

PRIMARY CARE RESEARCH - INFLUENCING AND IMPLEMENTING INTO POLICY

RAZISKAVE O PRIMARNEM ZDRAVSTVENEM VARSTVU - VPLIVANJE IN UVAJANJE V POLITIKO

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ABSTRACT

Keywords:

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This editorial describes how research in primary health care can be used to influence policy. It draws on previous literature to give an example from the UK of how research in one part of primary care, the health-visiting service, has endeavoured to use evidence to influence policy and practice. The editorial considers frameworks for policy implementation such as Bardach's eight phase approach and concepts that can inform policy implementation such as Lipsky's Street-Level Bureaucrat approach.

IZVLEČEK

Ključne besede:

izvajanje politike, primarno
zdravstveno varstvo, raziskave,
patronažna služba

Ta uvodnik opisuje, kako je mogoče raziskave o primarnem zdravstvenem varstvu uporabiti za vplivanje na politiko. Na podlagi prejšnje literature navaja primer iz Združenega kraljestva, kako so si raziskovalci z raziskavami enega dela primarnega zdravstvenega varstva, tj. patronažne službe, prizadevali za uporabo dokazov za vplivanje na politiko in prakso. Uvodnik obravnava okvire za izvajanje politike, kot so Bardachov osemfazni pristop in koncepti, ki se lahko uporabijo kot podlaga za izvajanje politike, kot je Lipskyjev pristop birokracije na ravni ulice.

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1 INTRODUCTION

With the advent of Universal Health Care and sustainability by 2030, the vision for Primary Health Care (PHC) emerging from the Declaration of Astana (1) states:

“PHC is a whole-of-society approach to health that aims equitably to maximise the level and distribution of health and wellbeing by focusing on peoples’ needs and preferences (both as individuals and communities) as early as possible along the continuum from health promotion and disease prevention, rehabilitation and palliative care, and as close as feasibly possible to people’s everyday environment” (1:viii).

The vision for the 21st century includes a long list of operational objectives in order to achieve the quality and accessibility required. One of those primary objectives is that health should be part of every policy, in every country. This presents a major challenge to policy makers and health care systems. It demands that fiscal policy as well as health, social, environmental and justice policy work closely together in a non-partisan and consensual approach based on sound evidence that values health, equity and removal of inequality. We can observe from the global approaches to the management and eradication of the COVID-19 pandemic that such policies are highly challenging and that decision-making is not always led by science, or that the science drawn upon is selective in relation to a given country’s political ideology and therefore its policy decisions. The universal use of facemasks was a good example of how different countries responded to the scientific community’s early advice that mask wearing could lower transmission, with some countries adopting a universal policy early on and others biding their time and even ignoring the scientific data. It can seem, even in the face of catastrophe, that policy is hard to influence through scientific research. This paper will explore some aspects of the process of research influencing and informing the evidence base for policy, drawing on examples from PHC research. It draws on previous models of policy analysis and implementation to suggest approaches that could be applicable for PHC researchers to consider.

2 THE POLICY CONTEXT

Policy is a very broad term that has a wide application ranging from local councils or community-based policies, to organisational or service policy, up to national and governmental policy, and indeed even at international level through treaties and agreements between countries such as the United Nations. Policy has been defined as:

“A policy is a deliberate system of principles to guide decisions and achieve rational outcomes. A policy is a statement of intent, and is implemented as a procedure or protocol. Policies are generally adopted by a governance body within an organization” (2).

There are a number of policy typologies. Black (3) repudiates the notion that there is a linear relationship between research evidence and policy, despite the positivist sense that good science should lead to effective decision making. Black discusses health-related policy in three ways.

Firstly, he refers to practice policies, those that govern clinical decision making such as the National Institute of Clinical Excellence’s (NICE) guidance. He argues that while practice decisions should most obviously be made in a linear direction, from science to decision, this is not always clear-cut when the clinical context moves from pharmaceutical intervention to public health for example. The interpretation of data and the factors that could confound a clinical decision that is not purely based on medication can lead to different practice policy decisions being made. Black uses the example of variations in cholesterol testing across countries but in more recent scenarios we can observe how decisions about delivery of vaccines against COVID-19 are varying between countries in terms of frequency and timing between doses. Such clinical decisions are based on policy that has to constantly evolve and emerge with the science on a day-to-day basis and is influenced by other political factors such as cost, human resource, logistics and public opinion.

Black secondly describes service policy. These policies determine the ways in which health services are delivered and he argues that the research evidence behind such policies is generally weak. This is most often seen in the development of PHC services, where other factors than science play a more significant part in the formulation of the policy. A recent example from England is the development of New Models of Care in PHC (4). The political motivation behind the change is mainly from an economic and resource perspective, to re-organise care, reallocate resources and workforces, introduce innovations and reduce costs. The national and local research (5) that is evaluating these new models cannot provide the science, neither at a speed at which policy needs to be formulated in the face of ever-changing health needs, nor in the type of language and methodologies that policy makers and their civil servants can rapidly engage with. There will be an inevitable lag between the science and the policy governing the direction of service delivery of PHC, which contributes to the constant criticism that health services are undergoing continual change.

Thirdly, Black refers to governance policies, where he suggests there is negligible reference to research. This high-level policy concerns both the fiscal and national organisation of health care. It is ideologically as well as needs driven and is based on political values and economics before science. This can be clearly observed between countries that adopt a policy towards social medicine and health based on welfare and taxation

compared with countries where health care is based on private insurance and remuneration. Different kinds of evidence will determine various ideological and cultural positions in health care systems, and the agendas of the policy makers, knowledge brokers and researchers will vary in the formulation of the policies.

Based on these levels of health care policy and the observations above I suggest that the relationship between policy and research is influenced by the following context:

- Policy is ideologically and culturally driven
- Policy is subject to constant flux and change
- Expectation that research is designed for policy
- Policy makers can seem distant from the research
- Expectation that policy makers access and are informed by research
- Expectation that one research study can account for change
- Expectation that policy and practice are closely linked
- Expectation that impact and influence of research needs substantial funding
- Expectation that changes adopted will remain static

These points will be addressed through examples from the literature that have discussed or demonstrated the relationship between research and policy. Drawing on Bardach's (2) eight-stage approach to policy analysis, the aim is show how researchers might influence policy formulation in PHC and how the policy context responds and can lead to change.

3 BARDACH'S EIGHT STAGES TO POLICY ANALYSIS

In their discussion of health care policy, Engelman et al. (6) turn to Bardach's (2) eight stages of policy analysis to illustrate a single clinical problem (cervical screening after total hysterectomy using the Pap smear test) and the relationship between clinical practice, evidence and policy development. This analysis is an example of Black's (3) practice policy in PHC that illustrates the eight stages of how identifying a practice problem can lead to policy guidelines. In this case the policy analysis showed there was insufficient evidence to undertake routine cervical screening after total hysterectomy for benign pathology. Bardach's eight stages are:

- defining the problem
- assembling evidence
- constructing alternatives
- selecting criteria
- projecting outcomes
- confronting trade-offs
- decision-making
- sharing the results of the process

In the following example from PHC I aim to demonstrate how this approach can be used to examine the policy implications of a different aspect of PHC, that of the integration of public health nursing (health visiting) with children's public health and primary care. The example is drawn from the previous analysis of this topic discussed by Bunn and Kendall (7).

4 DEFINING THE PROBLEM

A series of health reports from the UK have clearly demonstrated the serious health inequalities and variation in services and their relationship with social determinants of health, especially for children. For example, the Marmot Report (8) found that between 2010 and 2020 the number of children being born into poverty has not significantly changed, with the UK having one of the highest child poverty rates in Europe. Deprivation is a strong indicator for child health and development, school readiness and prospects for youth crime and unemployment. The report makes a strong case for giving every child the best start in life together with investment in services and policy that can support progressive universalism, i.e. providing a universal approach for all children that can be tailored and targeted for those with the most need to receive a higher level of support. The Royal College of Paediatrics and Child Health (RCPCH) Report on the State of Child Health (9) between 2014-2017 also showed that while there was improvement in some areas of child health such as teenage pregnancy and youth smoking, other indicators remained unchanged or worse - for example breastfeeding, mental health, childhood obesity. There were strong recommendations to provide early intervention and to strengthen the child health services in the community and primary care. In the UK, the health-visiting service is part of primary health care. Health Visitors are registered nurses who also hold a specialist public health qualification to work specifically with families of children aged 0-5 years. Health Visitors have a mandate to deliver the universal Healthy Child Programme (10) in the community through face-to-face contact with families at home or in group settings, and to focus around six high impact areas that include transition to parenthood, maternal mental health, breastfeeding, healthy weight and nutrition, managing minor illness and preventing accidents, and the well-being and development of children aged 2 years. The health-visiting service is one part of the UK's early prevention and intervention programmes, but is unique in its universal accessibility to all children and its focus on the child as part of the whole family and community.

However, despite numerous recommendations for investment in child health services the health-visiting service has seen a dramatic reduction in workforce and equitable access since 2014 after there was a rise in the

period 2012-14. The State of Health Visiting Report (11) has demonstrated through its annual survey how the workforce has been depleted nationally and regionally since 2014 and the lack of investment in the preparation of health visitors for the future. The policy question that Bunn and Kendall (7) therefore posed was how research in health visiting has informed policies that would support investments in and the provision of the health-visiting service.

5 GATHERING THE EVIDENCE

In their report in 2016 on the economics of health visiting, the iHV used the Heckman (12) equation to demonstrate the economic benefit of early intervention for children:

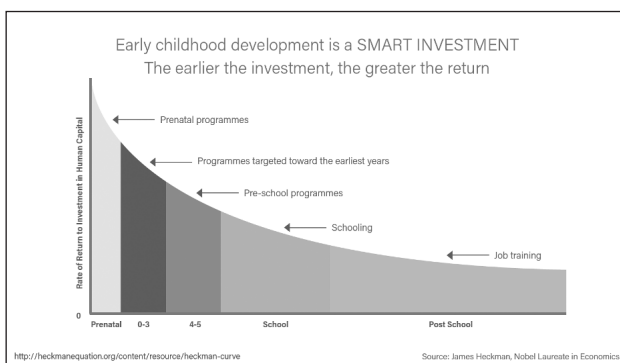


Figure 1. The Heckman curve.

This well-argued approach provides a model for policy that shows the earlier the intervention the greater the return on investment in human capital. But in order to persuade policy makers, there needs to be evidence of the effectiveness of the services or interventions that health visitors provide alongside the basic economic model.

Bunn and Kendall (7) used the impact evaluation model developed by Kuravilla et al. (13) to examine how research has influenced policy looking backwards and how it could be implemented into policy going forwards.

They conducted a documentary review of over 30 policy documents in the period 2000-2011, citation analyses on 19 papers where health visiting was the focus of the intervention, and interviews with seven health-visiting researchers. Although there were examples of policy documents being informed by health-visiting research, it was not always clear what role research had played in the development of recommendations and implementation. Information from researchers provided examples of local, national, and international impact, although the extent to which papers may have influenced policy was less clear from the citation analyses.

Many of the UK studies cited in policy documents were qualitative, observational or reflexive, and a limited stock of evaluative research, in particular Randomised Controlled Trials and other controlled evaluations, may limit the influence of health-visiting research on health care policy in the UK.

One of the major barriers to forming evidence-informed policy based on health visiting is the lack of relevant high-quality research. In particular, there is a lack of quantitative evaluations such as RCTs (14). Cowley and Bidmead (14) suggest that reasons for this may include limited research capacity within health visiting, low availability of research funding or the need to develop the theoretical bases of approaches used as a necessary precursor to testing their effectiveness. Confusion concerning the exact nature of health visitors' roles, the falling numbers of health visitors and issues concerning the status of health visiting may also have had a negative impact on research. However, health visitors appear to be central to the government's public health agenda and this, coupled with calls for an increase in health visitor numbers, may improve the status of health visiting and promote future research. Clearly a range of research methodologies can inform the role of the health visitor.

Qualitative research can inform the design and development of interventions and it has been suggested that UK researchers have produced a great deal of qualitative research that could provide the theoretical basis for evaluations of UK-based programmes and approaches (10). Case-control and cohort studies, by identifying modifiable risk factors, may provide a focus for prevention activities and interventions.

However, the final stage in the information chain is the evaluation of interventions in controlled studies, such as RCTs. Whilst RCTs are not necessarily appropriate for evaluating the health-visiting profession as a whole, they may be suitable for evaluating components of the health-visiting role, or particular aspects of training or organisation (14) and components of interventions such as preventing and supporting post-natal depression or programmes to build and improve parenting skills. Such interventions are often considered to be complex evaluations that are subject to multiple confounders and difficult to control. Funding for such interventions in health visiting is therefore difficult to secure and as Bunn and Kendall found, RCTs are rare and conducted in carefully limited interventions such as the Family Nurse Partnership programme (15).

As with this specific aspect of health visiting in UK PHC, there are similar limitations with policy and research implementation in all PHC settings where organisation and delivery of services is concerned and skills and funding to carry out RCTs and other complex evaluations are lacking.

6 POLICY CONTEXT

In relation to the health-visiting example, despite the reports on children's health, the return on investment of service expansion and the examples of strong research (albeit not RCTs), policy on investing in health visiting was subject to flux and change between 2010 and 2020. In 2011 there were a number of policy drivers that could be seen to be responsive to children's health:

- DH (16) Facing the future. A review of the role of health visitors. DH www.dh.gov.uk/cno.
- DH (17) NHS Next Stage Review Our vision for primary and community care.
http://www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/DH_085825. Department of Health.
- DH (18) Getting it right for children and families. Maximising the contribution of the health-visiting team. Department of Health.
- DH & DCSF (10) Healthy Child Programme The two-year review. Department of Health, Department for children, schools and families.
- Marmot Report (8) Fair Society, Healthy Lives. Giving children the best start in Life
- DH (19) Health Visiting Implementation Plan - A call to action to expand and strengthen health-visiting services. Led directly to increasing health visitor numbers by 4200 whole time equivalents.
- Underlying assumption that children's health and lives can be improved through health visiting and that monetary savings will be made by the NHS through prevention, early intervention and health promotion.

As a result, the policy to increase health-visiting numbers was implemented and the health-visiting workforce increased to 11620 by 2015/16 from 8000, just short of the original 12200 projected. This was deemed a success in policy terms in order to deliver on the Healthy Child Programme but as indicated, the influence of health-visiting research on this decision was limited. Moreover, major policy change since 2014/15 has once again depleted the workforce as shown in the iHV report on the State of Health Visiting 2020 (11). A fiscal decision at Department of Health level for the health-visiting service to be commissioned by Local Authorities led to a decrease in public health funding and inequitable ability for local authorities to commission the service. With the arrival of the COVID-19 pandemic thousands of children and families were left with a skeleton service, with health visitors being re-deployed with already unmanageable caseloads.

7 WHAT ARE THE ALTERNATIVES?

While it seems from limited evidence in this field that research plays only a limited role in policy concerning the health visiting service, there could be some further thought given to how policy can be influenced in its interpretation more locally. Lipsky (20) has described the notion of the 'street-level bureaucrat'; this can be thought of as the individual or local-level service providers who are governed by a policy but interpret it on the ground to meet the needs of their population:

"policy implementation in the end comes down to the people (the street-level bureaucrats) who actually implement it" (20).

Primary care practitioners working in the community have numerous opportunities to interact with the public and shape and interpret how policy can be implemented.

Lipsky identified the use of 'discretion' as a strategy for how public workers can implement policy ethically and fairly. In a qualitative study of street-level bureaucracy in health visiting, Hughs and Condon (21) identified three emerging themes which relate to this 'bottom-up' perspective on policy implementation:

- readiness to operationalise policy
- Face challenges in delivering the service vision
- and using discretion in delivering the vision

Such street-level bureaucracy can be identified in the ways in which health visitors have responded to the COVID-19 pandemic with innovation to meet the needs of their communities while maintaining protective restrictions in the light of a depleted workforce. The use of technology, provision of on-line groups for new parents and enabling parents to have contact and support with each other, for example. These innovations must be turned into research questions that feed back into the research-policy-practice process, although there is a concern that use of technology, for example, could become a new norm in an effort to cut costs.

When the policy analysis is conducted as for example by Bunn and Kendall (7) it becomes more explicit that the health-visiting influence on policy has been driven by health visitors, GPs, paediatricians, children's health services, professional organisations rather than research per se. The question for researchers and for primary health care seems to be whether we can live with these expectations between research, policy, and practice, knowing that the complex relationship between cause and effect will be unlikely to be proven.

8 DISCUSSION

In this paper I have attempted to show the complexity of the relationship between research, policy and practice or service delivery. This has been illustrated in PHC using the health-visiting example in the UK, but the broader PHC literature reveals very few examples of how research can have lasting influence on PHC policy and decision-making. This raises questions about how PHC researchers and practitioners could work together more responsively to address policy issues at all levels - clinical, service and governmental. Based on the issues raised so far I would suggest the following are necessary elements of the researcher-policy-practice relationship:

- Be critically aware of the policy context and drivers
- Engage and network with policy processes
- Don't expect too much too soon, evolve with changing policy
- Be responsive to changes
- Be open to challenge and prepared to challenge
- Involve PHC practitioners at all levels of research, the street-level bureaucrats

For some researchers and practitioners this will require development of new skills, for understanding the policy process and managing expectations, engaging with policy at the start of a research project to ensure the maximization of impact. It would be helpful for students of PHC to be introduced to policy analysis as part of their critical-thinking skills and to build this into master's and PhD programmes. Research that addresses applied issues of importance to practice and service delivery seems more likely to lever policy influence at a local level and to be more relevant to the street-level bureaucrats who may make interpretations to fit with their communities.

Research funding, including EU funding programmes, need to recognize the importance of policy impact in their funding applications processes. Nutley has defined research impact as:

'research impact forms a continuum, from raising awareness of findings, through knowledge and understanding of their implications, to changes in behaviour' (22).

In some programmes this is already apparent in terms of 'pathways to impact' (e.g. the UK Research Councils require this), but impact on policy is qualitatively different from impacts on society for example. PHC researchers should consider how impact on policy can be determined and measured, leading to changes for health care and society. A systematic review conducted by Raftery et al. (23) of 161 studies categorized three ways in which research can have impact: approaches to measuring monetised impact; approaches to assessing the contribution of randomised controlled trials (RCTs) to systematic reviews and meta-analyses; and approaches to assessing the contribution of

RCTs to stopping treatments that are ineffective. Some countries such as the UK and Australia have adopted a research quality framework (www.ref.ac.uk) to assess the strength and value of research in universities. Research impact in this context has been defined as:

'an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia' (24).

These highly administration-intensive processes have led to mechanisms and metrics by which research impact can be assessed in relation to significance and reach, and to evaluations of the strength of research in different disciplines to lead to change. It may be useful for PHC researchers to review these examples from different disciplines and compare how different methodologies and dissemination processes can produce impactful research that could influence policy.

In conclusion, research and policy are both a powerful and a complex combination, where it possible that one can drive the other for the benefit of society. However, the nature of the complexity of the relationship is what limits PHC research from observing significant change and benefit. It must be recognized that influence and change in policy and practice take place over long time periods, and that evidence from research is part of the complexity, rarely the whole solution.

CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

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ETHICAL APPROVAL

The study is in accordance with the Declaration of Helsinki.

REFERENCES

1. WHO/Unicef. A vision for primary health care in the 21st century. Geneva: WHO, 2018.
2. Bardach E, Patashnik EM. A practical guide for policy analysis: the eightfold path to more effective problem solving. CQ Press, 2019.
3. Black N. Evidence based policy: proceed with care. *BMJ*. 2001;323(7307):275-9. doi: 10.1136/bmj.323.7307.275.
4. NHS England 2015: the five year forward view. London: NHSE, 2015.
5. Morciano M, Checkland K, Billings J, Coleman A, Stokes J, Tallack C, et al. New integrated care models in England associated with small reduction in hospital admissions in longer-term: a difference-in-differences analysis. *Health Policy*. 2020;124(8):826-33. doi: 10.1016/j.healthpol.2020.06.004.

6. Engelman A, Case B, Meeks L, Fetters MD. Conducting health policy analysis in primary care research: turning clinical ideas into action. *Fam Med Community Health*. 2019;7(2):e000076. doi: 10.1136/fmch-2018-000076.
7. Bunn F, Kendall S. Does nursing research impact on policy? A case study of health visiting research and UK health policy. *J Res Nurs*. 2011;16(2):169-91. doi: 10.1177/1744987110392627.
8. Marmot M. Fair society, healthy lives: the Marmot review: strategic review of health inequalities in England post-2010. London: Institute of Health Equity, 2010.
9. Royal College of Paediatrics and Child Health. On the state of childrens' health. London: RCPCH, 2018.
10. DH & DCSF. Healthy Child Programme: the two year review. London: Department of Health, Department for Children, Schools and Families, 2009.
11. Institute of Health Visiting. The state of health visiting report. iHV, 2020
12. Heckman J. Schools, skills and synapses. *Econ Inq*. 2008;46(3):289-324. doi: 10.1111/j.1465-7295.2008.00163.x.
13. Kuruvilla S, Mays N, Pleasant A, Walt G. Describing the impact of health research: a research impact framework. *BMC Health Serv Res*. 2006;6:134. doi: 10.1186/1472-6963-6-134.
14. Cowley S, Whittaker K, Malone M, Donetto S, Grigulis A, Maben J. Why health visiting? Examining the potential public health benefits from health visiting practice within a universal service: a narrative review of the literature. *Int J Nurs Stud*. 2015;52(1):465-80. doi: 10.1016/j.ijnurstu.2014.07.013.
15. Owen-Jones E, Bekkers MJ, Butler CC, Cannings-John R, Channon S, Hood K, et al. The effectiveness and cost-effectiveness of the Family Nurse Partnership home visiting programme for first time teenage mothers in England: a protocol for the Building Blocks randomised controlled trial. *BMC Pediatr*. 2013;13:114. doi: 10.1186/1471-2431-13-114.
16. Department of Health, Facing the Future. A review of the role of health visitors. London: Department of Health, 2007.
17. Department of Health. NHS next stage review: our vision for primary and community care. London: Department of Health, 2008.
18. Department of Health. Getting it right for children and families: maximising the contribution of the health visiting team. London: Department of Health, 2009.
19. Department of Health. Health visiting implementation plan - a call to action to expand and strengthen health visiting services. London: Department of Health, 2010.
20. Lipsky M. Toward a theory of street-level bureaucracy. Madison: University of Wisconsin, Institute for Research on Poverty, 1969.
21. Hughes A, Condon L. Street-level bureaucracy and policy implementation in community public health nursing: a qualitative study of the experiences of student and novice health visitors. *Prim Health Care Res Dev*. 2016;17(6):586-98. doi: 10.1017/S1463423616000220.
22. Nutley S. Bridging the policy-research divide: reflections and lessons from the United Kingdom: edited version of a keynote address to the National Institute for Governance. Conference (Canberra, 2003). *Canberra Bull Public Administration*. 2003;(108):19.
23. Raftery J, Hanney S, Greenhalgh T, Glover M, Blatch-Jones A. Models and applications for measuring the impact of health research: update of a systematic review for the Health Technology Assessment programme. *Health Technol Assess*. 2016;20(76):1-254. doi: 10.3310/hta20760.
24. Higher Education Funding Council. Research excellence framework. HEFCE, 2014. Accessed January 15th, 2021 at: www.ref.ac.uk.