ADDRESSING INEQUALITIES

The Heart of the Post-2015 Development Agenda and the Future We Want for All

Global Thematic Consultation

MULTILATERAL COOPERATION BETWEEN AFRICA, LATIN AMERICA AND EUROPE TO DETECT SUCCESSFUL POLICIES FOR TACKLING MATERNAL AND CHILD HEALTH INEQUALITIES

Francisco Becerra-Posada, MD, MPH,[1] Angéline Serre, PhD,[2] Mario Tristán, MD, PhD,[3] Víctor Becerril-Montekio,[4] Sébastien Poulain,[2] Ana Ribeiro,[5] and the MASCOT-U-Group[6]

1) Council on Health Research for Development (COHRED)-Mexico/Switzerland, 2) Euroquality, France, 3) IHCAI Foundation, Costa Rica, 4) National Institute of Public Health (INSP), Mexico, 5) SPI, Portugal, 6) Referred in Acknowledgements.

Authors are partners of the EU FP7 funded MASCOT Project.

October, 2012

DISCLAIMER: The findings, interpretations and conclusions expressed in this paper are those of the authors and do not necessarily reflect the policies or views of UN Women, UNICEF or the United Nations. This paper forms part of the dissemination efforts from the project called "MASCOT" which has received funding from the European Community's Seventh Framework Programme FP7/2007-2013 under grant agreement n°282507. The European Community is not responsible for any use that might be made of the content of this publication. More information on the project can be found at http://www.mascotfp7.eu or by contacting the project manager Francisco Becerra (Becerra@cohred.org).

Abstract

Collaboration between countries is key to achieve health-related MDGs and reduce inequalities in health. Advances made by some countries remain unknown to others. These could benefit from their experience. MASCOT - **Multilateral Association for Studying Health Inequalities and Enhancing North-South and South-South Cooperation -** is a 3-year project supported by the European Commission aimed at mapping regional and local infrastructures, capabilities and capacities of research on MCH, as well as stimulating knowledge transfer and exchange between countries for shaping policies for better health services.

The project gathers experts from 16 countries in Latin America, Africa and Europe, to develop and implement coordinating activities for South-South and North-South collaboration. These actions as a way to reduce inequalities and of the strengthened cooperation in addressing MCH and health inequalities in LMIC countries.

The consortium is assessing the current situation of health research and MCH inequalities in the 16 countries. Will identify the best practices in the development of policies and strategies addressing those two aspects. The methodological approach, tools and procedures were standardised. Next step was to identify institutions/teams performing research in this area, to detect promising projects and research results as well as strategies, programs and policies implemented to tackle MCH inequalities.

This paper presents the methodological guidelines to conduct the fieldwork and some preliminary results that will help towards discussing the achievement of the MDGs and for debating on how inequalities can be addressed in the post-2015 agenda.

Introduction

The World Health Organisation (WHO) defines **health inequalities** as "*differences in health status or in the distribution of health determinants between different population groups (e.g. racial, ethnic, sexual orientation or socioeconomic groups). Some health inequalities are attributable to biological variations or free choice and others are attributable to the external environment and conditions mainly outside the control of the individuals concerned. In the first case it may be impossible or ethically or ideologically unacceptable to change the health determinants and so the health inequalities are unavoidable. In the second, the uneven distribution may be unnecessary and avoidable as well as unjust and unfair*".[1]

Considering that such inequalities result in differences for disease incidence, health outcomes, access to health care, or quality of health care, it has now become evident that in an age of astonishing progress, tackling this issue should be a priority for governments all over the world.

While significant differences can be exhibited between regions, countries, and continents, health inequalities continue to be an issue that affects all societies worldwide, from West to East and from North to South. Within every country (rich or poor), differences in health can be observed across the population and inequalities affecting children, adolescents and mothers remain particularly evident.

Health standards such as infant mortality, maternal mortality or life expectancy constitute good indicators of these inequalities. As examples, WHO statistics refer that in 2010, neonatal mortality rate was 34‰ live births in Africa and 9‰ in Americas, infant mortality has been improved from 108‰ live births to 75‰ in Africa and from 33‰ to 18‰ in Americas for the last 20 years and child mortality rose in 12 countries in Africa (e.g. 52% in Botswana and 43% in Zimbabwe). For adults, the probability of men between 15 and 60 years of age dying is 90.2% in Lesotho, 82.1% in Zimbabwe, while only 8.3% in Sweden[2] and the range in maternal mortality ratio per 100,000 live births is currently between 450 and 1500 in Africa, between 62 and 170 in Americas and between 17 and 64 in Europe (Interagency estimations).[3]

According to the WHO Commission on the social determinants of health, "*the poor health of the poor, the social gradients in health and the marked health inequities between countries are caused by the unequal distribution of power, income, goods and services*." Inequalities are therefore linked to salaries, place of residence and gender among other aspects. Unlike the behavioral determinants of health (downstream factors), these upstream factors are ones over which individuals have no direct control, but which can only be altered through social and economic policies and political processes.

Requirements for addressing health inequalities

In addition to the strong moral argument for addressing health inequalities based on the principles of social justice and equality, a powerful economic case can be made for reducing the gap in health status between the richest and poorest sectors of our society. This case involves recognizing the substantial social, economic and political costs associated with widespread inequalities in health and the benefit of improved overall health for individuals, communities and society as a whole. In Europe, health inequalities-related losses are estimated to be €1 trillion per year, or 9,4% of Gross Domestic Product (GDP). Better health would enable more people to participate in the economy, reducing the costs of lost productivity. All governments have therefore an interest in tackling inequalities to create a fairer and more just society that will allow all individuals and communities to fulfill their potential and benefit more equitably from public services investment.

The "Multilateral Association for Studying health inequalities and enhancing north-south and south-south COoperaTion" (MASCOT),[4] is an European Commission funded project under Framework Program 7 that aims to stimulate the cooperation between countries from 3 world regions (Europe, Africa, and Latin America) in order to identify and implement adequate and efficient country-specific strategies for tackling health inequalities preferentially affecting children, adolescents and mothers.

The consortium includes 11 partners from 11 countries in Europe (Switzerland, France, the UK and Portugal), Africa (South Africa, Tanzania, Ghana and Tunisia) and Latin America (Mexico, Costa Rica, and Chile), hence covering a large geographical area in 3 continents.

The 11 partners Consortium recognizes the need of having better coordinating mechanisms for South-South and North-South collaboration aimed at enhancing regional and local infrastructure, capabilities and capacities of research for health, as well as stimulating knowledge transfer and exchange mechanisms between countries and within countries for shaping policies, programs and health actions intended to provide better health and health services. These actions have to be understood as a way to reduce inequalities as the end-result of the strengthened collaborative actions.

The project has the following strategic objectives: a) To describe inequalities concerning MCH and mapping of strategies currently put into practice, b) to describe NHRS and detect dedicated projects and research teams working on MCH inequalities, c) to identify the best practices and evaluate their roles in the development of measures that are and/or should be implemented for tackling MCH inequalities in other countries, c) to develop country-specific strategies, and d) to stimulate multi-lateral collaboration and disseminate the results.

MASCOT Methodology

With the final objective to reduce health inequalities world-wide, the multilateral collaboration set up in MASCOT consists in stimulating and improving research in the field of health inequalities, notably for children, adolescents and mothers as well as the use of research results in the process of policy-making or decision-taking for MCH programs, strategies and actions. Important recommendations and advice will ensue from this project for the implementation of research activities. The MASCOT project will therefore contribute in different ways and at different degrees to the coordination of high quality research. The various ways in which this project can build on current activities, address the current needs and contribute to filling existing gaps include the following:

At the national level, mapping activities were implemented to assess and understand how the national health research system (NHRS) contributes to identify health research needs in MCH in individual countries with the perspective to answer them. Partners in Africa and Latin America (South Africa, Tanzania, Ghana, Tunisia, Mexico, Costa Rica, and Chile) applied the developed methodology. Other countries in the region that were selected based on their HDI (Brazil, Bolivia, Guinea Bissau, Malawi, and Mozambique) as to widen the base of intervention, the methodology was carried out by a locally hired experts. The information gathered and its analysis will notably result in a better structuring and coordination of the widely fragmented research activities and in increased interactions between the different actors of the sector. Data and report for Europe was to be done as a region as per the advances shown in development.

Documenting research in the area of maternal and child health in the participating countries and assessing its impact on MCH policies and strategies will gather information to allow organisations participating in this research, as well as those that use it for policy-making, to have better evidence for their future activities, interventions and programmes. Furthermore, proposals for concrete initiatives of interaction will be made to these actors in order to strengthen contacts and exchanges between them and ensure that information produced by this project continues to be built upon. In addition to major improvements recommendations to the national health research systems, MASCOT will also aim to initiate or intensify exchanges between the research structures and the national political bodies from the participating countries.

Tackling health inequalities is not an issue that can only be addressed at a national level anymore: it has now become a world concern. In MASCOT, are being joined to make progress to diffuse, share and make a common use of research results in order to develop and implement efficient remediation strategies at an international level. By increasing and improving the collaboration between countries from North and South, the MASCOT project fundamentally addresses this aspect.

In addition to consortium members, the project will also associate through the involvement of local experts a panel of countries presenting a wide range of characteristics: developed and developing countries, countries with and without current policies for reducing MCH inequalities, such as special interventions, programme innovations, and specific strategies, etc.

In order to achieve the above mentioned objectives, MASCOT developed a set of guidelines to standardise methodology, approach, data collection and questionnaires to be applied in the planned interviews. These guidelines were integrated and reviewed by the partners in charge of the working packages (WP) and then reviewed by all partners in an especially dedicated workshop.

For measuring and defining determinants for health and inequalities, the MASCOT proposal used existing databases, data repositories and national data available through National Health Authorities and other official national, regional and international bodies, such as UNICEF, as well as local or regional research and academic institutions that have gathered these data through existent health information systems, surveys, research studies and other related studies.

WP reflected the already mentioned objectives. One partner was in charge of data quality control as a means to ensure the quality and standardisation of data, the correct integration of the PROGRESS indicators. The selection and access to national or international surveys, and a standardised statistical process as per the partners and experts to analyse results integrating it with the local knowledge they had of their countries.

The PROGRESS framework is a useful starting point for summarizing and describing the broad field of health determinants. The acronym stands for: Place of residence, Race/ethnicity, Occupation, Gender, Religion, Education, Socio-economic status (SES) and Social capital. It was first used by Evans and Brown (2003). These categories cover the basic determinants of health. We used them as independent variables to measure social inequality.

These acronym as also used by Kavanagh, J. (20.) et al in three systematic reviews on specific issues regarding child and young people health issues[5 67], as well as re-analyzing the Cochrane Collaboration review of smoking cessation in pregnant women,[8] in which we based the information to determine which PROGRESS categories were of absolute importance.

The above mentioned systematic reviews include 128 studies in total where the PROGRESS categories were included and the predictive value of the variables was associated to inequalities in the conditions studied, extracting the data if the reviews the following PROGRESS indicator were selected.

Again, we came to the conclusion that some of these categories might be unavailable to all countries, so through the analysis of 4 systematic reviews we separated the most likely to be recorded, as well as accessible.

1 Place of residence: The place of residence refers to the civil subdivision of a country (district, county, municipality, province, department, state) in which the individual resides.

2 Ethnicity: is a group of people whose members identify with each other, through a common heritage, often consisting of a common language, a common culture (often including a shared religion) and/or an ideology that stresses common ancestry or endogamy.

3 Gender: Is a range of characteristics used to distinguish between male and female.

4 Religion: Is a collection of cultural systems, belief systems, and worldviews that establishes symbols that relate humanity to spirituality and, sometimes, to moral values.

5 Occupation: any activity on which time is spent by a person.

6 Education Level of the household

7 Socio-Economic Status: an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. For MASCOT the SES is defined by the combination of occupation and education. When possible we will use the House Wealth Index (HWI). It is available in UNICEF surveys and DHS surveys, in countries where other data sources. Are used the sources of raw data can be vary which means that other strategy of data sources combination will be needed.

The Construction of the HWI use information on assets or household possessions, thought to be indicative of wealth, generate weights (factor scores) for each of the assets through principal components analysis, weights summed by household, household members ranked according to the total score of the household in which they reside, divide the households into quintiles–each containing 20 percent of the household members (Disaggregation levels: lowest, second, middle, fourth, highest). “

Some activities in WP2, 3, 4 and 5 required the interview of specific persons working either at the Ministry of Health or other governmental bodies, as well as academic and research institutions. These interviews were carried out in a semi-structured manner and an informed consent was gathered for each interviewee in order to explain the scope of the project and the intended use of information and insure that no personal reference will be made to specific comments given during the interview. Some countries required the project to be reviewed by

an institutional or national Ethics Review Board. No action was taken until the authorization was obtained.

To secure confidentiality and regulate access to data, a system with login names and passwords has been implemented. Histories of data entry and/or modification are being recorded. Transfer of anonymized data to other partners needing such data for tasks within the project, or further analysis, and/or academic work and potential publications, is allowed after permission by the Project Board.

The Guidelines and its implementation

The Guidelines

The guidelines, a 75-page document, covered description of work, surveys and questionnaires for WP 2 to 4. A specific document was produced, discussed, adjusted and implemented. The mapping activities of WP2, 3 and 4 aimed to answer the following questions: 1) What is the current status of health inequalities preferentially affecting children, adolescents and mothers?, 2) Who are the key stakeholders (individual researchers, research groups or institutions) in the national health system for research for health performing research on the topics of interest to MASCOT?, 3) What are the structure, functioning and relations of the national system for research for health?, 4) What are the most important national policies/programmes/initiatives aimed at tackling health inequalities preferentially affecting children, adolescents and mothers?, and 5) Which institutions/organisations (ministry of health, agencies, etc.) are responsible for designing or implementing these policies/programmes?

A set of definitions for the project was established as to secure understanding of used terminology and to facilitate understanding. All types of research aiming at health inequalities preferentially affecting children, adolescents and mothers was to be covered. It included public and private research, basic and applied research, demonstration, etc.

Since the first stage of MASCOT aimed to determine how MCH research was taking place in the national health research system (NHRS), all types of research for health (including public and private research, basic and applied research, demonstration, etc.) was to be considered while determining the general landscape (WP3). The survey was then progressively narrowed to analyse exclusively research on health needs and health interventions/policies while evaluating the impact of MCH research on the development of national policies and strategies addressing health inequalities (WP4). Details were provided in each section of the guidelines.

The survey was to collect the most recent information available. It was thus expected that most data would concern on running research programmes, policies and interventions. However research programmes, policies and interventions that ended between January 2009 and June 2012 were also to be taken into account. The information related to the current status of health

inequalities (section II of the guidelines) could cover a longer period if recent data was not available.

The information required for completing the database and writing the national reports were of different nature and covered three distinct aspects: a) Indicators of maternal and child health **f**or analysing the current national status of health inequalities (section II of the guidelines), b) Information on the structures and mechanisms applying in the different levels of the national health research system (research governance & management, research financing and research implementation) for evaluating its performance (strengths and weaknesses) (section III of the guidelines), and c) Information on the use of MCH research for the development of strategies and policies applied in the country to tackle health inequalities preferentially affecting children, adolescents and mothers, for assessing the impact of research on the development of these approaches (section IV of the guidelines). This heterogeneous information was be collected through various means, including a bibliographical study, an online survey and semi-structured interviews.

Guidelines implementation

All country partners and national experts used the standardised guidelines. A workshop held in March 2012 in San José, Costa Rica, served as a discussion opportunity to review the guideline, listen to experts' recommendations and to train country experts on the different issues around the guidelines and clarifications. Chile, due to specific reasons of location of the partner's institution, opted to work with a national expert in coordination with country partner. Ghana, Malawi and Mozambique required an IRB authorization. There was a six month data gathering process, followed by report writing, reviews and regional report integration. A standardized format for both reports was prepared for partners to be used.

Given political instability during the data gathering process, the country expert in Guinea Bissau was not able to continue through the whole data collection phase. Bolivia faced a national medical and health authorities strike that lasted close to 50 days, delaying implementation and difficulting access to key interviewees, as almost all health authorities changed in the Ministry of Health (MOH) after the strike. Data collection through Internet faced problems to respondents due Internet connectivity issues; paper interview surveys were then applied through phone or personal interviews if possible. All data was then centralized at the data repository and checked for consistency.

Probably the most complicated issue of all was to get country data showing MCH and specific indicators needed to build the PROGRESS indicators. Not all countries had national available data of health surveys, and UNICEF ran surveys were not available for all countries. Efforts made by partners to get data went to the extreme of contacting National Surveys Authorities, as well as UNICEF contacts when discrepancies were found. Once data was concentrated, statistical analysis was performed in a systematic process for all data. Logs (statistical analysis results) were sent to all country experts and partners for their interpretation and analysis so they could include it in their country reports.

Once analysis was performed, country reports were prepared, a ‘twin colleague’ review was implemented as to provide suggestions, support for analysis and to detect language issues. 11 full country reports (Brazil, Bolivia, Chile, Costa Rica, Ghana, Malawi, Mexico, Mozambique, South Africa, Tanzania and Tunisia) were finalized, as one partial report for Guinea Bissau. With these, and desk work in Europe, three regional reports have been produced covering Africa, Europe and Latin America. These will be presented and discussed in detail at the Consortium Workshop and Meeting to be held in South Africa on 29-31 October 2012.

The results will be analised in two stages. The frst will render national and regional reports of the participating countries. The second one, will be a deeper analysis as to measure the improvements or not through the selected PROCESS indicators. In the second stage, a further analysis of the situation of the health research system will be issued, focusing in ways on opportunities for their strengthening. MCH research in the country tackling inequalities, or specific health issues has been listed and researchers linked those projects approached for interviews. Evidence of the utilization of research results (local and/or international) in health policies or health programs addressing MCH issues has been assessed.

Preliminary results

The summary of results here presented are preliminary. These come from Regional Reports drafts that have been compiled from national reports. The Project has still to perform a deeper analysis of the indicators, the reports on the national health research systems, and the use of results of research on MCH for policy design and MCH programmes orientation.

Africa[9]

- **Addressing MCH inequalities: T**he MASCOT study has established existence of inequalities in accessing maternal and child health services in all the African countries. These inequalities are on almost all PROGRESS indicators when available, however the intensity of gradient is different from country to country. Efforts must be put in place to ensure equity in access and utilization of MCH services.

- **Evidence informed policymaking in MCH:** The review of the MCH programmes and policies documents from almost all African countries showed lack of extensive utilization of research evidence in programme and policy development. Capacity must be built among researchers in research dissemination and among policy makers on accessing and utilization of research findings.

- **Engage MCH researchers:** In all African countries, MCH researchers must put much effort at interventions to diminishing the health gradient between populations with low socioeconomic resources and those with high socioeconomic resources.

- **Invest in Health MCH Research:** In almost all African countries except Tunisia, Much of MCH research support is supported by international donors, NGOs and foundations. It is time local resources are invested into local MCH for decision making.

- **Functional structures:** Putting in place structures for coordinating research in the country is imperative as in all the African countries, there is a need to a coordination mechanism between all the bodies and structures governing the health research system.

- **Research-Policymaker gap:** There is need to bridge the gap between researchers and policymakers in all the African countries. Policy makers feel researchers are not providing evidence for priority health needs and researchers feel policy makers are not making use of research evidence. There is need for a collaborated way in knowledge generation, access and utilization of research findings.

Latin America[10]

- **Addressing MCH inequalities:** The rural areas presented higher rates of Maternal Mortality Ratio, Under-five child Mortality, Children under 5 who are stunted, and Adolescent Pregnancy. On the other hand, Met need for contraception, Antenatal Care Coverage, and Postnatal Care for Mothers and Babies showed higher rates in urban areas. Other common results are shown in relation to educational level. Lower levels of education were associated with higher rates Maternal Mortality Ratio, Under-five child Mortality, and Adolescent Pregnancy. While higher levels of education were associated with higher prevalence of Met need for contraception, Antenatal Care Coverage, and Skilled Attendant at Birth. The PROGRESS indicator Gender showed that males had higher levels of Under-five child Mortality and Children under 5 who are stunted, when compared to females.

- **Invest in Health MCH Research:** The study also includes an analysis of the health research within Latin America's health systems and their role in maternal and child health research. The study found that the countries have defined their health priorities through their Ministries of Health or equivalent government entities. However, the

impact of health research is not always evaluated when developing these priorities. A factor that may explain this could be that, in many cases, research is the subject of other government entities such as the Ministry of Science and Technology or their equivalents, the Ministry of Education, and even the Ministry of Economy, which provide the main sources of funding.

- **Functional structures:** In regards to the infrastructure and the sources of funding, there are insufficient resources concentrated among the institutions that currently implement research. The research programs that exist are insufficient. The majority of the programs do not have as an objective to specifically study the inequalities in maternal and child health.

- **Research-Policymaker gap:** When analyzing the impact of research in the development of policies and programs, it is noted the existence of research groups that are continually delivering information to the scientific world. However, the real impact of these scientific contributions in the development of national policies cannot be visualized. This, shows a major disconnect between national health authorities and the scientific world. Similarly, the impact of research on policies to reduce inequalities in maternal and child health is not evident. In regards to the infrastructure and the sources of funding, there are insufficient resources concentrated among the institutions that currently implement research.

Europe[11]

- **Addressing MCH inequalities:** The European region includes countries with some of the highest levels of health and narrow health inequities. Maternal and child health policies and programmes have been broadly implemented in European health services and it is widely recognised that this is a key investment in countries' social and economic development. However, disparities in maternal and child health outcomes exist both between and within European countries given differences in socioeconomic development and uneven distribution of power, money and resources. European institutions shaping regional public policy have a strong commitment to supporting evidence and action to promote maternal and child health (MCH) and reduce maternal and child health inequalities (MCHI).

- **Invest in Health MCH Research:** The results found that on average the European region has improved maternal and child health in the relevant indicators which contribute to explain these, such as decreasing mortality or health care coverage (e.g. antenatal care, skilled birth, immunisation). However, when factoring in determinants of health, the

reports indicated inequalities in MCH were explained by lower income and education levels, and living in rural areas. These risk factors were particularly manifest among migrant women and ethnic minorities.

- **Functional structures:** The efforts made by European institutions and programmes to monitor and address inequalities are of crucial importance to the region as the economic crisis has exposed further disparities between and within countries and how these could be aggravated.

Discussion

The MASCOT project has made an effort to systematise the data collection in several countries. The project with a life span of two and a half years, has been active for one year and has produced standardised mapping guidelines that have been used in Bolivia, Brazil, Chile, Costa Rica, Ghana, Guinea Bissau, Malawi, Mexico, Mozambique, South Africa, Tanzania and Tunisia. Europe was studied as a region given the abundance of existing information. The data the project is obtaining will be discussed in a project's meeting at the end of October 2012. Further work awaits as for deeper analysis, and to detect which of the strategies countries have implemented, could be shared with other countries as an example of successful strategies that could be implemented.

The south-south collaboration will be channelized through WP5 and 6 still to be implemented, and discussed in a meeting next year in Mexico. North-south collaboration has been developed around the guidelines, the mapping strategies and country expert training. We expect to submit recommendations to the EU and northern countries on the relevance of mapping, of an integral assessment, and the importance of a system's approach to research. The project will submit recommendations to the participating countries looking for the strengthening of the research for health systems.

Acknowledgements:

We thank the MASCOT-U-Group for the work performed at National and Regional work: Bolivia: Eduardo Aranda; Brazil: Wanderley Marques Bernardo; Chile: Fernando Muñoz, Patricia Marcela Cortés; Costa Rica: Milena Castro, David López Alexandra Castro; Ghana: Patricia Akweongo, Moses Aikins, Phyllis Dako-Gyeke and Cynthia N.A. Afedi; Malawi, Felix Limbani; México: Miguel Ángel González Block, Emily Vargas; Mozambique: Maria de Fátima Cuembelo; South Africa: Tessa Dooms and Matthew Chersich; Tanzania: Michael Munga, Adiel Mushi,

Godfrey Mubyazi, Emmanuel Makundi, Julius Massaga, Mwele Malacela; Tunisia: Iman Harrabi, J Maatoug, Hassen Ghannem; UK: Martha Perry and Maggie Davies

REFERENCES:

[1]Health Impact Assessment, Glossary of terms, http://www.who.int/hia/about/glos/en/index1.html, accessed October 12, 2012

[2] Marmot, M. Social determinants of health inequalities, The Lancet, Volume 365, Issue 9464, Pages 1099 - 1104, 19 March 2005

[3] World Health Statistics 2012, WHO, 2012, http://www.who.int/gho/publications/world_health_statistics/2012/en/index.html, accessed October 13, 2012.

[4] www.mascotfp7.eu

[5] Kavanagh J, Oliver S, Caird J, Tucker H, Greaves A, Harden A, Oakley A, Lorence T, Thomas J. "Inequalities and the mental health of young people: a systematic review of secondary school-based cognitive behavioral interventions". London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, 2009. Taken from: http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2418

[6] Caird J, Kavanagh J, Oliver K, Oliver S, O'Mara A, Stansfield C, Thomas J. "Childhood obesity and educational attainment: a systematic review". London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, 2011. Taken from: http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2954

[7] Kavanagh J, Oliver S, Caird J, Tucker H, Greaves A, Harden A, Oakley A, Lorenc T, Thomas J. "School-based cognitive-behavioral interventions: A systematic review of effects and Inequalities. *behavioural interventions".* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, 2009.

[8] Kavanagh J, O'Mara AJ, Oliver S, Chamberlain C, Caird J, Barnett-Page E, Thomas J. "Re-analysing Equity in a Cochrane Review: Smoking Cessation in Pregnancy". Presented at the 19th Cochrane Colloquium, Madrid, Spain, 19-22 October 2011.

[9] MASCOT Africa Regional Report, Internal document. October, 2012

[10] MASCOT Latin America Regional Report, Internal document. October, 2012

[11] MASCOT Europe Regional Report, Internal document. October, 2012