RESCAP-MED
Research Capacity for public
health in the Mediterranean

Policy Brief No.1

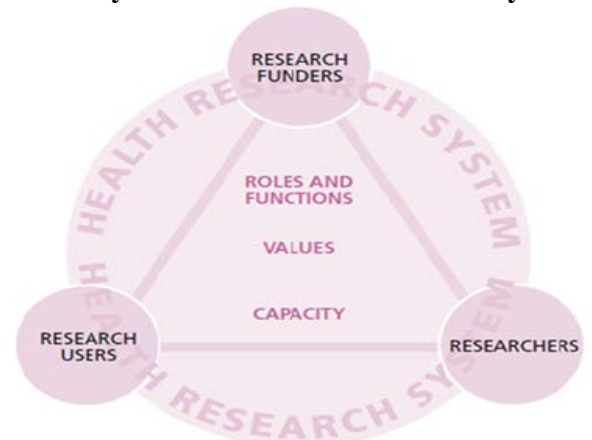**National Health Research Systems and Training Needs Assessment in Six Mediterranean Countries**

Public Health

- Epidemiology
- Environmental Health
- Health Economics
- Medical Anthropology
- Health Policy Evaluation

What is RESCAP-MED?

RESCAP-MED aims to build research capacity for public health in countries around the eastern and southern Mediterranean. Its purpose is to develop research skills for the challenge of non-communicable diseases (NCDs) and their social determinants: specifically the skills to address the burden of cardiovascular diseases (CVD), diabetes, and cancer.

RESCAP-MED links 11 partners. Six of these are academic institutions around the Mediterranean: Jordan, Lebanon, Palestine, Syria, Tunisia and Turkey. Four are academic institutions within the EU (in the UK and Ireland). And one is an international organization: the WHO East Mediterranean Regional Office (EMRO). RESCAP-MED is funded by the European Commission for three years (2012-2014).

RESCAP-MED aims to create a Mediterranean regional network for NCD researchers, in 5 key public health disciplines: epidemiology, health economics, environmental health, medical anthropology, and health policy evaluation.

National Health Research Systems (NHRS) mapping in six countries

What is a health research system?

A key objective of a health research system is to coordinate and support health research through appropriate infrastructure and funding mechanisms, and to promote research for effective national health development. Key features of a health research system are shown in Box 1. To understand the capacity of a health research system, it is important to assess existing gaps and imbalances in skills and expertise within the health research system, and to plan how to bridge existing gaps.

Box 1. Key features of a health research system*

*International Workshop on National Health Research Systems (2001 : Cha-am, Thailand). National health research systems: report of an international workshop.

Mapping health institutions engaged in health related research

A country mapping of health institutions engaged in health related research was completed in five of the six partner countries in the RESCAP-MED project (Jordan, Lebanon, Palestine, Tunisia and Turkey) using the Council on Health Research for Development (COHRED) tool that was customized for RESCAP-MED aims. The mapping phase took place between March and April 2012.

The mapping phase showed the following:

- National health strategies exist in all partner countries. Most include a research component.
- Four countries (Tunis, Turkey, Lebanon and Jordan) reported formal governance for their NHRS. In Palestine, there was no clear governance structure for health research.
- Similar institutions are engaged in health related research in all partner countries: governmental institutions (mainly ministries of health and education), universities, and non-governmental organizations (NGOs).
- The number of institutions engaged in NCD research varied among these countries.

## Challenges facing the NHRS in the partner countries

The main challenges facing the NHRS in the partner countries are shown in Box 2.

> **Box 2. Challenges facing the NHRS in the partner countries**
>
> - Health research is uncoordinated and fragmented, resulting in inefficiencies and duplication.
> - Inadequate collaboration and linkages between different research organizations.
> - National health priorities and health research priorities do not exist in some countries.
> - Health research is inadequately linked to the priorities and goals of the health system.
> - Knowledge translation of research evidence into policy-making is severely lacking.
> - Poor cooperation between policymakers and researchers.
> - Lack of institutional systems of monitoring and evaluation, and lack of activities to examine the system at national level.
> - Very low level of national funding allocated to health research.

Training Needs Assessment (TNA)

Training needs were assessed through the RESCAP-MED project to identify key gaps and constraints in the production of research related to NCDs, as identified by both academic and operational researchers, focusing on the five disciplines specified (Box 3).

Box 3. The five core public health disciplines as set by RESCAP-MED
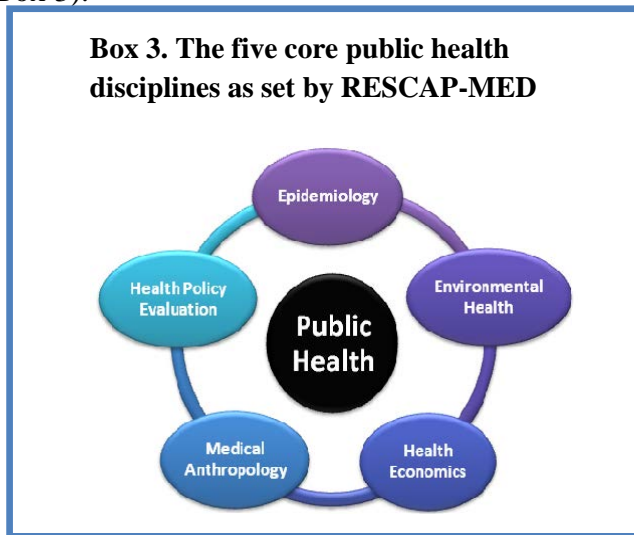
Training Needs Assessment Survey Findings

The methods used to determine the training needs are summarized in Box 4. The training needs assessment survey targeted young researchers with bachelor, master and PhD degrees with various years of experience in health related research. Medical doctors and specialists were also represented in the participating group.

Box 4. Methods for Training Needs Assessment

A training needs assessment tool was used to explore the participants' current standing in terms of skills, knowledge, abilities and research needs. Data collection was conducted in each partner country by their respective country teams. Participants were requested to rate a set of skills in each discipline in terms of their importance and the performance of raters with these skills. Training needs score is measured as the difference between the rating of the importance of specific discipline and the rating of the current performance in that discipline.

General research skills

Overall, young participants were found to have average and above average skills in using computers and computer programs, including word processing, power point, internet and e-mail. In some countries, participants were found to have below average (Jordan) or poor (Palestine and Lebanon) skills in using excel, access and statistical software.

The need for training in general research skills for young researchers varied between countries. Palestine and Turkey reported high levels of training needs for writing policy paper, qualitative report and qualitative data analysis. Jordan and Tunisia reported high levels of training needs for questionnaire development, statistical analysis and routine data use. Lebanon, on the other hand, reported high levels of training needs for policy writing and data analysis in addition to writing academic papers and research proposals.

Main disciplines training needs

A summary of the overall needs for the five countries are presented in Figure 1. Researchers in Turkey reported highest mean level for reported training needs (except in epidemiology) and researchers in Lebanon reported the lowest mean level.

Figure 1. Main disciplines training needs*
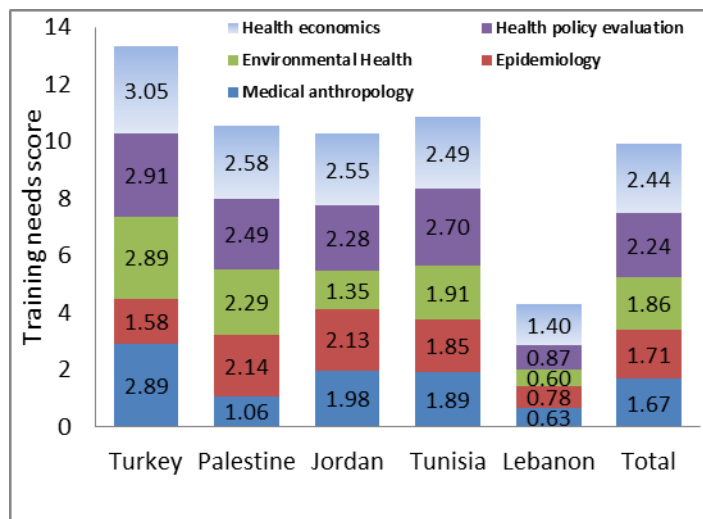
* Training needs score is measured as the difference between the rating of the importance of specific discipline on scale of 1 to 7 and the rating of the current performance in that discipline on scale of 1 to 7.

For the five disciplines:

- Health economics had the highest mean level for reported training needs in all countries.
- Heath policy was the second in rank in Palestine, Jordan, Lebanon and Tunisia, but third in Turkey.
- Epidemiology and medical anthropology had a similar rank in Tunisia and Lebanon. In Jordan and Palestine, epidemiology had a higher rank than medical anthropology, while in Turkey medical anthropology had a higher rank.

- In each discipline, the perceived importance and current performance differed. For example, the most important disciplines were judged to be epidemiology, health economic, and environmental health. The best performance was judged to be in epidemiology and environmental health. The gap between performance and importance was greatest for health economics and health policy evaluation.

Training needs for sub-competencies

Health economics: Training needs for health economics sub-competencies were very similar and all were high. Training needs were high for "statistical and econometric analyses of health and health care" followed by "economics of health system and health care". Few variation exists in the third rank in training needs where Palestine reported "provider payment mechanisms", Turkey and Lebanon reported "micro-economics of health care" and Tunisia reported "health financing" as training priorities.

Health policy: Within the health policy evaluation category, training needs varied between the partner countries. Training in "frameworks of health policy analyses" was highly needed by Palestine, Turkey, and Lebanon.

Epidemiology: Within the epidemiology field, training in "mathematical modeling" was the most needed competency reported in all partner countries. Training in "validity and reliability" was the second most needed competency reported by Jordan, Lebanon and Tunisia. Training in "effect modification (confounding and interaction)" was the second most needed competency reported by Palestine, Lebanon and Tunisia.

Medical anthropology: Training needs for medical anthropology were high and the needs for the sub-competencies were very close. The highest training needs were reported for "ethnographic methods", "understanding the role of culture in health" and the "clinic/hospital as a social settings".

Environmental Health: Training in "major environmental and occupational hazards" was reported as highly needed by Turkey, Palestine, Lebanon and Tunisia and was reported as least needed in Jordan. The second most needed training was in "policies to mitigate environmental hazards".

Key Informants Interviews Findings

Interviews were conducted with 6-10 key informants (KI) per country. Key informants were defined as individuals, managing or leading research.

- KIs from five partner countries (excluding Syria) noted the important role of research and the need to utilize information from research to inform policy and health system
- KIs noted that basic research skills are lacking at the national level.
- KIs highlighted basic research skills, methods, accuracy of research, statistics and epidemiology as a priority for training; they also reported that the five disciplines (epidemiology, health economics, medical anthropology, health policy evaluation and environmental health) are all important for public health.
- In current training already provided, general research methods, study design and epidemiology are the main topics typically covered. Current

trainings offered do not follow a systematic method of building up research knowledge.
- These trainings lack follow up and were not part of national plans for capacity building.
- The training already offered in their countries is limited to specific topics following institutional or international organizational activity.

The main challenges facing research training activities in the five countries as reported by all key informants are shown in Box 5.

Box 5. Challenges facing the NHRS in the partner countries

- Inadequate funding.
- Lack of coordination between institutions and researchers.
- Lack of time for the staff to attend training programs.
- Inappropriate training activities and not using the skills gained during training
- Lack of specialized trainers.
- Bureaucracy and logistics.
- Shortage of qualified trainers and the lack of motivation among staff.

In summary, research capacity building training was noted as important by the key informants. The issues of funding, internal organization, coordination and staff motivation were the main challenges facing such capacity building.