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Publication output in the field of Public Health and its appreciation at political level in Austria

102 – Innovation durch Evaluation: Impulse setzen durch Evaluationsprozesse im Social-Profit- und Public Health-Sektor

Abstract

In a pilot study, we aimed to identify the output of public health research by Austrian university and non-university research institutions and compare it with its translation into Austrian public health policy. A keyword search in PubMed was conducted for the period 2000-2013. The “Public Health Newsletter” published by the Austrian Ministry of Health and the “Health Reform Law 2013” were used as surrogate indicators for the translation of research into public health policy. 97 publications in peer-reviewed journals showed a wide variation in topics. Comparing the research topics with the articles of the “Public Health Newsletter”, we found identity in the field of communicable diseases. The Health Reform Law 2013 confirms the importance of evidence-based decision-making; yet, it contains no direct mentioning of or relation to research results. Based on our methodology, moderate appreciation of research results at the political level could be found in Austria.

Keywords:

Public Health, University Research, Evidence-based Health Policy, Public Health Research

Introduction

It is widely recognized that evidence from public health research can enhance public health policy by identification of health problems, definition of priorities in health care and by evaluation of the health impact of policies and programmes implemented. In times of budgetary constraints it is even more important to facilitate closer links between evidence based research results and policy actions. Nevertheless, the transfer of scientific knowledge gained from research studies to its application in practice still seems to be suboptimal. (Milat et al., 2011. p.1) This is a common phenomenon and does not apply to specific countries, like Austria, only. Therefore, the “WHO strategy on research for health” published in 2012 urges national governments “to establish or strengthen mechanisms to transfer knowledge in support of evidence-based public health and health-care delivery systems, and evidence-based health-related policies”(WHO. 2012, p.40)

For this essay, therefore, it seems appropriate to look at the output in public health research in Austria and relate its results to health policy implemented or initiated by the Austrian Ministry of Health, the leading public authority on health affairs. It is not scope of this study to analyse possible causal relationships between research and health policy on the one hand and health outcomes on the other.

Materials and Methods

We aimed to identify research output in the field of public health in Austria by conducting a keyword search using PubMed as a source. The search terms were defined as follows: The Mesh-Term “Public Health” had to be named in either Title or Abstract of the publications listed. To focus on Austria, the term “Austria” was used in combination. Furthermore the search was restricted to a ten-year time-period (2003-2013). Therefore the search-string used reads as follows: Search: ((public health[MeSH Terms]) AND public health[Title/Abstract]) AND Austria[Affiliation] Filters: 10 years.

As indicators for translation of scientific results into public health policy two (surrogate) indicators were chosen:

- the subjects presented in the “Public Health Newsletter” published by the Austrian Ministry of Health
- basic content of the “Health Reform Law 2013”

The “Public Health Newsletter“ is the direct follower of the printed paper „Mitteilungen der Sanitätsverwaltung“, a publication with a tradition of more than 100 years. This online information tool is issued on a quarterly basis. The Newsletter informs about health projects, changes in jurisdiction, state-of-the-art health information, health conferences, etc. Presently 4000 readers are listed in the electronic „Newsletter Service“. It is assumed that this number underestimates the true figure, as not all readers might be listed under the newsletter service. (BMG, 2013)

Looking at the contents of the new “Health Reform Law 2013”, a basic text analysis of the new Health Reform Law was performed in two directions:

- Does the Health Reform Law refer to public health, e.g. does it include a definition of the term?
- Does the Health Reform Law 2013 refer to evidence from published studies, in particular to studies from Austrian research institutions?

We classified all studies as well as topics - referred to in the Public Health Newsletter - concerned with infectious diseases, hygienic aspects, etc. as classical “Old Public Health”, while issues like economic evaluations, social determinants of health, public health programmes, etc. were attributed to “New Public Health”.

Results

Publications

Between the years 2003 and 2013 a total of 97 publications from researchers of Austrian institutions could be identified by our PubMed search. Sixty nine (71%) of these publications originate from university institutions, the major contributor being the Medical University of Vienna with 33 publications. The second-largest university-contributor is the Medical University of Graz with 11 publications. 28 publications come from non-university institutions, the biggest contributor being the AGES (Österreichischen Agentur für Gesundheit und Ernährungssicherheit GmbH, Wien) with 12 publications. Publications by

other non-university public health research institutions could not be identified using the applied search mechanism. The analysis of the research topics covered showed a wide variety from classical hygiene, nutrition, vaccination, infectious or chronic diseases as well as health-determinants' oriented studies or economic evaluations. 73 out of 97 could be allocated to typical public health topics ("old" and "new" Public Health). 24 studies of the 97 – based on the information of the title of the study - could not be allocated to one of them. Fifty-three percent (53%) of the classified publications – according to our differentiation – can be allocated to "Old Public Health", 47% to "New Public Health" topics.

Public Health Newsletter

Upon analysis of the contents of the "Public Health Newsletter" of the years 2008-2013 an average number of 40 articles per year were found. In years with an outbreak of epidemics such as H1N1-Virus in 2009 the number of articles amounted to roughly 50. Looking in particular at the year 2009, 8 out of 54 items were about H1N1. In the year 2010 this figure went down to 2 articles out of 51.

In years without particular events like new pandemics (i.e. H1N1) roughly 60% of the articles are regular (mostly yearly) reports on infectious diseases. The remaining 40% relate to differing health topics such as information on conferences, training seminars, and issues ranging from pharmacovigilance to vaccination. No particular focus on issues like non-communicable diseases or health promotion could be found. Comparing the results of the PubMed search with the titles in the Public Health Newsletter we found identical topics in the field of communicable diseases such as campylobacteriosis, tuberculosis, influenza and MRSA and nosocomial infections.

The Health Reform Law 2013

In § 3 of the Health Reform Law 2013 public health is defined as "the creation of societal and environmental conditions as well as of conditions that assure the maintenance of an adequate, effective and efficient health supply in different demographic settings . Section 2 of the Law states that the Austrian health targets ("Rahmengesundheitsziele") on the one hand and "Public Health" on the other have to be considered as the guiding principles of this law. These guiding principles are defined as

- The orientation towards a "health-in-all-policies approach"
- Systematic health reporting
- Further development of organisation and tasks of the "Öffentlicher Gesundheitsdienst" (official translation: Public health service)
- Health services research to ensure demand-oriented planning, development and evaluation
- Strengthening interdisciplinarity in health services, research and development with the goal to improve health for all and reduce existing inequalities.

The Health Reform Law in itself can be classified as a tool setting the basic structure and conditions to achieve public health goals. Its definition of "Public Health" comes close to the definition of "New Public Health" of Tulchinsky and Rosenbrock/Gerlinger.

Section 3 of the law states that integrated planning of the Austrian Health Care system has to be evidence-based. However, there is no clear definition of "evidence" (for example publications in peer-reviewed journals) and no reference to a particular research publication as a key information could be found in the text of the law.

Discussion of findings

Using PubMed as our source, we found the highest number of publications written by researchers of the Medical University of Vienna. Since 2004, the Medical University of Vienna operates a specialised organisational unit, the “Centre of Public Health”, that is focused on building scientific evidence with the goal to improve the overall health condition of the population by initiatives in capacity-building, public relations and consultancy to national and international organisations (Medical University of Vienna, 2013).

At the Medical University of Graz, the Institute for Social Medicine and Epidemiology is responsible for the Master Programme in Public Health. Social medicine as defined by the Medical University of Graz includes among others the implementation of (scientific) knowledge regarding the emergence of diseases and the initiation of projects that aim at improving the health status of the whole population (Medizinische Universität Graz, 2013) - a typical public health goal.

The roughly 50:50 relation of publications in the fields of “old” and “new” public health could be interpreted that academia in universities and other research institutions have gradually taken over the broader and more interdisciplinary oriented understanding of public health.

The publication output accomplished by both university institutions can most probably be attributed to the organisational structure and/or responsibilities of these university units. Organisational structures in general target at clearer definitions of responsibilities and research topics, thus leading to more focused results. It is the formal structure that enables the organisation to meet its stated objectives. Ideally, organizational structures are shaped and implemented for the primary purpose of facilitating the achievement of organizational goals in an efficient manner.

Our research has shown that the “Public Health Newsletter” of the Ministry of Health gives plenty of room to topics such as sanitation, hygiene, communicable diseases, etc. Research on topics like non-communicable diseases, life-style, health promotion, etc. – which rather belong to the presently prevailing broad definition of public health and are important issues in scientific publications - could not be found in this Newsletter . The Newsletter offers regular reports on infectious diseases, such as yearly reports on campylobacter, clostridium difficile, diphtheria, yersinia, EHEC, botulism, meningococcal diseases, tuberculosis, legionella, listeriosis, shigella, norovirus, salmonella, resistance to antibiotics, etc.

The focus on yearly reports is a result of the legal situation in Austria, requiring the Ministry of Health to have a regular reporting and monitoring of infectious diseases in Austria. The reporting is regulated by law and is under supervision and responsibility of the Ministry of Health, the Supreme Sanitary Council as advisory body at national level, the Food and Health Safety Agency (AGES) and regional health authorities.

Our second indicator for evidence informed health policy, the Health Reform Law of 2013 often refers to the importance of health promotion in general, which could be classified as an indirect publication impact. However, there is no clear definition of “evidence” (for example publications in peer-reviewed journals) and no reference to a particular research publication as a key information could be found in the text. Further, there is for example no mentioning of the necessity to have a formalized information exchange between university-based or non-university-based research institutions and politics.

Conclusion

It is a strength of this pilot study to provide a first overview and an orientation on public health research and its appreciation by health politics in Austria. We hope that it will stimulate more detailed and comprehensive studies in this area. On the other hand it is among the limitations of our study that we restricted our search to only one source – PubMed. This data bank allows searching only for the first and last authors' names. Therefore, multicentre studies published in PubMed journals with Austrian contributions were not included in the publications found, unless the Austrian researcher was either first or last author. Therefore, we might have underestimated the true publication output. A search using specific names of Austrian researchers could solve that issue. Further, the PubMed search could be supplemented with a search in ScienceDirect. Moreover, the indicators used for evaluating the transfer of peer reviewed research results were limited to the contents of the Public Health Newsletter and the new Health Reform Law 2013.

In conclusion, we have seen that the publication output in Austria identified and analysed covers various topics of relevance for public health policy and the health care system. Based on our methodology, moderate direct appreciation of research results at the political level could be found in the chosen health policy instruments, the Public Health Newsletter of the Ministry of Health and the Health Reform Law 2013. However, it seems evident that the necessity of transferring research evidence into health policy has been recognized in Austria too and is specifically included in recent legislation. The situation appears to be similar in other (EU-) countries. WHO is particularly interested in a proper transfer of research evidence into healthcare policy and practice, as failing to do so results in wasted resources and inequity in health. (Ward et al. p. 267f) Therefore, within the European context it is intended to develop stronger links between EU-funded research, national research, EU and national policy agendas. (Report of the Independent Expert Group, 2013, p.11).

Without doubt, further more comprehensive research into the field of showing the impact of public health research on public health policy should be performed. For improving the process of translating peer-reviewed research results into informed political decisions knowledge brokering tools such as knowledge management or capacity building could be considered.

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