

AHEAD Newsletter

INSIDE THIS ISSUE

- Message from the editor
- Research focus
- Meet AHEAD network researcher
- Opinion article
- AHEAD Network News
- Upcoming Scientific Events
- About the AHEAD Network

MESSAGE FROM THE EDITOR

Welcome to the first of our six-monthly newsletters of the AHEAD research network. The Allied Health, Environment and Development Research Network (AHEAD) unites researchers in various research disciplines (economics, epidemiology, public health, sociology of health and environment...) from both developed and developing countries on current topics relating to health and environmental issues. You can find out more on our network by reading Section 7 of this newsletter, or by connecting to our website www.aheadnetwork.org.

In this issue, we examine how to embed an aversion to increased correlation between health and socio-economic status in social welfare functions used to evaluate public health policies (Research Focus in Section 2). In Section 3 we meet Marwân-al-Qays Bousmah and Jean-Baptiste Combes who talk to us about their research on the health of migrants in the European Union. In Section 4, we discuss the question of where to build a unique medical facility across two competing isolated regions of a conflict area. In this issue you will find the latest news from network members in Section 5. This is followed by a diary of key upcoming scientific events (Section 6).

By Ramses H. Abul Naga



A graphic featuring the word "focus" in a bold, red, lowercase sans-serif font. The text is centered within a blue circular target symbol consisting of three concentric circles and a crosshair. The background is a yellow-to-orange gradient with a faint, large-scale circular pattern.

focus

RESEARCH FOCUS

CORRELATION AVERSION

Researchers interested in measuring social welfare and inequality in relation to bivariate distributions defined over health and income face the question of how to account for the intensity of the health gradient. When social welfare is defined as the average level of well-being individuals enjoy, there are essentially three normative perspectives one can take on the treatment of the gradient. One can believe that a high correlation between health and income is socially undesirable. In this case, the social welfare or inequality index is said to exhibit correlation aversion. In the opposite case, the social welfare index is increasing in the correlation, and the inequality index is decreasing. We may refer to this situation as one where the index is correlation preferring (the opposite of correlation averse). A third approach is correlation neutral: the gradient does not enter the evaluation of well-being and only the marginal distributions (income and health separately) are used in the evaluation of well-being and inequality.

If the individual social valuation functions are identical, and social welfare is the average of the values taken by these functions, there is a simple rule for choosing the individual social valuation function. If the social welfare function is correlation neutral, the cross-derivative of the social valuation function is chosen to equal zero. If the social welfare function exhibits the property of correlation aversion, the derivative is chosen as negative. Otherwise, the social welfare function is correlation preferring and we choose the derivative of the social valuation function to be positive.





Marwân-al-Qays Bousmah is a research associate at the Observatoire Régional de la Santé and SESSTIM (UMR 1252).



Jean-Baptiste Combes is a lecturer in Health Economics, École des Hautes Études en Santé Publique, EHESP.

MEET AHEAD NETWORK RESEARCHERS

The purpose of our research* was to investigate differences in health patterns between immigrants and nationals in Europe. To carry out this investigation, we have made use of panel data on more than 100,000 adults from 19 European countries. Relying on five different health measures, our study investigated the heterogeneity in health patterns between immigrants and European nationals, and also the heterogeneity across immigrants on the basis of the wealth of their country of origin.

We have found that on average immigrants were in comparatively better health than nationals at the time of their arrival in Europe. However, with time we have been able to identify a deterioration in the health of immigrants, bringing their health levels below the average attainment level of their chosen country of residence. As such, our research supports the hypothesis that the assimilation of immigrants is unhealthy.

There are however subtle differences in the pattern of convergence of the health of immigrants. Specifically, the unhealthy convergence is more pronounced in terms of chronic conditions for immigrants from low-HDI countries, and in terms of self-assessed health and body-mass index for immigrants from medium- and high-HDI countries.

** For more details about this research, we refer the reader to Bousmah, M.-a.-Q., Combes, J.-B.S., & Abu-Zaineh, M. (2019). Health differentials between citizens and immigrants in Europe: A heterogeneous convergence. Health Policy, Volume 123, Issue 2, pp. 235-243, 2019.*



OPINION ARTICLE

WHERE TO BUILD A MEDICAL FACILITY ACROSS THE REGIONS OF A CONFLICT AREA?

By Ramses Abul Naga

Consider a government of a conflict ridden country that is faced with the problem of constructing a hospital in one of two regions A and B. The difficulty lies in the fact that only one hospital may be built, and additionally that the two regions are isolated geographically, so that patients may not be able, or expected to, travel to the region where the facility is located.

If the hospital facility is built, it is inevitable one party will be left at a disadvantage. How can equity principles guide the public authority's decision as to which of the regions to select? There is no immediate answer to this question as we shall argue. We note first that this problem may be generally seen as an instance of a general allocation problem of an indivisible good.

Firstly, the government may insist on maintaining absolute equality between the two regions. Given that available resources can only produce one medical facility, the only solution that is compatible with equal treatment is to cancel the construction of the medical facility. This solution, forced equality between the regions, may be argued to be wasteful, since the hospital will no longer benefit any of the two regions.

“How can equity principles guide the public authority's decision as to which of the regions to select?”.

One compromise solution that is often invoked in relation to indivisible goods is rotation of the good. A summer house may be shared between the claimants of an inheritance through time sharing. Divorced parents may take turns during weekends in enjoying the company of their children. But in the context the conflict area we are discussing, rotation is made impossible because of the isolation of regions A and B.

One third perspective is to insure that equal treatment of the regions occurs ex-ante before the hospital is built. A common approach is to design a lottery that gives a 50% chance to each of the regions to be chosen. The fortunate party is then selected by the toss a coin to designate a winner. This lottery type solution may further be refined, by saying giving 1/3 chance to region A of



being selected if the population of region B is twice that of region A. This (1/3, 2/3) lottery brings an element of proportionality, in designing an ex-ante equitable allocation rule.

Of course it may be argued that tying the destiny of the regions to a toss of the coin may not be a commendable decision rule. One may then revert to the difficult decision of selecting one of the two regions, and offering compensation to the other region.

If the hospital is built in region B, the government may pass a law offering partial tax relief to region A, provide region A with priority in public health campaigns, or may commit to building the next hospital in region A when funds become next available. Compensation of course will do little more than to reduce the grievance of region A, but this is better than not offering any compensation to the losing party.

We have surveyed five equity principles: forced equality, rotation, ex-ante equality via lotteries, proportionality via lotteries, and compensation. In practice, sensible decision makers may not follow one unique equity stance, but more broadly they may design a priority scheme. A priority scheme may involve many criteria and stakeholders but ultimately is a rule for deciding which of regions A or B should be allocated the medical facility. For instance, experts may be called upon for deciding where the disease environment would benefit most from the presence of the medical facility. Historians may be consulted in order to examine if previous historical injustices need to be redressed. Campaign

groups and donors may provide some input in selecting one of the regions as part of a wider peace and reconciliation effort. The differential level of economic development of the two regions may be considered, and the poorer region may be selected for the investment in order to redress problems of regional inequality.



What is needed crucially is clarity and transparency in explaining how the decision is reached, and some degree of consensus should emerge from the wider public debate. In this practice, governments of conflict areas that enjoy greater political freedoms will offer greater transparency in explaining how priority has been established, while other governments that are averse to political debate and accountability will remain mute and opaque about how decisions in this matter are made.

AHEAD NETWORK NEWS

➤ AHEAD Workshops

In collaboration with its regional partners, the AHEAD Network has organized two workshops on “The Quest for Universal Health Coverage in The Mediterranean Developing Countries: Practical Challenges and Alternative Financing Strategies”.

The first symposium was hosted by the Faculty of Law, Economics and Social Sciences, University of Hassan II, Casablanca, Morocco (14 May 2018). The second symposium entitled “Who bears the burden of universal health coverage?” was held at the Institute of Community and Public Health of Birzeit University, Palestine (21 June 2018).

➤ AHEAD Working Papers

Bousmah, M-a-Q, Combes, J-B & Abu-Zaineh, M. (2018). Health differentials between citizens and immigrants in Europe: A heterogeneous convergence. AHEAD Working Paper 03/2018.

Abu-Zaineh, M., Awawda, S. & Ventelou, B. (2018). Who bears the burden of Universal Health Coverage? An assessment of alternative financing policies using an overlapping-generations general equilibrium model. AHEAD Working Paper 02/2018.

Abu-Zaineh, M & Abul Naga R. H. (2018). Measurement of health inequality using welfare decreasing variables. AHEAD WORKING PAPERS SERIES N° 01/2018.

➤ Selected Publications of AHEAD Network Members

Awawda, S.; Abu-Zaineh, M. and Ventelou, B. (2019) The quest to expand the coverage of public health insurance in the occupied Palestinian territory: An assessment of feasibility and sustainability using a simulation modelling framework. The Lancet, 393, Special Issue, S17, March 01, 2019.

Bousmah, M.-a.-Q., Combes, J.-B.S., & Abu-Zaineh, M. (2019) Health differentials between citizens and immigrants in Europe: A heterogeneous convergence. Health Policy, 123(2): 235-243.

Abu-Zaineh, M. & Woode, M. (2018). Investigating the Dimensions of Youth Wellbeing: An Exploratory Structural Equation Modelling Approach Applied to Palestine. Child Indicators Research, 2018, 11(1): 57-78.

Bárcena-Martín, Elena, María C. Blanco-Arana & Salvador Pérez-Moreno (2018). Social Transfers and Child Poverty in European Countries: Pro-poor Targeting or Pro-child Targeting? Journal of Social Policy: 1-20.

Arestis, Philip, Elena Bárcena-Martín & Salvador Pérez-Moreno (2018). Differences in Institutional Quality across Euro Area Countries: Which Factors Contribute Most to Inequality? Panoeconomicus, 65(3): 363-379.

William B. Weeks, Mariétou H. L. Ouayogodé, Bruno Ventelou, Todd Mackenzie and James N. Weinstein (2018). Community Economic Distress and Changes in Medicare Patients' End-of-Life Care Costs. Journal of Palliative Medicine, Volume 21, Issue 6, 742-743.

Ramses H. Abul Naga (2018) Measurement of Inequality with a Finite Number of Pay States: The Majorization Set and its Applications. Economic Theory 65, 99-123.

AHEAD NETWORK NEWS



➤ AHEAD Members Achievements

Congratulations to AHEAD Network member Sameera AWAWDA for having successfully defended her PhD thesis entitled “A roadmap to attain universal health coverage in developing countries: A microsimulation based dynamic general equilibrium model”, on Sept 25th 2019, at Aix-Marseille School of Economics (AMSE) under the co-direction of Pr. Bruno VENTELOU and Pr. Mohammad ABU-ZAINEH.

In her thesis Sameera AWAWDA has addressed the question of how developing countries can achieve Universal health coverage (UHC), which has been considered as a primary vehicle to achieve Sustainable Development Goals of 2015-2030. The thesis presents an operationalizing theoretical framework that is capable of assessing the feasibility of UHC using dynamic stochastic general equilibrium (DSGE) model and microsimulation technique. The first chapter presents the DSGE model that is calibrated to capture the salient features of an archetype developing economy. Results illustrate how the degree of financial-risk protection can vary with the financing-mix used to implement the UHC reform. The second chapter assesses the macro-fiscal conduciveness of UHC reforms and its impact on welfare and public finance in the

particular context of Palestine. Results show that while UHC can enhance welfare, a parallel expansion of the breadth and width of coverage may not be feasible unless a policy adjustment is undertaken. The third chapter examines the potential impact of UHC reforms on intergenerational inequalities in view of fiscal sustainability. The question of who bears the burden of the UHC is addressed using an overlapping generation model, while a convenient measure to assess the social impact of UHC-financing strategies is proposed. Results show that under conditions of limited fiscal space, the choice between deferred-debt and current UHC-financing implies a trade-off between fiscal sustainability against intergenerational inequality, with which the policy-maker will have to confront.

UPCOMING SCIENTIFIC EVENTS

➤ The 12th European Public Health (EPH)

Conference, 20-23 November 2019. Marseille, France.

<https://ephconference.eu>

ABOUT THE AHEAD NETWORK

The Allied Health, Environment and Development Research Network Research Network (AHEAD) unites researchers in various research disciplines (economics, epidemiology, public health, sociology of health, ecology and environment...) from both developed and developing countries on current topics relating to health, environment, and development. The network seeks to identify, in a multidisciplinary manner, the interactions between health and environmental issues and to integrate sustainable development goals into public policies in developing countries with a particular focus on the Middle East and North African Region (MENA) and Sub-Saharan Africa (SSA). The AHEAD Network aims to facilitate scientific exchange between researchers and to help pool together existing knowledge on questions relating to health, environment and development.



Allied Health, Environment and
Development Research Network

CONTACT US

Hosted by Aix-Marseille School of Economics (AMSE)
Aix-Marseille University
5-9 Boulevard Bourdet, CS 50498
13205 Marseille Cedex 1, France

Website

www.ahead-network.org

© Copyright AHEAD Research Network
AHEAD network is a registered association under the "French Law of 1901".
October 2019 edition

AHEAD wish to thank