

## ECONOMIC AND SOCIAL RESEARCH COUNCIL END OF AWARD REPORT



### For awards ending on or after 1 November 2009

This End of Award Report should be completed and submitted using the **grant reference** as the email subject, to **reportsofficer@esrc.ac.uk** on or before the due date.

The final instalment of the grant will not be paid until an End of Award Report is completed in full and accepted by ESRC.

Grant holders whose End of Award Report is overdue or incomplete will not be eligible for further ESRC funding until the Report is accepted. ESRC reserves the right to recover a sum of the expenditure incurred on the grant if the End of Award Report is overdue. (Please see Section 5 of the ESRC Research Funding Guide for details.)

Please refer to the Guidance notes when completing this End of Award Report.

|   |   |  |                     |
|---|---|--|---------------------|
| <b>Grant Reference</b>                                | <b>RES-167-25-0369</b>  |  |                     |
| <b>Grant Title</b>                                    | <b>Proposal to conceptually integrate social determinants of health research and the capabilities approach to development and social justice.</b> |  |                     |
| <b>Grant Start Date</b>                               | <b>1 February 2008</b>  | <b>Total Amount</b>  | <b>£ 206,862.48</b> |
| <b>Grant End Date</b>                                 | <b>30 September 2010</b>  | <b>Expended:</b>   |                     |
| <b>Grant holding Institution</b>                      | <b>UCL</b>  |  |                     |
| <b>Grant Holder</b>                                   | <b>Prof. Sir Michael Marmot</b>   |  |                     |
| <b>Grant Holder's Contact Details</b>                 | <b>Address</b>  | <b>Email</b>   |                     |
|   | <b>UCL Dept. of Epidemiology &amp; Public Health<br/>1-19 Torrington Place<br/>London WC1E 6BT</b>  | <a href="mailto:m.marmot@ucl.ac.uk">m.marmot@ucl.ac.uk</a> |                     |
|   |   | <b>Telephone</b><br>+44 20 7679 1694                       |                     |
| <b>Co-Investigators (as per project application):</b> |   | <b>Institution</b>   |                     |
| <b>Dr. Sridhar Venkatapuram</b>                       |   | <b>UCL (2/2008 – 10/2010)</b>                              |                     |
|   |   |  |                     |
|   |   |  |                     |

## 1. NON-TECHNICAL SUMMARY

Please provide below a project summary written in non-technical language. The summary may be used by ESRC to publicise your work and should explain the aims and findings of the project. *[Max 250 words]*

This research project began integrating the study of the social determinants and distribution of ill-health and mortality with the Capabilities Approach (CA), a leading conception of international development and social justice advanced by Amartya Sen and Martha Nussbaum. The initial motivations for bringing together these two domains were that first, some social epidemiological research showed that an individual's freedom and control in their daily lives was an important determinant of health. This freedom and control seemed similar to a capability in the CA. Second, the CA had not incorporated the rich body of research findings on social determinants and health inequalities. Third, both social epidemiology and the CA aspire to be global theoretical frameworks that apply to all human beings across all countries. And fourth, given that the CA provides both an analytical framework as well as foundational ethical arguments for improving human capabilities, there was potential that integrating social epidemiology with the CA would help produce ethical arguments to motivate addressing health inequalities and social determinants of ill-health. The project had three nodes of research, seminars, lectures, and conferences: conceiving health as a capability; social determinants of health, the CA, and social justice; philosophy and epidemiology. The researchers have exceeded the planned outputs, impacted both academic and public policy domains, and have identified next steps for further research and impact.

## 2. PROJECT OVERVIEW

### a) Objectives

Please state the aims and objectives of your project as outlined in your proposal to the ESRC. *[Max 200 words]*

The objectives were to produce a range of intellectual outputs including two substantial journal articles in each of three topic areas, organize two tracks of seminars (i.e. health inequalities, philosophy and epidemiology) and conferences/lecture series. These outputs as well as engagement with academic colleagues and other stakeholders were aimed to push forward the boundaries of social epidemiology, the CA, health and social justice philosophy, and inform health policy makers address health inequalities domestically and in health development programmes. The specific questions to be pursued included:

- i. Health as a capability: How can social determinants research and the conceptual device of a capability be integrated to build a descriptive account of human health seen as a capability to achieve biological/mental and agency functionings?
- ii. Social determinants, social justice, and capability to be healthy: In order to have prescriptive power, social epidemiology and the Capabilities Approach need to construct an argument for an entitlement to the social basis/social determinants of a capability to

be healthy.

- iii. Philosophy of epidemiology: How can social epidemiology respond to the charge that it is not an objective or natural science? Can individual level “bio-medical” determinants and social determinants be integrated into one model? What are the philosophical commitments underlying social determinants of health research?

## b) Project Changes

Please describe any changes made to the original aims and objectives, and confirm that these were agreed with the ESRC. Please also detail any changes to the grant holder’s institutional affiliation, project staffing or funding. *[Max 200 words]*

There was a no-cost extension of one-month. The extension was approved by the ESRC.

## c) Methodology

Please describe the methodology that you employed in the project. Please also note any ethical issues that arose during the course of the work, the effects of this and any action taken. *[Max. 500 words]*

This was an inter-disciplinary research project bringing together social sciences and philosophy. The research methodology was primarily conceptual and normative reasoning making use of empirical research in social epidemiology where it was relevant. At this early stage of bridging social epidemiology and the CA, conceptual and normative reasoning was seen to be the most coherent option of research method. It follows the method used in bioethics where health sciences are integrated with ethics. Rather than hypothesis testing, reasoning in bioethics is both informed by values and seeks to draw conclusions regarding values. The philosophical method of research may be helpfully described as reasoning that aims for ‘reflective equilibrium’. It is an account of the justification of ethics whereby considered judgements about particular issues are confronted with a range of competing theoretical views and facts. Through a process of reiterative adjusting of the judgements or the theoretical views, the aim is to find a stable fit. Within this process, the methods of reasoning used will range from identifying fallacies or incoherence in current thinking and practices, using thought experiments that help focus attention on the relevant principles, identify how we reason in analogous situations, and so forth.

In line with the ESRC-DFID’s call for innovative and interdisciplinary proposals, the research questions and philosophical method of research were chosen because applying social epidemiology in the context of developing countries could not avoid a number of problems regarding social epidemiology’s methodology, purpose, and scope. These problems cannot be addressed through further empirical research but require critical scrutiny of the discipline’s core concepts, research methodology, and conclusions. Social epidemiology needs more critical reasoning to solidify its promising yet nascent conceptual framework that uses concepts such as inequality, agency, autonomy, dignity, and control. The analysis and articulation of these concepts has been an abiding concern of philosophers, and epidemiologists have a great deal to

gain by drawing on the work that has already been done on these concepts. Conversely, philosophers such as CA advocates need epidemiology to ground their reasoning and arguments for what (global) society must do in response to the breadth of causes, distribution patterns, and consequences of health inequalities at the individual, community, national, and global levels. And, when it comes to reasoning about health in contrast to health care, philosophers have made too many bad assumptions and reasoned very narrowly. It is widely acknowledged that philosophers must now have a working knowledge of economics when reasoning about social and development policies, but it is not yet adequately appreciated that they also need to have a better understanding of the breadth of determinants and distribution of health inequalities. Therefore, rather than pursuing an empirical study of the social determinant of health and health inequalities in a development context, this project used philosophical reasoning to begin addressing some foundational questions at the intersection of social epidemiology, development theory and practice, and social justice philosophy.

#### **d) Project Findings**

Please summarise the findings of the project, referring where appropriate to outputs recorded on *ESRC Society Today*. Any future research plans should also be identified. [Max 500 words]

Over the course of the project, we have successfully pushed forward knowledge in each of the three research nodes, helped build inter-disciplinary understanding across relevant disciplines, and have established the potential for more research in this new area of inquiry.

The first track began bridging the state of the art knowledge on the social causation and distribution of disease and mortality with theories and debates of social justice. In particular, we began evaluating how well the most prominent conceptions of social justice deal with the findings in social epidemiology and the full range of causes, distribution patterns and consequences of ill health. (Venkatapuram & Marmot 2009, Venkatapuram, Bell & Marmot 2010, Venkatapuram 2011). We also showed how the debates in social justice philosophy can inform analysis of what conclusions to draw regarding inequalities in the causes of ill-health and health outcomes. In bringing together social epidemiology and the CA we found that they both share a similar underlying analytical framework. (Venkatapuram 2009, 2011) Social epidemiology sees health as being determined by biology, behaviours, and external material and psycho-social exposures. The CA sees capabilities as formed by the interaction of internal endowments and skills, external conditions, and agency. Aligning social epidemiology and the CA frameworks can help identify the causal pathways to health capabilities, and in turn, develop arguments that a moral entitlement to a 'capability to be healthy' is supported by epidemiological research.

The second track of research examined how health could be coherently conceptualized as a capability. In contrast to the notion of health as the absence of disease that is pervasive in medical science despite its shortcomings, we were able to show the coherence of human health conceptualized as the capability to achieve a set of basic functionings. (Venkatapuram 2010a, 2010b, 2011). Such a notion of health as a capability also aligns with social epidemiological research that identifies autonomy and control over daily living conditions as directly influencing disease outcomes. Viewing health as a capability opens up the sphere of health within the CA, and consequently on its influence in development programmes.

The third track of research brought philosophical reasoning to bear on the theory and practice of (social) epidemiology. While causation in epidemiology as a whole is an important aspect to continue exploring, we showed how social epidemiology fundamentally challenges the dominant explanatory model and methodology of epidemiology by cutting across the natural and social sciences. (Venkatapuram & Marmot 2009) The individual level biomedical explanatory model of causation of disease is threatened by the expansion of the explanatory scope outward and upward to include social factors in the causal chain. The acrimonious debates within epidemiology are really muddled debates over the scope and purpose of epidemiology, the ontology of social determinants as well as the truth status and scope of causal explanations in natural versus social science. (Venkatapuram 2009, Venkatapuram & Marmot 2009)

As we stated in the proposal, the research was aimed to lay the conceptual groundwork for building a theory of health causation and distribution that is applicable across human societies and which also provides guidance for an ethical social response. We intend to pursue further research in each of the three areas.

#### **e) Contributions to wider ESRC initiatives (eg Research Programmes or Networks)**

If your project was part of a wider ESRC initiative, please describe your contributions to the initiative's objectives and activities and note any effect on your project resulting from participation. [Max. 200 words]

This grant was administered under the ESRC-DFID Scheme for research on international poverty reduction. The call for proposals asked for innovate, interdisciplinary and rigorously reasoned proposals. Given the increasing influence of the capabilities approach on development theory and policy, our proposal aimed to further explore how the capabilities approach can incorporate the state of the art research in social epidemiology. We hope to have begun highlighting the scientific and ethical reasons for focusing on health capabilities in development programmes, and the analytical reasoning involved with evaluating and addressing health inequalities.

### **3. EARLY AND ANTICIPATED IMPACTS**

#### **a) Summary of Impacts to date**

Please summarise any impacts of the project to date, referring where appropriate to associated outputs recorded on *ESRC Society Today*. This should include both scientific impacts (relevant to the academic community) and economic and societal impacts (relevant to broader society). The impact can be relevant to any organisation, community or individual. [Max. 400 words]

Scientific/Academic:

We have written a lead article of a special issue of Journal of Bioethics which lays out the philosophy of science issues arising out of social epidemiology as well as the social justice issues arising out of identifying health achievements being determined by a broad range of social

factors. A second paper in the Journal of Public Health Ethics identified the empirical grounding of the capabilities approach and its similarities with social epidemiology's explanatory model. A third paper in Health and Human Rights examined the similarities and differences between social epidemiology, social medicine, and human rights. A monograph is being published in 2011 which argues for health as a capability, the state of the art of knowledge on the causation and distribution of ill-health, and a conception of health justice as one which distributes the social bases of the capability to be healthy. Additionally, we co-hosted two advanced seminars with the Philosophy department on health justice, helped organize two conferences on philosophy and health, and co-taught a course on global justice and health. We also advised and supported a research project recently established at Cambridge University on the philosophy of epidemiology. The responses to the articles, seminars, and conferences have been enormously positive resulting in more student enrolments, invitations for article submissions, and visiting lectureships.

**Policy:**

This research project, led by Sir Michael Marmot, also informed the work of the WHO Commission on the Social Determinants of Health, the Marmot Review of Health Inequalities in England Post-2010, and the European Review of Health Inequalities. The research informed some of the arguments about the social justice bases for identifying and addressing ill-health, and health inequalities visible in the form of the social gradient in health outcomes. The research has also informed articles written by Marmot regarding public policy responses to health and the recent recession in the UK, USA, and Europe. And the research has indirectly also informed Marmot's engagement with health policy makers in a number of countries who are seeking to address social determinants of health and health inequalities.

Though we tried we were not able to have much success engaging health development practitioners in the UK including DFID health programme officers. Health equity and social determinants of health is seen to be too outside the scope of current interests in "health systems", vertical disease programmes, and cost-effective health programming. We applied for follow-on funding to engage with health development actors in the UK but we were not successful with the grant application.

**b) Anticipated/Potential Future Impacts**

Please outline any anticipated or potential impacts (scientific or economic and societal) that you believe your project might have in future. *[Max. 200 words]*

There are number further impacts expected in the short and longer term. Most immediately the research will be most directly continued by Dr. Venkatapuram. After moving to the London School of Hygiene and Tropical Medicine, he plans on continuing to extend the inter-disciplinary research in the three areas, helping create courses on health and ethics, supervising graduate students, organize conferences and begin engaging with health development and global health policy makers and academics. The research has instigated interest among academics in philosophy, economics, and epidemiology regarding health equity which will likely result in joint, inter-disciplinary publications. The research outputs have also directly resulted in invitations for further article submissions, visiting lectureships, and student applications. Prof. Marmot is planning on writing a monograph on health inequalities and social determinants of health from a

global perspective which will be partly informed by the research and discussion from this research. And while Prof. Marmot will continue to engage with a number of national level health policy makers in a variety of countries, Dr. Venkatapuram plans on further developing working relationships with policy makers and researchers in India in regard to monitoring and addressing health inequalities and addressing social determinants of health.

You will be asked to complete an ESRC Impact Report 12 months after the end date of your award. The Impact Report will ask for details of any impacts that have arisen since the completion of the End of Award Report.

#### 4. DECLARATIONS

Please ensure that sections A, B and C below are completed and signed by the appropriate individuals. The End of Award Report will not be accepted unless all sections are signed. Please note hard copies are NOT required; electronic signatures are accepted and should be used.

##### A: To be completed by Grant Holder

Please read the following statements. Tick ONE statement under ii) and iii), then sign with an electronic signature at the end of the section.

###### i) The Project

|   |          |
|---|----------|
| This Report is an accurate overview of the project, its findings and impacts. All co-investigators named in the proposal to ESRC or appointed subsequently have seen and approved the Report. | <b>X</b> |
|---|----------|

###### ii) Submissions to *ESRC Society Today*

|   |          |
|---|----------|
| Output and impact information has been submitted to <i>ESRC Society Today</i> . Details of any future outputs and impacts will be submitted as soon as they become available. | <b>X</b> |
|---|----------|

**OR**

|  |                          |
|--|--------------------------|
| This grant has not yet produced any outputs or impacts. Details of any future outputs and impacts will be submitted to <i>ESRC Society Today</i> as soon as they become available. | <input type="checkbox"/> |
|--|--------------------------|

**OR**

|   |                          |
|---|--------------------------|
| This grant is not listed on <i>ESRC Society Today</i> . | <input type="checkbox"/> |
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###### iii) Submission of Datasets

|   |                          |
|---|--------------------------|
| Datasets arising from this grant have been offered for deposit with the Economic and Social Data Service. | <input type="checkbox"/> |
|---|--------------------------|

**OR**

|   |                          |
|---|--------------------------|
| Datasets that were anticipated in the grant proposal have not been produced and the Economic and Social Data Service has been notified. | <input type="checkbox"/> |
|---|--------------------------|

**OR**

|  |          |
|--|----------|
| No datasets were proposed or produced from this grant. | <b>X</b> |
|--|----------|