MDG 6: REDUCTION OF CASES OF TB, MALARIA AND HIV

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Introduction

Infectious diseases remain to be the single most important cause of morbidity and mortality in human history. Historical records will show that they were a scourge of humans in prehistoric times and remain to be so, even in modern times, even in the developing world. Most of these diseases, though, are preventable through vaccination and the practice of proper hygiene and infection control.

But TB, malaria and HIV still remain rampant . It is no wonder that the United Nations has chosen as one of the Millennium Development Goals (MDG 6), the reduction of morbidity and mortality due to TB, Malaria and HIV.

This paper will discuss the prospects of the Philippines for achieving MDG 6, taking into account the country's current realities and problems and existing efforts to curb them. The discussion of MDG 6 will be divided into the three disease areas: TB, Malaria and HIV. Each disease area will cover the following:

- *Epidemiology of the Disease*
- *MDG Indicators for the Disease and current status using these indicators*
- *Impact on other MDGs*
- *Assessment of Status of MDG Targets for the Disease*
- *Challenges/Problems in the Control of these diseases*

Disease experts were asked to analyze the data for each of the three disease areas: Dr. Charles Yu for Tuberculosis, Dr. Vicente Belizario for Malaria and Dr. Jessie Fantone for HIV/AIDS. They employed the following procedures and processes in collecting and analyzing pertinent and relevant data: (1) analysis of official documents (NCSB, WHO, DOH , NEDA); (2) expert opinions through Focus Group Discussions and Round Table Discussions; (3) trend analysis; and (4) critical appraisal of published and online related articles and official government and WHO publications.

Tuberculosis

Epidemiolgy of Tuberculosis

Tuberculosis remains a major public health problem in the Philippines. In terms of incidence, the Philippines ranks ninth among the 22 high burden countries in the world, from a previous 8th in 2003 and 7th in 2000. In the Western Pacific region, the country ranked third from a previous second in 2003 [WHO Report, 2007 & 2009]. In the Philippines, TB consistently is one of the ten leading causes of morbidity and mortality. It is the sixth leading cause of mortality with 33 deaths per 100,000 population [Philippine Health Statistics, 2003] and sixth in terms of morbidity with 137 cases/100,000 population [FHSIS, 2005]. The estimated burden of TB is 514,300 DALYs or over half a million healthy-life years lost annually due to illness and premature death . Economically, these premature deaths from TB translate to approximately PhP 27 billion pesos (US $490 million) loss of potential earnings yearly [Peabody, 2003] with 60 percent of the deaths occurring in the productive age groups. Furthermore, those in the productive age groups, the poor, the elderly and the men, are disproportionately affected. World Bank (2007) estimates that without Directly Observed Therapy Course (DOTS) the potential economic losses to the Philippines over a 10 year period (2006-2015) could range from 120-140 billion dollars.

MDG indicators for tuberculosis and where we are using these indicators

Table 1 is a summative tabulation of the different MDG targets that include incidence, prevalence, and mortality as well as case detection and treatment success and cure rates, The incidence reports are culled from DOH and WHO data while the prevalence includes the latter but also takes into account the three national TB prevalence surveys (NTPS) done in 1982,1997 and 2007 which present a fairly accurate picture of prevalence. On mortality, WHO uses an adjusted figure for baseline as compared to the data generated by the NCSB which utilizes actual figures obtained from the National Epidemiology Center- FHSIS. Figure 1 shows the cumulative percentage in reduction of the different targets.

Table 1: **Philippine Summary of Achievement of the TB MDG Targets**

	Baseline 1990	Midway (2000 unless otherwise indicated)	Latest (2007)	TARGET (2015)
Incidence (all cases/100,000)	335	305	290	168
Incidence (new ss+/100,000)	151	137	130	75
Prevalence (all cases/100,000)	820	554	500	400
Prevalence (smear positive) NTPS surveys	6.6/1000 (1982) 4.9	3.1 (1997)	2.0 (2007)	2.4
Prevalence (culture positive)	8.6/1000 (1982) 8.3** (1990)	8.1 (1997)	4.7 (2007)	4.1**
TB mortality (all cases/100,000)	80 (38.2*)	58 (2000)	41 (31*)	44
Proportion of TB patients detected (case detection rate) under Directly Observed Therapy Short Course (DOTS)	NA	48	75	70
Proportion of TB patients under DOTS successfully treated	NA	88	89	85
Proportion of TB patients cured (cure rate)	NA	<73	79 (2008)	85

Actual performance of the NTP with regard to the MDG targets for TB deaths, incidence and prevalence are shown in Figure 1 below. MDG targets are based on baselines 820, 151 and 80 per 100,000, respectively, for prevalence, incidence and deaths.
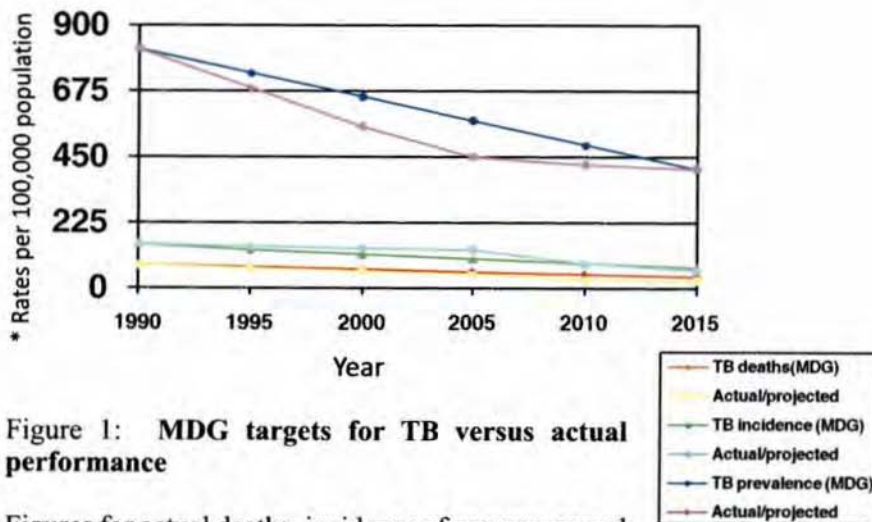

Figure 1: **MDG targets for TB versus actual performance**

Figures for actual deaths, incidence of new smear and TB prevalence 1990 up to 2005; projected from 2010 to 2015.

Impact of tuberculosis on the other MDGs

Eradicating extreme poverty and hunger

TB has long been a measure of a developing country's state of health. Indeed, it has been said that you can tell how the nation's health is doing by just looking at its TB statistics. TB is a disease of poverty, hitting more of the poorest economic classes yet it is also impoverishing once it hits families. So if a country's TB picture improves, does a country's GDP also improve or does its economy improve or is it vice-versa? The answer is probably not that simple but is probably both. Improvement in the nation's economy leads to better social conditions that hinder the spread of TB in communities through improvements in health care and services and better nutrition leading to increased body resistance to illness. Better HIV/AIDS treatment, for example, results in increased immunity, however, it may also lead to greater morbidities for TB because of increased survival of patients with longer life expectancies.

While men may be three times more likely to get TB than women, women may be less reluctant to seek/consult medical care or men may hinder them from seeking professional help. Less educational opportunities for women make them more prone to TB although recent data show both sexes with a high preponderance of ignorance about TB (with a high attribution to vice, alcohol/smoking, inheritance among other misconceptions).

Evidence also shows that the poor have systematically lesser access to health services than the non-poor. In fact, it has frequently been observed that the availability of good medical care tends to vary inversely with the need for it in the population served. This phenomenon is known as the inverse care law (WHO).

A 2002 study in Manila found that respondents with low family income (less than P2000 per month) were seven times more likely than those with medium and high incomes not to seek medical care.

Much has been written, also, about the interrelationship of TB and poverty and it is a given that TB in the Philippines with its low HIV prevalence (<1 percent) is mainly seen in the lower income groups. Tupasi (2000) showed that in 1997, the urban poor were 1.6 times more likely to have smear positive TB (5.6/1000 smear positive versus 3.5 in general urban population) . Please refer to Figure 2.
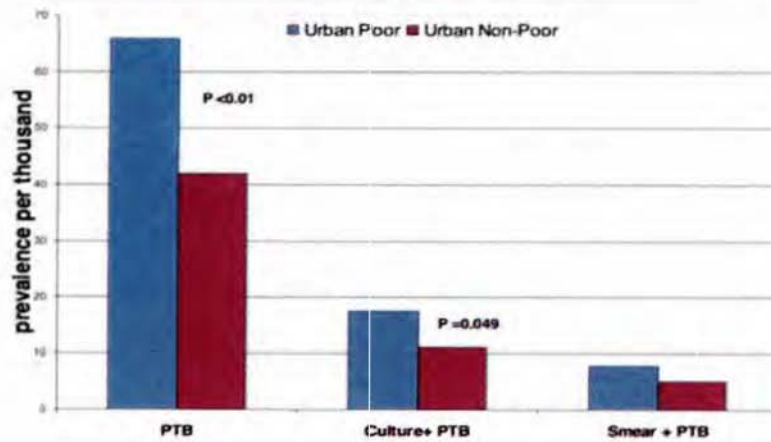
Figure 2: **Prevalence of PTB in Urban Poor and Urban Non-Poor Communities in the Philippines**

Source: Tupasi, T. E. et. al. Tuberculosis in the urban poor settlements in the Philippines. Int J Tuberc Lung Dis 4(1):4-11

Peabody and colleagues (2003) showed that a majority of TB cases have consistently been seen in the lower socio-economic strata with the poorest quintile having a prevalence twice as high (0.7 % versus the highest quintile 0.3%) with prevalence increasing by age and the elderly poor, three times more likely to have TB than the highest quintile group. The above findings were reconfirmed in the 2007 NTPS (where socio-economic status was derived as primary data for the first time) and where the lowest 80 percent wealth quintile were 1.6-1.7 times more likely to have TB than the highest 20 percent.

TB in Children

The burden of disease from childhood TB is uncertain, partly because of the difficulties of making the diagnosis in children and also because it is given less attention owing to its lower transmission potential. It is estimated that pediatric TB constitutes around 5-10 percent of the TB cases each year. For the Philippines, this would be in the range of 12,000 for the year 2000 (Powell, 2004) to about 20,000 cases/year in a more recent estimation by the DOH. In contrast to TB in adults where the risk of progression from infection to disease is estimated to be around 10 percent, the progression to TB among infants and children under 5 is around 43 percent and 25 percent, respectively (Powell, 2004).

Moreover, from a public health point of view, childhood TB is a "sentinel event". It suggests that there is recent transmission going on in the community. A rise in the incidence of childhood TB suggests that TB control in the community is not occurring as well as it should.

The leading causes of TB deaths in infants and young children are TB meningitis and miliary TB, from a review of recent mortality statistics. This may be due to the effectiveness of TB vaccines (BCG) at birth or a few months after birth which correlates highly as seen in systematic reviews of reducing miliary TB and TB meningitis. The latest NTP report as of May 2010 showed a cure rate of 80 percent and a success rate of 88 percent.

TB and Gender Equality

Regardless of whether more men or women are infected with TB, evidence suggests that women between 10-40 years of age have up to a 130 percent higher risk of progressing from TB infection to disease than men. Globally, case fatality rates are higher among women. It is also clear that the poverty-related determinants of TB infection and health-seeking behavior weigh more heavily on women than on men. Everywhere, women work longer hours, control fewer productive assets, earn less than men and face unique reproductive health risks. Women's health seeking behaviour is thus constrained by their lower socio-economic status and reduced access to information and economic resources. In this manner, poor women may be doubly disadvantaged. Evidence points to the specific constraints women may face when seeking to access TB services globally.

Improving maternal health

There are no accurate reports on TB and maternal deaths but TB remains a possible cause of maternal deaths. But a review of available statistics shows that TB is not among the leading causes of death.

Assessment of Status of MDG targets for Tuberculosis

As far as the MDG targets of detection and cure rates under DOTS, there is sufficient evidence to support the statement that the Philippines can achieve the targets (detection rates have been reached, success rates exceeded and cure rates approaching targets) using WHO indicators.

As far as the MDG target on TB-related death rates is concerned, the Philippines will be able to achieve the target for as long as WHO baseline indicators are followed. TB prevalence based on prevalence surveys may be

halved by 2015 but there is some cause for concern because of recent data that reveal the incidence rates target may not be achieved.

Challenges/Problems in the Control of Tuberculosis

There is an urgent need to realign baseline targets for death rates and prevalence rates as currently reported by NSCB to adhere to international standards set by WHO. There is likewise an urgent need for the government (particularly the new administration which will report the MDG achievements to the world in 2015), stakeholders, partners and NTP to redouble efforts to achieve MDG TB targets, with chances that the Philippines may miss targets due to slight missteps including problems in case reporting, supply chain for diagnostics and drug supply, waning political support for the TB control program and donor fatigue -- that will seriously affect the sustainability of TB control programs in place.

Malaria

Epidemiology of Malaria

Malaria remains the leading parasitic disease that causes mortality worldwide. Young children and pregnant women are the population groups most severely affected by malaria. Eighty five percent of the malaria-related deaths in 2009 occurred among children less than five years of age (WHO, 2009).

MDG indicators for malaria and where we are using these indicators

The malaria component of MDG 6 includes reducing incidence and mortality rates of the disease, increasing insecticide-treated bednet coverage among children below five years of age and increasing anti-malarial coverage among children below five years of age (UN Millennium Summit, 2000).

The goals of the Malaria Control Program (MCP) of the Department of Health (DOH) include reduction of morbidity and mortality, reduction of malaria transmission and reversal of incidence in endemic provinces.

Malaria has not been included among the 10 leading causes of morbidity in the Philippines since 2006 (DOH, 2006-2008), although malaria remains among the leading causes of morbidity in Regions II, IV-B and XII (DOH, 2008). There are 10.8 million people still at risk for the disease in the country

(DOH, 2008).   Fifty eight of the 80 provinces remain endemic for the disease, with 60.4 percent of endemic provinces located in Luzon, 39.5 percent in Mindanao and 0.1 percent in Visayas (DOH-MCP, 2009).   Malaria burden differs according to region, with Region IV-B being the leading contributor in 2009 (Figure 3).
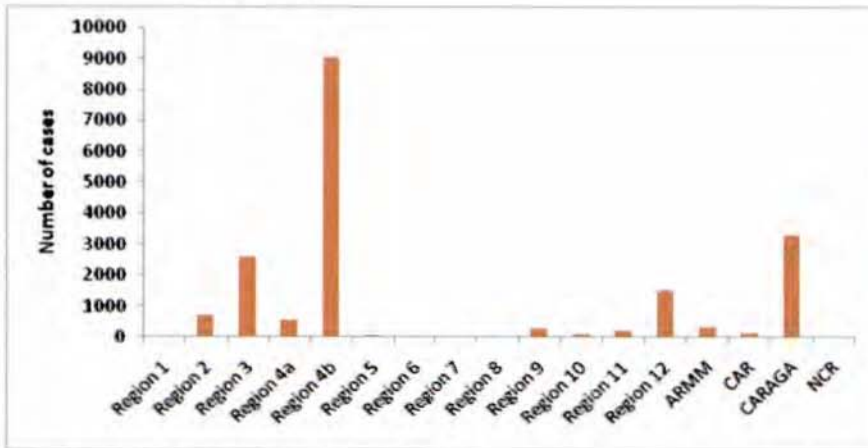

Figure 3. **Malaria cases per region in the Philippines in 2009**
Source: DOH-MCP, 2010

The mortality rate for malaria has also markedly decreased by 88.2 percent since 2005 (Figure 4). Only 22 malaria-related deaths were reported in 2009, compared with 150 in 2005. Similarly, malaria morbidity rate has also markedly decreased by 58.3 percent since 2005 (Figure 5).
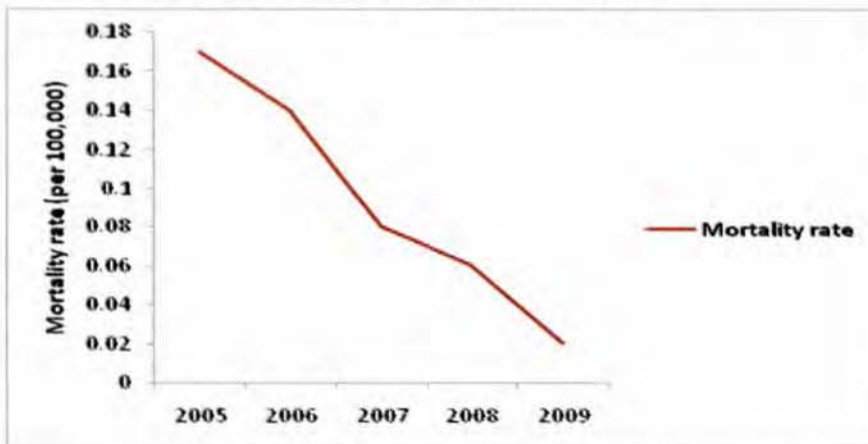

Figure 4. **Malaria-related deaths per 100,000 population in the Philippines from 2005 to 2009**
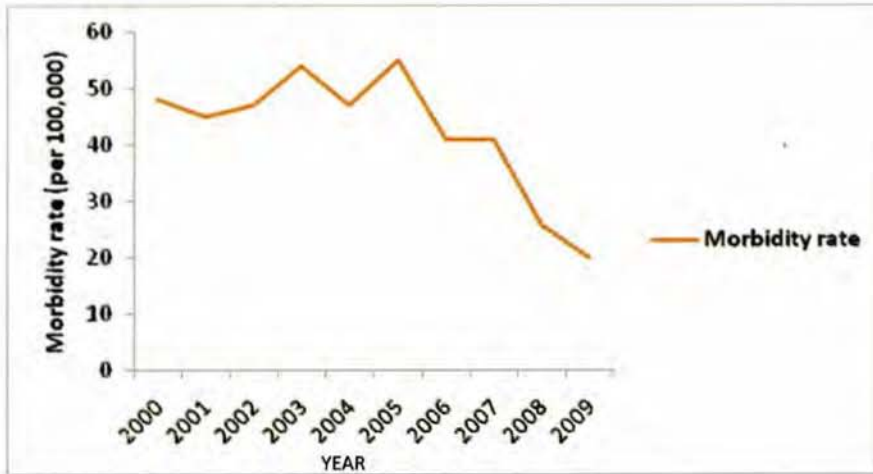*Source: DOH-MCP, 2010*

Figure 5. **Malaria cases per 100,000 population in the Philippines from 2000 to 2009**
Source: DOH-MCP, 2010

In 2009, a total of 18,781 malaria cases were reported (DOH-MCP, 2010). Data on malaria cases requiring admission and confirmed severe malaria cases could not be accurately identified because of lack of data from several provinces. Among the patients with blood smears in 2009, 66.7 percent were diagnosed with *P. falciparum*, 23.4 percent with P. vivax, 0.16 percent with *P. malariae*, and 0.5 percent with mixed infections (DOH-MCP, 2010).

To have a better picture of the status of malaria control in the Philippines, macrostratification was done. Macrostratification of malaria endemic areas is the process of classifying the different endemic sitios or localities of a particular barangay or village using a set of criteria. Macrostratification is done every three years to monitor and assess the improvements in malaria control in the endemic areas (DOH, 1996). (Please refer to Table 2.)

Table 2. **Macrostratification of malaria endemic provinces according to the annual incidence of malaria**

Category	Annual incidence of malaria
A	≥1000 cases
B	100 to <1000 cases
C	<100 cases
D	No documented indigenous case for the past 5 years

Source: DOH, 1996

The number of provinces in Category A has been reduced from 26 in 2000, to nine in 2005 and finally to five in 2008. The number of Category B provinces has increased from 22 in 2000 to 31 in 2005 and 22 to 27 in 2008. Malaria-free provinces have increased from 13 in 2000 to 22 in 2009. Four provinces in Category A, eight provinces in Category B and eight provinces in Category C were reclassified to the immediate lower categories, respectively, from 2005 to 2009. Nueva Ecija has moved to a higher
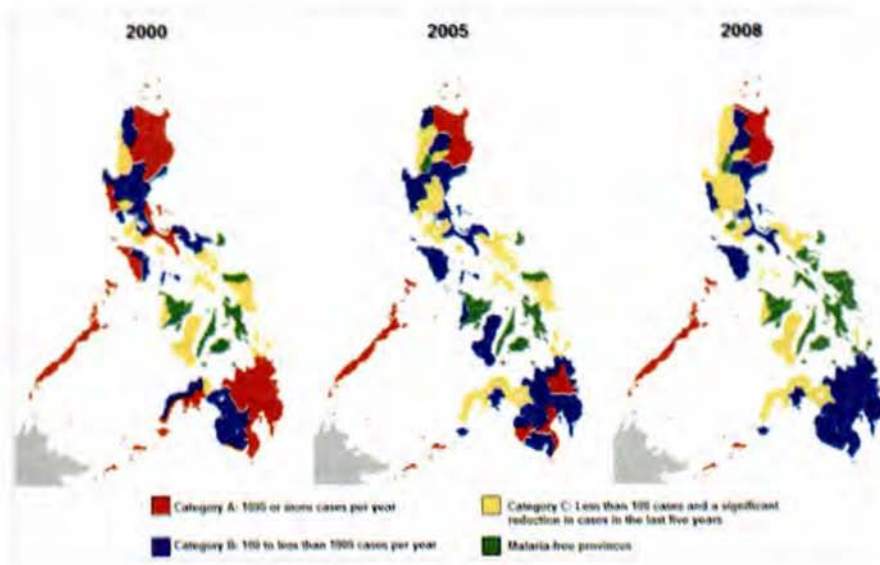

Figure 6. **Macrostratification of provinces according to category by average number of malaria cases**
Source: DOH-MCP, 1991-2009

Data from the DOH-MCP showed a steady decrease in the incidence rate of malaria cases and malaria-related deaths in children under 5 years old from 2005 to 2008, as shown in Figures 7 and 8, respectively.
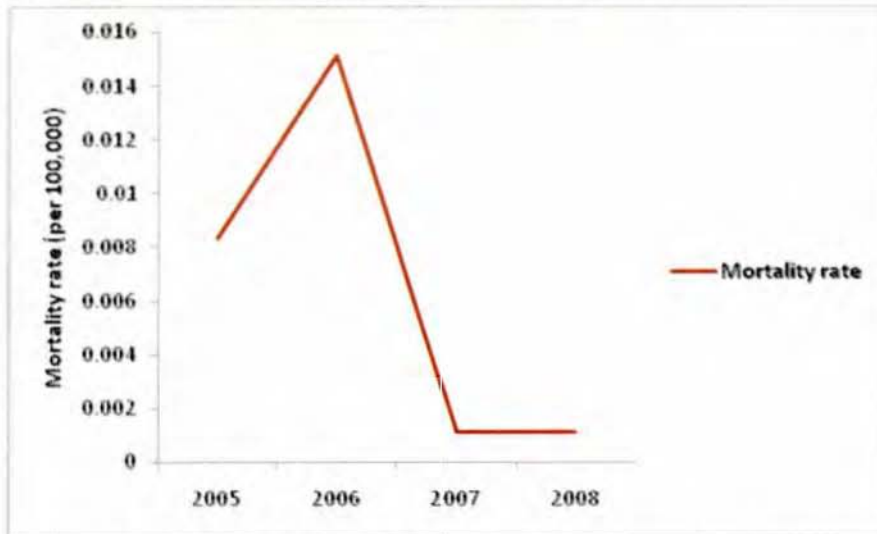

Figure 7. Overall malaria mortality rate in children under 5 years old in the Philippines from 2005 to 2008
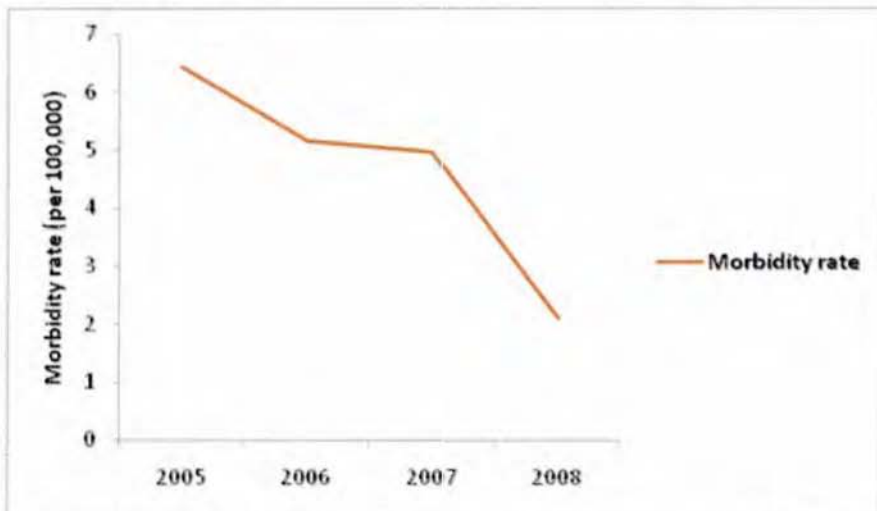*Source: DOH, 2005-2008*

Figure 8. Overall malaria morbidity rate in children under 5 years old in the Philippines from 2005 to 2008
Source: DOH, 2005-2008

With regards to Insecticide Treated Bed nets, the DOH, in collaboration with the Global Fund (GF) and Pilipinas Shell Foundation, conducted a survey on bednet utilization in the provinces of Apayao, Palawan, Quirino, Sulu and Tawi-tawi. A total of 9,684 households (99 percent confidence limit, 1.2 C.I.) were surveyed in the study. Ninety eight percent (98.2 percent) of the respondents reported to have slept inside their bednets during the previous night. Of the pregnant women surveyed, 86.1 percent utilized their bednets during the previous night, while 95.6 percent of children under 5 year old slept inside the bednet during the previous night (dela Cruz, 2009).

Anti-malarial coverage among children under five years of age

Data on Artemisinin-based combination therapy (ACT) coverage among children below five years of age was unavailable during the time of writing. Majority of malaria-related deaths occurred in this age group in 2009 (WHO, 2009), which may indicate limitations in service delivery of malaria interventions as well as poor health-seeking behavior. Efforts to increase access to quality health services that will include early diagnosis and treatment, especially in far-flung areas, will greatly contribute to the decrease in malaria morbidity and mortality. Information and education campaigns may help increase awareness and improve health-seeking behaviour in the community. Local initiatives such as provision of budget for local malaria control operations, social mobilization and empowerment of local health workers are important in achieving a more sustainable malaria control in the community (Brooker et al., 2007; Belizario et al., 2003).

The first-line treatment for P. *falciparum* malaria has been shifted to artemether-lumefantrine (AL) combination therapy, which has been proven to be highly effective in efficacy studies in the country (DOH, 2009). Surveillance for the efficacy of ACT is on-going in five sentinel sites in the Philippines to monitor possible resistance to the therapy. National regulations may also consider banning of oral artemisinin-based monotherapy to prevent development of resistance to the drug (WHO, 2009). A policy on the distribution of fake artemisinin tablets should also be implemented (Newton et al., 2008).

Impact of Malaria on the other MDGs

The benefits of malaria control bring about improvements in numerous aspects of health, thus contributing to the attainment of other MDGs, particularly MDG 1 or the eradication of extreme poverty, MDG 4 or the improvement of maternal health, MDG 5 or the reduction of morbidity and mortality in children less than five years of age, and other diseases in MDG 6 (UN Millennium Summit, 2000).

Assessment of Status of MDG targets for Malaria

There is a marked decline in the overall malaria morbidity and mortality in the Philippines suggesting that the country may be able to achieve the first target of MDG 6 for malaria. As for achieving the second target of increasing Insecticide-treated bednets (ITN) coverage in children under 5 years old, the country's progress may not be accurately assessed due to the unavailability of baseline coverage rates. In line with the parameters for MDG 6, there is a need to include monitoring of ITN coverage rates among children under five years in other endemic areas. Lack of data in ACT coverage rates may imply limitations in access to appropriate treatment and/or issues on data recording and reporting. For the country to sustain the gains of the MCP towards achieving MDG 6, challenges in health service delivery, which include access to accurate diagnosis, appropriate treatment, effective prevention of transmission and health education to improve health-seeking behavior need to be addressed. Availability of quality data and a reliable data information system are also important in disease monitoring and surveillance, as well as in assessing our progress towards achieving the goals of the MCP and the MDGs.

Challenges/Problems in the control of malaria

Existing challenges in malaria control include the lack of personnel at the local health unit level, lack of reliable data for surveillance, limited implementation of the Quality Assurance (QA) scheme for microscopy and lack of local funding as well as poor health-seeking behavior (DOH, 2010b; PHO Apayao, 2010; PHO Zambales, 2010). Mobile populations, armed conflicts and inaccessible terrain remain as major challenges in malaria control and surveillance in some provinces such as Apayao and Sulu (PHO Apayao, 2010; PHO Sulu, 2010).

HIV/AIDS

Epidemiology of HIV/AIDS

From 1984 to May 2010, the Philippine HIV and AIDS Registry of the National Epidemiology Center at the Department of Health reported 5,124 cases of HIV antibody-positive cases of which 4,238 (84 percent) were asymptomatic and 841 (16 percent) were AIDS cases. Of these sero-positive cases, 3,869 (76 percent) were males. The ages most commonly affected were from 20 -34 (60 percent) with a median age of 28 yrs.

Of these 5,124 cases, 4,544 (89%) got infected through sexual contact, 128 (3 percent) through needle sharing among injecting drug users, and 50 (1 percent) through mother-to-child transmission. No data are available for remaining 7 percent of the cases.

As to type of sexual contact, cumulative data shows that 2,319 (51%) were infected through heterosexual contact; 1,448 (32%) through homosexual contact; and 787 (17%) through bisexual contact. Starting in the year 2007 though, there has been a shift in the trend of sexual transmission from heterosexual contact (28%) to homosexual contact (72%).

A significant shift in the HIV and AIDS epidemic was noted beginning in 2007. Starting at 2 cases in 1984, when the first HIV case was reported, cases remained below 200 per year up to 2004. The epidemic was then described as "low and slow" in comparison to the rapid and exploding epidemics occurring in neighboring Southeast Asian countries like Indonesia and Thailand. In 2006, the number of cases breached the 300 cases a year mark. This was followed by 528 cases in 2008 and 835 cases in 2009. As of May 2010, 700 cases have already been reported. From an average of 2-3 cases a day in 2008 and 2009, the HIV and AIDS Registry is now reporting an average of 4-5 cases per day from January to May of this year (Figure 9).
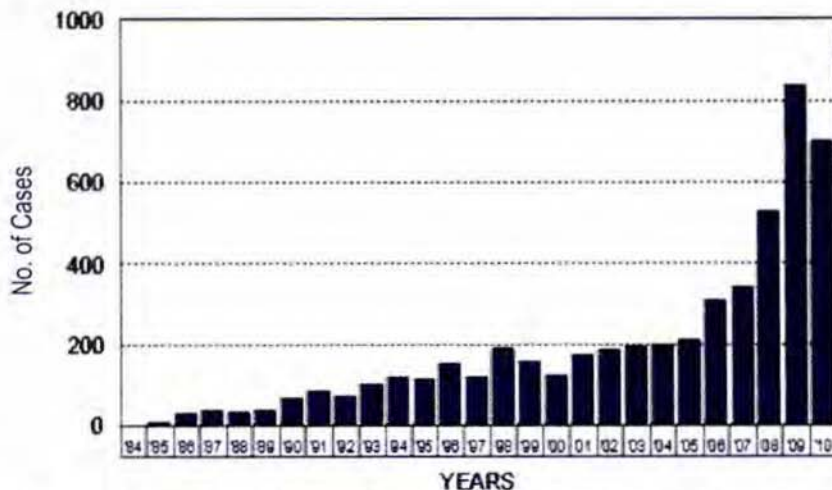

Figure 9. **Number of HIV and AIDS Cases in the Philippines by Year**

Source: HIV Registry Jan 1994 to May 2010 (N=5,124)

Although the Philippine prevalence is still below 1 percent, incidence rates are steadily increasing. The Philippine HIV and AIDS epidemic though labelled as 'low and slow' in the past was changed to "hidden and growing" in the years leading up to 2007. The situation may get worse if focused prevention and control measures are not implemented immediately.

MDG Indicators of HIV/AIDS and where we are using these indicators

To get a clearer picture of the MDG targets for HIV/AIDS, we have to discuss the UNGASS indicators.In June 2001, the United Nations General Assembly in the face of the worldwide pandemic of HIV and AIDS convened a special session to address the problems brought about by this disease. It called for member nations affected by the epidemic to provide progress reports every 2 years thereafter on the status of the epidemic in their respective countries. Thus, the United Nations General Assembly Special Session on HIV and AIDS, more popularly known as the UNGASS Country Report was born.

The UNGASS Country Report is basically a monitoring and evaluation tool to assess the country response to the HIV and AIDS epidemic. It follows an M&E framework composed of 25 indicators which are further divided into Input, Output, Outcome and Impact indicators (Figure 10)
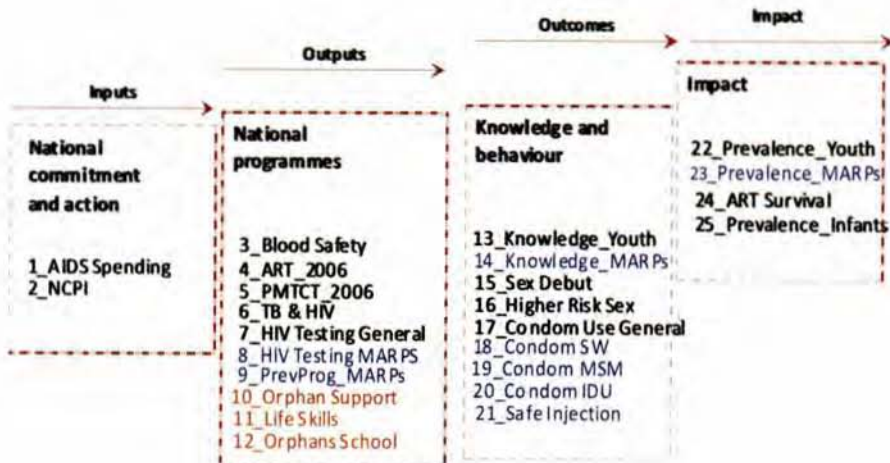

Figure 10. **UNGASS Indicators**

As a signatory to the Declaration of Commitment to the UNGASS, the Philippines submitted reports in 2003, 2005, 2007 and 2009. During the last 2 reports, the Philippine National AIDS Council Secretariat has been actively involved in the preparation of the report together with a team composed of members of the Philippine National AIDS Council, UNAIDS, and other international development partners.

Based on the UNGASS Report of 2009, the Philippines being a low prevalence country (<1 percent prevalence) is not required to report on indicators 10,11 and 12. Indicators marked in blue indicate data taken from most-at-risk populations which are collected through the Integrated HIV Behavioral Serologic Surveillance. Indicators marked in black are indicators from the general population and other sources.

One of the indicators frequently scrutinized by donors, government and the HIV and AIDS community alike is Indicator No.1 (Figure 11). It monitors the commitment in terms of resources for responding to the epidemic. Though the report shows an increase in spending particularly from external donors, the amount is still way below the P2 billion per year estimate of the costed operational plan for adequately responding to the epidemic.
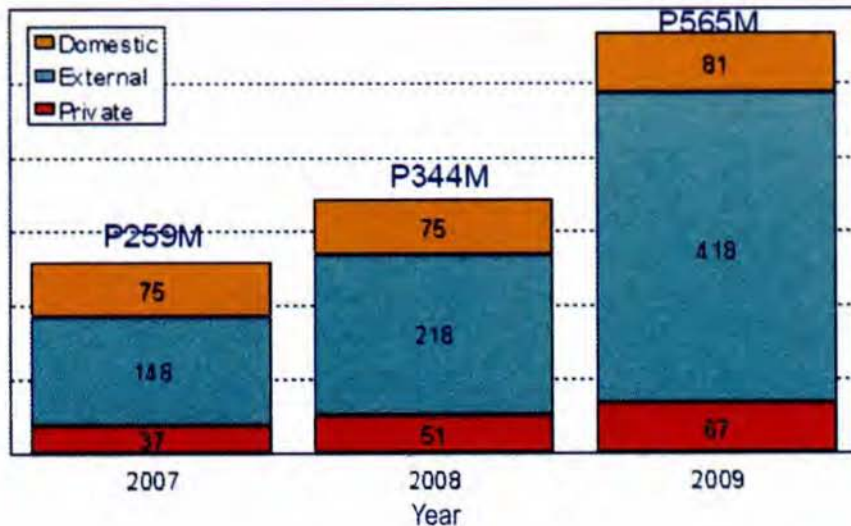

Figure 11. **AIDS Spending by Year and Source in Million of Pesos**

The second indicator, the National Composite Policy Index (NCPI) measures through a questionnaire administered to both government and non-government respondents involved in AIDS work their awareness and knowledge on the policy environment for facilitating the response to the epidemic. Two (2) workshops were conducted to accomplish the NCPI – one for civil society in February 2010 and another for government in March 2010. Government representatives who were tasked to accomplish the form found it difficult to complete the NCPI A. This feedback was likewise expressed by some civil society representatives who were present in the workshop. They had difficulty in answering the questions despite explanations on the meaning of said questions. The scores generated from the results of the NCPI for this reporting period for particular questions on strategy-planning efforts in the HIV programmes, political support for the HIV programmes, and efforts in the implementation of HIV prevention programmes fell below the previous NCPI scores. This may be attributed to inappropriate agency/organisational representation to the workshop and/or a general inadequate knowledge of the National HIV Response of some CSO representatives, in particular, and GO representatives, in general.

The output indicators measure the success of programs created to respond to the epidemic. Only the blood safety program (Indicator 3) and Indicator 6 which measures the number of TB/HIV+ cases given treatment were above 60 percent which is the benchmark for a program to make an impact.

The important indicators are indicators 8 and 9 which aim to measure if prevention programs have reached these most-at-risk-populations (MARPs). All of them did not reach the 60 percent benchmark for a program to be effective. Indicator 9 shows that 55 percent of Female Sex Workers were reached with prevention programs. Though not 60 percent, the result reflects the long-time focus of prevention programs on this particular group of most-at-risk-populations. This is further validated by the gradual decrease in STI and HIV rates in this group of MARPs.

The outcome indicators should reflect a change in knowledge and behavior among those targeted by the prevention programs. For the epidemic to be halted and reversed, 80 percent of those interviewed should have the correct knowledge and practice of non-risky sex. None of the groups tested reached 80 percent except Injecting Drug Users (Indicator 21). Although indicator 21 which measures injecting drug users knowledge on use of sterile injecting equipment to avoid HIV reached 85 percent, the latest findings in Cebu, where a sudden increase in HIV cases among injecting drug users is occurring, contradicts this result.

Indicator 23 which measures the impact of all these programs, showed a 900 percent increase in prevalence among MARPs from the previous UNGASS report (from .08% to 0.47%).

To summarize the UNGASS 2009 findings, despite an increase in resources, the Philippine HIV response can be characterized by low coverage of prevention programs which results in poor knowledge, low condom use among most-at-risk populations and low perception of risk among the youth.

Impact of HIV/AIDS on other MDGs

A generalized HIV epidemic, if allowed to happen, would obviously impact on most of the MDGs. Except for MDG 6A which is directly affected by the findings of the UNGASS 2009 Report, the other MDGs will hardly be affected. Not yet that is. And if we also presume that nothing will be done to reverse and halt the epidemic, then the prospect of seeing orphaned and dying children of mothers who died from HIV is not hard to imagine.

Assessment of Status of MDG Targets for HIV/AIDS

Given the increase in number of cases seen in the past two years and more so in the past five months of this year (Figure 12), the likelihood of MDG 6 being attained is very low. The higher incidence rates seen this year are being attributed to the poor program performance measured two years ago as reported by UNGASS 2007. With the findings from UNGASS 2009 showing almost the same results, then a continued increase in the following two years is likely.

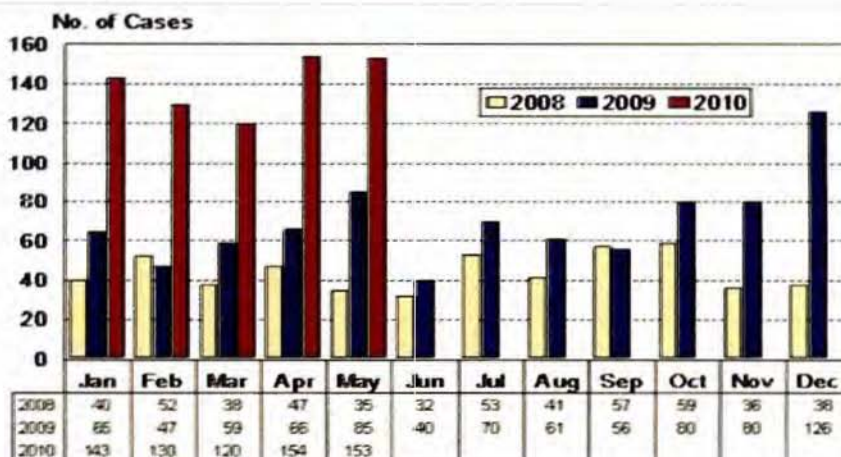|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	40	52	38	47	35	32	53	41	57	59	36	38
2009	65	47	59	66	85	40	70	61	56	80	80	126
2010	143	130	120	154	153							

Figure 12. **Number of New HIV Cases per Month (2008-2010)**

Another relevant finding of the HIV Registry aside from the shift in sexual transmission from heterosexual to homosexual was the increasing number of young men and women being infected with HIV (Table 3).

Table 3. **Number of young men and women age 15-24 who are HIV infected**

Sex	2009	2008	2007	2006	1984-2005
Male	201	102	37	28	107
Female	17	8	4	16	204
Total	218	110	41	44	311

Source: NEC, DOH

Challenges/Problems in the control of HIV/AIDS

The UNGASS report leaves much to be desired in terms of addressing the numerous gender issues. And the Philippine National AIDS Council is the first to admit that the Philippine response to the epidemic has no specific programs to address gender equality. But the report was able to uncover gaps in addressing these issues during the course of data collection for the report. These gaps will be considered during the formulation of the next AIDS National Strategic Plan which is in its 5th iteration.

These findings include the following:
- Lack of a specific program for women and girls. Our programs are designed as one size fits all
- Presence of many laws protecting women but are not being implemented
- Unclear policies on adolescent reproductive health
- Exclusion of girls from government health services because they are not yet supposed to have sex
- The Department of Education on which much of our advocacy for school children is dependent, still has not implemented an institutionalized sex education program in schools. Because of this, millions of children are deprived of basic knowledge on prevention and awareness
- Access to services for women and girls is very limited unless they are members of high risk or vulnerable groups

- Focus of interventions for sex partners are usually for the male partner specially among Overseas Filipino Workers and injecting drug users
- Less access to services for women and girls due to more stigma and discrimination.
- Increasing number of young people engaging in premarital sex with the age decreasing.
- Misconceptions among the young people that they cannot become infected with HIV

Conclusion

The survey of the three major diseases: Tuberculosis, Malaria and HIV/AIDS as described above in terms of achieving the MDG 6 revealed that insofar as Tuberculosis is concerned, the Philippines can achieve the targets. The assessment revealed that using WHO indicators, detection rates have been reached, success rates exceeded and cure rates approaching targets. TB-related death rates targets can also be reached provided WHO baseline indicators are followed. Recent data, however, disclose that incidence rate targets may not be achieved although TB prevalence may be halved by 2015.

Insofar as malaria is concerned, the Philippines may be able to achieve the first target of MDG 6 for this disease as there has been a marked decline in the overall mortality and morbidity rates. The second target of increasing insecticide-treated bednets (ITN) coverage in children below 5 years of age may be difficult to assess due to lack of baseline coverage rates. Availability of quality data and a reliable data information system are crucial in disease monitoring and surveillance as well as in assessing progress towards achieving MDG 6.

Given this year's increase in the number of HIV/AIDS cases, the likelihood of MDG 6 being attained is quite low. The shift in sexual transmission from heterosexual to homosexual and the increasing number of young men and women being infected pose an important challenge. Finally, the lack of a specific program for women and girls underscore the gender gap.

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