

**Abstract**

**CDD1243 - Learning effects on the costs of phased scale-up implementation of targeted HIV prevention among high risk populations in Karnataka, India**

S. Chandrashekar<sup>1</sup>, L. Kumaranayake<sup>2</sup>, B. Ramesh<sup>3</sup>, J. Blanchard<sup>3</sup>, M. Alary<sup>4</sup>

<sup>1</sup>London School of Hygiene and Tropical Medicine, Consultant, Bangalore, India, <sup>2</sup>London School of Hygiene and Tropical Medicine/ Dalhousie University, Economics, Halifax, Canada, <sup>3</sup>KHPT and University of Manitoba, Bangalore, India, <sup>4</sup>Centre hospitalier affilié universitaire de Québec, Unité de recherche en santé des populations, Quebec, Canada

**Background:** The India AIDS Initiative - Avahan project is currently involved in rapid scale up of HIV prevention in India emphasising targeting of high risk populations, using non-governmental organisations (NGOs) as the main delivery channel. However, there is very little information on the costs of such large-scale implementation, crucial for financial sustainability and determining future resource requirements. This study presents an analysis of district-level implementation costs for scale-up of Avahan activities in 15 districts in the Southern Indian state of Karnataka, reaching more than 24,000 sex workers.

**Methods:** The first 18 months of scale-up activities in the 15 districts were examined. Districts had varying start-up times and start-up periods. Financial and economic costs of implementing activities were retrospectively and prospectively collected from a provider perspective. Ingredients and step-down allocation processes were used to measure and allocate costs. Outcomes were measured using routinely collected project data. Costs are in US\$ 2004.

**Results:** The average start-up period per district was 8.2 months. In later starting districts, the duration of start-up was halved, and total start-up costs reduced by 48%. The average economic cost per district was US \$ 64,018 (range \$38,982-\$144,332). Recurrent costs ranged from 68% to 89% of annual economic costs. There was a seven-fold reduction in the average cost per sex worker reached as the scale of activities exceeded 3000 sex workers reached per district. There was a 3-fold reduction in average costs for later-starting projects.

**Conclusions:** Learning effects between early and later starting districts are important to consider in the rapid scaling-up of HIV prevention activities. Significant cost savings were observed as district-implementation was phased in over time both in start-up and average costs. As projects mature, both learning and scale effects could be significant.