



**NATIONAL INSTITUTE OF LABOUR
ECONOMICS RESEARCH AND DEVELOPMENT
(AN AUTONOMOUS INSTITUTE UNDER NITI
AAYOG, GOVERNMENT OF INDIA)**

**PROJECT WORK
ON**

**HOUSEHOLD MANAGEMENT FOR PREVENTING CATASTROPHIC
HEALTH EXPENDITURE: Role of Global Human Resource Management**

**Prepared by
Alexandre NIMUBONA**

**PROJECT REPORT PRESENTED IN FULFILMENT OF THE
REQUIREMENT FOR THE CERTIFICATE COURSE**

IN

INTERNATIONAL TRAINING PROGRAMME

ON

GLOBAL HUMAN RESOURCE MANAGEMENT

DELHI, JANUARY 11TH, 2017

Preface

Globalization and technological advancements have facilitated cross country trade in health services, especially in the mobility of human resource to seek job oversea. Health care has become one of the largest industries in globalization context and one of the most dynamic in terms of job creation and innovation. There have been impressive achievements in improved health status of populations. There remains, however, a recurrent concern regarding the adequacy of global human resource and the way they are currently used for protecting household from catastrophic health expenditure. Currently, the costs of delivering health care imposes a large, and often growing, burden in nearly all countries. To protect the population against the poverty due to these health expenses, a management of the households in a multicultural context proves important. This research organized in six chapters provides an overview of the role of global human resource management.

In the first chapter of introduction, explications of context, motivation, studied problem, research question, objectives and hypothesis are developed. The second chapter is a literature review. The third gives a brief description of Burundi country profile. The fourth chapter describes the followed methodology. The fifth presents and discusses results. The final chapter is conclusion and suggestions.

Abstract

Background: Financial protection for health of household is a common problem to all countries. About 25 million households around the world are pushed into poverty by the need to pay for health services. Conventional poverty estimates do not take into account direct health payments while they cause financial catastrophe to households, which may push them into poverty. The purpose of this study is to contribute to a better understanding of prevention of catastrophic health expenditure through a critical review of the role of global human resources management.

Methods: A survey by questionnaire is conducted to participants in international training program on global human resource management in India during the period of December 30, 2016 to January 3, 2017. Participants are chosen by convenience sampling. In 34 participants, 27 answered correctly. Others information are found in literature related to the research objective. Only documents published between 2000 and 2016 are used. This cross sectional study uses quantitative and qualitative approach to collect, treat and analyze data. Microsoft word and Excel 2010 are used.

Results: Household catastrophic health expenditure exist in all countries whatever their stage of development. Everywhere, the poor suffer the most, they become much poorer. The effects of population growth and household size in getting catastrophic health expenditure and poverty remain largely unrecognized. Health care are not financially accessible in 17/25 countries because of direct payment. Human resources for health have to reach into homes and communities to solve catastrophic health expenditure issues. So highly qualified multicultural managers are needed to increase globalize household cultures and help them managing their income.

Conclusion: Managing household for financial protection in health remains insufficient. The role of global human resource management should be to create healthy financial protection programs decentralized to household for developing more effective expenditure control strategies.

Dedication

This work is dedicated:

To God Almighty, who gave me strength and courage for its realization.

To my wife,

To my son,

To my parents,

To my brothers and sisters.

Acknowledgments

After an intensive period of six weeks, today is the day: writing this note of thanks is the finishing touch on my research. It has been a period of intense learning for me, not only in the scientific arena, but also on a personal level. Writing this research has had a big impact on me. I would like to reflect on the people who have supported and helped me so much throughout this period.

I would first like to thank my participant colleagues in international training program on global human resource management for their wonderful collaboration.

I would particularly like to single out the coordinator of this training program Dr. Ruby Dhar, I want to thank you for your excellent organization and for all of the opportunities I was given to conduct my research.

Special thanks go to Mrs. Richa Sharma for her comments and suggestions about results presentation.

In addition, I would like to thank my teachers and professors of NILERD for their valuable training. You definitely provided me with the tools that I needed to choose the right direction and successfully complete my project.

I would also like to thank the Indian Government for funding my training in India.

Finally, there are my friends.

Thank you very much, everyone!

Table of contents

Preface..... - 2 -

Abstract - 3 -

Dedication - 4 -

Acknowledgments - 5 -

Table of contents - 6 -

List of Tables..... - 8 -

List of figures - 8 -

Abbreviations - 9 -

Chapter 1: Introduction - 10 -

1.1. Clarification of keywords - 10 -

1.1.1. Household management - 10 -

1.1.2. Catastrophic health expenditure - 10 -

1.1.3. Human resources for health..... - 11 -

1.1.4. Global human resource management - 11 -

1.2. Context and justification - 11 -

1.2.1. Context - 11 -

1.2.2. Justification for the research..... - 12 -

1.3. Motivation of topic - 13 -

1.4. The research problem - 13 -

1.5. Research question..... - 15 -

1.6. Objectives - 15 -

1.6. Research hypothesis - 16 -

Chapter 2: Literature review..... - 17 -

2.1. Catastrophic health expenditure - 17 -

2.1.1. Factors determining catastrophic health expenditures..... - 17 -

2.1.2. Approaches to catastrophic health expenditures - 17 -

2.1.3. Measure of household catastrophic health expenditure..... - 19 -

2.2. Global Human Resource Management..... - 20 -

2.2.1. Globalization - 20 -

2.2.2. Global staffing: Sources of Human Resources’ - 23 -

2.2.3. Role of Global Human Resource Management - 25 -

2.2.4. Global Standards on Human Resources for Health - 27 -

Chapter 3: Burundi country profile - 28 -

3.1. Geographical location.....	- 28 -
3.2. Political background.....	- 29 -
3.3. Economic and social analysis.....	- 30 -
3.4. Food.....	- 31 -
3.4.1. Food in daily Life.....	- 31 -
3.4.2. Customs at ceremonial occasions.....	- 31 -
3.5. Commercial activities.....	- 31 -
3.6. Major industries.....	- 31 -
3.7. Trade.....	- 32 -
3.8. Urbanism, architecture, and the use of space.....	- 32 -
3.9. Tourist attraction in Burundi.....	- 33 -
3.10. Education.....	- 34 -
3.11. Health.....	- 35 -
3.12. Human resource management for health in Burundi.....	- 35 -
3.13. Effective and trends in human resources for health.....	- 35 -
Chapter 4: Research methodology.....	- 37 -
4.1. Type of study.....	- 37 -
4.2. Variables of study.....	- 37 -
4.3. Data collection.....	- 37 -
4.3.1. Secondary data.....	- 37 -
4.3.2. Primary data.....	- 38 -
4.4. Tools of data collection.....	- 38 -
4.5. Data collection techniques.....	- 39 -
4.5.1. Documentary analysis.....	- 39 -
4.5.2. Questionnaire administration.....	- 39 -
4.6. Sample determination.....	- 39 -
4.6.1. Target population.....	- 39 -
4.6.2. Sampling method.....	- 39 -
4.7. Research limitations.....	- 40 -
4.7.1. Study period.....	- 40 -
4.7.2. Field of study.....	- 40 -
4.8. Method of data analysis.....	- 40 -
Chapter 5: Results and discussion of research results.....	- 41 -
5.1. Household catastrophic health expenditure.....	- 41 -
5.2. Household size.....	- 42 -

5.3. Health care payment	- 43 -
5.4. Health care accessibility	- 44 -
5.5. Prevention of catastrophic health expenditure	- 45 -
5.7. Role of GHRM in prevention of CHE.....	- 46 -
Conclusion and suggestions	- 47 -
Conclusion.....	- 47 -
Suggestions.....	- 47 -
References	- 48 -
Annexes.....	- 53 -
Annexe 1 : Questionnaire.....	- 53 -
Annexe2 : Guide of documentary data analysis	- 54 -

List of Tables

Table 1: Political overview.....	- 29 -
Table 2: Snapshot of economic and social indicators	- 30 -
Table 3: Household size estimated by country.....	- 42 -
Table 4: Health insurance status by country.....	- 43 -
Table 5: Financial health care accessibility by country.....	- 44 -
Table 6: Preventing measures of catastrophic health expenditure	- 45 -
Table 7: Role of GHRM in prevention of CHE	- 46 -

List of figures

Figure 1: Effects of globalization on population health.....	- 22 -
Figure 2: Proportion of household catastrophic health expenditure by country	- 41 -

Abbreviations

CHE:	Catastrophic Health Expenditure
CTP:	Capacity to pay
FE:	Food Expenditure
GDP:	Gross Domestic Product
GHRM:	Global Human Resource Management
HBHI:	Household Based Health Insurance
ITP:	International Training Program
NILERD:	National Institute of Labour Economics Research and Development
OOP:	Out of Pochet
PPP:	Purchasing Pauer Parity
SE:	Subsistence Expenditure
THHE:	Total Household Health Expenditure
WHO:	World Health Organization

Chapter 1: Introduction

1.1. Clarification of keywords

1.1.1. Household management

In this research, a household is a person or a group of related or unrelated persons, who live together in the same dwelling unit, who share the same housekeeping arrangements, and who have the same eating arrangements¹.

As part of this research, household management refers to the various tasks associated with the organization, financial management, and day-to-day operations of a home. Household management depends on the individual's ability to carry out instrumental activities of daily living, which are activities necessary for independent living in the community. Household management can be divided into several different areas for purposes of description.

This research is interested in financial aspect of household management like paying health care.

1.1.2. Catastrophic health expenditure

When people have to pay fees or co-payments for health care, the amount can be so high in relation to income that it results in financial catastrophe for the individual or the household. Such high expenditure can mean that people have to cut down on their subsistence needs such as food and clothing, or are unable to pay for their children's education². Similarly, large health care payments can lead to financial catastrophe and bankruptcy even for rich households.³ So, catastrophic health expenditure occurs with health care payments at or exceeding 40% of a household's capacity to pay in any year⁴.

¹VAN WYK, S. S., MANDALAKAS, A. M., ENARSON, D. A., *et al.* Tuberculosis contact investigation in a high-burden setting: house or household? *The International Journal of Tuberculosis and Lung Disease*, 2012, vol. 16, no 2, p. 157-162.

²XU, Ke, EVANS, David B., CARRIN, Guido, *et al.* Protecting households from catastrophic health spending. *Health affairs*, 2007, vol. 26, no 4, p. 972-983.

³Himmelstein, David U., Elizabeth Warren, Deborah Thorne, and Steffie J. Woolhandler. "Illness and injury as contributors to bankruptcy." SSRN 664565 (2005).

⁴Xu, Ke, David B. Evans, Guido Carrin, Ana Mylena Aguilar-Rivera, Philip Musgrove, and Timothy Evans. "Protecting households from catastrophic health spending." *Health affairs* 26, no. 4 (2007): 972-983.

The present research defines capacity to pay as household's non subsistence spending. Impoverishment occurs when a non-poor household becomes poor after paying for health services⁵.

1.1.3. Human resources for health

Human resources, when pertaining to health care, can be defined as the different kinds of clinical and non-clinical staff responsible for public and individual health intervention⁶.

1.1.4. Global human resource management

It is the process of managing people in international settings⁷. This research analyzes how household can be managed in global settings for preventing them from catastrophic health spending.

1.2. Context and justification

1.2.1. Context

According to the WHO, health financing that is designed to reduce catastrophic expenditures considers the following⁸:

- Extending population coverage through prepayment mechanisms,
- Protecting the poor and disadvantaged,
- Designing benefits package, and
- Deciding the level of cost-sharing by the patient.

In that context, health systems can deliver health services, preventive and curative, that can make a difference to people's health.

⁵ World Health Organization (WHO). Distribution of health payments and catastrophic expenditures methodology. Geneva, Switzerland, 2005.

⁶World Health Organization: World Health Report 2000. Health Systems: Improving Performance. Geneva. 2000. P.77.

⁷R.C. RAJAN, International Human Resource Management. Published in Business. March 2013. Owerpoint Templates Page 8.

⁸(2005). Designing health financing systems to reduce catastrophic health expenditure. (Vol. 2). Department of Health Systems Financing, World Health Organization.

Retrieved from http://www.who.int/health_financing/pb_2.pdf

However, accessing these services can lead to individuals having to pay catastrophic proportions of their available income and push many households into poverty⁹.

So, human resources for health plays pivotal role in the accessibility of health services and the overall population health of any country¹⁰.

The purpose of this research is to contribute to a better understanding of prevention of catastrophic health expenditure through a critical review of the role of global human resources management perceived by participants in ITP on GHRM at NILERD in 2016. It seems to this research that proper management of human resources both national and international is critical in improving financial accessibility of people to health care.

A refocus on role of GHRM in health care and more research are needed to develop new policies of prevention catastrophic health expenditure. It should be pointed out that effective international human resource management strategies are greatly needed to achieve better outcomes from and access to health care around the world.

1.2.2. Justification for the research

In all probability, health policy makers have long been concerned with protecting people from the possibility that ill health will lead to catastrophic financial payments and subsequent impoverishment. Yet catastrophic expenditure are always present because the how of health systems are financed on the wellbeing of households, are insufficient.

This problem is most severe in low and middle income countries. For example, a study in Vietnam showed that the number of households with catastrophic health expenditure and impoverishment increased during the period of 2002–2010¹¹.

Saito *et al.* showed that during 2014 period in Nepal, about 14% households faced catastrophic health expenditure and 25% Ugandan households experienced catastrophic health expenditure. About 4% experienced impoverishment due to health service payments¹².

⁹Ke Xu, David B Evans, Kei Kawabata, RiadhZeramardini, Jan Klavus, Christopher J L Murray, Household catastrophic health expenditure: a multicountry analysis, THE LANCET. Vol 362. July 12, 2003.

¹⁰ James, M.K., Barbara, M.L. 2012. Human Resources for Health Challenges in Fragile States: Evidence from Sierra Leone, South Sudan and Zimbabwe. The North-South Institute. August, 2012. P.1.

¹¹ Minh HV, Phuong KNT, Saksena P, James CD, Xu K. Financial burden of household out-of pocket health expenditure in Viet Nam: findings from the National living standard survey 2002-2010. SocSci Med. 2013;96:258–63.

¹² Saito E, Gilmour S, Rahman MM, GautamGS, Shrestha PK, Shibuya K. Catastrophic household expenditure on health in Nepal: a cross-sectional survey. Bull World Health Organ. 2014;92:760–7.

In light of the above, this research is convinced that catastrophic health expenditure and impoverishment indices offer guidance for developing appropriate health policies and intervention programs to decrease financial inequity¹³.

For this, household can be well protected from catastrophic health expenditure if human resources management for health are globalized.

1.3. Motivation of topic

According to the present research, financial protection in public health remains insufficient. The goal of policymakers should be to create healthy financial protection programs for developing more effective expenditure control strategies. A more globalized reform strategy of human resources management for health is needed to enhance the breadth, depth and height of health financial protection.

This research focuses on the best measure to protect household in more global way against catastrophic spending that can represent health care payment. And till now any study of the role of GHRM for health in prevention of catastrophic expenditure have been undertaken. This first one shall be then the tool reflection for public health managers.

1.4. The research problem

The WHO estimates that every year, approximately 44 million households, or more than 150 million individuals, throughout the world face catastrophic expenditure, and about 25 million households or more than 100 million individuals are pushed into poverty by the need to pay for health services¹⁴.

A 2007 study by Ke Xu. and colleagues presents somewhat similar figures: Around 150 million people suffer financial catastrophe each year, 100 million are pushed below the poverty line due to health expenditures, and more than 90% of them live in low-income countries.

¹³Kien, Vu Duy, et al. "Socioeconomic inequalities in catastrophic health expenditure and impoverishment associated with non-communicable diseases in urban Hanoi, Vietnam." *International Journal for Equity in Health* 15.1 (2016): 169.

¹⁴Ke XU, David B.Evans, G.CARRIN, et al. Designing health financing systems to reduce catastrophic health expenditure. WHO/EIP/HSF/PB/05.02. Geneva, 2005. P.2.

The study collected data from 89 countries representing 89% of the world's population, and likewise estimates the median incidence of financial catastrophe to be at 2.3%, with the problem being more severe among middle income countries, and worse among low income countries where the median is at around 2.5% and results for some countries reach up to nearly 10%.¹⁵ Catastrophic health expenditures are a significant concern for several reasons. Payments for medical care often exceed the capacity of poor households to pay, thus families often have to cut back on other necessities such as food, clothing, or education, in order to pay for health care.

The absence of these other necessities can, in turn, lead to other dire consequences. Catastrophic expenditures create a negative impact even when they are not incurred: Many people decide not to avail of health care services in anticipation of unaffordable costs for care, both direct (for consultations, tests, or medicines) and indirect (transport and food). Untreated illnesses are thus prolonged or even worsen, leading to lost earnings and other welfare effects.

With the same idea, millions of people around the world are prevented from seeking and obtaining needed care each year because they cannot afford to pay the charges levied for diagnosis and treatment¹⁶. For example, in Moldova: the proportion of people who did not seek care for financial reasons decreased between 2008 and 2012 from 29.2 to 14.8 %. Yet, access for the very poor is still a problem, as 29.1 % of the poorest quintile said they could not afford services or drugs in 2012.¹⁷

Protecting people from financial risks associated with health care expenditure is emerging as a crucial component of national health strategies in many low income and middle income countries.¹⁸

According to Kabene *et al* relationship between human resources management and health care expenditure is extremely complex. GHRM for health can and must play an essential role in health care sector reform¹⁹ to reduce this complexity.

¹⁵XU, Ke, EVANS, David B., CARRIN, Guido, *et al.* 2007. *Loc cit.*

¹⁶KeXu, David B. Evans, Guido Carrin, Ana Mylena Aguilar-Rivera, Philip Musgrove and Timothy Evans. Protecting Households From Catastrophic Health Spending, *Health Affairs* 26, no.4 (2007):972-983. doi: 10.1377/Health Aff. 26.4.972.

¹⁷https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4531477/pdf/12913_2015_Article_984.pdf

¹⁸VERGET,S et al.,Health gains and financial risk protection afforded by public financing of selected interventions in Ethiopia: an extended cost-effectiveness analysis. Vol 3 May 2015.

¹⁹KABENE, Stefane M., ORCHARD, Carole, HOWARD, John M., *et al.* The importance of human resources management in health care: a global context.*Human resources for health*, 2006, vol. 4, no 1, p. 1.

Despite the implementation of policies for universal health coverage in many countries of the world, catastrophic expenditure can occur in all countries at all stages of development.²⁰ For example, data from the National Sample Survey on Household Consumer Expenditure, which was conducted in all Indian states in 2004–2005 and 2009–2010 show that between 3.3 and 3.9 % of Indian households have suffered from catastrophic health expenditure²¹ and the cost of treatment for illness is reported to cause 85% of all cases of impoverishment.²²

In Burundi, poverty alleviation remains a major challenge because the impoverishment of families due to catastrophic individual health expenditure affects 0.5% of the population, or nearly 45,000 people per year. In other words, on average, 123 Burundians fall daily into poverty because of these catastrophic health expenditures²³.

1.5. Research question

The concern is now to answer this question:

What would be the role of global human resource management in household management to prevent catastrophic health expenditure?

1.6. Objectives

- Using the literature review, to analyze the extent of catastrophic health expenditure for households,
- Using a questionnaire addressed to participants in the course of ITP on GHRM, to identify the role of GHRM in prevention of these CHE.

²⁰XU, Ke, EVANS, David B., CARRIN, Guido, *et al.*, 2007, *loc cit.*

²¹RABAN, Magdalena Z., DANDONA, Rakhi, et DANDONA, Lalit. Variations in catastrophic health expenditure estimates from household surveys in India. *Bulletin of the World Health Organization*, 2013, vol. 91, no 10, p. 726-735.

²²ASANTE, Augustine D., PRICE, Jennifer, HAYEN, Andrew, *et al.* Assessment of equity in healthcare financing in Fiji and Timor-Leste: a study protocol. *BMJ open*, 2014, vol. 4, no 12, p. e006806.

²³Ministère de la Santé Publique et de la lutte Contre le SIDA, Etude sur le financement de la santé au Burundi. Rapport de synthèse. Mai 2014.

1.6. Research hypothesis

The following hypothesis comes to answer to the question see above in previous page:

The role of GHRM in preventing household from catastrophic health spending is:

- To ensure that human resource management policies are in tandem with culture of employees,
- To adapt national health policies to household's cultures and in international context.

Chapter 2: Literature review

2.1. Catastrophic health expenditure

Protection against catastrophic health expenditures can reduce poverty and improve overall welfare in society²⁴.

2.1.1. Factors determining catastrophic health expenditures

Three factors have to be present for catastrophic payments to arise:

- The availability of health services requiring out-of-pocket payments,
- Low household capacity to pay,
- Lack of prepayment mechanisms for risk pooling.

2.1.2. Approaches to catastrophic health expenditures

Two approaches are frequently applied in the literature²⁵:

A. Proportionality of in income

The first approach sets the threshold in terms of proportionality of income. This approach considers the out of pocket (OOP) payments as a proportion of income (X). That is (OOP/X). Thresholds used varied from 2.5% to 40%. However, using the same threshold for both the poor and rich households is problematic for equity reasons as richer households are more likely to exceed the threshold level with less adverse effect than the poor ones especially at higher thresholds levels.

B. Ability to pay

The second approach is based on ability to pay. This approach considers OOP payments in terms of a measure of ability to pay (y), such that (OOP/y) where $y = X - S_{exp}$.

²⁴HAUCK, Katharina, SMITH, Peter C., et GODDARD, Maria. The economics of priority setting for health care: a literature review. *Washington: World Bank*, 2004.

²⁵Wagstaff A, van Doorslaer E. Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993–1998. *Health Econ.*2003;12:921–34.

The S_{exp} is subsistence deductions, while X is income as indicated in the first approach above (or consumption expenditure).

Expenses allowed in S_{exp} to compute the ability to pay has been a subject of debate in the literature. For example, some studies compute ability to pay as income less actual food spending. However household food expenditure may not capture actual subsistence expenditure as food spending by higher income households may include non essential food.

To overcome this limitation, a method proposed by WHO expresses capacity to pay as effective income remaining after basic subsistence²⁶.

Subsistence expenditure (S_{exp}) is defined as the average food expenditure of households whose food expenditure share is in the 45th to 55th range. Hence $y = X - S_{exp, 45th/55th}$, with X as consumption expenditure. This methodology has been slightly modified by considering all necessities rather than food consumption only²⁷.

To allow for international comparability, while excluding non essential spending, the subsistence level could be based on some internationally recognized cut off such as the dollar-a-day poverty line used by the World Bank. Note that there is a push for the revision of this poverty line to USD 1.25 dollars a day²⁸. Like other measures, the use of a poverty line value such as the dollar a day cut-off, also has limitations. For example it introduces uncertainty arising from the construction of food purchasing power parity (PPP) conversion factors.

Using a flat rate deduction poses the additional problem that capacity to pay (y) could become zero or negative, leading to an undefined or negative ratio.

More recently, a number of researchers have used a methodology proposed by the World Health Organization to compute the subsistence expenditure and the catastrophic health spending and impoverishment. This methodology incorporates an approach that circumvents the weakness related to estimation of PPP inherent to the use of an international poverty line and also avoids the problem of negative capacity to pay. This WHO methodology uses a food share-based poverty line for estimating subsistence.

²⁶Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJ. Household catastrophic health expenditure: a multicountry analysis. *Lancet*.2003;362:111–7.

²⁷Pal R. Measuring incidence of catastrophic out-of-pocket health expenditure:with application to India. *Int J Health Care Finance Econ*. 2012;12:63–85.

²⁸Ravalion M, Chen S, Sangraula P. A dollar a day revisited. *The World Bank Econ Rev*. 2009;23:163–84.

In this approach the poverty line is defined as the food expenditure of the household whose food expenditure share of total household expenditure is at the 50th percentile²⁹.

2.1.3. Measure of household catastrophic health expenditure

A. Out of pocket health expenditure

Out of pocket health payments refer to the payments made by households at the point they receive health services. Typically these include doctor's consultation fees, purchases of medication and hospital bills.

Although spending on alternative and/or traditional medicine is included in out of pocket payments, expenditure on health related transportation and special nutrition are excluded. It is also important to note that out of pocket payments are net of any insurance reimbursement.

B. Household consumption expenditure

Household consumption expenditure comprises both monetary and in kind payment on all goods and services, and the money value of the consumption of home made products.

C. Food expenditure

Household food expenditure is the amount spent on all food stuffs by the household plus the value of family's own food production consumed within the household. However, It excludes expenditure on alcoholic beverages, tobacco, and food consumption outside the home (e.g. hotel and restaurants).

D. Poverty line and household subsistence spending

The household subsistence spending is the minimum requirement to maintain basic life in a society. A poverty line is used in the analysis as subsistence spending. There are many ways to define poverty. None of them are perfect considering the soundness in theory and feasibility in practice.

²⁹Amaya Lara J, Ruiz GF. Determining factors of catastrophic health spending in Bogota, Colombia. Int J Health Care Finance Econ. 2011;11:83–100.

Here a food share based poverty line is used for estimating household subsistence. This poverty line is defined as the food expenditure of the household whose food expenditure share of total household expenditure is at the 50th percentile in the country³⁰.

The catastrophic health expenditure is now calculated as follow:

Step 1: Calculation of subsistence expenditure (SE)

- Calculate food expenditure (FE)/total household expenditure (THHE),
- Identify the 45th - 55th percentile of FE/THHE,
- SE = Mean FE of 45th - 55th of FE/THHE.

Step 2: Calculation of capacity to pay (CTP)

- $CTP = THHE - SE$ (if $FE > SE$)
- $CTP = THHE - FE$ (if $FE < SE$)

Step 3: Calculation of catastrophic health expenditure (CHE)

Catastrophic health expenditure is present if out-of-pocket expenditure is more than 40 per cent of a household's capacity to pay³¹.

2.2. Global Human Resource Management

A firm's orientation to ethics is influenced largely by its national and organizational culture.

2.2.1. Globalization³²

The term "globalization" has acquired considerable emotive force. Some view it as a process that is beneficial a key to future world economic development and also inevitable and irreversible.

³⁰Xu K. Distribution of health payments and catastrophic expenditures methodology. ((HSF) DHSF, (EIP) CEaIfP eds.). Geneva: WHO Discussion Paper No. 2; 2005.

³¹Meena Daivadanam, K.R. Thankappan, P.S. Sarma& S. Harikrishnan, Catastrophic health expenditure & coping strategies associated with acute coronary syndrome in Kerala, India. Indian J Med Res 136, October 2012, pp 585-592.

³²Hellier,J., Stages of Globalization, Inequality and Unemployment.University of Lille 1 and LEMNA, University of Nantes Pers. address: 28 rue de Sévigné 75004 Paris FRANCE.September 2012.

Others regard it with hostility, even fear, believing that it increases inequality within and between nations, threatens employment and living standards and thwarts social progress.

As far as this research can judge that, globalization offers extensive opportunities for truly worldwide development but it is not progressing evenly. Some countries are becoming integrated into the global economy more quickly than others. Countries that have been able to integrate are seeing faster growth and reduced poverty. So, countries must be prepared to embrace the policies needed, and in the case of the poorest countries may need the support of the international community as they do so.

A. Stages of globalization

Five different stages in the development of a firm into a global corporation are identified:

Stage 1: It is the arm's length service activity of essentially domestic company which moves into new markets overseas by linking up with local dealers and distributors.

Stage 2: The Company takes over these activities on its own.

Stage 3: The domestic based company begins to carry out its own manufacturing, marketing and sales in the key foreign markets.

Stage 4: The Company moves to a full inside position in these markets, supported by a complete business system.

This stage calls on the managers to replicate in new environment the hardware, systems and operational approaches that have worked so well at home. It forces them to extend the reach of domestic headquarters, which now is to provide support functions such as personnel and finance, to all overseas activities.

Although stage four, the headquarters mentality continue to dominate. Different local operations are linked, their relation to each other established by their relation to the center.

Stage 5: The Company moves toward a genuinely global mode of operation. In this context, a company's ability to serve local customers in markets around the globe in ways that are truly responsive to their needs as well as to the global character of its industry depends on its ability to strike a new organizational balance. That is termed global localization, a new orientation that simultaneously looks both directions. Getting to stage five, however, means venturing on to new ground together. To make this organizational transition, a company must denationalize their operations and create a system of values shared by corporate managers around the globe to replace the glue a nation based orientation once provided.

B. Globalization of public health

The globalization of public health means that global awareness, analysis, and action must be improved. It also means that charting a different course of development is an ethical imperative. Addressing health challenges like catastrophic health expenditure requires coordinated responses at many levels: individual, family, community, national, and global.³³

C. Effects of globalization on public health

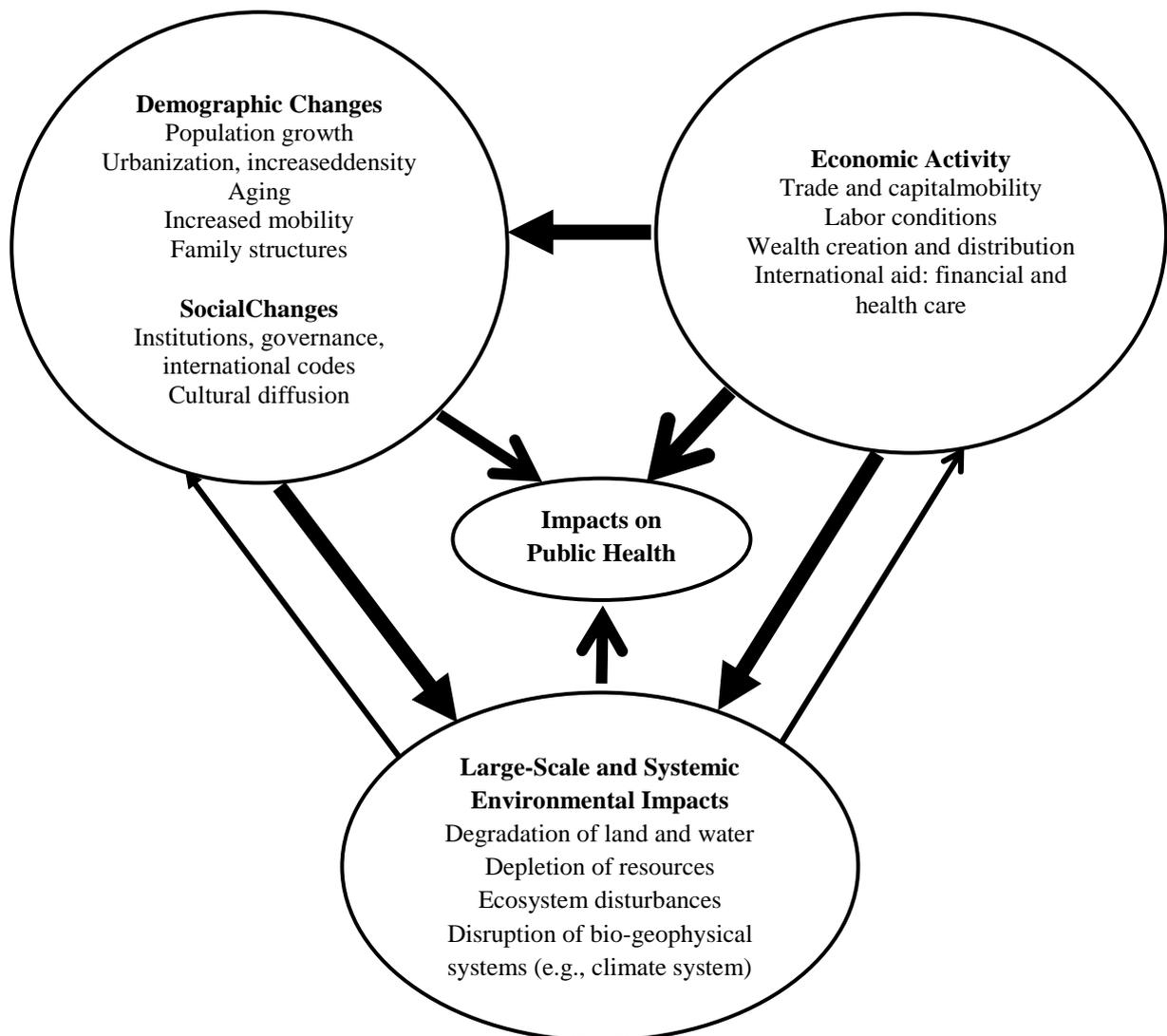


Figure 1: Effects of Globalization on Population Health

Source: McMichael, 2013.³⁴

The figure in previous page is a schematic representation of the three major domains social, economic, and environmental within which globalizing processes and changes are occurring.

³³YACH, Derek et BETTCHER, Douglas. The globalization of public health, II: The convergence of self-interest and altruism. *American journal of public health*, 1998, vol. 88, no 5, p. 738-744.

³⁴McMICHAEL, Anthony J. Globalization, climate change, and human health. *New England Journal of Medicine*, 2013, vol. 368, no 14, p. 1335-1343.

Shown are their main components, the two way interactions between them, and the central fact that all three domains influence the conditions for and levels of population health.

In particular, changes in population size, distribution, mobility, levels and types of economic activity, and global flows of capital and labor all have consequences for the environment, including the recent rapid increase in greenhouse-gas emissions as the primary cause of current climate change.

Those great contemporary environmental changes have diverse and far-reaching consequences for public health.

2.2.2. Global staffing: Sources of human resources^{35,36}

This research can tap four basic sources for human resources:

- Home country nationals,
- Host country nationals,
- Third country nationals, and
- Inpatriates.

A. Home Country Nationals

Home country nationals are managers who are citizens of the country where the organization is headquartered. In fact, sometimes the term headquarters nationals is used. These managers commonly are called expatriates, or simply "expats," which refers to those who live and work outside their home country.

There are a variety of reasons for using home country nationals. One of the most common is to start up operations. Another is to provide technical expertise. A third is to help the organization maintain financial control over the operation.

³⁵International HRM Association. Managing Human Resources in an International Business. 1999.

³⁶Michael G. Harvey et al., Strategic global human resource management: the role of inpatriate managers. *Human Resource Management Review*, 2000 Volume 10, Number 2, 2000, pages 153-175.

B. Host Country Nationals

Host country nationals are local managers who are hired by the organization. For a number of reasons, many organizations use host-country managers at the middle and lower-level ranks: Many countries expect the organization to hire local talent, and this is a good way to meet this expectation.

Also, even if an organization wanted to staff all management positions with home country personnel, it would be unlikely to have this many available managers, and the cost of transferring and maintaining them in the host country would be prohibitive.

This research has identified four reasons that firms tend to use host country managers:

- These individuals are familiar with the culture,
- They know the language,
- They are less expensive than homecountry personnel,
- Hiring them is good public relations.

C. Third Country Nationals

Third country nationals are managers who are citizens of countries other than the country in which the organization is headquartered or the one in which they are assigned to work by the organization.

Organizations use third country nationals for three reasons:

- These people had the necessary expertise or were judged to be the best ones for the job,
- The salary and benefit package usually is less than that of a home country national,
- They may have a very good working knowledge of the region or speak the same language as the local people.

D. Inpatriates

An inpatriate is an individual from a host country or a third country national who is assigned to work in the home country.

The use of inpats is helping organizations better develop their global core competencies.

2.2.3. Role of Global human Resource Management³⁷

Five main functions of global human resource management are vital concepts to the strategic operation of an organization.

A. Recruitment

Attracting, hiring and retaining a skilled workforce is perhaps the most basic of the human resources functions.

There are several elements to this task including developing a job description, interviewing candidates, making offers and negotiating salaries and benefits.

Companies that recognize the value of their people place a significant amount of stock in the recruitment function of human resources. There is good reason for this having a solid team of employees can raise the company's profile, help it to achieve profitability and keep it running effectively and efficiently.

B. Training

Even when an organization hires skilled employees, there is normally some level of on-the-job training that the human resources department is responsible for providing. This is because every organization performs tasks in a slightly different way. One company might use computer software differently from another, or it may have a different timekeeping method. Whatever the specific processes of the organization, human resources has a main function in providing this training to the staff. The training function is amplified when the organization is running global operations in a number of different locations. Having streamlined processes across those locations makes communication and the sharing of resources a much more manageable task.

³⁷BRATTON, John et GOLD, Jeff. *Human resource management: theory and practice*. Palgrave Macmillan, 2012.

C. Professional development

Closely related to training is Human Resource's function in professional development. But whereas training needs are centered around the organization's processes and procedures, professional development is about providing employees with opportunities for growth and education on an individual basis.

Many human resource departments offer professional development opportunities to their employees by sponsoring them to visit conferences, external skills training days or trade shows. The result is a win-win: it helps the employee feel like she is a vital and cared for part of the team and the organization benefits from the employee's added skill set and motivation.

D. Benefits and compensation

While the management of benefits and compensation is given for human resources, the globalization of companies has meant that human resources must now adapt to new ways of providing benefits to an organization's employees. Non traditional benefits such as flexible working hours, paternity leave, extended vacation time and telecommuting are ways to motivate existing employees and to attract and retain new skilled employees. Balancing compensation and benefits for the organization's workforce is an important human resource function because it requires a sensitivity to the wants and needs of a diverse group of people.

E. Ensuring legal compliance

The final function of human resource management is ensuring legal compliance with labor and tax law is a vital part of ensuring the organization's continued existence. The federal government as well as the state and local government where the business operates impose mandates on companies regarding the working hours of employees, tax allowances, required break times and working hours, minimum wage amounts and policies on discrimination. Being aware of these laws and policies and working to keep the organization completely legal at all times is an essential role of human resources.

2.2.4. Global standards on human resources for health

Human resources for health play a pivotal role in the accessibility of health services and the overall population health of any country. Specific benchmarks exist for governments and development partners to ascertain whether or not a country faces a health workforce crisis.

Health worker density is the most widely used indicator. The WHO has set a density indicator of 2.28 health care professionals per 1000 population as a minimum threshold for public health access.

Countries with densities lower than this are defined as having a critical shortage of health workers. The vast majority of these countries also have less than an 80 percent service coverage rate.^{38,39}

In the light of the foregoing, this research deduces that the role of Global Human Resource Management for Health is undoubtedly to ensure universal access to health care.

³⁸CRISP, Nigel et CHEN, Lincoln. Global supply of health professionals. *New England Journal of Medicine*, 2014, vol. 370, no 10, p. 950-957.

³⁹CAMPBELL, James, BUCHAN, James, COMETTO, Giorgio, *et al.* Human resources for health and universal health coverage: fostering equity and effective coverage. *Bulletin of the World Health Organization*, 2013, vol. 91, no 11, p. 853-863.

Chapter 3: Burundi country profile

3.1. Geographical location



Source: http://www.nationsonline.org/oneworld/map/burundi_map2.htm

3.2. Political background

Table 1: Political overview

Date of Independence	1 July 1962 (from UN trusteeship under Belgian administration)
Constitution	Transitional until 31 October 2004, extended until 30 April 2005. Post-Transitional Constitution approved by referendum held on 28 February 2005. Amendments to the Constitution require a three-quarters majority of the National Assembly, a two-thirds majority of the Senate and a majority in a national referendum
Type of Government	Republic
Legislature	The legislature is a bicameral Parliament that consists of the National Assembly and the Senate. Members are elected to the National Assembly by proportional representation from multi-ethnic party lists and a minimum of 2% of the votes must be obtained for representation. The National Assembly must have 60% Hutu and 40% Tutsi members, of which at least 30 % are women, elected by universal adult suffrage for a five year term; three members of the Twa ethnic group are co-opted
Judiciary	The judiciary is comprised of the Supreme Court with jurisdiction over ordinary matters of law, the Constitutional Court with jurisdiction over issues of the state and the Constitution, the High Court of Justice (which is the two previous courts sitting together) and subordinate courts and tribunals
Capital and largest city	Bujumbura
Geography Total Area Border countries	27,830 sq km Democratic Republic of the Congo 233 km, Rwanda 290 km, Tanzania 451 km
Official languages	French (official), Kirundi (Mother tongue), Swahili (along Lake Tanganyika and in the Bujumbura area)

Source: AFRODAD, 2013⁴⁰.

⁴⁰http://www.afrodad.org/phocadownload/publications/Country_Profiles/burundi.pdf

3.3. Economic and social analysis

Table 2: Snapshot of economic and social indicators

Gross domestic Product GDP (official exchange rate)	\$2,475 billion (2012)
GDP composition by sector	Agriculture: 31.1% Industry: 21.3% Services: 47.7% (2012)
GDP real growth rate	4% (2012)
Inflation rate (consumer prices)	16% (2012) 9.7% (2011 est.)
Budget (revenues & expenditures)	Revenues:\$473.2million Expenditures: \$558.5million (2012)
Population	8.575million (2011)
Population below poverty line	66.9% (2006)
Life expectancy at birth	Total: 59.69 years Male: 57.92 years Female: 61.5 years
Literacy rate	Total: 67.2% Male: 72.9% Female: 61.8% (2010)
GDP Per Capita	\$284 (at current prices) \$640 (2010)

Source: Source: AFRODAD, 2013, *loc cit.*

3.4. Food⁴¹

3.4.1. Food in daily Life

The most common foods are beans, corn, peas, millet, sorghum, cassava, sweet potatoes, and bananas. The diet consists mainly of carbohydrates; vitamins and minerals are provided by fruits, vegetables, and combinations of grains, but little fat and protein are available. Meat accounts for 2 percent or less of the average food intake. Fish is consumed in the areas around Lake Tanganyika. Meal production is labor-intensive. The cassava root is washed, pounded, and strained, and sorghum is ground into flour for pancakes or porridge. The porridge is rolled into a ball with one hand and dipped in gravy or sauce.

3.4.2. Customs at Ceremonial Occasions

Beer is an important part of social interactions and is consumed at all important occasions, such as the marriage negotiations between two families.

3.5. Commercial activities

Farmers cultivate a large number of crops for domestic consumption, including bananas, dry beans, corn, sugarcane, and sorghum. They also raise goats, cattle, and sheep. These products are transported to local markets and to the capital. Bartering is still common, particularly the use of cattle as currency.

3.6. Major industries.

There is little industry and development is slow because of a lack of trained workers and little investment or aid from foreign countries. It is difficult to develop industry in a country in which most people cannot afford to purchase the goods industry would produce. Currently, the country is involved mainly in processing food (primarily coffee), brewing beer, and bottling soft drinks. There is some production of light consumers goods, including blankets, shoes, and soap. The country also engages in the assembly of imported components and public works construction.

⁴¹<http://www.everyculture.com/Bo-Co/Burundi.html>

3.7. Trade

Coffee, which was introduced to the area in 1930, is the main cash crop, accounting for 80 percent of foreign revenue. This leaves the economy vulnerable to variations in weather and to fluctuations in the international coffee market.

Burundi has been attempting to diversify its economy by increasing the production of other products, such as tea and cotton. Other exports include sugar and cattle hides. It exports mainly to the United Kingdom, Germany, Benelux nations, and Switzerland. Burundi receives goods from the Benelux nations, France, Zambia, Germany, Kenya, and Japan. The main imports are capital goods, petroleum products, and food.

While the country produces some electricity from dams on the Mugere River, it receives the majority of its power from a hydroelectric station at Bukavu in the Democratic Republic of Congo and by importing oil from the Persian Gulf.

3.8. Urbanism, architecture, and the use of space

The capital city, Bujumbura, is the populous and most industrialized city. It is located on the north shore of Lake Tanganyika, and its port is the country's largest. Cement, textiles, and soap are manufactured there, and it is home to one of the country's two coffee-processing facilities.

Bujumbura, once known as Usumbura, was also the colonial capital, and many of its buildings reveal a European influence. The majority of foreigners in the country are concentrated in the capital, which gives the city a cosmopolitan feel. Large sections of the city, however, are almost entirely untouched by colonial influence.

The second-largest city, Gitega, is East of Bujumbura on center of the country. It was the old capital of the kingdom and has grown rapidly in the last several decades from a population of only five thousand in 1970.

Gitega is in the fertile highlands and is surrounded by coffee, banana, and tea plantations. It has a coffee-processing plant and a brewery that manufactures beer from bananas.

These are the only two urban centers. Ninety-two percent of the population lives in a rural setting, mostly in family groupings too small to be called villages that are scattered

throughout the highlands. A number of market towns draw inhabitants of surrounding rural zones to buy, sell, and trade agricultural products and handicrafts.

Burundians traditionally built their houses of grass and mud in a shape reminiscent of a beehive and wove leaves together for the roof. The traditional hut, called URUGO, was surrounded by cattle corrals. Today the most common materials are mud and sticks, although wood and cement blocks also are used. The roofs are usually tin, since leaves are in short supply as a result of deforestation. Each house is surrounded by a courtyard, and several houses are grouped together inside a wall of trees.

3.9. Tourist attraction in Burundi

Burundi has great potential touristic services:

- Beauty hills with large green spaces,



- Lake Tanganyika with very good beaches (Saga Resha, Saga Nyanza, Saga plage...)



- Three small lakes in north of the country (Cohoha, Kivu and Rweru),



— Source of Nil at Rutovu in Bururi province,



— Stanley and Livingstone stone place at Bujumbura,



— Waterfall of Mwishanga in Rutana Province,



Tourism in Burundi has great potential, but the country's conflicts have severely limited visitors to the region.

3.10. Education

Primary education begins at age seven and is compulsory for six years. Secondary education is divided into programs of three and then three to four years. Education is free in primary, and instruction is in French and Kirundi. Only small fractions of the first level of secondary school students are admitted to the secondary level, and fewer still are able to gain admission to the University.

3.11. Health

The most common health problems stem from communicable diseases and nutritional deficiencies, which account for most infant and child mortality.

Those suffering from malnutrition receive some relief from feeding centers set up by international aid workers. Malaria, cholera, pneumonia, influenza, and diarrhea are the major causes of death.

Sleeping sickness is widespread in the lake shore areas, and pulmonary diseases (tuberculosis) are common in the central highlands.

HIV/AIDS is also a serious health concern. Burundi has limited hospital facilities and an insufficient number of medical personnel.

3.12. Human resource management for health in Burundi

Burundi, like many other countries in Africa, is experiencing a human resource problem.

A number of problems have been identified, namely:

- Insufficient human resources with the required qualifications,
- Inadequate quality of staff training,
- Poor distribution of health professionals between the different geographical areas of the country to the detriment of the poor and remote areas of the capital,
- The management of human resources is marked by the high concentration of management at central level,
- Inadequate manpower and career management;
- Insufficient staff motivation.

3.13. Effective and trends in human resources for health

The total number of 15,937 agents was divided between 5,957 nurses, 418 physicians, 16 midwives and other support staff.

Technical personnel (medical and paramedical) are insufficient in quantity and quality in most levels of the health system, which affects the availability and quality of the services offered. This is compounded by the unavailability of certain skills in the labor market and the reluctance of staff to work in hard-to-reach areas.

The inadequacy of quality is partly due to insufficient supervision at public and private educational institutions, non-selective recruitment at private school level, failure to adapt curricula to employment needs, and inadequate planning of staffing needs⁴².

⁴²République du Burundi, Ministère de la santé publique et de la lutte contre le sida. Profil des ressources humaines en santé au Burundi. Edition 2012. P.18.

Chapter 4: Research methodology

Questions of the role of Global Human Resource Management in prevention of household catastrophic health spending are debated in this research.

4.1. Type of study

This research employs a cross-sectional study with analytical and explanatory purposes. It uses the mixed approach, ie the quantitative and qualitative approach.

4.2. Variables of study

This study collects information about the following variables:

The independent variables include:

- Health insurance status,
- Household size.

The dependent variables include:

- Catastrophic health expenditure,
- Role of Global Human Resource Management.

4.3. Data collection

Secondary and primary data are collected.

4.3.1. Secondary data

The study uses secondary data from **Google scholar, Google.co.in** and **Pubmed**

The main search engines used are:

- Catastrophic health expenditure,
- Globalization,
- Household management
- Human Resource Management,
- Human resources for health.

The literature on these sites is very voluminous. As a result, this study limits its choices to documents from 2000 to 2016.

A.Criteria for document inclusion

Identified documents are reviewed to choose those that include the items sought.

The determination of inclusion criteria of the data source documents is done by analyzing the contents. These criteria are:

- WHO publications or documents published in collaboration with WHO or other human productions which can be saved and free downloaded from the internet,
- Discussed themes: household catastrophic health expenditure and / or global human resource management,
- Language of publication: English and French.

B. Sorting of available data

In this research, this sorting is used to organize, classify, group and present data relevant to the research objective and that answer the research question.

4.3.2. Primary data

Primary data are collected from participants in International Training Programme on Global Human Resource Management.

4.4. Tools of data collection

Documentary analysis framework and questionnaire are used for data collection.

4.5. Data collection techniques

4.5.1. Documentary analysis

The documentary analysis consists in extracting all the meaning from the text in order to transmit it to those who need it⁴³.

To this effect, this study opts for the documentary analysis according to the annexed framework which allowed identifying the proportion of households who have suffered from catastrophic health expenditure.

4.5.2. Questionnaire administration

Questionnaire is administered to target population.

After having been agreed with the surveyors, the questionnaire is sent to their e-mail address. It is returned after filling by the same process. A pretest has been organized to one Burundian student who is doing a master's degree in Chemistry at Bangalore University for verifying questionnaire clarity. It was clear and no questions have been modified.

4.6. Sample determination

4.6.1. Target population

The target population for primary data consists of participants in the International Training Program on global human resource management at NILERD. 27/34 participants have been questioned and they answered correctly.

The targets for secondary data are the countries represented at the same training.

4.6.2. Sampling method

Non-probability sampling like convenience sampling is used.

⁴³Waller, Suzanne. L'analyse documentaire. Bulletin des bibliothèques de France n° 4, 2000. ISSN 1292-8399.

4.7. Research limitations

4.7.1. Study period

Study covers the period from 5 December 2016 to 10 January 2017.

4.7.2. Field of study

This study falls within the field of analytical studies of existing data on catastrophic health spending. It is limited to the household management in international setting to prevent these catastrophic spending.

4.8. Method of data analysis

Data are entered and analyzed using the computer. The layout of the results and the formatting are done using the Microsoft Word version 2010 software. Microsoft excel is used to construct graphics and tables.

The explanatory analysis referred of comparative between different countries is realized.

Chapter 5: Presentation, analysis and discussion of research results

This chapter presents analyses and discusses the research results.

5.1. Household catastrophic health expenditure

The following figure shows the proportion of the population suffering from catastrophic health expenditure in different years in 26 countries represented in the International Training Program on Global Human Resource Management at NILERD in India from 5 December 2016 to 14 January 2017.

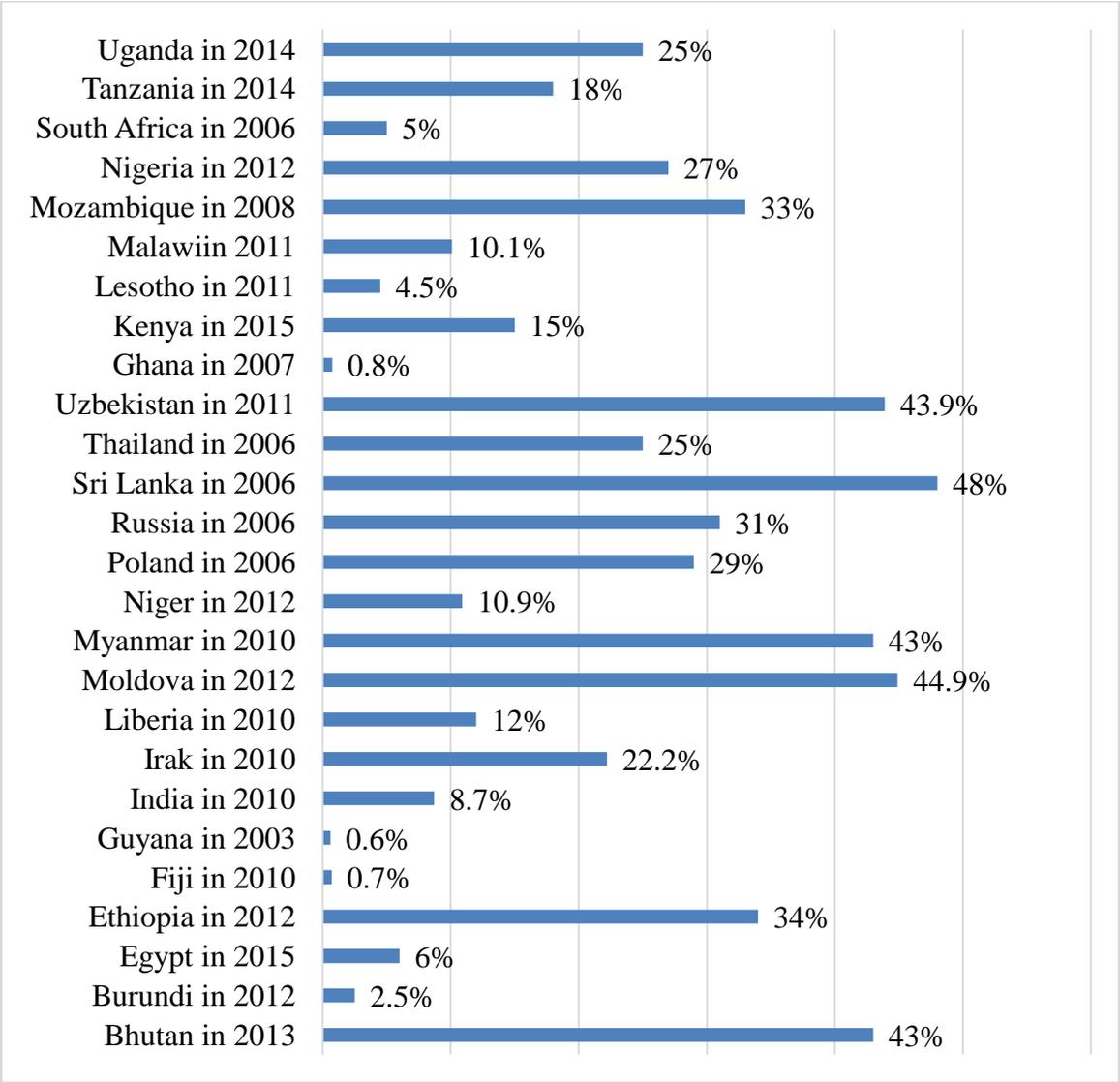


Figure 3: Proportion of household catastrophic health expenditure by country

Data source: information gathered from literature using guide of documentary analysis see in annexe 2

The figure 3 see in precedent page indicates that household catastrophic health expenditure exist in all studied countries. This was also approved by K.Xu *et al* when he says that catastrophic health expenditure may occur in any country, whatever its stage of development⁴⁴. This implicate that health systems around the world are not well organized to manage household in order to prevent those catastrophic spending. And everywhere, there are the poor who suffer the most from the inadequacies of the health systems and, in the absence of financial protection against the disease, they become much poorer.

5.2. Household size

Table 3: Household size estimated by country

Countries	Household size				
	1-2 persons	2-3 persons	3-4 persons	4-5 persons	More than 5 persons
Bhutan				×	
Burundi					×
Egypt				×	
Ethiopia					×
Fiji				×	
Guyana				×	
India	Data not available				
Irak					×
Liberia					×
Moldova			×		
Myanmar					×
Niger					×
Poland				×	
Russia		×			
Sri Lanka				×	
Thailand			×		
Uzbekistan				×	
Ghana					×
Kenya					×
Lesotho				×	
Malawi				×	
Mozambique					×
Nigeria				×	
South Africa					×
Tanzania					×
Uganda			×		
Total	0	1	3	10	11

Data source: information gathered from participants on ITP in GHRM using questionnaire see in annexe 1

This table indicates that household size is more than five persons in 11/25 countries.

⁴⁴K. Xu, D. Evans, G. Carrin et A. M. Aguilar-Rivera, Résumé Technique pour les décideurs, systèmes de financement de la santé: comment réduire les dépenses catastrophiques. WHO/EIP/HSF/PB/05.02.F. Vol.2, 2005.

This means that the effects of population growth and household size in getting catastrophic health expenditure and poverty remain largely unrecognized. The average proportionate distance between the poverty line and the average income of the poor doubles as one moves from a 4 member household to a 9 or more member household. Household that are always poor have an average of size of 6.1 while those that are always non poor have a size of 4.6⁴⁵. This clearly indicates that the vulnerability to catastrophic health expenditure may increase with household size.

5.3. Health care payment

Table 4: Health insurance status by country

Countries	Health care payments			
	Direct payment	Health insurance funds	Direct payment and insurance mixed	Others
Bhutan			×	
Burundi			×	Performance Based Financing, Third-party payment
Egypt			×	
Ethiopia			×	
Fiji			×	
Guyana			×	
India	Data not available			
Irak	×			
Liberia		×		
Moldova		×		
Myanmar	×			
Niger			×	
Poland			×	
Russia			×	
Sri Lanka	×			Third-party payment
Thailand			×	Third-party payment
Uzbekistan			×	
Ghana			×	
Kenya			×	
Lesotho			×	
Malawi			×	Third-party payment
Mozambique			×	
Nigeria			×	
South Africa		×		Third-party payment
Tanzania		×		
Uganda	×			
Total	4	4	17	

Data source: information gathered from participants on ITP in GHRM using questionnaire see in annexe 1

⁴⁵Aniceto C. Orbeta, Jr., Poverty, Vulnerability and Family Size: Evidence from the Philippines. ADB Institute Research Paper Series No. 68. September 2005.p.5, 7.

The table in previous page indicates that in 21/25 countries direct payment is always present. Risk of catastrophic health expenditure stays too present. This policy of direct payment by household, based on their capacity to pay for access to primary health care reinforces inequalities between rich and poor. Moreover, they can push households towards poverty.

5.4. Health care accessibility

Table 5: Financial health care accessibility by country

Countries	Health care financial accessibility	
	Yes	No
Bhutan	×	
Burundi		×
Egypt		×
Ethiopia		×
Fiji		×
Guyana		×
India	Data not available	
Irak		×
Liberia		×
Moldova	×	
Myanmar	×	
Niger		×
Poland		×
Russia	×	
Sri Lanka		×
Thailand	×	
Uzbekistan		×
Ghana		×
Kenya		×
Lesotho	×	
Malawi		×
Mozambique		×
Nigeria		×
South Africa	×	
Tanzania	×	
Uganda		×
Total	8	17

Data source: information gathered from participants on ITP in GHRM using questionnaire see in annexe 1

This table shows that health care are not financially accessible in 17/25 countries.

Or one of the fundamental functions of a human resource management for health is to put in place a health financing system that protects household against the financial risks associated with ill health.⁴⁶ In this context, human resources for health have to reach into homes and communities to solve publichealth issues⁴⁷ like catastrophic health expenditure.

5.5. Prevention of catastrophic health expenditure

Table 6: Preventing measures of catastrophic health expenditure

Preventing ways of catastrophic health expenditure	Frequency
Household obligatory health insurance	6
Immunization measures	1
Improving household basic sanitation	2
Financial assistance by the Government	7
Health education	5
Reduce health care tariffs at reasonable cost	1
Increasing health facilities	4
Household birth planning	1
Defining specific health policies to low-income households	1
Total of frequencies	28

Data source: information gathered from participants on ITP in GHRM using questionnaire see in annexe 1

Household compulsory health insurance and financial assistance by the Government are the most measures of prevention CHE frequently cited. This proves enough that it is the Government that must take the main responsibility. On the other hand, Government can not satisfy the whole population without its self-management. According to this angle of analysis, Household Based Health Insurance (HBHI) which is a voluntary, non-profit insurance scheme, formed on the basis of solidarity and collective pooling of health risks, in which household members participate effectively in its management and functioning should improve equity in access to health care in all countries.

Dibaba,E makes the same reasoning by saying that establishing community based health insurance schemes presumed to improve health care financing in a country, and has the

⁴⁶Bulletin of the World Health Organization 2012;90:664-671. doi: 10.2471/BLT.12.102178

⁴⁷KIM, Jim Yong, FARMER, Paul, et PORTER, Michael E. Redefining global health-care delivery. *The Lancet*, 2013, vol. 382, no 9897, p. 1060-1069.

potential to increase utilization, better protect people against catastrophic health expenses and address issues of equity of access⁴⁸. HBHI is also a health care financing option that may help to extend coverage to rural communities and the informal sector.

5.7. Role of GHRM in prevention of CHE

Table 7: Role of GHRM in prevention of CHE

Role of GHRM in prevention of CHE	Frequency
Household health education	6
Plan household interventions together with household	4
Increasing salaries in order to ensure health spending for the household	6
Recruitment of more health workforce for primary health and health sanitation	5
Household technical assistance in its income management	3
Research and decision-making based on evidences	3
Propose scheme to Government	2
Organize health mutual	1
Using successful experiences from other countries	3
Promoting income-generating activities for households	1
Total of frequencies	35

Data source: information gathered from participants on ITP in GHRM using questionnaire see in annexe 1

This table indicates that the role of GHRM in the prevention of household CHE could in the first place be household health education. As household is perceived as self-management, this could include multicultural education inculcating common values to all cultures in households. These values are: love, truth, right conduct, peace and no violence⁴⁹. So highly qualified multicultural managers are needed to increase globalize household cultures and help them managing their income.

⁴⁸Dibaba, E., Improving health care financing in Ethiopia. An Evidence Brief for Policy. 2014.p.4.

⁴⁹Hey, H., Universal Human Rights and Cultural Diversity. A review of Human Rights: New Perspectives, New Realities, edited by Adamantia Pollis and Peter Schwab. Boulder, CO: Lynne Rienner, 2000. 259pp.

Conclusion and suggestions

Conclusion

This research titled **“HOUSEHOLD MANAGEMENT FOR PREVENTING CATASTROPHIC HEALTH EXPENDITURE: Role of Global Human Resources Management”** had as objective to contribute to a better understanding of preventing catastrophic health expenditure through a critical review of the role of global human resources management perceived by participants on ITP in Global HRM at NILERD in 2016. Challenges on household catastrophic health expenditure in various countries represent a dire. Participants gave suggestions for measures to overcome these catastrophic health expenditure through Global Human Resource Management. Comparing and contrasting selected countries allowed a deeper understanding that managing household for financial protection in health remains insufficient.

Since all health care are ultimately delivered by and to people, a strong understanding of the global human resource management issues is required to ensure the prevention of catastrophic health expenditure. Further human resources initiatives are required in many health care systems, and more extensive research must be conducted to bring about new human resources policies and practices that will benefit household around the world. The role of global human resource management should be to create healthy financial protection programs decentralized to household for developing more effective expenditure control strategies.

Suggestions

Thus, this research suggests this to the human resource for health managers:

- Adapting to global competition by managing human resource in international settings,
- Face competition to get to help household to prevent catastrophic health expenditure,
- Replace some human resource responsibilities at household level,
- Observe all cultures to get to manage staff,
- Place men need at the right place.

References

They are arranged by language and order of their appearance in the text.

1. VAN WYK, S. S., MANDALAKAS, A. M., ENARSON, D. A., *et al.* Tuberculosis contact investigation in a high-burden setting: house or household? *The International Journal of Tuberculosis and Lung Disease*, 2012, vol. 16, no 2, p. 157-162.
Available at:
<http://docserver.ingentaconnect.com/deliver/connect/iatld/10273719/v16n2/s4.pdf?expires=1481820721&id=89464585&titleid=3764&accname=Guest+User&checksum=17A2BEEE827C20A5F923B1F82907BD98>
2. XU, Ke, EVANS, David B., CARRIN, Guido, *et al.* Protecting households from catastrophic health spending. *Health affairs*, 2007, vol. 26, no 4, p. 972-983.
Available at:
http://apps.who.int/iris/bitstream/10665/70005/1/WHO_EIP_HSF_PB_05.02_eng.pdf
3. Himmelstein, David U., Elizabeth Warren, Deborah Thorne, and Steffie J. Woolhandler. "Illness and injury as contributors to bankruptcy." *Available at SSRN 664565* (2005).<https://ssrn.com/abstract=664565> or <http://dx.doi.org/10.2139/ssrn.664565>
Google Scholar
4. Xu, Ke, David B. Evans, Guido Carrin, Ana Mylena Aguilar-Rivera, Philip Musgrove, and Timothy Evans. "Protecting households from catastrophic health spending." *Health affairs* 26, no. 4 (2007): 972-983. Available at:
<http://content.healthaffairs.org/content/26/4/972.full#ref-6>
5. World Health Organization (WHO). Distribution of health payments and catastrophic expenditures methodology. Geneva, Switzerland, 2005.
6. World Health Organization: World Health Report 2000. Health Systems: Improving Performance. Geneva. 2000. Available at:
http://www.who.int/whr/2000/en/whr00_en.pdf?ua=1
7. R.C. RAJAN, International Human Resource Management. Published in Business. March 2013. Owerpoint Templates. Available at :
<http://www.slideshare.net/rhimycrajan/international-human-resource-management-17363203>
8. (2005). Designing health financing systems to reduce catastrophic health expenditure. (Vol. 2). Department of Health Systems Financing, World Health Organization. Retrieved from http://www.who.int/health_financing/pb_2.pdf

9. Ke Xu, David B Evans, Kei Kawabata, Riadh Zeramdini, Jan Klavus, Christopher J L Murray, Household catastrophic health expenditure: a multicountry analysis, THE LANCET. Vol 362. July 12, 2003. Available at :
http://www.who.int/health_financing/documents/lancet-catastrophic_expenditure.pdf

10. James, M.K., Barbara, M.L. 2012. Human Resources for Health Challenges in Fragile States: Evidence from Sierra Leone, South Sudan and Zimbabwe. The North-South Institute. August, 2012. Paper 1. Available at:
<http://www.nsi-ins.ca/wp-content/uploads/2012/11/2012-Human-Resources-for-Health-Challenges-in-Fragile-States.pdf>

11. Minh HV, Phuong KNT, Saksena P, James CD, Xu K. Financial burden of household out-of pocket health expenditure in Viet Nam: findings from the National living standard survey 2002-2010. SocSci Med. 2013;96:258–63.

12. Saito E, Gilmour S, Rahman MM, Gautam GS, Shrestha PK, Shibuya K. Catastrophic household expenditure on health in Nepal: a cross-sectional survey. Bull World Health Organ. 2014;92:760–7.

13. Kien, Vu Duy, et al. "Socioeconomic inequalities in catastrophic health expenditure and impoverishment associated with non-communicable diseases in urban Hanoi, Vietnam." *International Journal for Equity in Health* 15.1 (2016): 169. Available at <https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-016-0460-3>

14. Ke XU, David B. Evans, G. CARRIN, et al. Designing health financing systems to reduce catastrophic health expenditure. WHO/EIP/HSF/PB/05.02. Geneva, 2005. Available at:
http://apps.who.int/iris/bitstream/10665/70005/1/WHO_EIP_HSF_PB_05.02_eng.pdf

15. XU, Ke, EVANS, David B., CARRIN, Guido, et al. 2007. *Loc cit.*

16. Ke Xu, David B. Evans, Guido Carrin, Ana Mylena Aguilar-Rivera, Philip Musgrove and Timothy Evans. Protecting Households From Catastrophic Health Spending, *Health Affairs* 26, no.4 (2007):972-983. doi: 10.1377 Health Aff. 26.4.972. Available at <http://content.healthaffairs.org/content/26/4/972.full.pdf+html>

17. VERGET, S et al., Health gains and financial risk protection afforded by public financing of selected interventions in Ethiopia: an extended cost-effectiveness analysis. Vol 3 May 2015. Available at: www.thelancet.com/lancetgh

18. KABENE, Stefane M., ORCHARD, Carole, HOWARD, John M., *et al.* The importance of human resources management in health care: a global context. *Human resources for health*, 2006, vol. 4, no 1. Available at:
<http://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-4-20>

19. XU, Ke, EVANS, David B., CARRIN, Guido, *et al.*, 2007, *loc cit.*

20. RABAN, Magdalena Z., DANDONA, Rakhi, et DANDONA, Lalit. Variations in catastrophic health expenditure estimates from household surveys in India. *Bulletin of the World Health Organization*, 2013, vol. 91, no 10, p. 726-735.
Available at: <http://www.scielosp.org/pdf/bwho/v91n10/0042-9686-bwho-91-10-726.pdf>

21. ASANTE, Augustine D., PRICE, Jennifer, HAYEN, Andrew, *et al.* Assessment of equity in healthcare financing in Fiji and Timor-Leste: a study protocol. *BMJ open*, 2014, vol. 4, no 12, p. e006806.
Available at: <http://bmjopen.bmj.com/content/4/12/e006806.full.pdf+html>

22. HAUCK, Katharina, SMITH, Peter C., et GODDARD, Maria. The economics of priority setting for health care: a literature review. *Washington: World Bank*, 2004.

23. Wagstaff A, van Doorslaer E. Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993–1998. *Health Econ.* 2003;12:921–34.

24. Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJ. Household catastrophic health expenditure: a multicountry analysis. *Lancet.* 2003;362:111–7.

25. Pal R. Measuring incidence of catastrophic out-of-pocket health expenditure: with application to India. *Int J Health Care Finance Econ.* 2012;12:63–85.

26. Ravallion M, Chen S, Sangraula P. A dollar a day revisited. *The World Bank Econ Rev.* 2009;23:163–84.

27. Amaya Lara J, Ruiz GF. Determining factors of catastrophic health spending in Bogota, Colombia. *Int J Health Care Finance Econ.* 2011;11:83–100.

28. Xu K. Distribution of health payments and catastrophic expenditures methodology. ((HSF) DHSF, (EIP) CEaIfP eds.). Geneva: WHO Discussion Paper No. 2; 2005. Accessed on 4/22/2015. Available at :
http://apps.who.int/iris/bitstream/10665/69030/1/EIP_HSF_DP_05.2.pdf?ua=1

29. Meena Daivadanam, K.R. Thankappan, P.S. Sarma & S. Harikrishnan, Catastrophic health expenditure & coping strategies associated with acute coronary syndrome in Kerala, India. *Indian J Med Res* 136, October 2012, pp 585-592. Available at: <http://icmr.nic.in/ijmr/2012/october/1006.pdf>
30. Hellier, J., Stages of Globalization, Inequality and Unemployment. University of Lille 1 and LEMNA, University of Nantes Pers. address: 28 rue de Sévigné 75004 Paris FRANCE. September 2012.
31. YACH, Derek et BETTCHER, Douglas. The globalization of public health, II: The convergence of self-interest and altruism. *American journal of public health*, 1998, vol. 88, no 5, p. 738-744. Available at: <http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.88.5.738>
32. MCMICHAEL, Anthony J. Globalization, climate change, and human health. *New England Journal of Medicine*, 2013, vol. 368, no 14, p. 1335-1343. Available at: <http://www.nejm.org/doi/pdf/10.1056/NEJMra1109341>
33. International HRM Association. *Managing Human Resources in an International Business*. 1999. Available at: <https://wps.prenhall.com/wps/media/objects/728/745520/chapter13.pdf>
34. Michael G. Harvey *et al.* Strategic global human resource management: the role of inpatriate managers. *Human Resource Management Review*, 2000 Volume 10, Number 2, 2000, pages 153-175. Available at: <http://people.math.sfu.ca/~van/diverse/bellut-papers/sdarticle-12.pdf>
35. BRATTON, John et GOLD, Jeff. *Human resource management: theory and practice*. Palgrave Macmillan, 2012.
36. CRISP, Nigel et CHEN, Lincoln. Global supply of health professionals. *New England Journal of Medicine*, 2014, vol. 370, no 10, p. 950-957. Available at: <http://www.nejm.org/doi/pdf/10.1056/NEJMra1111610>
37. CAMPBELL, James, BUCHAN, James, COMETTO, Giorgio, *et al.* Human resources for health and universal health coverage: fostering equity and effective coverage. *Bulletin of the World Health Organization*, 2013, vol. 91, no 11, p. 853-863. Available at: <http://www.scielosp.org/pdf/bwho/v91n11/0042-9686-bwho-91-11-853.pdf>
38. Aniceto C. Orbeta, Jr., Poverty, Vulnerability and Family Size: Evidence from the Philippines. ADB Institute Research Paper Series No. 68. September 2005. p.5, 7. available at: <https://www.adb.org/sites/default/files/publication/157217/adbi-rp68.pdf>

39. *Bulletin of the World Health Organization* 2012;90:664-671.
doi:10.2471/BLT.12.102178. Available at:
<http://www.who.int/bulletin/volumes/90/9/12-102178/en/>
40. KIM, Jim Yong, FARMER, Paul, et PORTER, Michael E. Redefining global health-care delivery. *The Lancet*, 2013, vol. 382, no 9897, p. 1060-1069. Available at:
<http://www.nejm.org/doi/pdf/10.1056/NEJMra1111610>
41. Dibaba, E., Improving health care financing in Ethiopia. An Evidence Brief for Policy. 2014 .Available at:
<http://www.portal.pmnch.org/evidence/sure/esimprovinghealthcarefinancingethiopia.pdf>
42. Hey, H., Universal Human Rights and Cultural Diversity. A review of Human Rights: New Perspectives, New Realities, edited by Adamantia Pollis and Peter Schwab. Boulder, CO: Lynne Rienner, 2000. 259pp.

Web sites

1. http://www.nationsonline.org/oneworld/map/burundi_map2.htm
2. http://www.afrodad.org/phocadownload/publications/Country_Profiles/burundi.pdf
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4531477/pdf/12913_2015_Article_984.pdf

French versions

1. Ministère de la Santé Publique et de la lutte Contre le SIDA, Etude sur le financement de la santé au Burundi. Rapport de synthèse. Mai 2014. Disponible sur:
[http://www.fbpsanteburundi.bi/cside/contents/docs/Etude sur le financement de la sante au Burundi.pdf](http://www.fbpsanteburundi.bi/cside/contents/docs/Etude_sur_le_financement_de_la_sante_au_Burundi.pdf)
2. République du Burundi, Ministère de la santé publique et de la lutte contre le sida. Profil des ressources humaines en santé au Burundi. Edition 2012. P.18. Available at:
http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/burundi/profil_rh_vf_22_janvier_20121.pdf
3. Waller, Suzanne. L'analyse documentaire. Bulletin des bibliothèques de France n° 4, 2000. ISSN 1292-8399. Available at:
<http://bbf.enssib.fr/consulter/bbf-2000-04-0134-016>
4. K. Xu, D. Evans, G. Carrin et A. M. Aguilar-Rivera, Résumé Technique pour les décideurs, systèmes de financement de la santé: comment réduire les dépenses catastrophiques. WHO/EIP/HSF/PB/05.02.F. Vol.2, 2005. Available at:
http://www.who.int/health_financing/pb_number_2_fr.pdf

Annexes

Annexe 1 : Questionnaire

This questionnaire is related to my research topic titled: **“HOUSEHOLD MANAGEMENT FOR PREVENTING CATASTROPHIC HEALTH EXPENDITURE: Role of Global Human Resources Management”**. Its objective is to contribute to a better understanding of preventing catastrophic health expenditure through a critical review of the role of global human resources management perceived by participants on ITP on Global HRM at NILERD in 2016. Thank you for giving me your time to reply fully. Your information will be kept confidential.

I. Information about identification

- 1. Name of your country:.....
- 2. Your degree:.....
- 3. Your profession:.....

II. Underline the right answer(s)

- 1. How are health care paid in your country?
 - A. By direct payment
 - B. By health insurance funds
 - C. The payment is mixed ie health insurance funds and direct payment
 - D. Other (explain, list).....
- 2. Estimate a household size in your country:
 - A. 1-2 persons B. 2-3 persons C. 3-4 persons D. 4-5 persons E. More than 5 persons
- 3. Are health care financially affordable for the entire population of your country?
 - A. Yes B. No

III. This research considers that household health spending are catastrophic when they reach or exceed 40% of household’s income.

According to you:

- 1. How can we prevent these catastrophic spending?
.....
- 2. What should be the role of global human resource management in prevention of these catastrophic health spending for household?
.....

Thank you once again.

Annexe2 : Guide of documentary data analysis

Country	Year	Proportion of population suffering from catastrophic health expenditure by country
Bhutan		
Burundi		
Egypt i		
Ethiopia		
Fiji		
Guyana		
India		
Irak		
Liberia		
Moldova		
Myanmar		
Niger		
Poland		
Russia		
Sri Lanka		
Thailand		
Uzbekistan		
Ghana		
Kenya		
Lesotho		
Malawi		
Mozambique		
Nigeria		
South Africa		
Tanzania		
Uganda		