

Helpdesk Report: Costing Family Planning Delivery in Nepal

Date: 24 January 2010

Query: For costing family planning interventions what are benchmark rates for Nepal or for similar regional contexts (such as hill regions in India)? If Nepal data is unavailable, can crude adjustments for rates be made to fit the Nepal context (considering the target groups in scaling up access will be poorer, more remote, less empowered and informed, and therefore more expensive to reach)?

Enquirer: DFID Nepal

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1. Overview

It was not possible to identify a clear data set of rates for family planning interventions within the scope of this study. Relevant literature did not give very recent figures.

Two benchmark rates were reported for family planning costs in Nepal:

- Thapa and Tsui (1990) estimated annual family planning costs of US\$38.54 million per year to reach 1.6 million users in the year 2000, a 34% contraceptive prevalence rate
- Vlassoff et al. (2004) reported that per user cost of family planning in Nepal for 1980 was US\$80 (1987 dollars)

Comparing with other figures in the Vlassoff report US\$80 seems very high. Per user figures for South East Asia are reported as both US\$22 and US\$8. These two different figures represent cost per unmet user and cost per current user respectively. That two different figures are reported for the same region highlights the complexity of reading data on this issue.

Section 4 of the report gives references for tips and advice on costing family planning with:

- details of a reproductive health costing tool from WHO
- an article providing practical tips on costing family planning programmes at the clinic level

- an article highlighting the difficulty with costing family planning as so little is known about service delivery costs

Section 5 contains background reading material on family planning programmes and costs. Section 6 provides some references on healthcare delivery in Nepal.

A recent HDRC helpdesk query on contraceptive prevalence rates provides some more recent information on current popular forms of contraception. For example injectables are found to be increasingly effective but this form of contraception may not be incorporated into older costing estimates.

2. Family planning needs and costs in Nepal, 1990 research paper

Family Planning Needs and Costs: Nepal, 1985-2000

Thapa S & Tsui AO, Asia Pacific Population Journal, 1990

Free access to abstract only <http://www.ncbi.nlm.nih.gov/pubmed/12283482>

Achievement of the Government of Nepal's goal of a total fertility rate of 2.5 by the year 2000 requires careful consideration of the levels of contraceptive prevalence required to meet this target, the optimal contraceptive method mix, and program costs. The scenario envisioned by government planners is for the fertility rate to fall from 5.8 in 1985 to 4.0 by 1990 and finally to 2.5 by the end of the century. The 2.5 target is 54% lower than what the United Nations regards as a plausible course of fertility decline and will require a 4-fold increase in contraceptive prevalence, from 15% in 1985 to 62% in 2000, given no change in method mix and high discontinuation rates, and a rise in the number of contraceptive users from a half-million to 2.8-2.9 million over a 15-year period. If no change of method mix occurs, the 2.5 fertility rate target requires that sterilisation use increase from 13% to 53%. An alternative contraceptive mix for the year 2000 is pill use, 13%; IUD use, 19%; and sterilisation, 13%.

Cost per user is estimated to be US\$5.85 in 1985.

Achievement of the government's target will require a 5-fold increase in annual spending for contraception, from US\$2.74 million in 1985 to US\$16.39 million in 2000, and a 24-fold increase, to US\$67.76 million, in total family planning expenditures. These projections suggest that the government may need to reassess its target; the United Nations has suggested that a fertility rate of 4.6 by the year 2000 is more realistic. Such a goal would require a contraceptive prevalence rate of 34%, 1.6 million users, and annual family planning costs of US\$38.54 million. Regardless of the scenario selected, there is a need for the government to examine carefully the cost-benefit ratios for contraceptives such as improved IUD's and subdermal implants.

3. Costs per user estimates for other countries

Assessing Costs and Benefits of Sexual and Reproductive Health Interventions

Vlassoff M et al., Occasional Report, New York: The Alan Guttmacher Institute, 2004

<http://www.guttmacher.org/pubs/or11.pdf>

The overall aim of this report is to inform decision makers about the key findings of existing studies about the costs and benefits of investments in sexual and reproductive health, to identify what factors the studies encompass and what they leave out, and to provide a complete picture of what the costs and benefits would look like, including benefits that are hard to measure.

It has three parts:

- a review and synthesis of what is known about the costs and benefits of investments in sexual and reproductive health
- a comprehensive outline that can be used by researchers and policymakers to view the gamut of costs and benefits, which, it is hoped, will lead to improvement in the measurement of costs and benefits of sexual and reproductive health investments
- in order to demonstrate the advantages of taking a more comprehensive approach to measuring costs and benefits, a partial application of the framework in the reproductive and maternal health field, namely in the area of contraceptive services and supplies.

Family planning cost per user for 1980 in Nepal, is reported (Table 2.6) to be US\$80 (1987 dollars). For comparison the cost reported for Sri Lanka is US\$8.

Average costs per user reported for South East Asia, within which Nepal is classified, is US\$22 (2003 dollars). This figure is given in a table (Table 3.15) of estimated costs for providing contraceptive services to women currently with unmet need. A different table (Table 2.14) provides figures for estimated average cost per contraceptive user in South East Asia US\$8.19. I interpret the possible difference between these two figures to be the difference between the cost of supplying a current user and the cost of supplying a user with unmet needs, but this is unclear in the report.

The Cost of Family Planning

RAND corporation, 1998

http://www.rand.org/pubs/monograph_reports/MR978/MR978.ch4.html

This report notes the change in cost per user figures as users rise. Data for Asia reported:

- US\$15 per user in Bangladesh, based on approximately 6,000 users, 1986-90
- US\$22 per user in the Philippines, based on approximately 2,500 users, 1994

4. Costing tools and guidance

Reproductive Health Costing Tool

The Partnership for Maternal, Newborn and Child Health

http://www.who.int/pmnch/topics/economics/costing_tools/en/index15.html

This tool is designed to estimate the resource requirements and costs of providing an essential package of reproductive/maternal health interventions at country or state/provincial level. Its main purpose is to help countries to quickly cost and create budgets for existing sector strategies and plans, such as Maternal Road Maps or Reproductive Health Action Plans.

In particular, the model calculates:

- the cost of providing/scaling up an essential package of reproductive health interventions (family planning, antenatal care, delivery care, emergency obstetric care, STIs and HIV prevention and treatment)
- the cost of activities/health systems improvements required to improve reproductive and maternal health in a country/district (training and supervision, equipment, reproductive health commodity security, referral system, IEC (information, education and communication))

For access to the Reproductive Health Costing Tool and manual, please contact Howard Friedman: freidman@unfpa.org

Analyzing Costs for Management Decisions

Management Sciences for Health, The Family Planning Manager, 1993

http://erc.msh.org/TheManager/English/V2_N2_En_Issue.pdf

This article provides basic worksheets for calculating the costs of two major items that make up the largest part of any family planning programme: personnel and contraceptive product costs. It is aimed for family planning managers at the clinic level.

The report sections include:

- using cost data to improve the productivity and efficiency of services
- determining personnel cost
- allocating personnel cost per visit
- determining the cost of contraceptive products
- calculating total cost per visit
- estimating cost per year of use

Why Do Projections of the Cost of Family Planning Differ So Widely?

Janowitz B, *Studies in Family Planning*, Vol. 24, No. 1, 1993

<http://www.jstor.org/stable/pdfplus/2939215.pdf?acceptTC=true>

That the variations in estimates of the cost of family planning are wide is not surprising, once it becomes apparent that the assumptions of investigators differ so greatly. This note makes clear that one reason that projections of family planning costs in the year 2000 differ so dramatically, even if similar assumptions are made about factors other than per-unit costs, is that we know so little about service-delivery costs. More energy must be directed toward carrying out cost studies using standardised methodologies for different method-delivery-system combinations for countries with varying levels of demand and contraceptive prevalence. In addition, studies of non-service-delivery costs are needed in order to get a total picture of family planning costs that includes both direct and indirect costs. Studies to determine the cost of indirect activities require that a consensus be reached on which indirect activities should be included in a family planning or population program.

5. Background and related materials

Adding It Up. The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health

Singh S et al., The Guttmacher Institute & UNFPA, 2009

<http://www.guttmacher.org/pubs/AddingItUp2009.pdf>

Chapters in this report discuss:

- progress and challenges in women's and newborns' health
- meeting the need for modern family planning services
- meeting the need for maternal and newborn health services
- investing in both family planning and maternal and newborn care

The report makes an interesting point that the cost per user of fulfilling unmet need would be higher than the cost of serving current users because of the expenses related to expanding and improving healthcare services in any developing countries.

Family Planning Programmes in Ten Developing Countries: Cost Effectiveness by mode of service delivery

Huber SC & Harvey PD, *Journal of biosocial Science* 21, 267-277, 1989

<http://bit.ly/fVgJ9V>

The cost effectiveness of various modes of family planning service delivery based on the cost per couple-year of protection (CYP) is assessed using 1984 data for 63 projects in ten countries (three each in Africa and Asia, and four in Latin America). More than 4-8 million CYPs were provided through these projects during the year studied. Programmes with the highest volume of services delivered corresponded to lowest average costs: social marketing (2-8 million CYPs) and sterilisation projects (960,000 CYPs) cost about US\$2 per CYP, on average; highest costs were for full service clinics and community-based distribution projects (US\$13-14 per CYP). Costs of clinics combined with community-based distribution services fell approximately midway between these two extremes.

Cost-effectiveness Analysis of Family Planning Programs in Rural Bangladesh: Evidence from Matlab

Simmons GB, Balk D, Faiz KK, *Studies in Family Planning* 22(2), 1991

Abstract only available free <http://www.ncbi.nlm.nih.gov/pubmed/1907039>

The Family Planning Health Services Project in Matlab is often seen as more expensive than similar activities carried out by the government of Bangladesh. At the same time, it has been observed that the project is much more effective. The alleged high cost of the project is said to make it difficult to replicate throughout the nation. Previously, the true costs of the project had not been documented. This study systemically examines the cost of the project and assesses its cost-effectiveness. An experimental design framework is used as a basis for understanding the cost-effectiveness of the project, although a sensitivity analysis lends further support to the relative efficiency of the approach undertaken in Matlab. Although in the aggregate, the Matlab Project is more expensive than the government's family planning program, it is also more effective, generating enough output to offset the extra costs of the intensified delivery system.

Estimating the Cost of Scaling-up Maternal and Newborn Health Interventions to Reach Universal Coverage: methodology and assumptions. Technical Working Paper

Department of Making Pregnancy Safer (FCH/MPS) and Health Systems Financing (EIP/HSF) for the World Health Report 2005

http://www.who.int/whr/2005/td_two_en.pdf

This document provides information on the methods, key parameters and underlying assumptions used to estimate the costs of expanding the coverage of skilled maternal and newborn health care at facilities towards universal access, which is defined here as 95% coverage. The costs include activities assessed to be crucial in strengthening maternal and newborn healthcare services to improve health and reduce morbidity and mortality in 75 key countries (including Nepal).

Barriers to effective family planning in Nepal

Schuler SR et al., *Studies in Family Planning* 16(5), 1985

Abstract only freely available online <http://www.ncbi.nlm.nih.gov/pubmed/4060211>

To investigate why family planning (FP) services in the Kathmandu Valley of Nepal are underused, a study was initiated under the auspices of the Nepal Family Planning/Maternal--Child Health Project. The study was intended to provide a user perspective, by examining interactions between FP clinic staff and their clientele. 'Simulated' clients were sent to 16 FP clinics in Kathmandu to request information and advice. The study revealed that in the impersonal setting of a family planning clinic, clients and staff fall into traditional, hierarchical

modes of interaction. In the process, the client's 'modern' goal of limiting her family size is subverted by the service system that was created to support this goal. Particularly when status differences are greatest, that is, with lower-class and low caste clients, transmission of information is inhibited.

Costs of Family Planning Programmes in Fourteen Developing Countries by Method of Service Delivery

Barberis M & Harvey PD, *Journal of Biosocial Science*, 1997

Abstract only freely available <http://www.ncbi.nlm.nih.gov/pubmed/9881132>

The cost effectiveness of several modes of family planning service delivery based on the cost per couple-year of protection (CYP), including commodity costs, is assessed for 1991-92 using programme and project data from fourteen developing countries (five in Africa, four in Asia, three in Latin America and two in the Middle East). More than 100 million CYP were provided through these family planning services during the 12 months studied. Sterilisation services provided both the highest volume (over 60% of total) and the lowest cost per CYP (US\$1.85). Social marketing programmes, delivering almost 9 million CYPs, had the next lowest cost per CYP on average (US\$2.14). Clinic-based services excluding sterilisation had an average cost of US\$6.10. The highest costs were for community-based distribution projects (0.7 million CYPs), which averaged US\$9.93, and clinic-based services with a community-based distribution component (almost 6 million CYPs), at a cost of US\$14.00 per CYP. Based on a weighted average, costs were lowest in the Middle East (US\$3.37 per CYP for all modes of delivery combined) and highest in Africa (US\$11.20).

NEPAL: Reaching the Urban Poor with Family Planning

The Extending Service Delivery Project, USAID

http://www.esdproj.org/site/DocServer/ESD_Legacy_Nepal.pdf?docID=3601

This case study documents how the Nepali Technical Assistance Group, with support from Extending Service Delivery Project, applied a multifaceted, community-based approach providing information and education on Healthy Timing and Spacing of Pregnancy (HTSP) to a marginalised, urban poor population in Kathmandu, Nepal. It also reports on preliminary outcomes of this intervention, designed to improve the community's knowledge of and attitudes toward HTSP and family planning with special focus on increasing the use of postpartum family planning.

Family Planning Saves Lives (Fourth Edition)

Smith R et al., PRB, 2009

<http://www.prb.org/pdf09/familyplanningsaveslives.pdf>

The average cost per year for contraceptive supplies is estimated to be about US\$1.55, based on the existing mix of contraceptive methods used in developing countries. Program costs are higher, however, because they include health personnel and the cost of running facilities and outreach programs. Program costs vary across regions and range on average from US\$2 to US\$35 per year of protection per person, depending on the mode of service delivery, such as social marketing, clinics, or community-based distribution. Costs in Africa tend to be higher, regardless of the service delivery mode. However, because many existing programs are underutilised, researchers believe that the average cost for an additional contraceptive user may be closer to the average cost of the commodity—an average of US\$1.55 per new user. Dramatically reducing the cost per user over the long term requires that governments successfully boost clinic attendance, increase the availability of and information on long-acting contraceptive methods, and partner with the private sector to provide services.

6. General healthcare delivery in the Nepal context

Macroeconomics and Health Nepal, Situational analysis

Paalman M., Royal Tropical Institute, 2004

<http://www.who.int/macrohealth/action/en/nepalsitanalysis.pdf>

A situational analysis report for the government of Nepal to help take forwards the Macroeconomics and Health agenda.

Primary healthcare, community participation and community-financing: experiences of two middle hill villages in Nepal

Sepehri A & Pettigrew J, *Health Policy Plan*, 2006

Free access to abstract only <http://www.ncbi.nlm.nih.gov/pubmed/10155881>

Although community involvement in health related activities is generally acknowledged by international and national health planners to be the key to the successful organisation of primary healthcare, comparatively little is known about its potential and limitations. Drawing on the experiences of two middle hill villages in Nepal, this paper reports on research undertaken to compare and contrast the scope and extent of community participation in the delivery of primary healthcare in a community run and financed health post and a state run and financed health post. Unlike many other health posts in Nepal these facilities do provide effective curative services, and neither of them suffer from chronic shortage of drugs. However, community-financing did not appear to widen the scope and the extent of participation. Villagers in both communities relied on the health post for the treatment of less than one-third of symptoms, and despite the planners' intentions, community involvement outside participation in benefits was found to be very limited.

Policy papers on health, Nepal

WHO country office for Nepal, WHO, 2007

http://www.nep.searo.who.int/LinkFiles/Health_Information_PPH.pdf

Background information on health policy in Nepal.

7. Additional information

Author

This query response was prepared by **Laura Bolton** l.bolton@ids.ac.uk

Experts contacted:

Amy Tsui, Johns Hopkins Bloomberg School of Public Health

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