

# Not by money alone: the health poverty trap in rural Uganda

By Viola N Nyakato<sup>1</sup> and Wim Pelupessy<sup>2</sup>

## **Abstract**

*This article discusses a 'health poverty trap' among rural households in Uganda and a framework of minimum health improvement and household productivity indicators that are tailored by social cultural situations. It is an attempt to identify the underlying nature and causes of persistent poverty in Uganda. Non economic community and intra household variables and relationships influence utilization of preventive health services and household productivity capacity. Social cultural factors which affect the distribution of family labor, alcoholism, food insecurity and poor nutrition, poor hygiene, and women participation in the household must be included in poverty reduction and health promotion agendas of rural Uganda.*

## **1. Introduction**

The recent increase in the awareness and interest in the multidimensional nature of poverty is a departure from the exclusive consideration of income and consumption shortfalls of a predetermined basic minimum level (Tsui Kai-yuen, 2000). However in practice the monetary approach mostly retains its dominance in descriptions and analysis, both nationally and internationally (Ruggeri Laderchi et al 2003; Bourguignon et al 2003). This is frequently the case for studies on poverty dynamics (Tony, Hulme, and Kanbur 2008). Without underestimating the weight of economics, we should consider the non-economic aspects of deprivation in the broadest sense (Shepherd 2007; Woolcock 2007).

According to Robyn and Durrheim (2007) poverty dimensions include: life expectancy, caloric intake, height and weight, formal education, literacy, health, access to public goods, adequate

---

<sup>1</sup> Faculty of Development Studies, Mbarara University of Science and Technology (MUST), Uganda; Contact [vnyakato@yahoo.co.uk](mailto:vnyakato@yahoo.co.uk)

<sup>2</sup> Development Research Institute (IVO), University of Tilburg University, the Netherlands; Contact [pelupessy@uvt.nl](mailto:pelupessy@uvt.nl)

housing, employment, the environmental impact and income. By definition poor people have fewer resources, and may be forced to sell what assets they have, including land and livestock, or borrow at high interest rates to deal with an immediate crisis caused by health problems. Despite these explanations, the causal relations in poverty trends are complex, health as a poverty dimension continues to have cross cutting characteristics that encompasses productive capacity as well as other direct and indirect costs.

While ill health and poverty are mutually reinforcing and can generate a vicious circle of deterioration and suffering, studies are often concentrated on how poverty is bad for health (Kawachi and Kennedy, 1997). The predominant explanations and theories on the relationship between health and poverty at a micro level present a unidirectional representation such as how modest out-of-pocket costs for health services can drive families in poverty (Whitehead et al, 2001). The experience in many low income countries continues to suggest that ill health is not only a manifestation of poverty; it is also a cause and a key human development indicator (Haines et al, 2000; Kanbur and Mukherjee 2003, Muhaondwa 1986; Zhang and Zhang, 2005).

Therefore, a health poverty trap will be introduced as an indication of how poor health conditions and poverty reinforce each other, making it difficult for poor population groups with health problems to break out of poverty. This can also be seen as insufficient economic productivity of individuals, households and the entire community, due to persistent poor health conditions. About 20 per cent of Uganda's mainly rural population still lives under conditions of chronic poverty, despite high economic growth rates and successful poverty reduction strategies. In this paper we will discuss the elaboration of an approach to break the health poverty trap of low-income populations in Uganda, based on a framework of minimum health improvement, socioeconomic progress and tailored by socio-cultural situations. The arguments will be unfolded in the following five sections. After this introduction we discuss the poverty dynamics in Uganda in section 2. The explanation of the health poverty trap will be in the next section 3. Section 4 will present the socioeconomic and cultural aspects. The policies of the Ugandan government will be presented in section 5. The intra-household relations and orientation of research on way-outs of the health poverty trap will be treated in section 6, while the concluding remarks will finish the paper.

## **2. Multidimensional poverty dynamics**

The 1999 Uganda participatory poverty assessment project (UPPAP) reports that poor Ugandans are mainly internally displaced persons in areas of conflict, civil war and HIV/AIDS orphaned children, marginalized groups in official decision making processes, the unemployed,

elderly and disabled persons, and people in remote rural areas (Accorsi, Fabiani, Nattabi, Corrado, Iriso, Ayella, Pido, Onek, Ogwang, and Declich 2005; Uganda 1999). The common poverty pattern seems to be of a structural nature and the persisting concentration in the northern region of the country is shown as a case of long standing conflicts. In the period 1992-2000 the North showed the highest poverty (60-70%) and chronic poverty (30%) rates, which apparently confirms the qualification (Appleton and Francis 1998; Krishna, Lumonya, Markiewicz, Mugumya, Kafuko, and Wegoye 2007; Lawson, McKay, and Okidi 2003; Okidi and Mckay 2003; Okidi and Mugambe 2002). Further insights by poverty analysts on Uganda give a more dynamic picture where groups of people have been escaping from and falling into poverty. For the North more than a tenth of the population had been moving out of and a quarter moving into poverty in the referred a period (Lawson et al, 2006).

From Table 1 it will be clear that poverty and especially chronic poverty is very much concentrated in rural areas and not only in the remote ones.

**Table 1: Poverty dynamics Uganda (1992/1999 panel data)**

Poverty status (%)					
Location	Chronic	Moving out	Moving in	Never poor	Total
National	18.9	29.6	10.3	40.9	100
Rural	20.5	30.7	11.1	37.6	100
Central	13.8	29.7	8.5	47,8	100
East	16.4	36.8	10.4	36.2	100
West	16.2	27.2	8.7	47.6	100
North	38.9	22.9	18.1	20.1	100
Central-West *)	20.4	24.0	15,0	40.6	100
Agriculture **)	23.3	63,2		13.5	100

Source: Lawson et al, 2006; Krishna et al., 2006, World Bank, 2006

Notes: \*) 36 villages, 25 years \*\*) agricultural self-employed, 1992-1996

It should be mentioned that poverty has been identified by lack of income to meet the basic needs of a household. From a multidimensional perspective Amartya Sen (1985) relates poverty to the key capabilities to function in society. This inspired Bastiaensen et al (2005) to define the poor as “those human beings who for one reason or another almost systematically end up at the losing end of multiple bargains”. This may include the working poor. Another important variable is chronic poverty, which “is that poverty which traps individuals and households in severe and multidimensional deprivation for several years and is often

transmitted across generations(Lwanga-Ntale 2006). This paper will explain the importance of health aspects for the movement out of and into poverty by rural households in Uganda.

### **3. A health poverty trap**

We describe a 'poverty trap' as a vicious circle that continuously runs through unfavorable household socioeconomic and cultural characteristics; such as unequal distribution of family labor, food insecurity and poor nutrition, poor hygiene, problematic intra-household relations, low household productive capacity and others. Poverty traps are persistent in Africa, specially in Sub-Saharan countries due to low-productive agriculture, small markets and high transport costs, slow technology diffusion, but also considerable health problems (Sacks et al, 2004). The 'health poverty trap' is explained as a state of being trapped into low productive capacity and income deprivation due to ill health conditions and the related health and social costs. Individuals', households' and the entire community's low productive capacity may also be due to poor health conditions related to household's and the community's beliefs and attitudes towards certain social cultural situations at the household level that determine family decision making.

While primary health indicators may provide a measure of the multidimensional nature of poverty (McCally, Haines, Fein, Addington, Lawrence, and Cassel 1998), much of what is written about the relationship often implicitly assume the causal direction as from wealth to health(Kanbur and Mukherjee 2003). Therefore the possibility that either at the individual or population level there can be a causal link running from health to wealth should be considered. To generate a mutually reinforcing virtuous cycle, the causality should run both sides(Leon and Walt 2001). This view is not new; it was a central part of the ideas of Edwin Chadwick, the nineteenth century public health care pioneer who emphasized measures that deal with the underlying causes of increases in family size, social production of illness and individual responsibility to live a healthy lifestyle (Krieger 2001; Shaphin 1997). In many cases primary health care has been assumed to be a prerogative for economic growth. Sen argues that while plenty of evidence show that income and health move together the connection is weakened by two major influences; how the income generated by economic growth is used to expand public services adequately and reduce the burden of poverty and when an economy is poor, how to achieve health improvements through using the available resources in a socially productive way (Sen 2001).

The evidence is that several of the great takeoffs in the economic history such as the rapid growth of Britain during the industrial revolution; the takeoffs in the US south in the early 20<sup>th</sup> century; the rapid growth of Japan in the 20<sup>th</sup> century; the dynamic development of Southern

Europe and East Asia in the beginning of 1950s and 60s were supported by important breakthroughs in public health, disease control and improved nutrition intake. The global declines in mortality that have been observed over the past 200 years have been importantly boosted by increased availability of calories in diet and advances in public health and medical technologies in Europe (R.W. Fogel 2004). The few available empirical (macro and micro) studies on Latin America show that health plays an important role in economic growth (Bloom, Canning, and Jamison 2004).

In the present paper we try to explain the discrepancy between health improvement and poverty reduction in the Ugandan context, by defining the socioeconomic and cultural determinants of health outcomes and wealth creation.

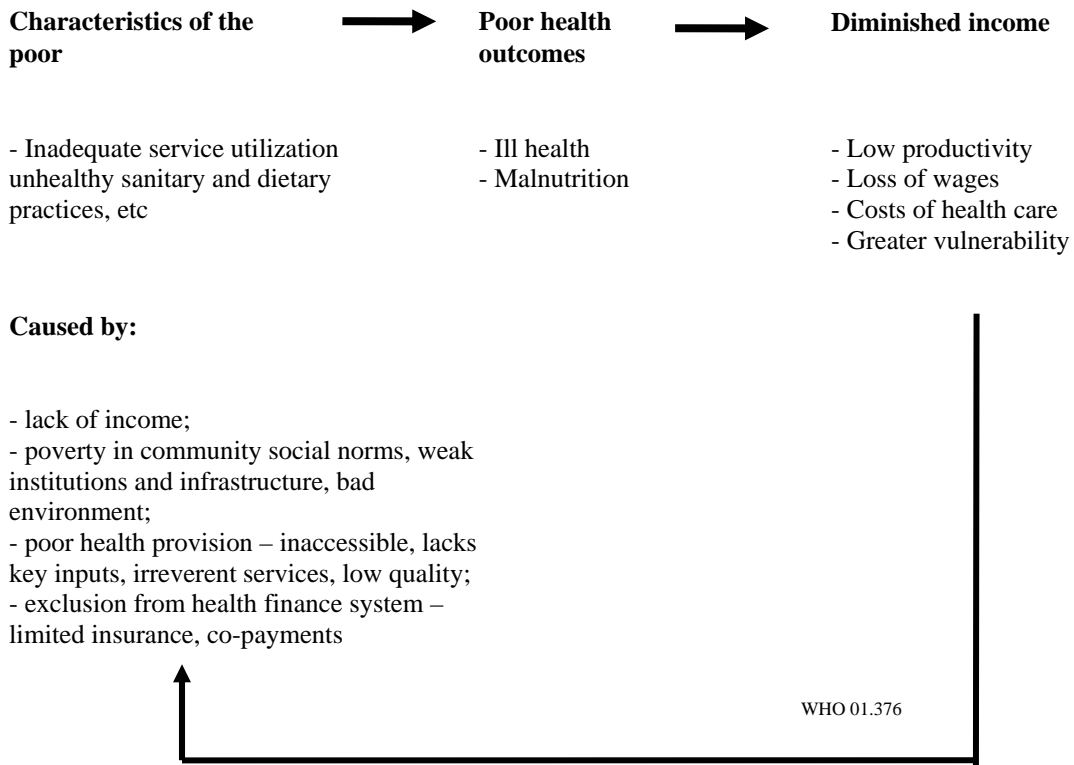
#### **4. Underlying factors of health improvement and poverty reduction**

The central attention of this paper is about the way socioeconomic and cultural situations affect individual and household health outcomes and the respective effects on productivity, priorities and capabilities. Numerous explanations and theories on the relationship between health and poverty present a unidirectional reasoning, such as how limited out-of-pocket costs for public and private health care services drive families into poverty, and increase poverty of those who are already poor – a situation Whitehead and her colleagues have called ‘medical poverty trap’ (Whitehead, Dahlgren, and Evans 2001). Other studies focused on the impact of user fees on poor household incomes (McIntyre, Thiede, Dahlgren, and Whitehead 2006; Nanda 2002; Shaw and Griffin 1995), which directly affect health care seeking behaviour among the poor in transitional economics (Segall, Tipping, Lucas, Viet, Tam, Xuan, and Huong 2000). As part of the reforms of the health system Uganda abolished user fees for first level government facilities in March 2001, which improved the access of poor women and children considerably (Kirunga et al, 2006).

The question has remained whether poor household’s failure to pay for health services in the past had sustained ill health, reduced productive capacity and might had led to impoverishment (Xu, Evans, Kadama, Nabyonga, Ogwal, Nabukhonzo, and Aguilar 2006). Haines and others discuss that when ill health hurts the main earner in poor families, it has severe implications for economically dependant family members and particularly children (Haines, Heath, and Moss 2000). The magnitude of this situation is illustrated by national household surveys and participatory poverty alleviation studies (Fu 1999; Nahar and Costello 1998; Tripping 2000; Uganda 1999). As presented in this section, social cultural situations continue to meet limited attention; as a result the circle of reducing poverty at the household level remains incomplete. Although social cultural factors like social norms tend to be

mentioned in most health promotion and poverty reduction strategies they are hardly operationalised. The following framework on health poverty may highlight underlying factors:

### Cycle of health and poverty



According to WHO 2001 report on macroeconomics and health, the main components of ill health in low income countries continue to include HIV/AIDS, malaria, tuberculosis (TB), childhood infectious diseases, maternal and prenatal problems, micronutrient deficiencies and tobacco related illnesses (Sachs 2001). If these conditions were controlled in conjunction with enhanced programmes of family planning, impoverished families could not only enjoy longer and healthier lives, but also be more productive. The linkages of health outcomes, poverty reduction and long-term poverty reduction are clear and much stronger understood than when it comes to underlying components or what this paper explains as the household social and cultural situations – community and cultural preferences, attitudes and norms(Ensor and Cooper 2004).



With regard to family size, infant and maternal mortality rates have remained highest and have not improved over the past five years (Okuonzi 2004). Much of the discussions about health improvement, inequality and poverty reduction still lack localized research and examples to understand the dynamics that may worsen the situation (Tashobya, McPake, Nabyonga, and Yates 2006). Extra efforts in identifying and discussing a framework on social cultural situations such as the social position of a woman, gendered relations and other related factors could enhance the capacity to improve health and rural households productivity (Braunholtz-Speight Rim and Nicola 2008).

## **5. Uganda's policies**

Countries with healthy populations and a good policy environment tend to grow faster. This apparent correlation between health and wealth operates through a number of channels including the effects of improved health on demography, education, the labor market and investment. Health and wealth are intricately and unquestionably related (Hommoudi and Sachs 1999; Sachs 2001). To determine and sustain improved population health require interlinking political, economic, social, cultural, environmental, behavioral and biological factors (Ziglio, Hagard, and Griffiths 2000). However, the burdens of disease in most low-income regions particularly sub Saharan Africa stands as a severe barrier to economic growth. Health improvement must be addressed centrally in any comprehensive development strategy (Diane McIntyre 2006 ). Reducing poverty in Uganda has been registering forward and backward movements, where income poverty fell drastically in the 1990s from 56% in 1992 to 44% of the population in 1997 and more recently the 2000 household survey reported a further decline to 35%, however, after this year the proportion of the people living below the poverty line rose to 38% in 2003 (Byaruhanga 2002; Uganda 2004).

The national poverty reduction priorities are health (public health care), education, rural feeder roads and safe and clean water (Woodhouse 2005). The government's 2004/2005 and 2007/2008 Poverty Eradication Action Plan (PEAP) aim at achieving increases in per capita income and consumption, reversal of the growing inequality trends and raising savings of the poor (Uganda 2004). While education, water and sanitation are important, household (maternal and child) health status have remained both a necessary condition and a prerequisite for development and households' economic status (Goujon and Lutz 2004; WorldBank 2005). In Uganda ill health continues to be named as a cause of poverty more than others (Bonnell 2000; Yates, Kirunga, Cruz, McPake, Ssenkooba, Murindwa, Bataringaya, Nazerali, and Omaswa 2006). For nearly two-thirds of the households in the Central and Western regions of Uganda

who descended into poverty over the past 25 years this was due to ill health and health related costs (Krishna et al. 2007).

In spite of the significance of health for Uganda's economic development (Appleton 2000; Filmer and Pritchett 1999), health improvement still remains a challenge (Zaramba 2006). In the 1995/96 the burden of disease (BOD) study using the discounted life years (DLYs) measure found that 75% of all DLYs are due to preventable diseases with five of them<sup>3</sup> accounting for approximately 60% of the total burden (Jeppsson, Okuonzi, Ostergren, and Hagstorm 2004). In general, the 1990's registered poor health indicators in particular unimproved child and maternal health outcomes which prompted the government of Uganda and the development partners to embark on improving health systems performance (Yates et al. 2006). As a result the government initiated a process of preparing a National Health Policy and a Health Sector Strategic Plan.

The policy plans focus on reducing child and maternal mortality, including provision of emergency obstetrics care closer to rural women and further development of prevention, treatment services for malaria and HIV/AIDS and respective utilization of financial resources for the sector (Byaruhanga 2002). The changes are operationalized in the health sector strategic plans (HSSP) 2000/1, 2004/5, 2009/10 and the Uganda Poverty Eradication Plan (PEAP) with the overall objective of delivering the Minimum Health Care Package (UMHCP) to all Ugandan households (Muhwezi 2005). The UMHCP is categorized in preventive, curative clinical and population based health services. The use of preventive services - immunization, antenatal care, delivery care, contraceptive services, voluntary counseling and testing for HIV/AIDS improved after the abolition of user fees in March 2001. This utilization is still low among rural dwellers and poor socioeconomic groups (Deininger and Mpuga 2005).

The package targets the most common diseases using the most cost effective interventions designed to shift spending towards areas of greatest effectiveness. These include: increasing resource allocation for primary health care, abolition of users' fees in public facilities, expansion of rural lower health facilities, provision of subsidies for Private Not for Profit (PNFP) sub sector, introduction of health sub district structure, recruitment of qualified health workers and increase in the volume of essential drugs purchased for health centre (Gwatkin

---

<sup>3</sup> Perinatal and maternity related conditions 20.4%, malaria 15.4%, Acute lower respiratory tract infections 10.5%, AIDS 9.1%, Diarrhea 8.4%

2007; Pakhurst, Penn-Kekana, Blaauw, Balabanova, Danishevski, Rahman, Onama, and Ssengooba 2005).

## **6. Intra-household differences**

According to the 2005 African Region Human Development report, Uganda has the world highest maternal and child mortality rates: 505/10000 and infant and under five mortality rates at 101 and 152 per 1000 live births respectively (WorldBank 2005). The most important contributor to these high mortality relates to a combination of high fertility and short birth spacing. Recent studies show that with regard to this problem, Uganda needs to prioritize efforts to increase the use of modern family planning methods if women have to have their desired family size and birth (Krishna et al. 2007; Okuonzi 2004). Other efforts have to be directed to provision of obstetric care and addressing adolescent reproductive health needs. However, the results of recent research on contemporary fertility transitions are quite diverse. Increasing life expectancy and rising permanent income have negative impacts on fertility in developing countries (Bollen, Glanville, and Stecklov 2007; Bongaarts and Watkins 1996; Zhang and Zhang 2005). Bongaarts and Watkins showed that developing countries of practically all continents had strongly decreasing fertility rates in the post 1950 period, which in general coincided with their increasing Human Development Index (HDI). Sub-Saharan Africa countries were the exception with more or less stable fertility rates, accompanying their HDI growth. The authors indicated the importance of processes of social interactions consisting of the diffusion of information and ideas, their evaluation and the social influence of perceptions (Bongaarts and Watkins 1996). Further studies are needed, when one considers the early strong fertility decline since the 1960s of African. South African women that predates the establishment of family planning programmes and other modern contraceptive means (Moultrie and Ian 2003).

Studies have shown that a household is an important 'producer' of health and influences health outcomes notwithstanding the availability of health services (Lindelov 2008). Thus the need to discuss household based factors that influence utilization of birth control and other services by analyzing household social cultural constraints and the overall effect on household productivity capacity.

Using health indicators for poverty reduction means improvement in the major health outcomes, which include; maternal and child mortality and morbidity rates, medical and sanitary facilities and nutrition. The reverse of these indicators is used by Gwatikin and others to describe a failing and inequitable health system (Gwatikin, Bhuiya, and Victora 2004).

Improvement in these health indicators leads to increasing household wellbeing which can further facilitate health improvements, and so on.

In developing countries most health improvement theories and practices continue to be dominated by technical, financial, physical and material reasoning than by socioeconomic and cultural ones (Botes and Rensburg 2000; Tashobya, McPake, Nabyonga, and Yates 2006). In 2004 a study on Uganda's implementation of the national health policy concluded that the 1997/1998 district primary health care fiscal allocation increased up to approximately 2.4 million US dollars which was below the USD 4 million of the original national projection (Jeppsson, Okuonzi, Ostergren, and Hagstorm 2004).

In 2002 a study on health priorities of the people in Uganda found out that socially stigmatized diseases and health conditions were considered to be more serious compared to non-stigmatized conditions. In spite of their low prevalence, poverty and lack of knowledge were the perceived major causes of ill-health in the community (Kapiriri, Norheim, and Heggenhougen 2002). Literature on Uganda's health systems and poverty reduction strategies is continually dominated by selective studies on HIV/AIDS, increase of resources by the local government and the importance of the living conditions of (Buvé, Bishikwabo, and Mutangadura 2001), when there are other factors that still influence the vulnerability by creating poor health and poverty traps (Barrientos 2007; Collins 2007).

Nyakato et al (2007) identified a combination of underlying causes for ill health and low productivity among local communities in Southwestern Uganda. These include: unequal distribution of family labor, alcoholism, food insecurity and poor nutrition, poor hygiene, large family size, social relations, intra-household relations in particular among husband and wife, lack of women participation and exclusion in general. These factors link together in a complex web and have commonality that can cause a continuous web of low productivity and stagnant maternal and child health indicators in rural communities in Southwestern Uganda. The multiple effects of these factors on health outcomes at the local level (Schulz, Parker, Israel, Allen, Decarlo, and Lockett 2002), make them essential components of building community capacity to create change (Goodman, Speers, McLeroy, Fawcett, Kegler, Parker, Smith, Sterling, and Wallerstein 1998), to sustain improved health and wealth indicators and stand at the odds of these circumstances (Lafond 1995). However, there is lack of research evidence on how the above-mentioned factors should be handled for rural health improvement and poverty reduction. There is need to find out the causal relationship between these factors, with health variables and levels of income. The consideration of the intra-household differentiation is

important to study internal decision-making processes of differential access to resources(Bird 2004).

## **7. Concluding remarks**

The persistence of a health poverty trap depends on economic and non-economic community and intra-household variables and relationships. In the paper we have concentrated on the non-economic ones, paying attention to intra-household relationships, which in rural areas of Uganda are still affected by socially stigmatized health practices. The household still remains the primary unit of health promotion and production in most rural communities and therefore effective research on the simultaneous effects of household social cultural situations has to be drawn at the household level. Policies and strategies to facilitate community and individual norms and value change are more than needed. Social cultural factors which affect the distribution of family labor, alcoholism, food insecurity and poor nutrition, poor hygiene, and women participation in the household must be included in poverty reduction and health promotion agendas of rural Uganda.

Poverty reduction and health promotion interventions, in the socio-cultural sphere focus on long term results and the elimination of underlying social barriers to household productive capacity and improved health, may become the break through a health poverty trap. Partly due to the predominance of income measures, poverty reduction interventions are constrained by expectations to produce short-term results. However, only a long-term perspective on pro-poor policies is realistic in reaching a higher sustainable level of welfare for the poorest rural groups. Only then will the poor and marginalized be able to take responsibility of their livelihoods and contribute actively to interventions that are effective in improving their livelihoods.

Mbarara/Tilburg

August 25, 2008

## References

- Accorsi, S., M. Fabiani, B. Nattabi, B. Corrado, R. Iriso, E. O. Ayella, B. Pido, P. A. Onok, M. Ogwang, and S. Declich. 2005. "The disease profile of poverty: morbidity and mortality in northern Uganda in the context of war, population displacement and HIV/AIDS." *Transactions of the Royal Society of Tropical Medicine and Hygiene* 99:226-233.
- Appleton, Simon. 2000. "Education and Health at the Household Level in Sub-Saharan Africa." *Paper provided by Chicago - Graduate School of Business* 33.
- Appleton, Simon and Teal Francis. 1998. "Human Capital and Economic Development." Centre for the Study of African Economics, University of Oxford, Oxford.
- Barrientos, A. 2007. "Does vulnerability create poverty traps?" *Manchester: IDPM/Chronic Poverty Research Centre (CPRC)*. Working Paper 76. .
- Bird, Kate. 2004. "Chronic Poverty and Understanding." *CPRC Working Papers*.
- Bloom, E, David, David Canning, and T Jamison, Dean. 2004. "Health, wealth, and welfare." *Finance and development* 41:10 - 15.
- Bollen, Kenneth, Jennifer Glanville, and Guy Stecklov. 2007. "Socio-economic status, permanent income, and fertility : A latent-variable approach." *Population Studies* 61:15 - 24.
- Bongaarts, John and Cotts Watkins, Susan 1996. "Social Interactions and Contemporary Fertility Transitions." *Population and Development Review* 22:639 - 82.
- Bonnel, R. 2000. "Economic analysis of HIV/AIDS." World Bank.
- Botes, L and D Rensburg. 2000. "Community participation: nine plagues and twelve commandments." *Community Development* 18:41 – 58.
- Braunholtz-Speight Rim, Caroline, Harper and Jones Nicola. 2008. "Progressive social change – women’s empowerment." *Chronic Poverty Research Centre. Uganda*. Policy Brief no. 12.
- Buvé, A, Nsarhaza Bishikwabo, K, and G Mutangadura. 2001. "The spread and effect of HIV-1 infection in sub-Saharan Africa." *The Lancet* 359:2011-2017.
- Byaruhanga, Charles 2002. "Poverty reduction and public sector reform in Uganda: the roles of institutions in the past experience and challenges for the way forward." in *'integrating structural and budget reforms for a better performing public sector'*. Adam Smith Institute, London.
- Collins, A, Patricia 2007. "Knowledge into action? Understanding ideological barriers to addressing health inequalities at the local level." *Health Policy and Planning* 80:158 – 171.
- Deininger, Klaus and Paul Mpuga. 2005. "Economic and welfare impact of abolition of health user fees: Evidence from Uganda." *Journal of African Economies* 14:55 - 91.
- Diane McIntyre, Michael Thiede, Göran Dahlgren, and Margaret Whitehead. 2006 "What are the economic consequences for households of illness and of paying for health care in low- and middle-income country contexts? ." *Social Science & Medicine* 62:858-865.
- Ensor, Tim and Stephanie Cooper. 2004. "Overcoming barriers to health service access: influencing the demand side." *Health Policy Plan.* 19:69-79.
- Filmer, D and L Pritchett. 1999. "The impact of public spending on health: does money matter?" *Soc Scie Med* 49:1309 - 1323.
- Fu, W 1999. *Health care for China’s Rural Poor, international policy programme*. Washington: World Bank.
- Goodman, Robert M., Marjorie A. Speers, Kenneth McLeroy, Stephen Fawcett, Michelle Kegler, Edith Parker, Steven Rathgeb Smith, Terrie D. Sterling, and Nina Wallerstein.

1998. "Identifying and Defining the Dimensions of Community Capacity to Provide a Basis for Measurement." *Health Educ Behav* 25:258-278.
- Goujon, Anne and W Lutz. 2004. *Future Human Capital: Population Projections by level of Education*, Edited by W. Lutz. UK and USA: Earthscan.
- Gwatkin, R, D 2007. "10 best resources on health equity." *Health policy planning* 22:348 – 351.
- Gwatkin, R, D, , Abbas and Bhuiya, and G Victora, Cesar 2004. "Making healthy systems more equitable." *The Lancet* 364.
- Haines, Andy , Iona Heath, and Fiona Moss. 2000. "Joining together to combat poverty: everybody welcome and needed." *Quali. Health care* 9:4-5.
- Hommoudi, A and Jeffrey Sachs. 1999. "'Economics Consequences and Health Status: A review of the Evidence' " Center for International Development at Harvard University.
- Jeppsson, Anders, Agatre Okuonzi, Sam, Per-olof Ostergren, and Bo Hagstorm. 2004. "Using burden of disease/cost effectiveness as an instrument for district health planning: experience from Uganda." *Health policy*.
- Kanbur, Ravi and Diganta (March 2003) Mukherjee, , . Colchester: . 2003. "Premature Mortality and Poverty Measurement'." University of Essex - Working Papers of the Institute for Social and Economic Research.
- Kapiriri, Lydia , OF Norheim, and Kristian Heggenhougen. 2002. "Whose priorities count? Comparison of community-identified health problems and Burden-of-Disease-assessed health priorities in a district in Uganda." *Health Expectations* 5:55.
- Krieger, Nancy. 2001. "Theories for social epidemiology in the 21st century: an ecosocial perspective." *International Epidemiological association* 30:668 - 667.
- Krishna, Anirudh, Daniel Lumonya, Milissa Markiewicz, Firminus Mugumya, Agatha Kafuko, and Jonah Wegoye. 2007. "Escaping poverty and becoming poor in 36 villages of central and western Uganda." *The Journal of Development Studies* 42:346 - 370
- Lafond, Anne 1995. "Sustaining primary health care." *Earth Scan*
- Lawson, David, A McKay, and J Okidi. 2003. "Poverty Persistence and Transitions in Uganda: A Combined Qualitative and Quantitative Analysis." *Manchester: IDPM/Chronic Poverty Research Centre (CPRC)*. Working paper 38.
- Leon, David and Gill Walt. 2001. *Poverty Inequality and Health; an international perspective; a divided world*. New York: Oxford University Press.
- Lindelow, Magnus. 2008. "Health as a family matter: Do intra - household education externalities matter for maternal and child health? ." *Journal of Development Studies* 44:562 - 585.
- Lwanga-Ntale, Charles. 2006. . . 2006. "A Social Protection agenda for Uganda's Poorest of the Poor." *Chronic Poverty Research Centre. Uganda*. Policy Brief No. 2.
- McCally, Michael, Andrew Haines, Oliver Fein, Whitney Addington, Robert S. Lawrence, and Christine K. Cassel. 1998. "Poverty and Ill Health: Physicians Can, and Should, Make a Difference." *Ann Intern Med* 129:726-733.
- McIntyre, Diane, Michael Thiede, Goran Dahlgren, and Margaret Whitehead. 2006. "What are the economic consequences for household of illness and paying for health care in low - and middle - income country contexts?" *Soc Scie Med* 62:858 - 865.
- Moultrie, Tom and Timaeus Ian. 2003. "The South African fertility decline : Evidence from two censuses and a Demographic and Health Survey." *Population Studies* 57:265-83.
- Muhwezi, K, Jim. 2005. "Health Policy Statement 2005/2006." edited by M. o. Health: The Republic of Uganda.

- Nahar, S. and A. Costello. 1998. "Research report. The hidden cost of 'free' maternity care in Dhaka, Bangladesh." *Health Policy Plan*. 13:417-422.
- Nanda, Priya 2002. "Gender Dimensions of User Fees: Implications for Women's Utilization of Health Care." *Reproductive Health Matters* 10:127-134
- Okidi, John and Andrew Mckay. 2003. "Poverty Dynamics in Uganda: 1992 - 2000." *Chronic Poverty Research Centre CPRC Working Paper 27*.
- Okidi, John and Gloria Mugambe. 2002. "An Overview of Chronic Poverty and Development Policy in Uganda. ." *CPRC Working Papers* 11.
- Okuonzi, Agatre, Sam. 2004. "Learning from failed health reform in Uganda." *BMJ* 329:1173 - 1175.
- Pakhurst, Oliver, Justin, Loveday Penn-Kekana, Duane Blaauw, Dina Balabanova, Kirill Danishevski, Azizur Rahman, Syed, Virgil Onama, and Freddie Ssenooba. 2005. "Health systems factors influencing maternal health services: a four - country comparison " *Health policy* 73:127 - 138.
- Sachs, Jeffrey. 2001. "Macroeconomics and health: Investing in health for economic development." World Health Organisation - Report of the commission on Macroeconomics and health.
- Schulz, J, Amy , A Parker, Edith, A Israel, Baebara, Alex Allen, Maggie Decarlo, and Murlisa Lockett. 2002. "Addressing Social determinants of health through community – based participatory research:The East Side Village Health Worker Partnership." *Health Education and Behavior* 29:326 – 341
- Segall, Malcolm, Gill Tipping, Henry Lucas, Dung Viet, Truong , , Thanh Tam, Nguyen Vinh, Dao Xuan, and Lan Huong, Dao 2000. "Health care seeking by the poor in transitional economies: The case of Vietnam." Institute of Development Studies, Brighton, England.
- Sen, Amartya 2001. *Economic Progress and Health*, Edited by D. Leon and G. Walt. New York: Oxford University Press.
- Shaphin, Steven. 1997. "A social history of truth: Civility and science in seventeenth - century England " *Journal of Social History* 30.
- Shaw, P and C Griffin. 1995. "Financing health care in sub Saharan Africa through user fees and insurance: directions in development." World Bank, Washington.
- Shepherd, Andrew 2007. "Understanding and explaining chronic poverty. An evolving framework for Phase III of CPRC's research." *Overseas Development Institute, London, CPRC Working Paper* 80.
- Tashobya, K, Christine, Barbara McPake, Juliet Nabyonga, and Rob Yates. 2006. *Health Sector reforms and increasing access to health services by the poor: what role has the abolition of user fees played in Uganda*, Edited by K. Tashobya, Christine, F. Ssenooba, and O. Cruz, Valeria. London, Kampala: Institute of Public Health, Makerere University Uganda and Health Systems Development Programme, London School of Hygiene and Tropical Medicine, UK.
- Tony, Addison , David Hulme, and Ravi Kanbur. 2008. "Poverty Dynamics : Measurement and understanding from an Interdisciplinary Perspective." *BWPI working Paper* 19.
- Tripping, G 2000. "The social impact of user fees for health care on poor household: commissioned report for ministry of health." Hanio, Vietnam
- Uganda. 1999. "Uganda Participatory Poverty Assessment Project Report." Ministry of Finance, Planning and Economic Development Kampala.
- . 2004. "Poverty Eradication Action Plan 2004/5 - 2007/8." edited by P. a. E. D. Ministry of Finance.

- Whitehead, M, G Dahlgren, and T Evans. 2001. "Equity and health sector reforms: can the developing countries escape medical poverty trap? ." *The Lancet* 358:833 – 6
- Woodhouse, Philip 2005. "Local Identities of Poverty: poverty narratives in decentralized government and the role of poverty research in Uganda." *GPRG Working Paper, Global Poverty Research Group*. 13.
- Woolcock, Michael. 2007. "Toward an Economic Sociology of Chronic Poverty : Enhancing the Rigor and Relevance of Social Theory. ." *Brooks World Poverty Institute, Manchester, CPRC Working Paper* 104.
- WorldBank. 2005. "Improving health outcomes for the poor in Uganda." Human Development Sector, Africa Region.
- Xu, Ke , B Evans, David, Partrick Kadama, Juliet Nabyonga, Peter Ogwal, Ogwang, Pamela Nabukhonzo, and Ana Aguilar, Mylena. 2006. "Understanding the impact of eliminating user fees: Utilization and catastrophic health expenditures in Uganda." *Soc Scie Med* 62:866 - 876.
- Yates, Rob, C Tashobya Kirunga, O Cruz, Valeria, Barbara McPake, Freddie Ssenooba, Grace Murindwa, Juliet Bataringaya, Hanifa Nazerali, and Francis Omaswa. 2006. *The Ugandan Health system reforms: miracle or mirage*, Edited by C. T. Kirunga, F. Ssenooba, and O. Cruz, Valeria. London, Kampala: Institute of Public Health, Makerere University, Uganda, Health Syetems Development Programme, London School of Hygiene and Tropical Medicine, UK and Ministry of Health Uganda.
- Zaramba, Sam. 2006. "Taking responsibility for sustainable improvements in the health status of Ugandans." in *Health Systems Reforms in Uganda: Processes and Outputs*, edited by C. T. Kirunga, F. Ssenooba, and O. Cruz, Valeria. UK: Health Systems Development Programme, London School of Hygiene and Tropical Medicine.
- Zhang, Jie and Junsen Zhang. 2005. "The effects of life expectancy on fertility, saving, schooling and economic growth: Theory and Evidence." *Scand. J. of Economics* 107:45 – 66.
- Ziglio, E., S. Hagard, and J. Griffiths. 2000. "Health promotion development in Europe: achievements and challenges." *Health Promot. Int.* 15:143-154.