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# Looking closely on who benefits from public subsidies in health care: a gender perspective 

Rosario G. Manasan and Eden C. Villanueva

While it is important to ascertain whether national government expenditures on gender-sensitive programs are protected or not, it is also equally important to understand the gender-specific distribution of benefits from mainstream or untargeted expenditures which comprise the bulk of national government spending.

Benefit incidence analysis requires the measurement of: (1) the unit costs of providing a particular service; and (2) the number of units of these services that are utilized by boys and girls, men and women. Benefit incidence can then be calculated as the value of the unit costs multiplied by the number of units utilized by the relevant individuals. The benefit incidence depends upon: (1) the allocation of public expenditure in providing specific types of public services; and (2) the behavior of households in utilizing said public services.

It should be emphasized, however, that a gender gap in the distribution of the benefits of govern-
ment spending does indeed indicate a gender bias in the budget allocation process or in the delivery of publicly provided services. Such a gap may stem from various sources: (1) the intrinsic nature of the services being provided by the government; (2) the behavior of households given their particuI ar situation; and (3) the bias in government policy, systems, and practices. Because of this, benefit incidence analysis is contextual and should be informed by good gender analysis.

For instance, it is a fact that more males avail of the government's tuberculosis (TB) control program. In principle, this result may arise either because TB is more prevalent among males or because the health-seeking behavior of households is such that more TB-afflicted women tend not to avail of the services. If the former is found to be true, then the result of the gender-differentiated incidence analysis should be "normalized" by

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Table 1. Male/female share in total DOH budget

|  |  | \% Male | \% Female | Budget In P million |
| :---: | :---: | :---: | :---: | :---: |
| 1997 | Targeted |  |  |  |
|  | Women |  | 100.00 | 371.6 |
|  | Children | $50.54^{\text {a }}$ | $49.46^{\text {a }}$ | 399.2 |
|  | Family | $14.18^{\text {b }}$ | $85.82^{\text {b }}$ | 13.5 |
|  | Untargeted |  |  |  |
|  | Other public health | $41.75^{\circ}$ | $58.25^{\text {c }}$ | 3,439.8 |
|  | National TB Program | $68.99^{\text {d }}$ | $31.01^{\text {d }}$ | 170.4 |
|  | Hospitals | $48.26^{\text {e }}$ | $51.74{ }^{\text {e }}$ | 6,118.6 |
|  | Total | $48.20^{\text {f }}$ | $51.80^{\text {f }}$ | 10,513.2 |
| 1998 | Targeted |  |  |  |
|  | Women |  | 100.00 | 799.9 |
|  | Children | $50.54^{\text {a }}$ | $49.46{ }^{\text {a }}$ | 187.7 |
|  | Family | $14.18^{\text {b }}$ | $85.82^{6}$ | 5.9 |
|  | Untargeted |  |  |  |
|  | Other public health | $41.75^{\circ}$ | $58.25^{\circ}$ | 1,823.0 |
|  | National TB Program | $68.99{ }^{\text {d }}$ | $31.01^{\text {d }}$ | 147.7 |
|  | Hospitals | $48.26^{\text {e }}$ | $51.74{ }^{\text {e }}$ | 7,882.0 |
|  | Total | $48.20^{\text {f }}$ | $51.80{ }^{\text {f }}$ | 10,846.0 |
| 1999 | Targeted |  |  |  |
|  | Women |  | 100.00 | 768.5 |
|  | Children | $49.52^{\text {a }}$ | $50.48^{\text {a }}$ | 193.5 |
|  | Family | $13.74{ }^{\text {b }}$ | $86.26^{\text {b }}$ | 9.4 |
|  | Untargeted |  |  |  |
|  | Other public health | $42.37^{\circ}$ | $57.63^{\circ}$ | 2,600.9 |
|  | National TB Program | $68.99{ }^{\text {d }}$ | $31.01^{\text {d }}$ | 145.2 |
|  | Hospitals | $49.38{ }^{\text {e }}$ | $50.62^{\text {e }}$ | 7,684.2 |
|  | Total | $44.67{ }^{\text {f }}$ | $55.33^{\text {f }}$ | 11,401.6 |
| 2000 | Targeted |  |  |  |
|  | Women |  | 100.00 | 131.4 |
|  | Children | 49.52 ${ }^{\text {a }}$ | $50.48^{\text {a }}$ | 354.3 |
|  | Family | $13.74{ }^{\text {b }}$ | $86.26^{\text {b }}$ | 227.8 |
|  | Untargeted |  |  |  |
|  | Other public health | $42.37^{\circ}$ | $57.63^{\circ}$ | 5,612.4 |
|  | National TB Program | $68.99^{\text {d }}$ | $31.01^{\text {d }}$ | 17.0 |
|  | Hospitals | $49.38{ }^{\text {e }}$ | $50.62^{\text {e }}$ | 4,622.1 |
|  | Total | $44.49^{\text {f }}$ | $55.51{ }^{\text {f }}$ | 10,965.0 |

${ }^{\text {a }}$ Based on utilization of RHUs and BHUs of children
${ }^{\mathrm{b}}$ Based on population of children and females
${ }^{\text {chased on utilization of RHUs and BHUs of population aged } 6 \text { and above }}$
'Based on beneficiaries of TB Program
eBased on utilization of government hospitals
'Based on budget share of programs
comparing it with the gender-differentiated prevalence rate.

However, if the latter is true, then the analyst has to analyze the problem further and find out the underlying reasons why women tend not to avail of the government's anti-TB services. Is it cultural,
(i.e., women are expected to put their needs last relative to other members of the family)? Is it because the schedule of government facilities conflicts with the women's own schedule inside the household as they care for the family or children? If it is the former, then government should complement service delivery with focused or targeted information, education and communication (IEC) programs to counteract the cultural bias. If it is the latter, then a change in the way government delivers the service is indicated. In either case, one can argue that there is an implicit bias in the government program.

This Policy Notes looks closely at this possible bias and assesses who indeed benefits from government expenditures for public services, in particular, for health care, in terms of gender. It should be stressed, though, that this study is limited by the current availability of gender analysis of the different programs of government.

## Who benefits from public spending

 in health?Based on sex-disaggregated data on the beneficiaries of various health programs of the Department of Health (DOH) and the utilization of government health facilities in addition to the corresponding spending levels of the department on each of these programs, a sex-differentiated incidence analysis of DOH expenditure was undertaken. The results are presented in Table 1 and show that on average, slightly over half of the benefits of DOH programs accrued to females in 1997-2002. From this result, though, it is not possible to directly conclude if gender bias is present unless the sex differentials in the utilization of various programs, particularly the untargeted programs, are scrutinized more closely.

## Looking closely...

## Utilization of government hospitals

The 1998, 1999 and 2002 Annual Poverty Indicator Surveys (APIS) have sex-disaggregated information on the utilization of government hospitals. In particular, the 2002 APIS shows that
more females than males in all income classes utilize government hospitals (which account for $51.9 \%$ of total DOH expenditures in 1997-2002). M oreover, it is notable that the gap in the proportion of female-male beneficiaries of government hospitals increases with income (Table 2).

These observations do not necessarily indicate a gender bias in favor of females. For one, this finding is consistent with the fact that maternity cases account for a significant proportion of total admissions in government hospitals. Sex-disaggregated data on incidence of the illnesses that resulted in the rest of the admissions as well as an analysis of the gender differential in the healthseeking behavior of individuals with respect to these illnesses are needed before any conclusion could be reached on whether there is a gender bias in the delivery of government hospital services or not. U nfortunately, this study is not able to explore this issue further because of lack of data.

## Beneficiaries of the National TB

Program
The National Tuberculosis Program (NTP) Registries provide sex-disaggregated data on TB symptomatics who sought treatment at government health centers. Table 3 shows that there are more males than females among the sputum smear positive (SS+) cases who received treatment under the NTP. Sixty nine percent of the SS+ patients initiated treatment in 2003 are males while 31 percent are females. This is true across age groups and across regions. Table 3 shows that the gender gap in favor of males widens with ages betw een 0 and 54 years old. On the other hand, Table 4 shows that the gap in favor of males is significant in the NCR, Ilocos, Calabarzon, Western Visayas, Eastern Visayas, Southern Mindanao and Central M indanao regions (with more than $70 \%$ of those initiated treatment being males).

While more males than females clearly benefit from the NTP, this does not necessarily indicate a gender bias in service delivery policies, systems and procedures. For one to be able to make a firm statement in this regard, additional sex-disaggre-
gated data and good gender analysis of the TB problem are needed. The discussion below provides a more nuanced assessment of the gender issues of the NTP.

Based on the 1997 National TB Prevalence Survey (NTPS), Tupasi et al. (1999) show that the prevalence of TB is consistently higher in males than in females regardless of whether prevalence is measured in terms of radiographic changes, smear positive, or culture positive test results (Table 5). A comparison of Tables 3 and 5 shows that the male-to-female ratio for the number of SS+ cases initiated treatment in $2003(2.23=69 / 31)$ is higher than the male-to-female ratio for the TB prevalence based on radiographic changes in the 1997 NTPS but lower than the ratio for TB prevalence based on sputum smear test and sputum culture test.

On the other hand, Guerrero et al. (2004), in their assessment of the Kusog Baga program (a program initiated by the World Vision Canada aimed at reducing the mortality, morbidity and incidence of TB in target areas in collaboration with the DOH'sNTP and LGUs), provide more in-

Table 2. Utilization of government
hospitals by sex

|  | \% Distribution <br> Income Group <br> Male |  |
| :--- | :---: | :---: |
|  |  |  |
| Quintile 1 | 48.95 | 51.05 |
| Quintile 2 | 49.51 | 50.49 |
| Quintile 3 | 47.66 | 52.34 |
| Quintile 4 | 46.30 | 53.70 |
| Quintile 5 | 43.48 | 56.52 |
| All income groups | 47.36 | 52.64 |

Source of basic data: APIS 2002 and DOH SAOB 2002

Table 3. New sputum positive initiated treatment, 2003

| Age Group | Male | Female | Total | \% Male | \% Female |
| :--- | ---: | ---: | ---: | ---: | :---: |
| $\mathbf{0 - 1 4}$ | 356 | 300 | 656 | 54.27 | 45.73 |
| $15-24$ | 6,360 | 3,218 | 9,578 | 66.40 | 33.60 |
| $25-34$ | 9,302 | 4,551 | 13,853 | 67.15 | 32.85 |
| $35-44$ | 11,458 | 4,761 | 16,219 | 70.65 | 29.35 |
| $45-54$ | 10,713 | 4,000 | 14,713 | 72.81 | 27.19 |
| $55-64$ | 6,445 | 2,858 | 9,303 | 69.28 | 30.72 |
| 65 and above | 3,648 | 2,018 | 5,666 | 64.38 | 35.62 |
|  |  |  |  |  |  |
| All age groups | 48,282 | 21,706 | 69,988 | 68.99 | 31.01 |

Source: DOH

Table 4. New sputum positive initiated treatment by region, 2003

| Regions | \% Male | \% Female |
| :--- | :---: | :---: |
| NCR | 70.20 | 29.80 |
| CAR | 66.01 | 33.99 |
| Ilocos | 70.92 | 29.08 |
| Cagayan Valley | 69.58 | 30.42 |
| Central Luzon | 66.38 | 33.62 |
| CALABARZON | 70.90 | 29.10 |
| MiMaRoPa | 67.88 | 32.12 |
| Bicol | 66.88 | 33.12 |
| Western Visayas | 75.62 | 24.38 |
| Central Visayas | 66.45 | 33.55 |
| Eastern Visayas | 70.38 | 29.62 |
| Zamboanga | 69.06 | 30.94 |
| Northern Mindanao | 64.10 | 35.90 |
| Southern Mindanao | 72.75 | 27.25 |
| Central Mindanao | 70.03 | 29.97 |
| CARAGA | 61.23 | 38.77 |
| ARMM | 58.40 | 41.60 |
|  |  |  |
| Total Philippines | 68.99 | 31.01 |

Source: DOH
sights into the gender differentials in TB diagnosis and treatment. They found that more male than female TB symptomatics seek help, i.e., go to health facilities for consultation (Table 6). ${ }^{1} \mathrm{M}$ ore female than male TB symptomatics who consulted, how ever, are tested. Similar with the findings of the 1997 NTPS, the prevalence of SS+ TB is found to be higher in males than females. However, the male-to-female ratio for the TB prevalence rate in the Kusog Baga areas is lower than that in the 1997 NTPS. Moreover, the proportion of the SS+ cases who are given treatment is also higher among males than females in these areas.

The conceptual model for gender analysis of the TB control given in Uplekar, Rangan and Ogden (2000) provides a good perspective for interpreting the findings from the Kusog Baga study (Figure 1). It traces the sex and gender differences in the incidence/prevalence of infection, in the access to and use of available health care resources, in the knowledge, beliefs, and perceptions about the disease, and in the procedures and practices of health care facilities/health workers.

Table 5. Prevalence (per 1000) of pulmonary TB, 1997

|  | Observed |  |  |  | Adjusted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Active PTB | $\begin{gathered} \text { Smear+ } \\ \text { TB } \end{gathered}$ | $\begin{gathered} \text { Culture+ } \\ \text { TB } \end{gathered}$ | Active PTB | Smear+ TB | Culture + TB |
| Male | 53.0 | 6.5 | 16.4 | 49-53 | 5.4 | 13.9 |
| Female | 31.0 | 2.1 | 6.4 | 29-30 | 1.9 | 5.8 |
| All | 42.0 | 4.3 | 11.2 | 38-42 | 3.6 | 9.8 |
| Male-to-female ratio | 1.7 | 3.1 | 2.6 | 1.69-1.77 | 2.8 | 2.4 |

It is notable that the male-to-female ratio of TB symptomatics who seek medical care islow er than all of the ratios derived from the various measures of TB prevalence from the 1997 NTPS. The survey conducted by Guerrero et al. (2004) suggests that this may be attributed to the fact that more women than men tend to seek care for themselves on their own.

W hile there appears to be some gender bias in favor of females during the diagnosis phase, there appears to be some bias in the opposite direction in the provision of treatment. The survey of Guerrero et al. (2004) indicates that males are given preferential treatment both by their wives and the BHWs (who are predominantly women) in terms of food, nurturing, follow-up and monitoring because of their traditional role as breadwinners. Women, on the other hand, are perceived to be more compliant, responsible and conscientious, and thus do not require as much follow-up and monitoring.

Thus, while there appears to be no gender bias in the formal rules on service delivery, some bias in favor of men is apparent in the informal rules followed by both health workers and households in providing TB treatment. At the same time, some analysts (e.g., U plekar, Rangan and O gden 2000) point out that the relatively higher male-to-female ratio for TB prevalence based on SS+ notification might be explained by the higher case of underdetection among females because they are not given (or do not get) additional diagnostic tests to verify the sputum test results. ${ }^{2}$

## Benefit incidence for other health services

It should be noted that many health services are devolved. Thus, it is important to know what occurs at the local level. For instance, in LGU X,

[^0]more males than females are found to benefit from the various health services provided in the rural health units (RHUs) and the barangay health stations (BHSs) such as the under-5 clinic, Garantisadong Pambata and O peration Timbang, TB control and even the EPI (Table 7).

In this LGU, the ratio of boys to girls availing of the under-five clinic ranged from 1.17 to 1.34 in 2001-2004, compared to the 1.05 male-to-female ratio for the under-five popuIation. This indicates that there is some bias in favor of males either in the delivery of the

Table 6. Percent distribution of TB symptomatics, SS+ cases and SS+ initiated treatment in sample areas from Kusog Baga sites (1998-2003)

|  | \% of TB <br> Symptomatics <br> who Consulted | \% of TB <br> Symptomatics <br> Tested | \% of Tested <br> who are SS+ + | \% of SS+ Given <br> Treatment |
| :--- | :---: | :---: | :---: | :---: |
| Males | 56.80 | 80.50 | 27.10 | 81.90 |
| Females | 43.20 | 87.80 | 11.80 | 72.50 |
| Male-to-female ratio | 1.31 | 0.92 | 2.29 | 1.13 |

Source: Guerrero et al. 2004

Figure 1. Conceptual model for studying sex and gender differentials in TB control


Table 7. Beneficiaries of health programs by sex in LGU X

| Health Programs | 2001 |  | 2002 |  | 2003 |  | 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F |
| EPI (FIC)* | 52.2 | 47.8 | 53.6 | 46.4 | 54.1 | 45.9 | 53.0 | 47.0 |
| Vitamin A supplementation | 53.2 | 46.8 | 50.1 | 49.9 | 52.9 | 47.1 | 48.5 | 51.5 |
| Under-five clinic | 55.6 | 44.4 | 54.8 | 45.2 | 53.9 | 46.1 | 57.2 | 42.8 |
| Garantisadong Pambata I | 55.5 | 44.5 | 53.6 | 46.4 | 53.5 | 46.5 | 52.6 | 47.4 |
| Garantisadong Pambata II | 51.1 | 48.9 | 51.5 | 48.5 | 51.8 | 48.2 | 51.2 | 48.8 |
| Operation Timbang | 50.4 | 49.6 | 54.8 | 45.2 | 52.3 | 47.7 | 49.5 | 50.5 |
| National TB Program | 66.3 | 33.7 | 54.4 | 45.6 | 70.4 | 29.6 | 77.8 | 22.2 |
| Filariasis | 37.7 | 62.3 | 51.6 | 48.4 | 54.8 | 45.2 | 52.1 | 47.9 |

*Expanded Program on Immunization (fully-immunized children)
havior of households. The same is true of the Garantisadong Pambata 1 in all the years in the 2001-2004 period and of the O peration Timbang in 2002 and 2003. M oreover, the ratio of males to females receiving TB treatment in 2004 (3.5) appears to be significantly higher than the male-tofemale ratio for the TB prevalence rate based on the 1997 NTPS, again suggesting some bias in favor of males in the delivery of the TB control program.

## Conclusion and policy recommendations

* The availability of sex-disaggregated data on beneficiaries of government services is crucial in

[^1]the analysis of benefit incidence. To be able to have a better feedback and meaningful analysis on the outputs of their services, government agencies should monitor the utilization of their services and establish a database with sex-disaggregated information.

* Budget analysis has to be better informed by gender analysis. It should be noted that even if there is no gender bias in the formal policies and procedures that govern the delivery of services of various government agencies, gender bias might result from the informal rules, attitudes and behavior not only of service providers but also of the target clientele.
* The setting up of consultation mechanisms during the process of formulating health policy as well as the raising of gender issues during policy dialogues with governments are very important.亩


## References

Budlender, D. 2004. Expectations and realities in gender-responsive budget initiatives. U nited Na tions Research Institute for Social D evelopment.
Commonwealth Secretariat. 1999. [O nline]. Gender budget initiative tools. Available from http:/ /www.thecommonwealth.org/gender.
Guerrero, S., J. Cabigon, J. Caragay et al. 2004. Gender and TB control and prevention: the Kusog Baga Program. Report submitted to the World Vision Development Foundation.
M anasan, R.G. and E.C. Villanueva. 2005. Impact of fiscal restraint on budgetary allocations for women's programs. PIDS Discussion Paper Series No. 2005-16. M akati City: Philippine Institute for Development Studies.
U plekar, M., S. Rangan and J. Ogden. 2000. Gender and tuberculosis control: tow ards a strategy for research and action. Paper prepared for Communicable Disease, Prevention, Control and Eradication, World Health O rganization.


[^0]:    ${ }^{1}$ D ata used in this analysis came from selected sites (Cavite, Capiz, Iloilo, and General Santos).
    ${ }^{2}$ Ideally, sputum negative patients should have further tests like a chest X-ray to pick up the false sputum negative cases.

[^1]:    For further information, please contact
    The Research Information Staff
    Philippine Institute for Development Studies
    NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, 1229 Makati City
    Telephone Nos: 892-4059 and 893-5705
    Fax Nos: 893-9589 and 816-1091
    E-mail: rmanasan@pidsnet.pids.gov.ph; veden@pidsnet.pids.gov.ph; jliguton@pidsnet.pids.gov.ph

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