

Institution: University College London

Unit of Assessment: 27 - Area Studies

Title of case study: Developing health economics in Russia, Eastern Europe and Central Asia

1. Summary of the impact (indicative maximum 100 words)

Research in health economics led by Dr Christopher Gerry has catalysed important changes in the university syllabus at state universities in Russia, Ukraine, Kazakhstan, Tajikistan and Croatia. Specifically, a 2011–2014 capacity-building teaching and research programme co-ordinated by Dr Gerry and funded by the Open Society Foundations has led to the introduction of health economics – a disciplinary field not previously well established in the region – at multiple universities within the region. Participants of the programme have subsequently incorporated health economics in their home institutions.

2. Underpinning research (indicative maximum 500 words)

In 2009 Dr Christopher Gerry (at UCL since 2002; Senior Lecturer in Health Economics in its School of Slavonic and East European Studies, SSEES, since 2008), working with Professor Tomasz Mickiewicz (UCL, 1999–2011; Professor of Comparative Economics within SSEES 2002–2008) and their PhD student Zlatko Nikoloski (UCL, 2007–2011), began to explore a widely cited controversy originating in a *Lancet* article (Stuckler, King and McKee, 'Mass privatisation and the post-communist mortality crisis.' *Lancet* 31:373(9661):399–407) published in January 2009. The article claimed a causal link between mass privatisation and a 13% rise in male mortality in post-Communist societies, a claim that the UCL team interrogated on three specific grounds: (i) methodological (was the econometric approach robust?); (ii) conceptual (was the logic underpinning the causal pathway consistent with health production?); (iii) contextual (was the institutional and societal context correctly used and interpreted?).

They found that the link claimed for the relationship between mass privatisation and mortality did not stand up to closer scrutiny. In particular, they argued in an article published in 2010 [a] that the health trends at the root of the claimed association actually pre-dated the initiation of mass privatisation programmes and that on closer inspection the trends did not differ greatly between privatisers and non-privatisers. Most significantly, they argued that the original claims stemmed from a misunderstanding of the ways in which health is produced and in which socioeconomic outcomes, policies and institutions interact in post-Communist states, and demonstrated the importance of understanding empirical methodologies and their relation with theoretical approaches and country specificities.

This observation resulted in a more conceptually oriented follow-up piece of work published in 2012 [b] which, by illustrating the importance of correctly specifying the underlying data-generating process in the context of Russia and Eastern Europe, showed that mass privatisation was *not* associated with post-Communist mortality fluctuations. In reaching this conclusion, Gerry tested all plausible models accounting for the temporal dependencies of the data and found no evidence of a relationship between mass privatisation and male mortality fluctuations. While the research raised important questions concerning the dynamic nature of health production, it also highlighted the complexity of the health patterns emerging in the post-Communist world and the need for indigenous research and teaching in health economics to understand these.

This work prompted successful applications for further research funded by Nuffield (2011–13) and the European Commission (2011), and in 2012 led to the invited publication of the key research findings in *Social Science and Medicine* [c]. Here, Gerry discussed the complexities of the causal pathways between socio-economic change and ill-health, emphasising the need for further exploration of the catastrophic patterns of mortality and morbidity characteristic of the post-Communist world.

These three publications ([a], [b], [c]), which draw on aggregate-level data from the post-Communist region, make a significant contribution to a debate in the literature relating to that region, and represent the core of the research underpinning impacts outlined below. They, in turn, stimulated two smaller projects enabling a microeconomic exploration of the ways in which health

Impact case study (REF3b)



is produced at the level of the individual. In this subsequent research, Gerry worked with Georgios Papadapoulos (UEA) on further analysis of health persistence, this time specifically in Russia, using data from the Russian Longitudinal Monitoring Survey. The work, which drew on the combined strengths of Gerry's expertise in Russian data and socioeconomic contexts and Papadapoulos' experience of handling large data sets, provided further support for the hypothesis that the health production process is fundamentally dynamic, underscoring the singularity of the post-Communist context.

3. References to the research (indicative maximum of six references)

- [a] Gerry, C. J., Mickiewicz, T. M., & Nikoloski, Z. (2010) Did Mass Privatisation really increase post-Communist male mortality? *The Lancet*, Vol. 375, No. 9712. doi: 10.1016/S0140-6736(10)60158-4.
- [b] Gerry, C. J. (2012a) The journals are full of great studies but can we believe the statistics? Revisiting the mass privatisation mortality debate. *Social Science & Medicine* Vol. 75(1) pp. 14–22. doi: 10.1016/j.socscimed.2011.12.027.
- [c] Gerry, C. J. (2012b) Re-revisiting the Mass Privatisation–Mortality debate. A response to Stuckler, King and McKee. *Social Science & Medicine* Vol. 75(1) pp. 32–35. doi: 10.1016/j.socscimed.2012.02.005.

Funding:

Gerry, C. (Grant holder) (2010–11) Erasmus Mundus Research Fellowship (at Higher School of Economics, Moscow), EUR13,000, Sept 2010-Sept 2011. European Commission, EACEA. Peer reviewed grant. (Contributed to [b])

Davis, C. (Grant holder), Gerry, C. J. & Walker, C. (2011–13) Economic Change, State Priorities and the wellbeing of vulnerable groups: children and the elderly in Russia. (£14,943) Nuffield Foundation, Award Number RUVF0. Peer reviewed grant. (Contributed to [b and c])

4. Details of the impact (indicative maximum 750 words)

Gerry's research has stimulated debate and discussion both within and beyond academic circles, in the UK, the US and in the regions under discussion, about health in post-Communist societies, particularly demonstrating the need for indigenous capacity in health economics. This led to the establishment of a project in 2011, co-directed by Gerry, to develop health economics as a part of core economics teaching and research at universities across the region. To date, 15 universities in Eastern Europe, Russia and Central Asia have sent early career researchers and teachers to a health economics training programme jointly led by Gerry. Within two years of the programme's start, impact is evident, with new or substantially reformed health economics teaching and research introduced in major universities in Russia, Kazakhstan, Tajikistan, Ukraine and Croatia.

The publication of Gerry et al's critique [a] of the much-discussed *Lancet* article linking mass privatisation directly with increased male mortality in post-Communist regions, was quickly picked up by the mainstream press. Its coverage in national outlets, including *The Guardian* (4 May 2010), ensured that this challenge to an accepted 'fact' contributed to media discourse about the findings themselves and raised broader questions about issues such as the reliability of statistics [1].

As the research developed, Gerry was invited to present its findings in Moscow, Tartu, Georgia, St Petersburg, Vienna, Kiev, Oxford and London. Not only did those presentations extend the reach of the research impacts on public discussion, debate and awareness of associated issues, they also resulted in multiple further invitations to give lectures and masterclasses in Health Economics in universities including the Higher School of Economics, Moscow (two lectures in 2012); University of Tartu (summer school lecture in 2010); and International School of Economics, Tbilisi (2 x 1 week lecture courses in 2011–2012). These invitations themselves and the subsequent delivery of talks based on the research demonstrated and enhanced its contribution to a raised awareness of both the importance and the *absence* of a capacity for health economics in the region. Prior to this, where health economics existed at all, it was based largely on the financial management of health care organisations rather than being seen as part of the behavioural social sciences bridging economics and public health [2].

Impact case study (REF3b)



Following one of these visits, Gerry applied with Dr Yulia Vymyatnina (European University, St Petersburg) to the Open Society Foundations' Higher Education Support Program, from which they sought support for a project (ReSET) to develop health economics as a part of the core Economics teaching and research syllabus at universities across Russia, Central Asia and Eastern Europe. The findings published in [b] were central to this application, particularly as they related to: the complex relations between socioeconomic events and health outcomes; the challenges of finding robust relationships using econometrics; and the importance of linking empirical work to both the theoretical underpinnings of the discipline and the area specificities conditioning the relationship. On the basis of these findings, the training programme was designed to combine a theoretical and an empirical approach to the dynamics of health production which enabled it to address the specific weaknesses of health economics teaching in the region, while also recognising the importance of the controversies on which the research focused.

Their application was approved in 2011, since which date Gerry and Vymyatnina have co-directed the almost \$500,000 'Global Health Economics' programme. The programme, which involves multiple international experts as expert faculty (lecturers), provides exposure to and training in contemporary methods and thinking in health economics to early career economists and health specialists in universities in the post-Communist states of Russia, Kyrgyzstan, Kazakhstan, Ukraine, Tajikistan and Croatia. Expertise delivered through the programme has been drawn from across the globe with a view to providing the most solid foundation possible in theoretical health economics and a good understanding (through the use of the research outlined in section 2) of methods for empirical research in health economics. Since 2011, the Global Health Economics programme has delivered eleven sessions on topics such as Health Financing, Economics of Evaluation and Applied Health Econometrics to 30 young academics from 15 different universities in the region, recruited through a competitive selection process in early 2011. Participants all attended annual two-week intensive summer sessions held in St Petersburg in July 2011, 2012 and 2013, as well as shorter winter sessions in February 2012 and 2013; a final session is scheduled for April 2014. In between, there were site training visits and sub-group meetings in Sumy (May 2012 and 2013), Almaty (May 2012 and 2013), Moscow (2011, 2013) and Nizhny Novgorod (June 2013). Participants also worked interactively on their teaching and research portfolios throughout the period under the online mentorship of the programme's international faculty. Through this, they generated shared resources [3] for health economics. The programme has allowed participants to engage in collaborative research projects in the health economics field and equipped them with the tools to establish contemporary health economics programmes in their own universities for the first time. The resultant paradigm shift, both in participants' approach to research and in the incorporation within their home institutions of health studies into mainstream economics courses, has already led to the development and delivery of new or improved programmes in the region.

These and other benefits of the project – the continuation of which is contingent on the demonstration of its impacts across the region – are revealed through its scrutiny (most recently in May 2013) by external reviewers tasked with compiling an annual audit report [2] and through participant feedback [4]. The latter established that Health Economics (HE) courses either had been or were being introduced for the first time or in substantially reformed mode in major state universities in Ukraine, Kazakhstan, Tajikistan, Russia and Croatia, as demonstrated by the table below (derived from [4]):

| University | Did HE exist at the start of the project? | Has HE provision been introduced or substantially changed as a result of the project? | Are you now engaging in HE research, whereas you weren't previously? |
|--|---|---|--|
| Higher School of Economics, Moscow (Russia) | Yes | Yes | Yes |
| European University, St Petersburg (Russia) | No | Yes | Yes |
| Sumy University (Ukraine) | No | Yes | Yes |
| Zagreb University (Croatia) | Yes | Yes | Yes |
| Almaty (Kazakhstan) | No | Yes | Yes |

Impact case study (REF3b)



| Dushanbe (Tajikistan) | No | Yes | No |
|--------------------------|-----|-----|-----|
| Penza (Russia) | No | Yes | No |
| Novosibirsk (Russia) | n/a | n/a | Yes |
| Nizhny Novgorod (Russia) | No | Yes | Yes |

The participant feedback below, from 2012, confirms the benefits both to participants themselves and more broadly to the institutions to which they belong:

[text removed for publication]

The programme's impact and reach has been such that a new research laboratory ('Department of Economics of Health Reform') in Moscow under the Russian Presidential Academy of National Economy and Public Administration was established. It was formally opened in September 2013, following an application for funding accepted in May 2013, with Gerry approved as an 'international expert' and appointed as Vice-Head for the period 2013–2016 [5]. Four participants of the ReSET project have been appointed as Research Fellows affiliated to the new research laboratory.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- [1] Examples of media coverage of the research include articles in *The Guardian* (Jonathan Wolff 'The journals are full of great studies, but can we believe the statistics?', 4 May 2010, available at http://bit.ly/GDs3Q2: paper circ. 300k); The BEARR Trust Newsletter distributed to affiliates (No. 56, February 2011: 'Post-Communist Mortality Controversy': http://bit.ly/19tQr3 (PDF); and on Radio Free Europe (5 Feb 2010: 'New Research Rejects Claim That "Shock Therapy Reform" Kills' by Ron Synovitz: http://bit.ly/1aa8fil; RFERL website audience of 23m in 21 countries in 2011).
- [2] For the previous lack of emphasis on Health Economics in post-Communist regions see p.1 of External Review 2011: *HESP Evaluation* (available on request), which states that: "In the target region, Health Economics is not an established field, and so the challenges the organizers and faculty face are formidable, with every indication that they are not only aware of these challenges, but will also be able to rise to the occasion."
- [3] See http://bit.ly/16NISnR for an example of one group's development of a shared resource for Health Care Policy Evaluation (front page print out available on request).
- [4] Compiled from participant feedback (available on request).
- [5] http://www.ranepa.ru/eng/academics/research.html (front page print out available on request); plus megagrant application (January 2012); details of programme of work accepted (May 2012); and formal invitation to Gerry (August 2013).