Engagement of health research institutions in knowledge translation in the Eastern Mediterranean Region

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Abstract

Background: Health research institutions in the Eastern Mediterranean Region (EMR) can play an integral role in promoting and supporting Knowledge Translation (KT). Assessing institutions' engagement in KT and bridging the "research-policy" gap is important in designing context-specific strategies to promote KT and informing funding efforts in the region.

Aims: The objective of this study was to explore the engagement of EMR institutions in KT activities.

Methods: A cross-sectional survey of institutions undertaking health research in the 22 EMR countries was undertaken. The survey covered institutional characteristics, institutional planning for research, national planning for health research, and knowledge management, translation and dissemination.

Results: 575 institutions were contacted of which 223 (38.3%) responded. Half the sampled institutions reported conducting priority-setting exercises, with 60.2% not following a standardized approach. Less than half institutions reported frequently/always (40.5%) involving policymakers and stakeholders in setting priorities for research on health. Only 26.5% of respondent institutions reported that they examine the extent to which health policymakers utilize their research results. Moreover, only 23.3% reported measuring the impact of their health research.

Conclusions: There is still misalignment between national health research priorities and actual research production, and KT activities are still rarely undertaken by institutions in the EMR. National governments and international funding agencies are called to support research production and translation in the EMR. Institutions and researchers are also called to produce policy-relevant research and be responsive to the needs and priorities of policy-makers.

Keywords: knowledge translation, Eastern Mediterranean Region, research institutions, health research, health policy

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Introduction

The role of evidence-informed health policies in improving health systems, and reducing inequity is increasingly recognized. There is a need support the translation of evidence to action across decision-making interfaces and embedding research within policy-making processes and practice (*1,2*). The World Health Report 2013 emphasized the crucial role of translating evidence into policies in supporting health in general and attaining Universal Health Care coverage in particular (*3*). One of the strategies that emerged from the report was to support the knowledge translation (KT) of evidence to policies and actions. KT is defined as "a dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system" (*4*).

Despite global calls, the work on KT and utilization of research in policy-making is still limited in the Eastern Mediterranean Region (EMR). A recent survey of researchers in the EMR showed that only 15% produced policy briefs, disseminated messages that specified possible actions (24%), interacted with policy-makers and stakeholders in priority-setting (16%), and involved them in their research (20%) (*5*). Another survey of policy-makers revealed that less than 43.1% collaborated with researchers and less than half reported that research is not delivered at the right time, lacks actionable messages (35.5%), and lacks information about research quality and local applicability (40.1%) (*6*).

Health research institutions in the EMR can play an integral role in promoting and supporting KT. Assessing institutions' engagement in KT and in bridging the "research-policy" gap is important in designing context-specific strategies to promote KT and informing funding efforts in the Region. There are scarce, if any, previous regional surveys that document engagement of institutions undertaking health research in the EMR in KT. Previous studies focusing on knowledge translation were country specific and not regional in nature (*7*). The objective of this study was to explore engagement of EMR institutions undertaking health research in KT with emphasis on institutional planning for research, national planning of health research and knowledge management, translation and dissemination.

Methods

A cross-sectional survey of institutions undertaking health research in all 22 EMR Member States was conducted from August 2015 to July 2016. The survey was developed based on various sources (*1,8–15*). The survey included 10 sections, of which four are discussed in this paper, and are: institutional characteristics; institutional planning for research (adapted from El-Jardali et al. [*4–5*] and Kennedy et al. [*10*]); national planning of health research (adapted from Tugwell et al. [*8*], Kennedy et al. [*10*], World Health Organization [*11*], and Ismail et al. [*9*]); and knowledge management, translation and dissemination (adapted from Lavis et al. [*13*], Campbell et al. [*15*] and Gholami et al. [*14*]). The survey was pilot-tested to ensure validity and reliability and the time of completion was estimated using a guiding protocol for pilot testing.

Data were collected through trained focal people identified by the World Health Organization Regional Office for the Eastern Mediterranean (WHO/EMRO) in each of the study countries. The surveys were administered in English electronically through email.

Data were analysed using Statistical Package for the Social Sciences (SPSS) version 24. Questions were analysed based on country income level, facility type and sector. Thematic analysis was used for the open-ended questions whereby data was coded and then categorized by most recurrent themes.

Results

A total of 575 institutions were contacted across 22 countries in the EMR of which 223 (38.8%) from 22 countries responded to the survey.

Institutional characteristics

The majority of sampled institutions were academic research centres / institutes (44.7%). Organizational sectors were mostly public (64.2%) while only 10.6% were private. Most organizations were public of which 68% had less than 20 years of experience. A total of 40% of non-academic research centres/institutes were non-governmental organizations (NGOs).

Institutional planning for research for health

Funding types and sources

The majority of institutions submitted less than 10 proposals to national, regional or international sources, and mainly in response to calls for proposals. Institutions received less than 10 grants regardless of funding source. Institutions within low–middle income countries were most likely to receive funding for less than 10 proposals (83.1%). Moreover, non-academic research centres were least likely to receive funding from regional sources (80%).

Priority setting

Half of the sampled institutions reported conducting priority setting exercises. Even when conducting priority-setting exercises, 60.2% reported not following a standardized priority setting methodology. When asked about methodologies, responses were diverse and not reported descriptively by many institutions in this survey. Some reported conducting literature reviews, focus groups, or surveys without elaborating on the exact methodology. Less than half of the institutions reported frequently / always (40.5%) involving policy-makers and stakeholders when setting priorities for research on health (Table 1). Moreover, 43.1% frequently/always translate high-priority policy concerns into priority research on health themes and/or questions. It was not clear how often institutions made an up-to-date list of the country's research on health priorities to be available to researchers/scientists. It was also unclear how often institutions involved policy-makers and stakeholders in research projects (Table 1).

National planning for health research

Similar numbers of institutions reported knowing (49.1%) and not knowing (43.8%) whether their countries have national health research priorities. The overwhelming majority of proposals did not address national health research priorities (70.2%). Topics mainly included noncommunicable diseases (NCDs), maternal and child health, cancer, reproductive healthcare and mental health. Upper–middle income countries were most likely to report

Table 1 Trends in priority setting exercises

	Never/rarely n (%)	Occasionally n (%)	Frequently/always n (%)
How often does your institution involve policymakers and stakeholders in setting priorities for the institution's research on health?	53 (27.2)	63 (32.3)	79 (40.5)
How often does your institution translate high priority policy concerns into priority research on health themes and/or questions?	41 (21)	70 (35.9)	84 (43.1)
How often does your institution make available an up-to-date list of the country's research on health priorities to the institution's researchers / scientists?	62 (31.8)	63 (32.3)	70 (35.9)
How often does your institution involve policymakers and stakeholders in its research projects (in the development of joint proposals/ research methodology and tools/ analysis & write-up/ publications?)	56 (28.8)	72 (36.9)	67 (34.3)

not having national health research priorities, whereas low–middle income countries were most likely to report not knowing whether their countries had national health research priorities.

Recognition and coordination of national health priorities

Institutions indicated that funders occasionally (35.4%), or frequently (23.9%) formulate their priorities and calls for proposals for research for health in response to national / regional needs. Half the respondents (48.2%) did not know whether their countries had a national health council that regulates funding priorities. Only 29.2% of institutions were involved in a national priority setting exercise between 2010 and 2014, held either by the institution itself, or in collaboration with WHO, ministries of health or national research councils.

A little over half of responding institutions reported that their country's ministry of health has a department that coordinates health research (55.8%) and less than half reported having a national health sector strategy (46.9%). Around half of responding institutions did not know whether their countries had legislation that deals with health research (55.4%). However, 57% reported that their countries had a national ethical review committee (Table 2).

Knowledge management, translation and dissemination

Dissemination of research findings

Institutions reported mostly disseminating their research findings through seminars and conferences (64.1%), peer-reviewed scientific journals (58.8%), and institutional websites (58.7%). Those methods reported to be never or rarely used included policy briefs (48.4%), policy dialogues (48.4%), letters/briefs/tailored messages to policy-makers/stakeholders (39.9%), and institution-owned, peer-reviewed scientific journals (40.4%) (Table 3). Other means of dissemination included media briefings, presentations to stakeholders, and lectures among others. The majority of institutions (72.2%) reported disseminating health research findings within their institutions, sometimes referred to as "permeability of information". Methods for dissemination included seminars, conferences, dissemination on website, newsletters, journal articles, and journal clubs, among others.

Knowledge transfer and translation

Institutions reported that they most frequently transfer/translate knowledge to the following categories: other academic faculties / schools / institutes / departments (39.9%); policy-makers in the government (36.3%); healthcare providers (36.3%); and directors in health care institutions (34.1%). Knowledge transfer and translation was reported to be never or rarely conducted with directors in NGOs (53.8%); directors in international agencies (55.2%); directors in donor agencies (64.1%); and general public or healthcare recipients (43.9%) (Table 3). Knowledge transfer and translation was least reported by high-income countries to policy-makers (26.7%) and directors in NGOs (10%). Low–middle income countries were likely to never or rarely report transferring and translating knowledge to directors in donor agencies (52.3%) and directors in a health professional association or group (21.5%). Approximately two-thirds of respondent institutions reported that their researchers had the skills to disseminate research findings to policy-makers in government (62.8%), and directors of NGOs (74.9%) (Table 4).

Table 2 Coordination of national health research

	N	%
Does the Ministry of Health have a department that deals with and coordinates health research in your country?		
Yes	116	55.8
No	31	14.9
Don't know	61	29.3
Does your country have a National Health or Health Sector strategy?		
Yes	97	46.9
No	16	7.7
Don't know	94	45.4
Is there any legislation in your country that deals specifically with health research?		
Yes	63	30.9
No	28	13.7
Don't know	113	55.4
Does your country have a National Ethics Review Committee?		
Yes	127	57.0
No	23	10.3
Don't know	73	32.7

Table 3 Means of disseminating health research findings and frequency of knowledge transfer and translation

	Never/ rarely n (%)	Occasionally n (%)	Frequently/ always n (%)
Means of dissemination of health research findings			
Institution own peer-reviewed scientific journal	90 (40.4)	34 (15.2)	99 (44.4)
Other peer-reviewed scientific journals	50 (22.4)	42 (18.8)	131 (58.7)
Seminars/conferences	28 (12.6)	52 (23.3)	143 (64.1)
Press releases to the media	75 (33.6)	72 (32.3)	76 (34.1)
Institution/researcher's social media	88 (39.5)	61 (27.4)	74 (33.2)
Institution's website	41 (18.4)	64 (28.7)	118 (52.9)
Newsletters/emails/printed reports to research networks within the institution	57 (25.6)	68 (30.5)	98 (43.9)
Newsletters/emails/printed reports to research networks outside the institution	76 (34.1)	75 (33.6)	72 (32.3)
Letters/briefs/tailored messages to policy-makers/stakeholders	89 (39.9)	72 (32.3)	62 (27.8)
Policy briefs	108 (48.4)	64 (28.7)	51 (22.9)
Policy dialogues	108 (48.4)	72 (32.3)	43 (19.3)
Frequency of knowledge transfer and translation			
Policy-makers in the government (e.g., Ministry of Health, Ministry of Social Affairs, Ministry of Education, etc.)	57 (25.6)	85 (38.1)	81 (36.3)
Directors in nongovernmental organizations (NGOs)	120 (53.8)	57 (25.6)	46 (20.6)
Directors in international agencies (e.g., United States Agency for International Development [USAID], World Bank, WHO, etc.)	123 (55.2)	54 (24.2)	46 (20.6)
Directors in donor agencies	143 (64.1)	46 (20.6)	34 (15.2)
Directors in health care institutions (e.g. PHCCs, hospitals, etc.)	71 (31.8)	76 (34.1)	76 (34.1)
Directors in a health professional association or group (e.g., Syndicate of Hospitals, Order of Physicians, Order of Nurses, etc.)	79 (35.4)	79 (35.4)	65 (29.1)
Healthcare providers (e.g., clinicians, nurses, pharmacists, etc.)	64 (28.7)	78 (35)	81 (36.3)
Other academic faculties/schools/institutes/departments	55 (24.7)	79 (35.4)	89 (39.9)
General public or healthcare recipients (e.g., citizens, patients, clients, etc.)	98 (43.9)	80 (35.9)	45 (20.2)

Research impact

Only 26.5% of respondent institutions reported that they frequently/always examine the extent to which health policy-makers utilize the institution's health research results. Moreover, only 23.3% measure the impact of their health research outcomes (Table 5). More than half of responding institutions (55.3%) reported believing that health research produced by their institution has impacted health policymaking. Some reported methods for impact assessment included feedback from stakeholders, article citation, implementation of research recommendations, and changes in health policy, among others.

Discussion

This mapping exercise provides an overview of the engagement of institutions undertaking health research in the EMR in KT activities. The study showed that many EMR countries might be lacking a national strategy for health research, since almost half of respondents reported not having or not knowing whether their countries have national health research priorities. This finding concurs with another mapping exercise conducted in the Region, which showed that three out of 10 countries surveyed reported setting national health research priorities, while only two countries had a dedicated national health research policy (*10*).

Findings highlight misalignment between national health research priorities and actual research production, since the majority of respondents indicated submitting proposals not addressing national health research priorities. This corroborates findings of previous studies conducted in the Region that highlighted a gap in the production of policy-relevant research (*5*,*16*,*17*). This can be explained by the fact that only 31.7% of the surveyed institutions reported being involved in a national priority setting exercise over the past five years. A survey of researchers in the EMR has also found that less than half of researchers (16%) interacted with policy-makers and stakeholders in priority setting (*5*). Even when institutions reported conducting priority-setting exercises, 60.2% reported not following a standardized

Table 4 **Skills for disseminating health research**

Do researchers in your institution have skills on how to disseminate research results to:	No N (%)	Yes N (%)
Policy-makers in the government (e.g., Ministry of Health, Ministry of Social Affairs, Ministry of Education, etc.)	83 (37.2)	140 (62.8)
Directors in nongovernmental organizations	56 (25.1)	167 (74.9)

methodology, while the remainder provided no details on the exact methodology. There was no significant difference according to organization type, sector or country income level with regard to whether or not such an exercise was conducted. However, involving policy-makers and stakeholders in setting priorities for research on health was highest among NGOs. Conducting priority setting is only the first step in KT and should be followed by evidence synthesis, development of KT products and impact assessment (*18*).

Around half of respondents did not know whether a national health council that regulates funding priorities exists in their country. Findings also suggest that funders occasionally and rarely formulate their priorities and calls for proposals in response to national/regional needs, which can partially explain the misalignment. Respondents mostly reported NCDs as their top priority, which corresponds to regional and global priorities as declared by stakeholders, policy-makers and regional and international organizations (*17*,*19*–*21*).

Our findings suggest that KT activities including policy briefs, policy dialogues and letters/briefs tailored to policy-makers are still rarely undertaken by institutions in the EMR. This supports findings of a previous survey of researchers in the EMR (*5*). Another survey conducted in 2008 in 10 countries in the EMR also found that none of those countries reported systematic efforts to feed research results into decision-making (*10*). Indeed, only 26.5% of the institutions surveyed in this study reported frequently/always examining the extent to which health policy-makers utilize their health research results, and only 23.3% measure the impact of their health research outcomes. Policy briefs and similar KT products are important tools for topics that are highly politicized and where the nature of the problem is contentious and lacks clarity (*22*). As such, there is a need for capacity development to create such tools and evaluation of their effectiveness in the context of the EMR.

It was interesting to observe that institutions in high-income EMR countries were least likely to transfer/translate knowledge to policy-makers and directors in NGOs. In addition, they were most likely to report submitting proposals not addressing national health research priorities and not knowing whether a national health council that regulates funding priorities existed in their countries, compared to other income level countries. These findings can be interpreted by the minimal representation of major research institutions from high-income EMR countries.

Implications for research and policy

National governments and international funding agencies are called to support research production and translation through increasing the funding allocated to health research and knowledge translation, and through investing and supporting capacity building activities in KT in the Region. Recently, WHO/EMRO has supported capacity building activities in this regard, including holding a regional training of trainers policy briefs development workshop carried out during Sept 2016 (*23*), followed by national exercises carried out in the Islamic Republic of Iran, which are also planned for Egypt, Saudi Arabia and Sudan. In addition, the Knowledge to Policy (K2P) Center at the American University of Beirut, Lebanon, has been designated as a WHO-Collaborating Center for Evidence Informed Policy and Practice during the period 2016–2019 to support this agenda (*24*). K2P is supporting WHO/EMRO through conducting priority-setting exercises to identify policy relevant priorities. The Center is also building capacity in evidence synthesis, producing knowledge translation documents, and guidance documents.

Institutions and researchers can also work to produce policy-relevant research and engage policy-makers in regular national priority-setting exercises. There is also a need for a standardized methodology for a priority-setting and impact assessment. A measure of the impact of research on policy can motivate institutions and researchers to engage in KT and for funders to support such KT activities.

Table 5 **Utilization of research results and impact**

	Never/rarely N (%)	Occasionally N (%)	Frequently/always N (%)
How often do you examine the extent to which health policy-makers utilize your institution's health research results?	86 (38.6%)	78 (35)	59 (26.5)
How often do you measure the impact of your health research outcomes (did it influence policymaking)?	93 (41.7%)	78 (35)	52 (23.3)

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Engagement des établissements de recherche en santé en faveur de l'application du savoir dans la Région de la Méditerranée orientale

Résumé

Contexte : Les établissements de recherche en santé de la Région de la Méditerranée orientale peuvent jouer un rôle prépondérant dans la promotion de l'application du savoir et le soutien apporté à cet égard. Il importe d'évaluer l'engagement des établissements en faveur de l'application du savoir et de combler le décalage entre les recherches et les politiques pour l'élaboration de stratégies adaptées au contexte qui permettent de faire la promotion de l'application du savoir, ainsi que pour l'orientation des efforts de financement dans la Région.

Objectifs : L'objectif de la présente étude était d'examiner l'engagement des établissements de la Région de la Méditerranée orientale dans les activités liées à l'application du savoir.

Méthodes : Une étude transversale a été réalisée auprès d'établissements faisant de la recherche en santé dans les 22 pays de la Région de la Méditerranée orientale. L'étude couvrait les aspects institutionnels, la planification institutionnelle de la recherche, la planification nationale de la recherche en santé, ainsi que la gestion des connaissances, leur application et leur diffusion.

Résultats : Sur 575 établissements contactés, 223 (38,3 %) ont répondu. La moitié des établissements étudiés ont rapporté avoir réalisé des exercices d'établissement des priorités, 60,2 % de ces établissements ne suivant pas une approche standardisée. Moins de la moitié des établissements ont indiqué qu'ils impliquaient fréquemment/toujours (40,5 %) les responsables politiques et les parties prenantes dans l'établissement des priorités en matière de recherche en santé. Seulement 26,5 % des établissements ayant répondu ont mentionné qu'ils cherchaient à savoir dans quelle mesure les responsables politiques en santé utilisaient leurs résultats de recherche. De plus, seulement 23,3 % ont déclaré mesurer l'impact de leur recherche en santé.

Conclusion : Il existe toujours un décalage entre les priorités de recherche en santé nationales et les travaux de recherche produits concrètement, et les établissements de la Région de la Méditerranée orientale continuent de ne mener des activités liées à l'application du savoir qu'en de rares occasions. Les gouvernements des pays et les bailleurs de fonds internationaux sont appelés à soutenir la production et l'application de la recherche dans la Région. Les établissements et les chercheurs sont également incités à générer une recherche utile à la politique, ainsi qu'à répondre aux besoins et aux priorités des responsables de l'élaboration des politiques.

مشاركة مؤسسات البحوث الصحية في الترجمة التطبيقية للمعارف في إقليم شرق المتوسط

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الخلاصة

الخلفية: يمكن للمؤسسات المعنية بالبحوث الصحية في إقليم شرق المتوسط أن تلعب دوراً أساسياً في تعزيز ودعم الترجمة التطبيقية للمعارف (أي وضع المعرفة البحثية موضع التطبيق). ويُعَدُّ تقييم مشاركة المؤسسات في الترجمة التطبيقية للمعارف وسد الفجوة بين «البحوث – والسياسات» أمراً هاماً في تصميم استراتيجيات محددة السياق لتعزيز وضع المعارف موضع التطبيق وتوجيه جهود التمويل المبذولة في الإقليم.

الأهداف: الهدف من هذه الدراسة هو استكشاف مشاركة مؤسسات إقليم شرق المتوسط في أنشطة الترجمة التطبيقية للمعارف.

طرق البحث: مسح مستعرض للمؤسسات التي تجري بحوثاً صحية في ٢٢ بلداً من بلدان إقليم شرق المتوسط. وقد غطّى المسح الخصائص

المؤسسية، والتخطيط المؤسسي للبحوث، والتخطيط الوطني للبحوث الصحية، وإدارة المعارف، والترجمة والنشر.

النتائج: جرى الاتصال على ٥٧٥ مؤسسة واستجابت ٢٣٣ مؤسسة منها (٣٨,٣٪). وأفادت نصف المؤسسات التي شملتها العينة بأنها تجري عمليات لتحديد الأولويات، حيث لم يتبع ٦٠,٢٪ منها منهجاً معياريًا. وأفاد أقل من نصف المؤسسات (٤٠,٥٪) بأنها تشرك صناع السياسات وأصحاب المصلحة في كثير من الأحيان أو دائماً في تحديد أولويات بحوثها الصحية. وأفادت ٢٦,٥٪ فقط من المؤسسات المستجيبة أنها تدرس مدى استفادة صانعي السياسات الصحية من نتائج بحوثهم. علاوة على ذلك، أفاد ٢٣,٣٪ فقط من المشاركين بأنهم يقيسون تأثير بحوثهم الصحية.

الاستنتاجات: لا تزال هناك اختلالات بين الأولويات البحثية الصحية الوطنية، ونادراً ما تضطلع المؤسسات البحثية في إقليم شرق المتوسط بالإنتاج الفعلي للبحوث وأنشطة الترجمة التطبيقية للمعارف. وإن الحكومات الوطنية ووكالات التمويل الدولية مدعوة لدعم إنتاج البحوث والترجمة التطبيقية لها في إقليم شرق المتوسط. وكذلك المؤسسات والباحثون مدعوون إلى إنتاج بحوث ذات صلة بالسياسات والاستجابة لاحتياجات واضعي السياسات وأولوياتهم.

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