

A vision to strengthen resources and capacity of the Palestinian health research system: a qualitative assessment

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Abstract

Background: The World Health Organization has proposed a global strategy to build a robust Health Research System Resources and Infrastructural Capacity (HRSRIC). Despite the growing research productivity, HRSRIC in Palestine has rarely been investigated.

Aims: To analyse perceptions of health research system performers to understand the status of HRSRIC, identify its gaps, and propose policy solutions to strengthen HRSRIC.

Methods: This qualitative study targeted 3 health sectors: government, academia, and local and international organizations. Fifty-two in-depth interviews and 6 focus group discussions were conducted with key informants who were selected purposively. Data were analysed using MAXQDA 12.

Results: Despite the availability of competent personnel, the overall HRSRIC, such as human and financial resources, and facilities, forms a central challenge. HR financing is limited, unsustainable, and flows from external and individual sources. The public and private funds are largely in shortage with resources misallocation and donors' conditionality. HR quality is moderate while knowledge transfer and translation are not well conceptualized and inappropriately performed. Lack of governance, coordination, HRSRIC strategy, resource allocation, systematic and reliable data, evidence-informed culture, and environmental impacts are the main common gaps.

Conclusions: The overall status of HRSRIC in Palestine is still lacking and major challenges persist where the pace of strengthening efforts is steady. There is an emphasis that strengthening HRSRIC is an imperative step and real investment opportunity for building a successful health research system. Political commitment, consolidated leadership structure, operational capacity building strengthening strategy, resources mobilization, and sovereignty are key requirements.

Keywords: health policy, health research system, health resources, health system, Palestine

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Introduction

Health Research System Resources and Infrastructure Capacity (HRSRIC) is recognized as a central functional pillar of HRS. Strengthening of HRSRIC contributes to addressing global health challenges and improving health outcomes in low- and middle-income countries. HRSRIC is a complex and context-sensitive issue that requires a combination of different analysis approaches applied at individual, institutional and societal levels (1). Therefore, HRSRIC consists of 2 components: (1) creating and sustaining human and physical resources and infrastructural capacity; and (2) securing research funds. Both components are necessary to conduct, absorb and utilize HR. This is certainly emphasized by the World Health Organization (WHO), which states that mobilizing and sustaining the sufficient resources (2) are important to generate high-quality knowledge to support evidence-informed decision-making (3). HRSRIC should

be considered in any attempts to analyse the HRS, and this is clearly and fundamentally featured in conceptual HRS frameworks that help in better system understanding through a wide-range analysis approach (4–6), as other similar studies have found (7–9). These frameworks portray the HRS fabric, including HRSRIC, which forms a solid base and imperative priority for any HR advancement.

Mobilizing and equipping HRS with all resources is an ongoing process of empowering individuals, organizations and nations. Therefore, the WHO, Council on Health Research for Development, the Global Forum on Health Research, and other agencies such as the World Bank have explicitly and unanimously underlined the HR capacities (10,11). However, globally, numerous studies have revealed that there is an unequal distribution of resources for higher education and research. Moreover, many low- and middle-income countries have difficulties

in building up their HR capacity to support effective national HRSs for better decision making (12,13). Some of these difficulties are: lack of qualified human resources and researchers, lack of research funding, and lack of infrastructural capacity (14). Unfortunately, HRSRIC remains one of the world's unmet challenges in managing HRSs (15–17), where the allocation is < 0.5% of national health budgets for HR (18) in the context of a 10/90 gap (19).

In response to this situation, a Health Research Capacity Strengthening (HRCS) strategy has been recently implemented worldwide to improve the ability of these countries to tackle the persistent and disproportionate burdens of disease. The strategy has gained a substantial investment from donors; hence, they are increasingly interested in evaluating the impact of their investments on HR and HS (20). The World Bank defines HS as “the combination of resources, organisation, financing, and management that culminate in the delivery of health services to the population” (worldbank.org/curated/en/102281468140385647/Healthy-Development-the-World-Bank-strategy-for-health-nutrition-population-results). Embracing the HRCS scope in this paper is a realistic guide with the adopted frameworks. The terms capacity strengthening and capacity building are often used interchangeably; the first refers to establishing a research infrastructure, while the second precisely denotes enhancing a pre-existing infrastructure (20).

Regionally, HR across the Middle East and North Africa region faces critical deficits; most notably are governance, resources, and capacity of knowledge production and application (4,21). Similar deficits exist in Palestine with insufficient understandings and conceptualizations about the reality of HR potential. In fact, in Palestine (an external-aid-dependent country), donors play an inadequate role in supporting the capacity of research institutions (22–24). This necessitates assessing and understanding local resources and international aid allocated towards HR capacity to ensure effective utilization of available funds (25). Therefore, addressing the aforementioned critical challenges and knowledge gap was one of the driving factors to conduct this study. Furthermore, this is the first study to examine HRSRIC. The study is crucial and it seeks to depict a clear and comprehensive picture towards assisting the policy-makers in building a well-infrastuctured, resourced and capacitated national HRS in a state being constructed like Palestine. The overall aim was to understand HRSRIC constituents to inform health policy-makers with evidence and insights towards resourceful and enabled HRS. To achieve the overall aim, we tried to assess the actual status, gaps and shortfalls, and to identify opportunities for improvement, allocation and optimization of resources and capacity components of the HRS in Palestine.

Methods

Study design

This study is part of a comprehensive system analysis. The design, methods and instruments used were typically similar to those of relevant local studies that dealt with other components of HRS and carried out in Palestine. Identical participants, 104 key informants, were purposively selected from 3 sectors in the health field. Perceptions of participants from 3 sectors in Palestine were investigated: government, academia, and local and international nongovernmental organizations (NGOs). The approaches of collecting, managing and analyzing data through conducting 52 in-depth interviews and 6 focus group discussions (FGDs) were also typically adopted and used in previous similar studies in Palestine (7–9).

Ethical approval

The Research Commission of Swiss Tropical and Public Health Institute approved the study (FK No. 122; approval date: 21 October 2015). Ethical approval was also obtained from the “Ethik Kommission Nordwest und Zentralschweiz” in Switzerland (Reference No. UBE-15/116; approval date: 23 January 2016). Ethical and administrative approval was obtained from the Palestinian Ministry of Health (28 April 2016), the Institutional Review Board of the Helsinki Committee in Palestine (reference No. PHRC/HC/73/15; approval date: 7 December 2015), and the Institutional Review Board at Najah National University (reference No. 112/Nov./2015, approval date: 6 December 2015).

Results

The overall responses were obtained from 104 experts who were involved in HRS and aware of the system resources and capacity. The responses covered the findings in 3 key areas. Apart from the sociodemographic characteristics of the participants that were previously presented in other relevant published (7–9) and in press studies, 2 other areas were: (1) the overall existing situation, limiting and facilitating factors of human resources, infrastructure, and facilities of the HRS; and (2) the situation of HRS financing, sources, gaps, and best solutions for optimization. HRS human resources and infrastructure and HR financing (HRF) were the main 2 findings on which the current study focused.

HRSRIC in Palestine

Table 1 presents the findings about HRSRIC, which are classified into 3 themes: (1) overall landscape of the HRSRIC; (2) obstacles related to HRSRIC; and (3) perceptions to improve the resources and capacity.

For the first theme, experts described the status of HRSRIC as experiencing a noticeable shortage. However, some experts pointed to plenty of qualified human resources, particularly in academia, but highlighted the fact that these were untapped and, as many experts alleged, not adequately trained. Various academics

Table 1 HRS resources and infrastructure capacity (HRSRIC) in Palestine

HRS resource and infrastructure capacity (HRSRIC)		Theme 2: Enhancing factors
Theme	Theme 1: description of HRSRIC status	Theme 2: Limiting factors
Sector		
Gov.	<ul style="list-style-type: none"> - Existed in infrastructure and human resources - Existed but insufficient - Existed but insufficient and non-sophisticated - Insufficient with untrained staff - Very weak with good staff - Insufficient with good human resources - Insufficient with existed trained staff - Plenty of human resources - Only existed human potentials - Sufficient R&I, especially in academia - Limited R&I - Limited R&I - Weak R&I and infrastructure - Scarce except qualified staff - Scarce of R&I - Scarce of R&I - Very weak R&I and infrastructure 	<ul style="list-style-type: none"> - Develop the researchers and policy makers competency and expertise via continuous education - Boost the internal and external exchange programs - Encourage health professionals on in-job research - More investment in under and post-graduates in HR - Good management of better allocation and rational utilization, - Political will and certain capacity development vision - Fixed budgets allocation and founding a national fund (5% from MOH's budget for HR) - Expand the R&C of good HR prioritization and production such as experimental studies - Revitalize the international support - A system to govern and develop all R&I properly through a harmonized sectorial approach - Collective strategic thinking to identify our HR priorities and then the required national capacities
Acad.	<ul style="list-style-type: none"> - Existed capacity but untapped manpower - Existed facilities and qualified manpower - Great potentials and experts exist - Good R&I and advanced facilities - Existed R&C, especially in academia - Insufficient capacity with talented experts - Variable capacity with good manpower - Limited capacity and facilities with well-qualified staff - Limited R&I with certain infrastructure - Limited R&I - Limited and scarce R&I - Limited capacity and relative good experts - Weak capacities and potentials - Very weak infrastructure and skilled experts - Poor HR facilities and no infrastructure - Too limited R&I - Nationally, basic needs for the MOH are not existed, while institutionally yes - Severe lack of bright minds, but our R&I are controlled by Israel 	<ul style="list-style-type: none"> - Good management by MOH for optimal allocation of sufficient budgets and resources - Founding a system and reform strategy to set an empowering vision for upgrading the infrastructure - Promote the learning approach inside the Palestinian institutions - Capacity building programs for policy makers and researchers and allocate enough time for HR - Avoid the politic impacts in health - Pay attention to experimental HR - A need for PNIPH role to develop HR capacities - Exploit the donor's support in the capacity advancement - Expand the local and international partnerships and exchange initiatives - Renovate the school's curriculum to be research-based and enhance faculty members loads - A need for an electronic national library, technical HR center, and university hospitals - Enhancing research prioritization exercise

Table 1 HRS resources and infrastructure capacity (HRSRIC) in Palestine (concluded)

HRS resource and infrastructure capacity (HRSRIC)	
Theme 1: description of HRSRIC status	Theme 2: Limiting factors
<p>Theme</p> <p>Theme 1: description of HRSRIC status</p>	<p>Theme 2: Enhancing factors</p>
<p>Sector</p> <p>NGOs</p> <ul style="list-style-type: none"> - Excellent R&IC - Existed R&IC, but need a proper use - Good R&C, but does not reflect on the HR performance - Good R&IC and infrastructure - Insufficient and improving with good staff - Insufficient capacity and very inspired staff - Insufficient R&IC - Insufficient R&IC - Limited R&IC - Limited and undeveloped R&IC - Weak R&IC - Weak R&IC with brilliant manpower - Very weak R&IC as no system and interest - Very weak R&IC - Poor R&IC and infrastructure and capable staff - Poor R&IC - Scarce R&IC in all sectors - The absence of capacity but very good experts 	<ul style="list-style-type: none"> - A collective national body, PNIPH can take this lead - A political will and attention should be presented - Investment and sustainable and national official fund - Urge the international agencies to assist the country research R&IC advancement - Regular priorities setting to determine the required R&IC - Sponsor and support the senior and junior researchers through incentives and exploit the postgraduates - Maximize the optimal resources use and allocation - Capacity buildings programs - HR value and orientation should be enhanced - Adopt the multi-disciplinary approach in HR - Promote the R&C of the operational and clinical studies - Complimentary HR environment rather than a competitive and public-private partnership - A national network includes the state, academia, and NGOs, to coordinate and mobilize R&IC - The active role of the SRC and LPHA
<p>NGOs</p> <ul style="list-style-type: none"> - An organizing system is missing - Maladministration and resources misallocation - Unsustainable individual and external fund and deficiency of national, no specific budgets - Lack of advancing plans to R&IC - HR is competitive for personal purposes and lack of coordination - Brain drain and HR is undervaluing - Financial crises in academia - Lack of manpower capabilities, training, and motivation - Lack of technology use, advanced libraries and well-equipped facilities for RCTs or applied studies - Duplication and fragmented institutional potentials 	

remarkably revealed that the Ministry of Health faced a chronic scarcity of essential medical supplies, academia suffers from acute financial crises, and the lack of most resources is due to the absolute control and restrictions imposed by the occupation. All responses about HR resources themed into 2 descriptive categories. The first category was the most frequent and represented the vast majority. The descriptive remarks ranged from “severe lack”, “very weak”, “limited”, “scarce”, and “inadequate”. While the other responses, which formed the second category, comprised: “resources exist”, “good”, and “good but unsophisticated and insufficient”. Academics participated in FGDs referred to the poor performance of HR. They admitted to the availability of resources and good capacity, but managing HRSRIC was said to be a central difficulty. Government experts recognized the lack of research budgets where they called for a 5% of the central health budget to be allocated to HR. Conversely, NGO experts alleged that the national health plan 2011–2013 allocated 1% to HR, but other experts from NGO sector argued that this percentage was not translated in the ground.

The second theme reflected the main obstacles facing HRSRIC and was mainly correlated with the absence of a regulatory framework. Mismanagement of resources, a weak strategic leadership, duplication and individuality in HR efforts, brain drain, and insufficient experience and skills of current human resources were common hurdles reported by experts. Others pointed to other factors such as lack of sustainable and national funds, political turmoil, time constraints, and lack of investment plans in infrastructure innovation and technological development in all sectors.

The third theme presented perceptions to tackle these hurdles; the majority agreed on the centrality of having the political support to initiate a strategic dialogue to build a national HR body. Participants recommended that this body should be in charge of framing a development strategy and policy with emphasis on: (1) securing adequate and fixed budgets, stimulate the local support and invest donor funds appropriately to strengthen HR infrastructure; (2) advancing the capacities of strategic planning and optimal resources management; (3) fostering partnerships, fellowships, exchange programmes, learning institution approach and capacity building programmes, whether at the local or international level, to evolve the institutional and national HR resources and capacities; and (4) improving approaches to research prioritization exercises, integration, intra-inter-trans-disciplinarity, and networking for better resources and capacity identification, allocation and utilization.

HRF

Table 2 shows the findings on the status of HRF, which comprised 4 themes: (1) status of funding; (2) funding sources; (3) gaps; and (4) steps needed to improve financing. Concerning HRF status, there was an overwhelming consensus on extreme fund deficiency directed to HR. The majority of experts harmoniously echoed that

Table 2 Health research financing in Palestine

Theme	Theme 1: the status of HRF	Theme 2: HRF sources	Health research financing (HRF)	Theme 3: HRF gaps	Theme 4: Improving the HRF
Sector					
Gov.	<ul style="list-style-type: none"> - No specific budget in MOH - Not sufficient fund at all - Generally is minimal - Scattered fund and donors are working randomly without sustainable funding sources - Underinvestment which is not given a priority politically - We do not have a fund at all - HR is itemized in the gov. budget for HR and academia and NGOs alike - The funding mechanism is enough, sufficient, and sometimes are plenty 	<ul style="list-style-type: none"> - Mostly comes from external donors, little from national such gov., banks, companies.. etc. - Mainly from donors then some national sources and MOH rarely funded HR - Mostly funded individually (self-funding) e.g. postgraduates and others from external donors directed to national institutions 	<ul style="list-style-type: none"> - The bureaucratic process to secure fund - The absence of a financing strategy for HR based on priorities - No political interest in HR - Lack of gov. financial resources - Research funding and agendas are donor-driven - The absence of a collective body 	<ul style="list-style-type: none"> - Good resources management - Set priorities to allocate fund based on them - Academia should play a role in funding HR 	
Acad.	<ul style="list-style-type: none"> - There is no available national or institutional fund - We have a problem with funding with no interest of banks and another possible funder - There is no funding except foreign which means no staff allotted for HR - Inadequate, unsustainable, conditioned serve donors ideologies - The lowest gov. priority, and budgets unavailable - Lack of fund which is a key barrier - No gov. allocation - Donor agenda-driven 	<ul style="list-style-type: none"> - Externally or self-funding from postgraduates, without gov. fund - Foreign sources - Mainly depends on external sources with complicated procedures - Local researchers personally financing their descriptive studies which are less expensive - From NGOs and some gov. institutions e.g. MOHE - Mostly self-funded or from donors - MOH fund is completely not existed - Usually by donors and individuals - Lower from institutes and gov. and bigger from external 	<ul style="list-style-type: none"> - The unwillingness of serious political decisions - Funder restrictions and control - The scarcity of national resources, simply, MOH does not have money for securing pharmaceuticals - The absence of a sponsoring body - Political deterioration and siege - No political interest in HR 	<ul style="list-style-type: none"> - Allocate sufficient fund through establishing a national fund or central gov. budget allocation - Local and international cooperation - Allocated HR sustainable fund from the GDP - Mobilize local fund and initiate the external NGOs support for HR based on clear society needs - Agreed national agendas steering the external donors 	
NGO	<ul style="list-style-type: none"> - No specified fund in UNRWA for HR, which is part of NCDs budget - Absolutely no local fund - Seasonal without significant gov. fun - There is a lack of funding - We do not have special budget allocated for HR, this aspect is an institutional challenge - HR fund is based on programs, rarely has a separate budget - Externally and unsustainable - No institutional fund and individual - Unsustainable due to unpredictable political situations - Unsustainable and its channels is weak 	<ul style="list-style-type: none"> - Internationally funded - Individual-based or donor-dependent e.g. World Bank, Japanese and Norwegian gov., WHO, and UNFPA - External donations - Mostly international, sometimes academia funded partially and indirectly - The individual fund, but sometimes WHO, USAID, and EU funding HR - Mostly international, private funding for HR is weak as well as the gov. - Mainly international, such the Lancet through LPHA and limited comes from MOHE and NGOs as fellowships or in-kind fund 	<ul style="list-style-type: none"> - HR is not itemized in the gov. budget - Lack of investment sense, huge spending on services instead of HR which costs less - Donor policies and agendas - Large fund for applying operational and clinical research projects are mainly unaffordable - Significant spending on other sectors (security) - External fund to HR cut off from humanitarian and relief projects not developmental 	<ul style="list-style-type: none"> - Secure sustainable fund through political and financial commitment - Many fund opportunities to develop HRS in Palestine to be invested - Activate the international role in supporting HR, financially and technically - Initiate national proposals to big donors sides, like Bill and Melinda Gates Foundation, John Hopkins University, and many other - Promote the conviction and importance of HR 	

the hands of the Palestinian government and institutions were tied in spending to HR. This was emphasized through their reflections that there was “no specific HR budget and allocation”, “HRF is insufficient, scattered, unsustainable, and project-based”, “HR is not a priority and underinvestment”, “external, conditioned”, and “a major challenge”. With regard to the sources of this fund, the experts overwhelmingly agreed on the 2 main sources of HRF: (1) mainly from external resources and donations through international organizations; and (2) an individual resource, which means that researchers are financing their research at their personal expense.

The most important gaps that hindered appropriate and sustainable HRF were focused on the following 3 dimensions. The first was associated with the low official interest in HR, the absence of regulatory frameworks, financing, and investment strategies, and that less-important sectors were allocated greater funding. The second was notably related to bureaucratic procedures for financing and the conditions of the donors. The third dimension was the scarcity of national resources and political conditions. For better HRF, it is essential to promote the importance of HR and develop national HR agendas, to identify and guide resources appropriately.

To summarize, the findings indicate that a political commitment is essential to ensure sustainable financial resources for HR through possibly different channels, where the majority of proposed solutions tackle the financial scarcity of HR, such as: (1) establishing a national fund under the Ministry of Health/Palestinian National Institute of Public Health joint patronage with proper resources allocation and management; and (2) stimulating domestic financing and optimizing international funding on the basis of a long-term strategic partnership to ensure the pillars of HRS are firmly in place.

Discussion

This study dealt with the 2 most important pillars of the HRS (3), exploring the system resources and infrastructural capacity. As HRS is a complex and diverse subject (26,27) and under growing attention (2,28,29), the findings of this system analysis are expected to offer a worthwhile contribution to the understanding of both components in order to move forward towards a successful HRS based on a national strategy. To address the weakness of HRS-RIC and HRF, this strategy should be politically adopted, a matter of consensus, and backed by international players, to ensure a well-resourced and capacitated HRS.

Generally, skilled human resources in Palestine are increasing in spite of the institutional challenges. Other literature indicates the contrasting evidence that research personnel are limited with a lack of qualified experts (30), where the distribution of these resources is challenging because they are concentrated within academia and government. In addition, the competencies and freedom of movement of those personnel need to be improved, especially for those from the Gaza Strip. The Palestinian

researchers in full-time equivalents are nearly 2000 equivalent to 564.1 researchers per 1 million inhabitants (31). The teaching faculty makes up 44% of the workers in the Palestinian higher education institutions; this ratio is not in harmony with international standards (two thirds for teaching and the rest as administration and services). Compared to that in the region, Egypt has almost 600 researchers, while Jordan is the highest with around 1900 (4). Overall, the number of researchers from the Eastern Mediterranean Region is relatively low (ranging from 29 to 1927 per million people) (32). However, the workforce can be seen as promising and improving compared with other HRSRIC components such as infrastructure, facilities and funding, where these components remain structurally and functionally weak, not only in the HRS but also in the HCS alike and strengthening them is often neglected (18,33,34).

Due to state fragility, national institutions, mainly government and academic, face severe financial crises that negatively affect performance (35). This not only hampers any HR development effort but also threatens the continuity of public services, particularly education and health. In view of capacity gaps, building a robust HRS will be unattainable as long as we lack a governing framework, strategic thinking in resources and capacity allocation, and sustainable investment for HR (4,21,33). In recent years, a growing number of projects have supported the Palestinian HR capacity through international and local parties, for instance, European Union–Horizon 2020, academic partnerships, United Nations agencies, Islamic Development Bank, governments (such as Palestinian–French Joint Committee, the Palestinian–German Science Bridge, Palestine–Quebec Science Bridge, and Norwegian Institute of Public Health through Norway’s Minister of Foreign Affairs), Qatar Charity, Welfare Association, and local private sector (including banks, pharmaceuticals companies, and business people). To make a greater impact, such initiatives, projects and interventions are required to be structured, strategic and focused within the inclusive national framework and they ought to follow a long-term development vision.

Brain drain forms another intractable challenge in Palestine (30) due to a lack of incentives and discouraging environments. This issue is the focus of international debate in HR (2), and regionally, Arab states lose 50% of their newly qualified physicians and 15% of their scientists annually (4). Therefore, building or strengthening HRSRIC effort is an urgent priority. The effort of retaining and bringing back the intellectual capital and skilled human resources to the country, and training and educating the current health workforce should be applied at the individual and institutional levels as part of a comprehensive developmental strategy. To attain this target, 3 approaches should be followed: (1) HRCS strategy (20); (2) HRS operational and functional framework (2); and (3) ESSENCE, 7 basics for strengthening HR capacity (25). ESSENCE is an initiative that allows donors/funders to identify synergies, establish coherence and increase the value of resources and action for health research. Also, as

it is system, its pillars affecting each other, applying these approaches in tackling HR production and quality, HR transfer, and HR translation is also essential, in order to move synergistically to the empowering of the HRSRIC. These 3 operational components related to HRSRIC must be fundamentally embedded and well-functioning in any HRS (2).

The overall HRF is persistently scarce, as other comparable (7–9) and different (36–38) studies have affirmed. However, limited and volatile individual and institutional financing efforts (38) could have an impact if structured and brought into a collective framework. Certainly, as a relevant study proved (7–9), HR is still not high on the government priorities list due to many conflicting concerns. Different factors behind the lack of HRF, which agreed with some other studies, are: (1) HR and evidence-based concepts are not well entrenched among decision-makers (39,40); and (2) weakness of advocacy and pressure campaigns to initiate a serious movement towards strengthening the HRS. Even with the donors' limited role, Palestinian HR primarily depends on the unsystematic external and individual funding with a clear lack of public domestic funding. In contrast, another study revealed that public investment is the main source in the region's countries and HRF is among the lowest globally and WHO Regional Office is a key body offering HRF (4). There are other funding gaps concerning the donors' conditions, influence and procedural difficulty (39,41) and the scarcity of national resources due to the political conditions. For sustainable HRF, HR should receive the commitment of a fixed budget, at least 1% of the national health expenditure (2), along with a national integrated and pooled fund under government stewardship financed by Palestinian and non-Palestinian entities' contributions (4,18).

It is worth mentioning that the study takes into account the impact of the current reality on the development of HRSRIC. It is important to shed light on the role and impact of the political situation on HR in relation to limiting or facilitating the strengthening efforts of human and financial resources and infrastructural potentials. In Palestine, as an exceptional case, there are 2 pathways to understanding the current political scene. First, the continuation of the Israeli occupation undermines any national development efforts by restricting the movement of individuals, supplies, goods and materials, properties demolition, raids, and seizing land and natural resources. Second, the consequences of the ongoing intra-Palestinian political division among major political factions in the Gaza and West Bank. These consequences are the multiplicity of administrations, mistrust, conflicting visions, duplication of agendas, budgetary deficits, disturbances throughout the public sector such as salaries reduction, overstaffing with low productivity, and compulsory collective retirement. Therefore, addressing these 2 factors, as part of the efforts to advance the HRS in general, and the HR resources and infrastructure in particular, is important and inevitable. Accordingly, the Palestinians, with a considerable role of

the international institutions, are invited to a national workshop that seriously examines the opportunities of eliminating these obstacles and leads to launching efforts to enable and strengthen the resources and facilities of HRS in Palestine.

We made some proposals that could not be addressed in this study to become research ideas in the future. Among the most important of these ideas, initially considered also at the outset, is that a sectorial and more empirical national HR capacity assessment may be useful in determining precisely HRSRIC, such as assets, resources and facilities at the institutional, sectoral and national levels. Such assessment deserves to be implemented using qualitative and quantitative measurements. Once the HRS is structured, national comprehensive system analysis is required to investigate inputs, processes and outputs dimensions.

The study limitations can be summarized as follows: (1) knowledge gap of relevant local and regional literature and reports on the subject; (2) time constraint in mapping the definite existing capacities across the sectors, as well as in targeting more participants and targeting of additional relevant institutions; (3) difficulties related to gathering quantitative data on HR stakeholders and capacities in Palestine due to lack of data availability, quality, organization and accessibility; (4) field restrictions on the freedom of movement of the research team as a result of the closure and security checkpoints; and (5) environmental and political fluctuations and institutional changes that may escalate or reduce the role of the stakeholders on the one hand and funding flow to the health sector in general and to HR activities in particular on the other hand.

Conclusion

This system analysis is important not only to Palestine but also to other countries in the region in order to guide the HRSRIC strengthening and advancement endeavours meaningfully. The overall status of HRSRIC in Palestine is insufficient/weak and major challenges persist where the pace of strengthening efforts is steady. Inadequate HR capacity for infrastructure, facilities, supplies and logistics is not addressed strategically. This applies to dozens of projects, which are dedicated to expand and boost HRSRIC, that have not been implemented through a national strategic approach. This scarcity of resources and loss of capacities is affected politically by perpetuating factors, such as the Israeli occupation and the intra-Palestinian divisions. A strategy for HRSRIC is crucially required to be adopted. Human resources are considered a promising side in HR compared with some other countries in the region. Thus, there is a necessity for investment in empowering the knowledge and competencies on HR subjects, enhancing an effective incentive system, and providing the required health facilities with a supportive environment to face the rising brain drain. Furthermore, the Palestinians loss of control over their

resources and politicized foreign aid are also contributing to the misallocation and scarcity of resources.

In spite of the scarcity in the region, HR in Palestine is often funded by external donors and individual and institutional sources. This funding is still scarce, with a considerable lack of government funding. The HR in the successive budgets almost does not itemize in light of the lack of regional HRE, which is another major challenge characterized by scarcity, unsustainability and individuality. The reasons behind the scarcity of financial resources include donor conditions and procedures, allocation malpractices, and prevailing political conditions. Therefore, a plan to establish a national HR fund with a sound and adequate budget, perhaps by allocating 1% of the total health budget to reach 5% by 5 years, as well

as ensuring diverse financing sources and a collective pooled contribution, may be a viable solution to explore.

Thus, in light of these compelling challenges in the Palestinian context, the issue of framing a strengthening agreed strategy for HRSRIC remains a national strategic demand. The strategy needs to be framed in the context of institutionalized national governance for HR in Palestine. The following aspects, promotional and professional incentives, educational capacity building programmes, infrastructure investment and facilities expansion, sustainable budgets and diverse funds, and local and international partnership and cooperation, are essential foundations that should be built in to the strategy. Eventually, HRSRIC strategy can be equated to the Palestinians' national struggle for building the pillars of the state institutions.

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Une vision pour le renforcement des ressources et des capacités du système palestinien de recherche en santé : évaluation qualitative

Résumé

Contexte : L'Organisation mondiale de la Santé a proposé une stratégie mondiale visant à mettre sur pied un solide système de ressources et d'infrastructures au service de la recherche en santé. Bien que la productivité de la recherche ait augmenté, les ressources et les infrastructures relatives à la recherche médicale ont rarement été étudiées en Palestine.

Objectifs : Analyser les perceptions des acteurs de la recherche en santé pour comprendre l'état des ressources et des infrastructures dans ce domaine. Repérer les lacunes et proposer des mesures visant à renforcer les ressources et les infrastructures au service de la recherche en santé.

Méthodes : La présente étude qualitative était centrée sur les trois secteurs de la santé suivants : secteur public, monde universitaire, organisations locales et internationales. On a mené 52 entretiens approfondis et six discussions thématiques de groupe avec des informateurs clés choisis à dessein. Les données ont été analysées à l'aide du logiciel MAXQDA 12.

Résultats : En dépit de la présence de personnel compétent, le système global de ressources et d'infrastructures pour la recherche en santé, par exemple, les ressources humaines et financières et les installations, représente un défi de taille. Le financement de la recherche en santé est limité, ne s'inscrit pas dans la durée et provient de sources extérieures et individuelles. Les fonds publics et privés sont largement insuffisants, les ressources sont mal réparties et leur utilisation est soumise aux conditions des donateurs. Les travaux de recherche sont de qualité moyenne ; le transfert et l'application des connaissances sont mal définis et ne donnent pas des résultats satisfaisants. Les principales lacunes concernent l'absence de gouvernance, la coordination, la stratégie relative au système de ressources et d'infrastructures au service de la recherche en santé, l'allocation des ressources, la collecte systématique des données et leur fiabilité, la culture de l'information basée sur des données factuelles et les incidences environnementales.

Conclusions : Dans l'ensemble, le système de ressources et d'infrastructures palestinien pour la recherche en santé présente encore des lacunes et d'importantes difficultés subsistent dans les domaines où des activités de renforcement

sont menées à un rythme soutenu. L'accent est mis sur la nécessité impérieuse de renforcer le système de ressources et d'infrastructures pour la recherche en santé et sur le fait qu'il s'agit d'une véritable occasion d'investir pour concevoir un système de recherche efficace. À cet égard, l'engagement politique, la consolidation des structures d'encadrement, la mise en place d'une stratégie de renforcement des capacités opérationnelles, la mobilisation des ressources et la souveraineté constituent des points essentiels.

رؤية لتعزيز موارد وقدرات نظام البحوث الصحية الفلسطيني: تقييم نوعي

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الخلاصة

الخلفية: اقترحت منظمة الصحة العالمية استراتيجية عالمية لبناء القدرة البنيوية لنظام البحوث الصحية وموارده في فلسطين على نحو قوي. وعلى الرغم من تنامي الإنتاجية البحثية، نادراً ما يجري استقصاء القدرة البنيوية لنظام البحوث الصحية وموارده في فلسطين.

الأهداف: هدفت هذه الدراسة إلى تحليل تصورات العاملين في نظام البحوث الصحية لفهم وضع القدرة البنيوية للنظام وموارده، وتحديد الثغرات التي تعترضه، واقتراح حلول سياساتية من أجل تعزيز القدرة البنيوية للنظام وموارده.

طرق البحث: استهدفت هذه الدراسة النوعية ثلاثة قطاعات صحية: القطاع الحكومي، والأوساط الأكاديمية، والمنظمات المحلية والدولية. وأجريت اثنتان وخمسون مقابلة متعمقة و6 مناقشات ضمن مجموعات بؤرية مع مخرجين رئيسيين جرى اختيارهم بطريقة هادفة. كما قمنا بتحليل البيانات باستخدام نظام MAXQDA-12.

النتائج: على الرغم من توافر العاملين الأكفاء، تُشكّل القدرة البنيوية للنظام وموارده في المجمع، مثل الموارد البشرية والمالية والمرافق، تحدياً رئيسياً. ويتسم تمويل البحوث الصحية بالحدودية وعدم الاستدامة، ويرد من مصادر خارجية وفردية. وتعاني صناديق التمويل العامة والخاصة من عجز كبير مع سوء تخصيص الموارد والشروط التي تفرضها الجهات المانحة على التمويل. وتتسم البحوث الصحية بنجودة متوسطة في حين أن نقل المعرفة وترجمتها لم يُوضع لهما تصوّر جيد ويُنفذان على نحو غير مناسب. وتتمثل الثغرات المشتركة الرئيسية في الافتقار إلى الحوكمة، والتنسيق، واستراتيجية القدرة البنيوية لنظام البحوث الصحية وموارده، وتخصيص الموارد، والبيانات المنهجية والموثوقة، والثقافة المستنيرة بالبيّنات، والآثار البيئية.

الاستنتاجات: لا يزال الوضع العام للقدرة البنيوية لنظام البحوث الصحية وموارده في فلسطين يعاني من القصور، ولا تزال هناك تحديات كبيرة في المجالات التي تتسم فيها وتيرة جهود التعزيز بالثبات. وثمة تأكيد على أن تعزيز القدرة البنيوية للنظام وموارده خطوة حتمية وفرصة استثمارية حقيقية لبناء نظام بحوث صحية ناجح. وهناك متطلبات رئيسية تتمثل في الالتزام السياسي، وهيكلة القيادة الموحد، واستراتيجية تعزيز بناء القدرات التشغيلية، وتعبئة الموارد، والسيادة.

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