

The Elimination of Lymphatic Filariasis: A Strategy for Poverty Alleviation and Sustainable Development – Perspectives from the Philippines

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Abstract

Background: Within the Philippines areas endemic for lymphatic filariasis are in regions with the highest incidence of poverty. Out of a total of 79 provinces, 39 have a higher poverty incidence than the national average and 30 of these 39 provinces are endemic for lymphatic filariasis.

Discussion: Recognizing that provinces endemic for lymphatic filariasis (LF) are also the poorest provinces, the elimination of lymphatic filariasis in these areas presents significant opportunities to reduce poverty and inequalities in health. The implementation of an effective national programme for the elimination of lymphatic filariasis will provide means for sustainable development at national, local and community levels.

Summary: The elimination of lymphatic filariasis as a public health problem is a 20-year strategic plan for the world community, with the vision of all endemic communities free of transmission of lymphatic filariasis by 2020 and with the commitment to ensure the delivery of quality technologies and human services to eliminate lymphatic filariasis worldwide through a multi-stakeholder global alliance of all endemic countries. This global goal of elimination of lymphatic filariasis is a significant opportunity for partnerships – a world with less poverty through sustainable development and free from the scourge of lymphatic filariasis.

Background

The Philippines, although classified by International Agencies as a lower middle income country, has seen its national poverty incidence rise by 2.6% from 37.36% in 1997 to 39.4% in the year 2000. This figure represents 30 million people out of a total population of 76.4 million [1].

There are also extensive disparities in the poverty incidence between both urban and rural areas and among different regions and provinces within the Philippines. The

National Statistical Co-ordination Board estimated that in the year 2000, urban poverty incidence was 19.9% compared to 46% in rural areas. Further, Metropolitan Manila, the capital region, had a poverty incidence of 8.2% compared to 31.5% in Luzon, 41.7% in Visayas and 47.1% in Mindanao [1]. Provincially, poverty incidence ranges from 20.2% in Mountain Province and Ilocos Norte to 63.7% in Samar and Masbate [2].

The Philippines has a continuing high annual population growth rate of 2.36%, largely due to a low contraceptive

prevalence rate (CPR) of 49 [3]. This compares with CPR levels of 74 to 79 with its Asian neighbours [4]. Despite increases in both Gross Domestic Product and Gross National Product in 2001 of 3.4% and 3.7% respectively, such improvements have not had an impact on the poorest of the poor in the country [6] (This is because rapid population growth drags down real per capita income growth, which would be higher today if population had grown more slowly. Low average per capita incomes hamper further reductions in population growth. Some of the difficulties caused by an imbalance between less than desired economic growth and larger than intended population size are high dependency rates that lead to low rates of savings and investment, thus depressing possible future growth trajectories. Too many people chasing too little public provisions of quality basic services, including education and health, can cause inadequate human capital formation. Thus, cohorts reaching working age have fewer skills and are less productive and less employable, leading to low incomes, low growth, more poverty and further strains on the system of social provision). In the Philippines the poorest 40% have only 16% share of household income while the richest 20% has a 50% share [9].

The pattern of the burden of disease in the Philippines, currently in epidemiological transition, is typified by the infectious diseases such as, diarrhea, pneumonia, bronchitis, influenza and tuberculosis representing the leading causes of morbidity whilst all infectious diseases, as leading causes of morbidity and heart disease, stroke, pneumonia, cancer, accidents and tuberculosis together with a mix of chronic degenerative diseases and some infectious diseases, acting as leading causes of mortality [7].

In 1999, health expenditure was only 3.4% of the GNP (US\$1,200). Furthermore, health expenditure per capita was only US\$32.00, whilst the percentage share of "out of pocket" expenditure on health was as high as 46% of the total expenditure on health [8].

Discussion

The Philippines: Poverty, Health and Lymphatic Filariasis

Poverty

Poverty is multi-dimensional, extending beyond low levels for income, and is manifested by:

1. Lack of opportunity
2. Low capabilities
3. Low level of security
4. Lack of empowerment

In health specifically, it is the lack of access and opportunities, inequities and disparities in access to:

1. Health knowledge
2. Health promotion and the prevention of diseases
3. Primary health care services
4. Essential drugs
5. Emergency medical and obstetrical care
6. Disability and rehabilitation services
7. The maintenance of health, well-being and productivity.

In the Philippines areas endemic for lymphatic filariasis are in regions with the highest incidence of poverty. Out of a total of 79 provinces, 39 have a higher poverty incidence than the national average [2] and 30 of these 39 provinces are endemic for lymphatic filariasis [10]. For example, Romblon province, which is ranked 71 out of 79 in terms of poverty incidence, has a Circulating Filarial Antigen (CFA) rate of 18.75% and Oriental Mindoro province, which is ranked 76, has a microfilaria prevalence rate of 12.59%. These two provinces have the highest prevalence rates compared to other provinces surveyed so far [2,10].

Poverty Alleviation

Since 1986 successive Philippine government have pursued a social reform agenda that targeted poverty alleviation and reduction in the poorest provinces of the country. A National Anti-Poverty Commission (NAFC), headed by a Secretary of Cabinet rank, has been formed; for the urban poor, a Presidential Commission for the Urban Poor (PCUP) has also been established. The Aquino (1986–92) and Ramos (1992–98) administrations were successful in lowering the incidence of poverty in the country [5].

However, during the Estrada administration (1998–2001), despite its slogan of "ERAP for the Masses" (See Note) poverty incidence increased [6]. There has been no new data yet generated by the Macapagal-Arroyo administration (2001-present) with regards the effects of her programs on poverty incidence over the past year.

Access and inequities to health services

In 1993, the Department of Health and the Philippines Institute for Development Studies commissioned a joint survey examining the health seeking behavior of Filipinos. The sample size was stratified into economic quartiles,

and showed that across income groups, self-care is the most prevalent, ranging from 40% in the richest quartile to 56% in the poorest quartile. Furthermore, the poorest consulted a doctor the least (25% vs. 36%, 37% and 48% of the other quartiles) and use traditional healers the most (60%) [11].

More recently, a survey by the Social Weather Station (SWS) for the World Bank Filipino Report Card on Pro-Poor Services in 2001 [12], (where the sample size was stratified into three economic expenditure classes to measure the utilization of health facilities by location and expenditure class), showed that there are disparities between urban and rural classes and among expenditure classes. Urban populations tend to use private hospitals and clinics (56%) while the rural population uses more government hospitals (43%) and traditional healers (39%). The poorest 30% of expenditure class most frequently use traditional healers (40%), followed by the village health station and government hospital (both 37%) while the top 40% expenditure class uses the private clinic and hospital the most (68%) and the government health center and traditional healer the least (both 16%).

Other indicators of lack of access and inequality are:

45% of Filipinos die without any medical attention [4]. Two thirds of all infants are born at home with 44% of babies delivered by untrained hands [4].

In general urban women receive prenatal care from doctors while rural women receive prenatal care from a nurse or a midwife [13]. Five provinces with the highest maternity mortality ratios and also those with the highest poverty incidence had ratios twice as high as those of the five lowest maternal mortality ratios [14]. The highest unmet needs in family planning are also in the poorest regions, namely the Autonomous Region of Muslim Mindanao (29.4%), Eastern Visayas (28%) and Bicol (25.1%) [4].

Children in the Autonomous Region of Muslim Mindanao are much less likely than those in other regions to receive immunization [13]. The highest prevalence of underweight children are found in the regions with high poverty incidence such as Western Visayas, Eastern Visayas and Bicol [15].

These two surveys showed the lack of access of the poorest to basic health services and the disparities between the poor, middle and rich classes and disparities between urban and rural populations.

Lack of access and disparities in access to essential drugs

Mean expenditure on medicines per household per year in Mindanao is estimated at US\$45 compared to US\$152 in

Luzon and US\$104 in Metropolitan Manila. Medicines constitute 40–50% of all health expenditures by Filipino households. Households from the bottom 30% of income class spend US\$27 on medicines compared to US\$116 by the middle 30% group and while the highest 40% spend US\$123 [10].

The Elimination of Lymphatic Filariasis as a means to Poverty Alleviation

Recognizing that provinces endemic for lymphatic filariasis (LF) are also the poorest provinces, the elimination of lymphatic filariasis in these areas presents significant opportunities to reduce poverty and inequalities in health. An analysis of the services offered shows that the LF elimination programme provides an entry point to poverty alleviation:

1. LF surveys and mapping using ICT and community reporting of hydrocoele and elephantiasis increase the poor's access to health knowledge, health information and epidemiological data as well as access to diagnostic services.
2. Mass drug administration (MDA) with DEC and albendazole increases access to essential drugs and ensures universal coverage for treatment of LF and geo-helminths.
3. The establishment of morbidity reduction services for those with disabilities caused by LF will increase access to health services and rehabilitation particularly for those who live as stigmatized outcasts with such disabilities. This will also mean the poor returning to productive economic work and an active social life.
4. Increase in access to other health services with the integration of additional health services during the mass drug administration (MDA) such as bed net distribution, immunization, growth monitoring and promotion, Vitamin A and iodized salt distribution and sanitation and hygiene education. The 'Filaria Fair' in the Philippines, organized by local governments, creates a festival out of the MDA, offering additional services to attract more people to take the DEC and albendazole.

The Elimination of Lymphatic Filariasis as a means to Sustainable Development

The implementation of an effective national programme for the elimination of lymphatic filariasis will provide means for sustainable development at national, local and community levels. With the devolution/decentralization of health services in the Philippines since 1993, there has been a great need for health system development especially for local government units. National and local governments are therefore given the opportunity for health systems development in:

1. Health planning technologies
2. Health logistics system with the procurement of diethylcarbamazine citrate, receipt of albendazole and their distribution, inventory procedure and accountability
3. Health research systems development with epidemiological research, basic health research, health social science research, health systems research, evaluation research, operational research and participatory action research.
4. Development of health management information systems using the latest information technology like Geographic Information Systems (GIS), FilSim and remote sensing
5. Social marketing and social mobilization methodologies
6. Setting up health referral systems, for example, using the adverse drug reaction reporting system
7. Vertical and horizontal integration system with LF elimination programs and primary health care
8. Human resource development in health through scientific and program updates
9. International and regional networking for technical assistance and resource mobilization
10. A focus for leadership and governance

At the community level, community participation and community management will be facilitated by the LF elimination strategies. Sustainable community development will be promoted through disability prevention and rehabilitation; reduced morbidity from geo-helminths will improve nutrition and decrease iron deficiency anemia due to hookworm and reinforce sanitation campaigns. The community will have more economically and socially productive members and improvement of the over-all health, well-being and quality of life of its people.

Furthermore, the elimination of lymphatic filariasis will stimulate increased investments in health through North-South partnerships, a re-allocation of national budgets for health, an increase in local budgets for health by local governments or by resource mobilization from the private sector or community health financing, however, elimination of lymphatic filariasis will most significantly move more resources for health towards the poorest quintile.

Conclusions

The elimination of lymphatic filariasis as a public health problem is a 20-year strategic plan for the world community, with the vision of all endemic communities free of transmission of lymphatic filariasis by 2020 and with the commitment to ensure the delivery of quality technologies and human services to eliminate lymphatic filariasis worldwide through a multi-stakeholder global alliance of all endemic countries. This global goal of elimination of lymphatic filariasis is a significant opportunity for partnerships – a world with less poverty through sustainable development and free from the scourge of lymphatic filariasis.

Competing Interests

Competing interests: none declared

Authors Contributions

JGT was sole author of this review

Note

"ERAP for the Masses": ERAP is the nickname of former President Joseph Estrada (July 1998–January 2001). His campaign slogan was "ERAP for the Masses". Estrada or ERAP was a former movie star who constantly portrayed lead characters who came from the poor and defended the poor from oppressors and exploiters. Thus his campaign slogan became very popular among voters coming from the masses.

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