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Abstract

Background: There is a growing international and regional interest in Health Research Systems
(HRSs) in light of a global strategy for HRS stakeholders’ (HRSSHs) active involvement. HRSSHs in Palestine have rarely been investigated with regard to uncertainties.

Aims: This study aimed to analyse perceptions of HRSSHs in order to understand their roles and involvement, identify gaps, and offer policy solutions for stakeholders’ engagement in the Palestinian HRS.

Methods: This qualitative study targeted three local Palestinian health sectors, government, academia, and local and international agencies. Data were collected through 52 in-depth interviews (IDIs) and 6 focus group discussions (FGDs) and then analysed using MAXQDA 12 software. Participants and institutions were selected purposively based on a set of criteria and peer review.

Results: The overall HRS stakeholders’ roles were unsatisfactory, with low involvement from society, the private sector, and local and international sectors. The important role of academia and the Ministry of Health is moderate while that of international agencies is weak due to conflicting agendas and lack of a guiding body. Most universities have poor representation in public decision-making and potential scarcity in health research. Interest–power imbalance among stakeholders is reported where political, organizational, and technical shortfalls were indicative of weak roles and low involvement, along with a lack of health research culture, structure, resources, defined roles, and network.

Conclusions: Tackling the inadequate roles, interests’ disparity, and poor involvement of HRSSHs is imperative for HRS strengthening. Redefining HRSSHs’ roles and involving all stakeholders is key through strategic dialogue, consolidated leadership, and resource mobilization.

Keywords: Health experts, health research system, stakeholders, Palestine

Introduction

Health Research System (HRS) is a system encompassing people, institutions and activities to generate high-quality knowledge to be utilized in health improvement (1). HRS involves not only the health sector but also key sectors such as science, education, economy, technology or development systems, or indeed aspects of international or private research systems (2). Stakeholders are a key pillar of the HRS who gain in terms of research regulation, production and utilization. This pillar is interconnected and indispensable for any successful HRS, and it is essential to tackle it in system analysis and mapping. Therefore, the World Health Organization (WHO) definition of HRS has delineated two levels of stakeholders – people and institutions (1). Such people are officially engaged in health research (HR) across different institutions of the Palestinian healthcare system. Their primary task is to boost the capacity and productivity of the HRS to be utilised in health decision-making (3).

HRS is a complex issue with diverse actors and contexts (4) and the lack of common understanding is rooted in its multi-disciplinary nature. Since it has impacts on, and relationships with other key systems, a holistic building and analysis approach is required to fulfill the system’s potential in order to attain health and comprehensive development (5). HRS stakeholders (HRSSHs) are the dynamic engine of all HR operations; consequently, grasping their roles, relationships and level of involvement is essential. They can affect or be affected by the HRS and are considered an important source of information and critical perspectives (2).

For system understanding and strengthening, different conceptual HRS frameworks that identified HRS boundaries were used (6,7). In addition, a wide-range analysis approach was employed using a stakeholder analysis technique (8) to map HRSSHs. This useful combination technique was adopted to identify stakeholders’ influence and importance that may significantly impact HRS success (2,9). The technique was also applied to examine stakeholders’ engagement across the HR process, from setting up priorities to disseminating results (10). The advantage of HRSSHs’ involvement increases the utilization of HR to support the healthcare system’s performance and subsequently promote population health (11,12). By contrast, stakeholders’ disengagement creates gaps in the formulation of HR policies and priorities (12).
Even though the support of international HRSSHs, particularly donors’ support, is indispensable and needs to be used effectively to build proper research institutions (13), their contribution is often inadequate and conflicting (14). For example, one concern that should be addressed in Palestine as a main aid recipient country is the negative influence of donors on the local research and policy agenda (15,16). Therefore, understanding the role of international HRSSHs as aid suppliers is important to ensure effective use of their contribution to strengthen the HRS in Palestine.

As a central pillar of HRS, this study addresses the HRSSHs issue as the first national study in Palestine and the region (17). The study is the fourth study of a larger research project that investigated all HRS components, which is a necessity not only for the healthcare system but also for Palestine in general as an emerging state. The overall aim is to understand the roles and contributions of HRSSHs in order to bridge the knowledge gap and provide demonstrable strengthening insights to decision-makers. Four objectives were formulated to achieve this aim:

1. Explore the roles, functions and responsibilities of local HRSSHs in the Palestinian HR arena.
2. Assess the role of international agencies and institutions with regard to HR support and contributions.
3. Map the level of involvement and influence of national and international HRSSHs.
4. Determine weaknesses and propose improvements to promote active involvement of HRSSHs.

Methods

This qualitative study used a similar design to other local studies relying on different system analysis frameworks developed by Pang et al. (2,3) framework, system thinking, and comprehensive HRS assessment. The same tools were used and included a set of dedicated questions on HRSSHs. The study targeted a diverse group of stakeholders including experts, policy-makers, academics, and directors from the three relevant Palestinian sectors: government, academia, and local and international non-governmental organizations (NGOs). The methods of data collection, management and analysis were similar to other national studies (18,19). Data were collected through 52 in-depth interviews (IDIs) and 6 focus group discussions (FGDs) and then analysed using MAXQDA 12 software (VERBI GmbH, Berlin, Germany). Participants and institutions were selected purposively based on a set of criteria and peer review.

In order to obtain a precise realization of HRSSHs involved in HR in Palestine and map appropriately their roles and influence, the study approached the participatory stakeholders’ analysis through three methods relying on experts’ perspectives, the principal investigator’s
knowledge, and pertinent literature. The analysis was completed through the three approaches of analysis: the conceptual context of experts (participants’ perceptions), the HRSSHs involvement-roles continuum, and the HRSSHs power-interest grid.

**Ethics clearances**

The Research Commission of Swiss TPH approved the study (FK No. 122; approval date: 21 October 2015). Ethical approval was also obtained from Ethikkommission Nordwest und Zentralschweiz (EKNZ) in Switzerland (reference No. UBE-15/116; approval date: 23 January 2016). Ethical and administrative approval was received from the Palestinian Ministry of Health (approval date: 28 April 2016); the institutional review board of Helsinki Committee in Palestine (reference No. PHRC/HC/73/15; approval date: 7 December 2015); and the institutional review board (IRB) at Najah National University (NNU) (reference No. 112/Nov./2015 (approval date: 6 December 2015).

**Results**

The findings cover two domains: 1) socio-demographic characteristics of study participants; and 2) the overall status of local and international HRSSHs.

**Socio-demographic characteristics of study participants**

This aspect was clearly illustrated elsewhere in the literature, which addressed other HRS topics in Palestine (18,19). Overall, the study participants had diverse backgrounds and leadership positions. The majority were educated to doctoral level and held more than 20 years of experience, particularly those participants from NGOs. One third of the participants were female. Participants and their institutions were distributed as follows: 18 experts from 8 academic institutions, 19 participants from 15 NGOs (10 local and 5 international), and 15 participants from governmental institutions.

**The status of HRSSHs**

There were four aspects related to HRSSHs: 1) the role and responsibilities of HRSSHs; 2) their level of involvement; 3) power/interest factor; and 4) the role of international actors in health research.

**The role and responsibilities of HRSSHs**

As indicated in Table 1, the findings on the role of the HRSSHs were combined where national stakeholders’ roles were not appreciated by the majority of experts. Most of the responses were distributed into two categories: negative perceptions and positive perceptions. Responses to the
first category were the most frequent and reflected a conservative and unfavorable perception of the role of HRSSSHs and reflected by a diverse spectrum of remarks, such as: “non-robust and weak”, “fragmented and seasonal”, “unsatisfactory and inadequate”, “unfulfilled”, “competitive and non-integrative”, and few echoed, “there are no stakeholders”. In contrast, the positive and more specific category was less frequent. Responses included: “somewhat cooperative”, “impressive at the micro-institutional level”, “a pivotal and good academic role while weak at the governmental level”, and “all roles are improving and can be better”. Three specific quotes reflected this, with a government expert stating: “All HRSSHs are working independently”; an academic added: “weak role due to the producer–user gap where HR production is personal”; while an NGO expert echoed “each party does its best but the overall role is not as wished”.

In a relevant context, a number of experts agreed principally on the importance of the binary-role of the Ministry of Health (MoH) and academia in HR. Experts emphasized the unilateral regulatory and governing role of the MoH through the Palestinian National Institute of Public Health (PNIPH), and to remain a major reference, funder and user of HR. However, some NGOs experts in focus group discussions strikingly disagree on the mandate and capacity of the institute with regards to HR. Alongside some academics, they criticized the government’s role in managing, funding and directing HR. Although a few praised the role of the Ministry of Higher Education (MoHE) in embedding scientific research in curricula and supporting research initiatives, some described these initiatives as individualistic. The question of who can share the role of MoH and other government ministries was controversial. Some suggested that academia could take up this role, others referred to WHO, and a few expressed the opinion that all relevant parties need to be involved. Some experts argued that the academic role is limited to HR production only, although two academics criticized the low level of this role. Remarkably, the financing role of both private, local and international NGOs sectors is criticized by a group of experts among the three sectors. An NGO expert echoed that the INGOs are important in the HR scope. In contrast, an expert from the same sector refuted this perception.

The pattern of stakeholders’ involvement

Figure 1 illustrates the involvement level of HRSSSHs, which also reinforces many of the aforementioned pertinent perceptions. The continuum figure represents the actors through three dimensions: institutional and societal, individual, and assigned roles. The continuum has a dualistic explanation: 1) depicts the current level of engagement of the HRSSSHs according to the demonstrated three dimensions; and 2) indicates that the current representation is a factual reflection of a successful HRS, but on condition that the scaling up of the three dimensions to a higher level is ensured. In other words, tri-involvement, society–institution–individual, needs to be constantly maximized, so that each role becomes representative and weighted in HRS. Certainly, the first dimension showed government and academia as the most involved parties, while the private sector and community were insufficiently involved. Finally, as experts delineated, most of the assigned roles of the HRSSSHs in the continuum are almost identified realistically, with varying levels of government and academic involvement in HR, but both actual
roles remain weak.

Mapping HRSSHs in accordance to Power/interest Grid

*Figure 2* displays the distribution grid of HRSSHs in Palestine. This analytical grid aims for a better understanding of the actors’ interactions and influence and it comprises four quadrants. Four national bodies, academia, and WHO are almost located in the first quadrant, high power–high interest, where most Palestinian academic institutions are national NGOs. The second quadrant shows high power–low interest, and includes most of the government ministries and the highest sovereign institutions, headed by the president, Palestinian legislative council (PLC), Cabinet, and MoH. Low power–high interest is the third quadrant, which shows the lowest stakeholders’ representation, excluding certain academic institutions and INGOs. The last quadrant is low power–low interest, where few national bodies, most INGOs, local NGOs, the private sector, professional associations, and community are situated. Importantly, the overall reflection is that the majority of national and governmental bodies dominate the power structure, but with a low interest in HR. Unlike international and local NGOs, private and community institutions that have low power, as well as academia and some INGOs who possess moderate power and a prominent interest, contribute best to HR.

The role of international actors in health research in Palestine

As demonstrated in *Table 2*, the general perception indicates that the international role in supporting HR is currently indispensable but ineffective. This is evidently shown in the majority of experts' beliefs that this role is still at a low level; a few experts hailed the financial and technical role, but on an ad-hoc basis with a non-strategic motive and value. A substantial agreement across the three sectors was observed with regards to the factors behind the weakness of this role, which were:

1. Political – fund conditions, donor agendas, and political mandates.
2. Opaque factors influencing donor’s roles; unsustainable, unpredictable and inadequate resources, and essentially low interest to HR.
3. Factors related to their operational role, as mainly emergency-based, humanitarian-oriented and project-driven and with a short-term scope. Donors’ activities do not meet local needs, and their selective support for HR is often related to evaluating their own implemented programmes.

Two policymakers delineated “plays a positive role but insufficient and unsystematic in supporting advanced HR”; an academic viewed that, “this role is not efficient and unsustainable, and far from our interest”; while NGOs noted that, “the role is majorly humanitarian-focused”.

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The findings came with a range of thoughts for solutions to enhance this role. One important solution, which was frequently expressed by experts, is the need to speed up forming a unified national advisory policy entity for HR; a few suggested the PNIPH for this assignment. This body’s mission with the involvement of all HRSSHs would be to formulate a national strategy, including a national fund for regulating, prioritizing and funding HR. In light of this strategy, it is important to focus on revitalizing the leadership role of MoH and/or PNIPH to allocate and manage the international fund appropriately towards HRS components, primarily investing in human and infrastructure capacity building. Furthermore, a strategic dialogue led by MoH with local and international donors needs to be launched in order to formulate a common and long-term vision linking their fund structurally with the local HR needs and priorities. Other perceptions emphasized that maximizing and diversifying fund sources for a sustainable funding pledge is indispensable and should be managed by appealing to national institutions, individuals and communities abroad. Furthermore, optimizing the use of resources and prioritizing HR on a regular basis through solid technical and governance procedures. Another reported enhancing factor was defining the role of the donors in the supervision, monitoring and evaluation of this fund, which should be done under state leadership. Lastly, donors should be urged to establish HR units associated with the national HR body and, more importantly, their technical assistance and fund should be harnessed for establishing sustainable HRS in Palestine.

**Discussion**

This study dealt with one of the most important pillars of the HRS (3) – analysing the involved HRSSHs in the Palestinian HR arena. As HRS has a complex and diverse context (2,4) and is under growing attention (1,5,19), the findings of this study can be helpful to Palestinian policy-makers with regard to understanding the pattern and network of stakeholders in order to move forward towards a successful HRS based on active participation.

As a substantial pillar, HRSSHs forms the primary driving force of the HRS; analysing their views gives a better understanding of how to improve their roles and performance (20). The study found that the overall role of the Palestinian HRSSHs is below the required level (21), evidently described as unsatisfactory and scattered. In other words, such roles have been criticised as being severely deficient in terms of HR funding, production and application. Such findings largely intersect with another pertinent study (22) that found fragmented HRS roles are assumed to be a leading problem and resulting in system under-performance. The proposed bilateral functional roles, such as the MoH with academia or other bodies, are not an effective solution under various system contexts. Hence, as the literature suggests (4,21), a participatory, representative and inclusive approach would be more appropriate under an agreed governing framework.

In the Palestinian HR context, the government and academia – whether institutional or individual – are clearly involved, but still play an insufficient role, which hinders the
strengthening of HR outputs for translation into sound health policy (8). In return, the less involved stakeholders such as private NGOs and the community are likely related to structural system problems. This indicates that all parties have different and sometimes conflicting agendas. These results were notably inconsistent with WHO’s HR strategy that calls for sectorial inclusiveness and strategic partnerships among all HRSSHs (23). Likewise, the literature urges for harmony between the system and HRSSHs goals (4) and HRS values and principles (21), as HR agendas are increasingly shaped by players’ involvement (2).

In fact, a power–interest interface is a valuable supplementary approach for a better understanding of the actors’ interaction in HRS. In this study, it was observed that the government bodies own the power factors with a significant low interest. This may be interpreted as the need to consult and satisfy these bodies carefully to meet their needs. However, actors with a moderate power and a good HR interest, such as academia, PNIPH, and WHO, are required to expand their roles and involvement (24). The overall indication on this issue is the lack of official attention, orientation, and investment in HR, which is consistent with previous studies from Palestine (18) and elsewhere (6,25–28). Importantly, the community, private industry, and INGOs, which are inactive when it comes to HR, are also important groups to be involved due to their untapped influence (1,2,8,21,28,29).

Undoubtedly, the donors’ role in supporting HRS in fragile settings is crucial as long as it is directed meaningfully to serve crisis management (30). Their role in building proper research institutions is perceived as weak and unclear in Palestine (15,31,32); consequently, donors rarely run HR. Their investment in HR is selective, driven by external agendas with unsustainable funding (28), and mostly emergency-based projects. Because Palestine faces unstable political, economic and social pressures, this fund should be harnessed jointly and optimally in HR as a vital development pillar to meet long-term national needs. To achieve this, a collective national body, which may be led by the MoH or another national entity such as PNIPH, should harness this fund and technical aid and usefully align with a national vision (33) supported by a collaboration strategy. The Paris Declaration–Accra Agenda for Action and ESSENCE are initiatives dedicated to donors’ efforts alignment on HR. Such international decrees are needed in the Palestinian HRS to improve the coordination and harmonization of research capacity investments (14,34).

**Limitations**

Although this study contributes to bridging the knowledge gap, a scarcity of literature and reports was noted. Furthermore, movement restrictions due to political instability and study time constraints were also a limitation to capture more participants and institutions. Eventually, gathering quantitative data on HR stakeholders was hindered by the lack of data availability, quality and accessibility.
Conclusion

Stakeholders are a central component of the HRS where it forms the functional driving force. Therefore, understanding their roles is a prerequisite for any strengthening effort. The performance of the HRSSHs is generally below the required level, although both academia and MoH moderately play important roles. Distinctly different from the development and services NGOs, it is worth mentioning that the majority of universities in Palestine are national NGOs, where their poor representation in public decision-making and potential scarcity hinders a growing academic interest in HR. In summary, the weakness of HRSSHs roles and involvement is the result of political, organizational and technical shortfalls. Imbalance in the interest–power pattern among stakeholders is considerably reported. The critical need is to enhance the involvement balance and correcting pattern of a power–interest factor among all stakeholders to get them all involved, interested and influential. All HRSSHs roles should be appropriately redefined and invested at the official level and work synergistically to reach a high power–interest. Undoubtedly, as it is also applied to the capacity components of HRS, establishing a clear strategy with a collective involvement is a serious demand. It is clear that the role of external donors in supporting HR is substantially inadequate given the paucity of domestic resources and instability. This role needs to be strengthened through a long-term plan that reflects the national needs and a comprehensive strategic dialogue among local and international parties is important and desirable.

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References


5. Andrew Kennedy, Carel IJsselmuiden. Building and strengthening national health research systems. A manager’s guide to developing and managing effective health research systems. 2006.


14. WHO. Seven principles for strengthening research capacity in low- and middle-income countries: simple ideas in a complex world. 2014.


