, so this new program will need to make tough decisions. The current status of water supply is that public standpipes do exist in slum areas, but do not supply water continuously, and there is frequently low pressure and cross-contamination. Because of this women collecting standpipe water are forced to wait for long periods and frequently seek other options. The percentage of household practicing hand-washing with soap is low and slum areas have sanitation coverage rates of less than 25%, with open defecation a common practice.

You have been asked to develop a policy memo detailing the strategy you recommend to reduce water-related diseases in the three above-mentioned slum neighborhoods. Your major constraint is that this new program has limited funding, so you must wrestle with trade-offs and propose a clear policy direction.

You are familiar with major categories of water-environmental interventions: water quantity, water quality, sanitation and hygiene, as visually highlighted in the photos provided by Genevieve Connors (see slides 27 – 54 at the end of her lecture on the Stellar course site). You are also aware of the relative efficacy of these environmental interventions, detailed in the research of both Esrey and Fewtrell/Colford, as summarized in the following figure:

Comparison of Esrey (1985) and Fewtrell & Colford MetaAnalyses (2004)

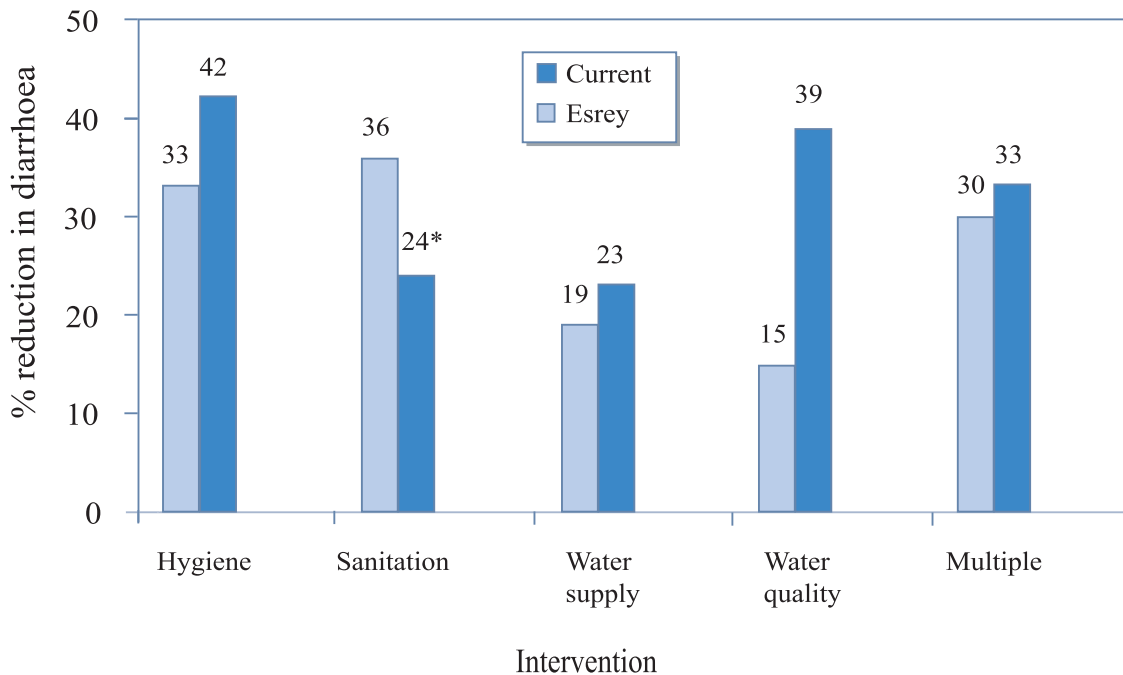


Figure by MIT OpenCourseWare.

You are being asked to provide guidance on policy direction in terms of these possible interventions.

You anticipate that local officials have many other demands on their time and attention. Therefore you want to effectively communicate your ideas to them as persuasively as possible. From previous work, you know that they expect a professional memo, *not* an analytical essay. It should express your own ideas, based on your expertise, and should avoid using quotations. Citations are not strictly necessary in a professional memo, although if you do choose to refer to statistics or other writers' work, you should cite them accordingly. Your memo should be no longer than 750 words. Use bullet points, information-rich headers, figures, diagrams and simple tables, as appropriate, and to emphasize key ideas.

Your memo should reflect what you have learned in the class thus far, and may also draw on your knowledge from other coursework, work and/or life experience.

Hard copy due in class March 6th