



The Barriers and Enablers of Women's Career Progression to Management Positions in Jordan's Health Sector

HRH2030: Human Resources for Health in 2030



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Acronyms

FGD	focus group discussion
HRH2030	Human Resources for Health in 2030
IDI	in-depth interview
MOH	Ministry of Health
UNDP	United Nations Development Program
USAID	United States Agency for International Development

I. Executive Summary

This research report discusses the barriers and enablers to women's career advancement in the public and private health sectors in Jordan. Through this study on occupational segregation, initiated by the HRH2030 (Human Resources for Health in 2030) program, the United States Agency for International Development (USAID) will assist the government of Jordan to strengthen its health workforce with evidence by informing policies and other interventions to strengthen women's progression to top-level management positions.

The findings provide vital information that can be used by government, health institutions, and other stakeholders to strategize ways to reduce gender inequalities in the workplace and promote qualified women into the decision-making sphere. Improving gender parity will optimize participation, performance, productivity, and efficiency of the country's human resources for health. This will in turn strengthen the overall health system, which is critical for enhanced health outcomes in Jordan.

The research used a mixed-methods design utilizing quantitative and qualitative data collection techniques. The study included both female and male health professionals from a variety of health sectors including the Ministry of Health, university hospitals, and the private sector and from a range of health professions including physicians, registered nurses/midwives, and pharmacists. Research tools included structured questionnaires for the quantitative research, which surveyed a total of 2,082 female health professionals and 1,100 male health professionals, and semistructured in-depth interviews and focus group discussions to obtain qualitative findings from 103 individuals.

The majority of surveyed health professionals (89.8% of women and 90.6% of men) agreed that people should be rewarded based on performance, regardless of whether they are men or women. Almost three-quarters (73.2%) of women reported they have the skills and abilities for career advancement, with 69.4% feeling like they were qualified to be in a higher management position. Still, the study also found that 58.9% of female health professionals perceived that women are more likely to face barriers for career advancement, and 61.1% of male health professionals believed female managers are less capable in managing the organization. Recognizing multiple structural barriers within the institutional environment, this study examines the various gender disparities that derive from sociocultural norms and attitudes, access to professional development opportunities, family responsibilities and their effects on institutional policies, workplace practices, and women's career progression in Jordan's health sector.

The findings give way to a set of recommendations to implement data-informed interventions to systematically respond to existing barriers and strengthen women's opportunities for career advancement, including:

- Establishing clear and transparent promotion criteria for all employees and ensuring gender diversity in selection processes
- Increasing professional development opportunities with equitable access for all staff, including targeting women to strengthen management and soft skills, offering courses during work hours, and linking training to career planning and promotion
- Enhancing mentoring and networking possibilities by forming a national network for women's leadership in health and establishing formal and informal institutional mentoring programs

- Addressing institutional discrimination by committing to gender equity as a workplace value in policies and regulations, maintaining gender-disaggregated human resources data, and putting mechanisms in place to report and address gender discrimination violations
- Strengthening work/life balance considerations in scheduling shifts, offering flexible working options, and supporting family obligations by providing child care services

II. Introduction

Research purpose

USAID has a long history of supporting programming to increase gender equity and has intensified efforts to address female empowerment and male engagement in recent years. USAID underlines gender equality and female empowerment as core development objectives “fundamental for the realization of human rights and key to effective and sustainable development outcomes” (USAID, 2012). Likewise, USAID has been a vital supporter of global- and national-level efforts to improve the health workforce, “as higher levels of female participation in the labor force will increase economic growth at the macro level and household security at the micro level” (USAID Jordan, 2012). USAID investments in gender programming and the health sector have resulted in notable progress — expanding access to health services and building the skills and performance of providers — which has led to improving the quality of health services and health outcomes. However, barriers remain in ensuring equitable access for male and female health workers, including attraction, retention, performance, satisfaction, and opportunities to advance to management positions.

HRH2030 (Human Resources for Health in 2030), USAID’s flagship program on human resources for health, works with Jordan’s health sector to reach the nation’s goal of achieving universal health coverage, as set forth in *Jordan 2025: A National Vision and Strategy*. According to *Jordan 2025*, the “single biggest challenge over the next decade” is the “workforce participation challenge,” with only 15% of females, compared with 65% of males, considered economically active in Jordan in 2015 (MOPIC, 2015). This figure is much lower than the regional and global averages of the same year. Data from the Middle East and North Africa region note that an average of 27% of women are economically active (76% for men); world averages are 51% for women, 77% for men (MOPIC, 2015).

In 2016, HRH2030 developed a global gender strategy intentionally addressing gender inequalities that act as barriers to the participation of women and men in the health workforce. In 2017, HRH2030 developed a Jordan-specific gender strategy. Under the core theme of assisting countries to more effectively leverage existing resources, HRH2030 seeks to evolve from an exclusive focus on the availability or numbers of health workers to giving equal importance to accessibility, acceptability, quality, and performance. Fundamental to this mission is ensuring gender inequalities are addressed. Examining gender gaps in human resources for health will lead to a more productive health workforce and system better suited to meet the needs of communities.

This research has been initiated by HRH2030 to support the government of Jordan to strengthen its health workforce with data and inform policies and other interventions that support career advancement for women to top management positions. This research is guided by HRH2030’s gender strategies and a literature review of women’s enrollment in the health workforce in Jordan. By exploring existing barriers and potential enablers, the research improves our understanding of the underlying drivers behind women’s underrepresentation in management positions. Greater gender diversity in health sector management will optimize the participation, performance, productivity, and efficiency of the country’s human resources for health, all of which are important components of a strong health system and critical to improving overall health outcomes in Jordan.

Country context

To achieve transformational change in Jordan's health sector, we must address the root gender biases and the norms that prevent equitable male and female participation in management. This requires an understanding of the role women play in Jordan's health sector and gender roles within Jordan and their impact on women in the workforce.

Gender roles and their impact on women in the workforce

The sociocultural structure of Jordanian society plays a prominent role in determining the low rate of women's participation in the workforce (Hakki and Somach, 2012; Hendy, 2012). [Gender](#), or how a society ascribes day-to-day roles, rights, and responsibilities to women and men, can impact their access to information or services and their overall autonomy. Women and men's decisions about if, when, and how to engage in work beyond the family and household responsibilities are intrinsically tied to ever-changing gender norms.

Existing global research on the advancement of women to managerial positions in the workforce finds that women are often hindered by macro sociocultural factors (Eiser and Morahan, 2006). Gender configurations in Middle Eastern countries are highly impacted by the patriarchy, which frequently draws sharp distinctions between the roles of men and women in society (Metcalf, 2008; Moghadam, 2004). Traditional gender norms position men to exhibit preeminence and authority over women in terms of financial responsibility, inheritance, marriage, and divorce and to prioritize the role of a woman to that of "mother" (Kazemi, 2006). This also impacts women within the labor market, demonstrated through fewer opportunities to make career decisions and constrained choices to enter and progress within a career path.

In Jordan, female representation among university graduates from the faculties of health sciences indicates that women appear to have similar opportunities as their male counterparts to obtain preservice education in health. The *High Health Council Strategy 2015* data (High Health Council, 2015) cited that 56% of graduates from medical faculties, 66% of graduates from dental faculties, 71% of graduates from the nursing faculties, and 73% of graduates from the pharmacy faculties in Jordan were women. However, there is a discrepancy between the high rates of women graduating from medical universities and those that enter the health sector workforce.

While many women receive a university education, upon graduation there are often expectations for women to start a family rather than focus on career (Amer, 2012). Gender norms constrain women from working in some areas, including jobs that require travel and contact with strangers or jobs with long working hours (Kharouf, 2000). Economic and legal factors in Jordan also play a crucial role in defining the engagement of women in different kinds of professions. As men are often the sole decision-maker for the household, a woman's ability to make decisions about her own livelihood may be constrained. For instance, a woman living with her husband may be forced to move with him if he needs to change residence. Also, a woman may need to seek her husband's permission if she wants to work. A woman's career life is ultimately tied to her husband's decisions and circumstances (Majcher-Teleon and Slimène, 2009).

Women in the health sector

The health sector in Jordan comprises a variety of service providers from the public and private sector. This includes the Ministry of Health, which is responsible for providing public health services and overseeing the health sector for the entire country; the Royal Medical Services, responsible for managing the armed forces health sector; university hospitals (King Abdullah and Jordan University hospitals); the private sector; United Nations agencies including the United Nations Relief and Works Agency; and international and nongovernmental organizations.

Jordan's health system comprises a variety of health cadres and specialties, with a diverse array of health services provided by 106 public and private sector hospitals throughout the 12 governorates of Jordan. Approximately 44% of the total workers in the health sector are women (High Health Council, 2015) — many of whom funnel into specialized fields. In 2017, women in Jordan were estimated as comprising 81% of pharmacists and 80% of nurses, compared with 21% of physicians (The Jordan Times, May 16, 2017).

While these numbers show a high level of participation from women in the health sector, female health professionals have a minor presence in senior decision-making or top-level managerial positions, which is similar to other sectors in Jordan (Al Rai newspaper, May 21, 2017). Outside of the health sector, one study showed that women held only 21% of top-level management positions in public companies in Jordan (Canadian Department of Foreign Affairs, Trade and Development; Switzerland State Secretariat for Economic Affairs, and UKaid, 2001). Within management structures, while women are represented in supervisory roles, they tend to hold more low-level management positions compared with male managers (Al-Hmood, 1994). At the Ministry of Health, while women comprise approximately 55% of the ministry staff, they only hold 27% of the management positions (MOH, 2016). This leadership divide was noted by the Human Resources Management section of the ministry's 2013-2017 strategic plan, which cited "poor investment in human resources development due to limited financial resources," "the need to review job descriptions," and "lack of a clear career path for most professions in MOH" (MOH, 2012) as issues to be addressed.

Challenges to women's career progression to management positions

Women's experience in the workplace is complex and multifaced; it is a confluence of factors that impact women in the workforce. These factors include structural and attitudinal barriers as well as gender discrimination in the workplace.

Structural and attitudinal organizational barriers

Career advancement of women in management is hindered by a multitude of structural and attitudinal barriers, which are ingrained at the organizational level (Ely, Ibarra, and Kolb, 2011; Ely and Myerson, 2010; Tlaiss and Kauser, 2010). One study of female health care providers in Middle Eastern countries confirmed gender discrimination at their workplaces, the absence of family-friendly policies that assist working mothers in achieving a minimum level of work/life balance (Jamali, Sidani, and Kobeissi, 2008). Another study confirmed inadequate organizational support in terms of policies that protect them from discrimination at work (Mansour, 2009).

Lack of support from supervisors, the absence of training and developmental opportunities (El-Jardali, et al., 2011), and discrimination in recruitment and promotion were also highlighted as obstacles to women's career advancement. Men are frequently given preference for

management positions and are promoted at a much faster pace than their female counterparts (Jamali, Sidani, and Kobeissi, 2008). Female nurses also noted the widespread use of “wasta” (El-Jardali, et al., 2011), an Arabic word that loosely translates into nepotism, or using one’s familial connections and/or influence to get things done. This practice is not only common within organizational contexts across the Arab region (Hutchings and Weir, 2006) but also empirically proven to have a significant impact on the career advancement of women in the Middle Eastern region (Tlaiss and Kauser, 2011).

Gender discrimination in the workplace

Reports from USAID and the United Nations Development Program provide a relevant gender analysis of the public sector in Jordan (USAID, 2014; UNDP, 2012). While they do not focus on the health sector, they indicate that the majority of women, regardless of their positions, face issues that point to gender discrimination in the workplace.

Discrimination against women was identified in the public sector, demonstrated by the exclusion of women from important posts, from workplace participation, or from important decision-making related to their work (Al Adayleh, 1998). Studies in different sectors in Jordan showed that discrimination against women, particularly married women, reduces opportunities for career growth and limits chances for promotion into higher management positions. Azzam and Al-Shhab (2003) identified several obstacles hindering women’s advancement to leadership positions, including negative attitude of employees toward leadership by women, social norms and stereotypes, and women’s personal or familial circumstances, such as a husband’s lack of understanding of a woman’s role in the workplace.

Previous studies on gender discrimination in the workplace reveal that unlike their male counterparts, female workers face criticism for staying late at work and are frequently required to give more detailed justifications than men to request vacation time (HRH2030, 2016). Despite the existence of policies and legal protections, they are not equitably enforced, resulting in female workers relying on the goodwill of their supervisors to grant them leave to care for sick children, breastfeed, or transfer to another department when faced with harassment. Women were also faced with the added burden of securing child care facilities in order to work.

Even if workplace policies are in place to provide equal employment and benefit opportunities for men and women, in practice, women do not equally enjoy these benefits or opportunities due to pervasive gender discrimination in the workplace. In supervisory relationships, persistent gender norms that traditionally place men in an authoritative position make it difficult for female supervisors to assign tasks to their male employees, thus forcing them to take on additional work pressure. Another study analyzing women’s workplace challenges specifically in the health sector found that female nurses faced added workplace discrimination from the gender biases of patients and clients, such as disrespectful treatment of patients toward female nurses (Al Maiyah, 2015).

Knowledge gap on women’s career progression to management positions in Jordan’s health sector

A recent review of women’s enrollment in the health workforce in Jordan conducted by HRH2030 found that there are currently a limited number of studies with 1) basic (gender-disaggregated) statistics, 2) gender-disaggregated analysis of research data or studies focusing on the female health workforce, 3) explanatory studies on the education-practice gap, 4) a focus on

non-nursing disciplines, or 5) data on interventions and policies (HRH2030, 2016). These knowledge gaps mean that little is known about female health worker choices or preferences in education, the workplace, recruitment/deployment, and/or career progression.

An unpublished audit of gender distribution of employees of the Ministry of Health in Jordan reveals that women represented more than half (54.8%) of the ministry staff from January 2012 until the end of 2015, and among those who were still in office at the end of 2015, women comprised 74.9% of pharmacists, 69.8% of nurses, 57.1% of allied medical professionals, and 15.3% of physicians (MOH, 2016). However, the audit also provides interesting insight into nonenrollment factors (i.e., “participation”) that affect women’s experience in the Ministry of Health workforce (MOH, 2016). Although the proportional distribution of cadres who were still in office at the end of 2015 indicated that more than half of all ministry employees were women, they held a small proportion of management positions: 32.6% low-level management positions (67.4% by men); 13.2% middle-management positions (86.8% men); and 9.5% of the top-level manager positions (90.5% by men).

The HRH2030 literature review notes that most research questions are focused on addressing knowledge gaps related to women’s enrollment in the health labor market after graduation. But the Ministry of Health audit findings indicate that research questions should perhaps focus less on the question of enrollment of women in the health sector and be redirected to focus more on exploring the underrepresentation of women in management levels, including strategies related to career progression and leadership (HRH2030, 2016).

Studies on different sectors in Jordan show several obstacles hindering women’s advancement to management positions, including negative attitudes of employees toward leadership by women, social norms and stereotypes, and women's personal or familial circumstances (Azzam and Al-Shhab, 2003). This research study is a step toward improving knowledge gaps and addressing drivers behind the underrepresentation of women in management positions in Jordan’s health sector.

III. Methodology

Research purpose and objectives

The purpose of this study is to identify the barriers and enablers to women's career progression to management positions in the public and private health sectors in Jordan. Findings may inform policies (and other interventions) to improve gender parity and optimize the participation, performance, productivity, and efficiency of the country's human resources for health. This may enhance a sustainable and well-functioning health system, critical for positive health outcomes in Jordan. Specifically, the main objectives of the study are to:

1. Identify and explore experiences, perspectives, barriers, and enablers to women's career progression to management positions in the health care sector
2. Establish individual characteristics that impede or support women's career progression to managerial positions
3. Analyze women's career path trends in the health care system, from hiring to senior management positions
4. Assess women's and men's perception of the policies and practices of the health care system regarding equality and nondiscrimination between women and men

Conceptual framework and definitions

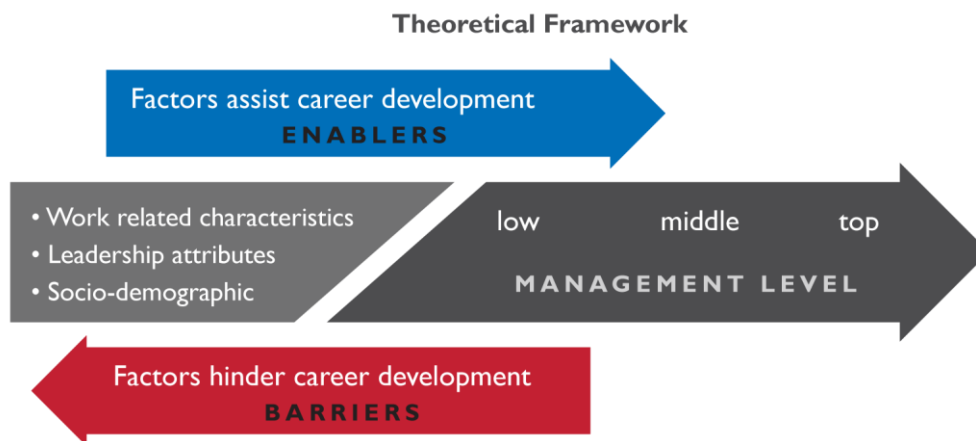
Based on the research objectives, the following conceptual framework (Figure 1) was developed based on a critical review of associated literature and various theoretical framework models, including the Gender Schema Theory, Gendered Organizational Structure Model, Inclusionary Diversity Model, Promotional Opportunity Model, Stereotype Threat Model, Technical/Care Divide Model, and Work/Family Partnership Model.

- Gender Schema Theory addresses the issue of the patriarchal society's production of the "unconscious culture" of gender bias through the internalization of socially constructed sex-typing of masculine versus feminine traits. These schemas influence the expectations, performance, and evaluations of male and female professionals.
- The Gendered Organizational Structure Model explains the status and experience of women in organizations based on structures including informal networking, diversity performance evaluation, recruitment practices, mentoring, training, retention, stereotyping, and preferred leadership.
- The Inclusionary Diversity Model is a response to inhospitable institutional climates, including informal networks, which have been cited as a cultural barrier to obtaining high-level management positions. Such barriers can influence women's performance evaluations and potentially contribute to an exclusionary environment.
- The Promotional Opportunity Model states that promotional policies and practices are designed to foster opportunities traditionally deemed essential for women to rise to executive level positions. The model highlights the significance of line experiences, performance-based feedback, training, and career development on the ability of women to rise to chief executive officer and other senior-level positions.
- The Technical/Care Divide Model links to the perception of masculine versus feminine traits and associates technical and scientific traits as both masculine and higher ranking, or, in other words, valued for top-level management positions. In the health sector, in addition to management positions such as hospital and department heads, the

- association is made up of professions such as physicians and surgeons, whereas feminine professions are associated with caring, nurturing, and humanistic traits, also perceived as characteristics for lower-ranking positions and in the health sector most associated with nursing. Furthermore, this framework of a technical (male)–care (female) dichotomy explains why women are then expected to make career choices based on their nurturing responsibilities when struggling in the work/family life balance.
- The Work/Family Partnership Model addresses the issue of balancing work and family responsibilities. The implementation of policies that help employees manage nonwork responsibilities such as dependent care services and flexible scheduling programs like various types of family leave practices yields a positive effect on the number of women in upper-level management

While these models do not overlap, they are linked to one another, building on and perpetuating social constructs and translating into perceptions about health care professions and ranks. Based on this analysis, the study presumes that women’s progression to top-level management positions is affected by two opposite and competitive groups of factors (factors hindering and factors assisting the advancement); leadership training and skills; and underlying sociodemographic and work-related characteristics (**Figure 1**).

Figure 1. Female health professional’s career path to management positions



In this study, the key concepts are defined as follows:

Career advancement or progression in this study refers to the promotion of an employee into a higher-level role. In the health sector, this may refer to growth into an area of technical specialization or into managerial positions. This study specifically looked at career progression or advancement into a management function in the health sector (manager positions are defined below).

Gender refers to the economic, political, and cultural attributes and opportunities associated with being male or female. Gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviors, values, and relative power and influence that society ascribes to the two sexes on a differential basis. Gender is an acquired identity that is learned, changes over time, and varies widely within and across cultures. Gender is relational and refers not simply to women or men but to the relationship between them.

Gender equality refers to the absence of discrimination based on a person's sex in the allocation of resources or benefits or in the access to services. Gender equality entails the concept that all human beings, both women and men, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or prejudices. Gender equality means that the different behaviors, aspirations, and needs of women and men are considered, valued, and favored equally. It does not mean that women and men must become the same, but that their rights, responsibilities, and opportunities will not depend on whether they are born male or female.

Gender equity means fairness of treatment for women and men, according to their respective needs. This may include equal treatment or treatment that is different but considered equivalent in terms of rights, benefits, obligations, and opportunities. In the development context, a gender equity goal often requires built-in measures to compensate for the historical and social disadvantages of women. Specific measurements and monitoring are employed to ensure that, at a minimum, programs, policies, and projects implemented do not leave women worse off than men in their peer groups and families and that measures are taken to compensate for historical and social disadvantages.

Health sector refers to the organization of people, institutions, and resources that deliver health services to meet the health needs of target populations. In this study, those representing the health sector will be the Ministry of Health, private and teaching hospitals, health-related councils, and pharmaceutical companies.

Manager positions in this study are positions that are held by physicians, nurses/midwives, and pharmacists who plan, direct, coordinate, and supervise the delivery of health care in an entire facility or a single department. This definition includes those in medical schools because the majority of staff in medical schools in Jordan hold a dual role in the affiliated teaching hospitals. This definition excludes people with nonmedical backgrounds. In the Jordanian health care system, it is common practice to assign managerial roles only to health care professionals, not to persons with nonmedical backgrounds.

For the purpose of this study, managers are divided into three levels:

- Low-level managers (department supervisors, section supervisors, and section leads)
- Middle-level managers (department directors, department managers, and chiefs [clinical department])
- Top-level managers (directors, presidents, vice presidents, chief executive officers, and assistant directors)

These managers are classified in a hierarchy of authority and perform different tasks. Oftentimes in the qualitative section, the terms “management” and “leadership” were used interchangeably by respondents, for instance to describe characteristics or positions. The quantitative survey questionnaire referred strictly to manager or management positions.

Sex refers to the biological characteristics that define humans as female or male.

Study design

This study employed a mixed-methods design utilizing quantitative and qualitative research methods and included a selected group of health professionals of both genders including

physicians, registered nurses/midwives, and pharmacists. The research tools included a structured questionnaire for the quantitative research and semistructured tools for the qualitative in-depth interviews (IDIs) and focus groups discussions (FGDs) (Annex C).

The research was conducted in three phases:

- Qualitative FGDs and IDIs with key informants to inform the structured questionnaire and discussion guides and pilot testing of the quantitative tool with a random sample of 20 women and 20 men
- Concurrent but separate quantitative and qualitative data collection
- Remaining qualitative data collection to validate or probe further on issues determined by preliminary analysis of quantitative results and integration of quantitative and qualitative findings during data analysis and writing of the report

The quantitative and qualitative researchers met regularly so that the qualitative research would cover all aspects and issues raised by the quantitative. To make the study more comprehensive, the qualitative component complemented the quantitative by carrying out IDIs and FGDs with health professionals intentionally excluded from the quantitative study population, such as dentists, lab technicians, and other allied health professionals not necessarily in managerial positions.

Sampling

One-stage cluster sampling technique was used to select the potential participants in the quantitative research component. Clusters included hospitals in public, private, and teaching sectors and other health institutions such as professional councils and private sector pharmaceutical companies. A sample of hospitals was selected¹ according to the following criteria:

- Hospitals from three health sectors (Ministry of Health, private, and university hospitals)
- Hospitals covering the three regions in Jordan (south, middle, and north)
- The largest hospitals (according to the number of beds and workload) from Ministry of Health and private sectors in each region
- Two peripheral Ministry of Health hospitals

The quantitative research sample consisted of a total of 2,082 female health professionals (comprising 1,429 nurses/midwives, 336 pharmacists, and 317 physicians) and 1,100 male health professionals (630 nurses, 374 physicians, and 96 pharmacists). Notably, dentists were excluded from the quantitative sample because most dentists have private practices and their career and promotion paths are different from health professionals in the public, private, and teaching hospitals. Similarly, allied health professionals were excluded from the questionnaire sample.

¹ Princess Basma Hospital, Al-Basheer Hospital, Al-Karak Hospital, Specialty Hospital in Amman, Specialty Hospital in Irbid, King Abdullah University Hospital, and Princess Rahma Hospital.

The qualitative research sample² consisted of a total of 15 FGDs and 23 semistructured IDIs. A total of 103 health professionals at different levels, with or without managerial positions, participated in the qualitative component. Sixty-two females and 41 males included physicians, registered nurses, pharmacists, but also health professionals not included in the quantitative sample, such as dentists and lab technicians. Of the 103 health professionals, 37 of them only participated in the qualitative FGDs and IDIs, while 66 participated in both the qualitative and quantitative research.

Male health professionals were included in the study population for a comprehensive understanding of gender roles, attitudes, practices, and potential gender bias toward their female colleagues in the health sector.

Quantitative data collection and analysis

A structured, pretested, and self-reported paper questionnaire was used to collect data from female health professionals and a similar questionnaire to that used for the female professionals was used to collect data from male health professionals to have points of gender comparison (Annex C). The questionnaires were adapted from those of previous studies and guided by a conceptual framework (Figure 1) that was developed by the researchers based on a critical review of the literature and various theoretical framework models (Annex A). To reduce errors, the questionnaires included specific instructions, grouped questions into sections, and positioned clearly numbered questions in a logical order. The aim of the questionnaires was to solicit information on demographic variables of the respondents; career ambitions and perceptions; family-related barriers; social-cultural factors, norms, and beliefs; organization structure and culture; negative stereotypes about women; gender bias; women's perception of equity, equality, and nondiscrimination in the workplace; and other barriers.

The respondents were asked to express the extent of their agreement with the given statements using a four-point Likert-type scale ranging from 1, strongly disagree, to 4, strongly agree. Some questions were answered by "Yes" or "No" answers. Cronbach alpha coefficients were calculated to determine the reliability of the instrument.

Descriptive and inferential analyses were used to evaluate the quantitative data. Multivariable binary logistic regressions were used to determine the effects of sociodemographic and job-related characteristics on the individual responses. The women's responses on a total of 24 potential barriers were subjected to factor analysis. Five barrier factors were retained in the analysis. The General Linear Model procedure was used to determine the factors associated with the perception of barriers' domains. The General Linear Model procedure provides regression analysis and analysis of variance for one dependent variable by one or more factors and/or variables. A p-value of less than 0.05 was considered statistically significant.

Qualitative data collection and analysis

A qualitative study utilizing an FGD and IDI approach was conducted using semistructured open-ended interview questions (Annex C). If the respondents were not able to participate in the

² The exploratory focus group and interviews with the Women in Leadership Research Advisory Committee Board members are not considered to be a part of the qualitative research sample and hence not reflected in the overall findings and discussion.

FGD, they were visited and interviewed individually and in person. The FGDs and IDIs aimed to collect in-depth data from women and men of various health professions and positions of seniority including nurses, physicians, dentists, and technicians to understand potential barriers and enablers to women's career development to top-level management positions in the health system.

For the FGDs, a small group of six to eight women was led through a free-flowing open discussion by a skilled female moderator using a semistructured topic guide. An assistant moderator took notes and recorded the discussion. For the IDIs with female health professionals, a female researcher carried out the interview. For male participants, either a male or female researcher carried out the interview. All IDIs and FGDs were digitally recorded with the participants' informed consent. The number of focus groups was set to at least three groups, but the number of FGDs to be conducted was left open to reach the sufficient level of detail and data needed on the research questions.

All qualitative data were transcribed verbatim and analyzed according to the models identified by the conceptual and theoretical frameworks. The text was then translated, reviewed for quality assurance, and coding was finalized. Content analysis and comparative analysis of the themes were carried out according to the agreed-upon variables used in the quantitative research and variables based on additional research subjects.

Quality assurance

To ensure the quality of the research and credibility of the data, the researchers adopted the following procedures:

1. The quantitative questionnaire and the topic guides for the FGDs and IDIs were pretested. The quantitative structured questionnaires were pilot-tested on 20 female and 20 male health professionals in the health sector. The FGD and IDI guides were tested by organizing one FGD and three to five interviews to adapt and further develop existing instruments to ensure they are tailored to and appropriate for the situation in Jordan.
2. The research was conducted under the supervision of the Women in Health Leadership Research Advisory Committee and with close involvement of the HRH2030 team. The data collection instruments were translated into Arabic for use in the field using forward-backward translation methods.
3. The data collectors were trained by the research team on how to administer the questionnaires and collect the data. With permission, the semistructured IDIs and FGDs were recorded to avoid data loss. \
4. All IDIs and FGDs were first transcribed verbatim and then reviewed by another researcher for quality assurance purposes.
5. The data were triangulated by asking the same questions to different groups of respondents (for instance, female health professionals who have different managerial positions and females with no managerial positions) and by asking the same type of questions to the same individuals and groups using different methods (IDIs and FGDs).

Ethical approval

Ethical approval was obtained from the Ministry of Health's Ethical Review Board and Jordan University of Science and Technology's Institutional Review Board (Annex B), and data collection approval was received from private hospitals included in the research. Every effort was made to protect the confidentiality and anonymity of the respondents. IDIs and FGDs were conducted in private locations. Each respondent was assigned a code to participate in both qualitative and quantitative data collection. In addition, respondents signed consent forms (Annex C) to take part in interviews and FGDs and to have their answers recorded. As part of the consent process, respondents were informed about the nature of the study in accessible language and given a brief about the project with contact information to research consultants and the HRH2030 team. Participants were assured that the information they provided would be kept strictly confidential, and no comments would be attributed directly to them or their place of employment. Respondents were given the right to withdraw at any time.

Open data policy

Data results collected from this study are valuable resources and strategic assets that will be made freely available to the public, barring any privacy, confidentiality, security, or legal restrictions. Audio recordings and transcripts of the qualitative data, however, will not be accessible to the public.

Strengths and limitations of the study methodology

This study attempts to be as comprehensive as possible to capture an in-depth understanding of gender roles within in the health sector. However, as with any study, there are variables that are out of the control of the researchers that may limit the overall findings of the research or variables the researchers intentionally choose to omit to work within a defined scope or time and resource limitations. The strengths and limitations of the study methodology include:

Strengths

- This is the first national comprehensive study of its kind on barriers and enablers to women's career advancement in the public and private health sectors in Jordan, providing a basis for policy changes regarding management roles.
- The study used a mixed-method approach (qualitative and quantitative) to strengthen and validate findings.
- The study intentionally included both female and male respondents, women and men from different health professions and sectors, and women and men from various career levels within the health sector for a more comprehensive qualitative data set.
- The research design was created for the purpose of collecting evidence and concrete data points to support and inform policies and interventions to improve gender equality at all levels of the health sector, as this will in turn strengthen the health system and contribute to positive health outcomes.

Limitations

- Nonresponse bias is a limitation in this study. However, the overall response rate for the quantitative study was relatively high at 81.8%. Most nonrespondents refused to participate in the study because of busy schedules.
- The study did not include health professionals in the Royal Medical Services or military hospitals due to approval difficulties and delays and their unique military rank system.
- Dentists were excluded from the quantitative sample because the majority of dentists have private practices and their career and promotion paths are different from health professionals in the public, private, and teaching hospitals. Similarly, allied health professionals were excluded from the questionnaire sample.
- The study did not analyze economic variables that could influence a women's opportunities for career advancement, such as financial incentives, household income needs or scenarios, salary levels, or pay gaps.

IV. Quantitative Findings

Description of respondents

This study included a total of 2,082 female health professionals and 1,100 male health professionals in three health sectors (public, university hospitals, and the private sector). The descriptive characteristics of respondents are presented in **Table I**.

Table I. The socio-demographic and work-related characteristics of survey sample respondents

Variable	Women (N = 2082)		Men (N = 1100)	
	N	%	N	%
Level of education				
Diploma	409	19.6	121	11
Bachelor degree	1432	68.8	756	68.9
Master's degree or high specialty	199	9.6	151	13.8
Doctoral degree or sub-specialty	42	2	70	6.4
Years of experience in the current institution				
<5	724	34.8	430	39.1
5-9.9	496	23.8	206	18.7
≥10	862	41.4	464	42.2
Marital status				
Single	520	25	264	24
Married	1500	72	825	75
Divorced	47	2.3	8	0.7
Widow	15	0.7	3	0.3
Health profession				
Physician	317	15.2	374	34
Nurse/midwife	1429	68.6	630	57.3
Pharmacist	336	16.1	96	8.7
Health sector				
Public	1388	66.7	714	64.9
Private	226	10.9	103	9.4
Teaching	468	22.5	283	25.7
Current managerial level				
Has no managerial roles	1815	87.2	621	56.5
Low management level	152	7.3	337	30.6
Middle management level	95	4.6	100	9.1
Top or Senior management	20	1	42	3.8

The public sector is the leading employer for the majority of male and female respondents, followed by teaching hospitals and lastly the private sector. Though most of the survey respondents were employed by the public sector, women and men differed significantly in their sociodemographic and work-related characteristics. For female health professionals, the vast majority (68.9%) are nurses/midwives, with much smaller proportions employed as pharmacists and physicians. Nurses/midwives also represented the largest portion of male respondents at 57.3%, but with a much larger percentage of physicians (34%) compared with female physicians.

Of all participants, only a small percentage held middle- or high-level management roles; however, the distribution of health professionals according to managerial status does not present an accurate picture of health institutions as these workers were purposively selected according to their managerial status.

Nearly three-fourths (72%) of female health professionals surveyed were married. The majority of those married women's spouses were employed at a similar or higher managerial level. This is in striking contrast to married male respondents, the majority of whom reported that their spouses were either unemployed or employed at a lower managerial level than them.

Female health professionals' career ambitions

Although most women (74.7%) considered their career as stable, over half of female health professionals reported that they were continuously on the lookout for career advancement opportunities. Nearly three-quarters (73.2%) of women reported possessing the necessary skills for further career advancement, and 69.4% felt they deserved to be promoted to a higher management position. Only a small portion (3.7%) of women stated that they had declined promotions. **Table 2** shows a snapshot of career ambitions among female health workers according to their profession.

Table 2. Career ambitions of female health professionals according to health profession

Women's response	Health profession						Total (N = 2082)		p-value
	Physicians (n = 317)		Nurses (n = 1429)		Pharmacists (n = 336)				
	n	%	n	%	n	%	n	%	
Continuously on the lookout for career advancement opportunities	155	49.4	799	56.4	218	65.5	1172	56.8	<0.005
Have the needed skills and abilities for further career advancement to higher management positions	216	69.0	1025	72.6	260	79.5	1501	73.2	0.008
Deserve to be promoted to a higher management position	201	63.4	986	69.9	244	72.8	1431	69.4	0.025
Have declined promotions in the current organization	5	1.6	61	4.3	10	3.0	76	3.7	0.069

Although women did not differ significantly in their career ambitions according to marital status or health sector, a multivariable analysis of the data revealed that women under 30 years old were significantly more likely to be on the lookout for career advancement compared with women over 40 years old.

Female health professionals with a bachelor or master's degree were also far more likely to report that they had the needed skills and deserved to be promoted compared to those with only a diploma. Similarly, women with more than 10 years of experience compared with those with fewer than five years of experience were significantly more likely to report that they deserved a promotion to a higher position. Career ambition did not differ significantly between women of different marital status or sector of employment.

Health professionals' perception of women's managerial characteristics

Although the majority of both women (92.4%) and men (88.6%) surveyed reported that women are able to gain credibility from peers, supervisors and senior managers, the data revealed a significant divide in perceptions of women's managerial characteristics. **Table 3** shows health professionals' perception of women's managerial characteristics — traits that are commonly associated with those in high-ranking/supervisory positions. Nearly all female health professionals perceived women as being proactive and hardworking (95.0%) and as committed to their work (92.7%). However, fewer than three-quarters of male health professionals shared that same sentiment. More than half (61.1%) of men believe that women managers are less capable than men to manage the organization. The data also reveal a much deeper issue in that irrespective of respondents' perception of women's managerial abilities, nearly half of all health professionals (42.1% of women and 45.8% of men) reported that women are less interested than men in managerial positions.

Table 3. Health professionals' perception of women's managerial characteristics according to health profession

	Women (N = 2082)		Men (N = 1100)		p-value
	n	%	n	%	
Women are able to gain credibility from peers, supervisors and senior managers	1910	92.4	975	88.6	<0.005
Women are pro-active and hardworking	1964	95	804	73.1	<0.005
Women are committed to their work	1914	92.7	747	67.9	<0.005
Women are less interested than men in managerial positions	875	42.1	515	45.8	0.045

Health professionals, both men and women, did not differ significantly in their perception of women's managerial characteristics according to health profession or health sector. The multivariable analysis revealed that:

- Women with previous management positions were significantly more likely to report that women can gain credibility from peers, supervisors, and senior managers.
- Women at top/senior management levels were significantly more likely to report that women are proactive and hardworking compared with women with no managerial roles.
- Compared with married women, single women were significantly more likely to report that women are committed to their work.
- Women and men in the public sector were significantly more likely than those in the private sector and teaching hospital to report that women are less interested than men in managerial positions.

Health professionals' perception of sociocultural factors effects on women career advancement

Table 4 shows the health professionals' perception of sociocultural factors effects on women career advancement. Women were significantly more likely than men to perceive the effects sociocultural factors on women career advancement.

Although fewer than half of women (45.2%) and men (43.3%) perceived cultural beliefs as constraining to women's career advancement, more women (57.5%) and men (48.8%) reported that the traditional attitude toward women as the weaker sex influenced their opportunities for career progression. Additionally, over three-quarters of women (77.2%) and nearly two-thirds of men (64.0%) reported that men do not like sharing authority with women.

Table 4. Health professionals' perception of socio-cultural factors effects on women career advancement

	Women (N = 2082)		Men (N = 1100)		p-value
	n	%	n	%	
Cultural beliefs are hostile to women career advancement	931	45.2	476	43.3	<0.005
Traditional attitude of women as weaker sex has an effect on their career progress	1180	57.5	537	48.8	<0.005
Men do not like sharing authority with women	1586	77.2	704	64	<0.005

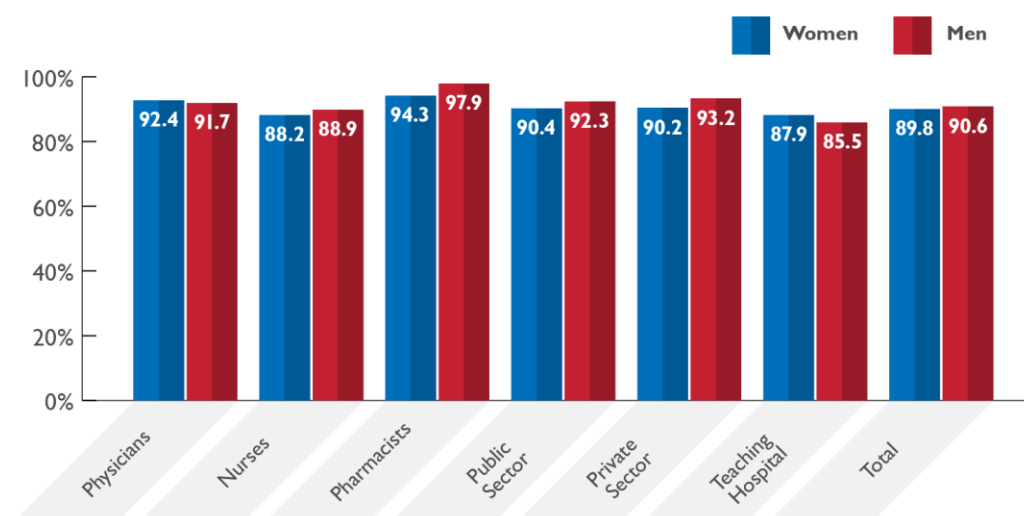
Compared with nurses and pharmacists, female physicians were significantly more likely to perceive that cultural beliefs are hostile to women's career advancement and the traditional attitude toward women as the weaker sex impacted their career progress. Male physicians, nurses, and pharmacists did not differ significantly in their perception of sociocultural factors. Health professionals' perception of sociocultural factors effects on women career advancement did not differ significantly according to health sector, except that a higher proportion of men in the private sector were more likely than men in other sectors to perceive that the traditional attitude toward women as the weaker sex has an effect on their career progress.

The basis for promotion to managerial positions in health institutions

The majority of female health professionals and almost the same proportion of male health professionals believed that people should be rewarded based on their performance regardless of whether they are men or women (Figure 2). Health professionals in teaching hospitals (87.9% of women and 85.5% of men) were less likely than those in public sector (90.4% of women and 92.3% of men) and those in private sector (90.2% of women and 93.2% of men) to report that people should be rewarded based on their performance regardless of whether they are men or women. However, this difference was significant among men only. Pharmacists (94.3% of women and 97.9% of men) were more likely than physicians (92.4% of women and 91.7% of men) and nurses (88.2% of women and 88.9% of men) to report the same.

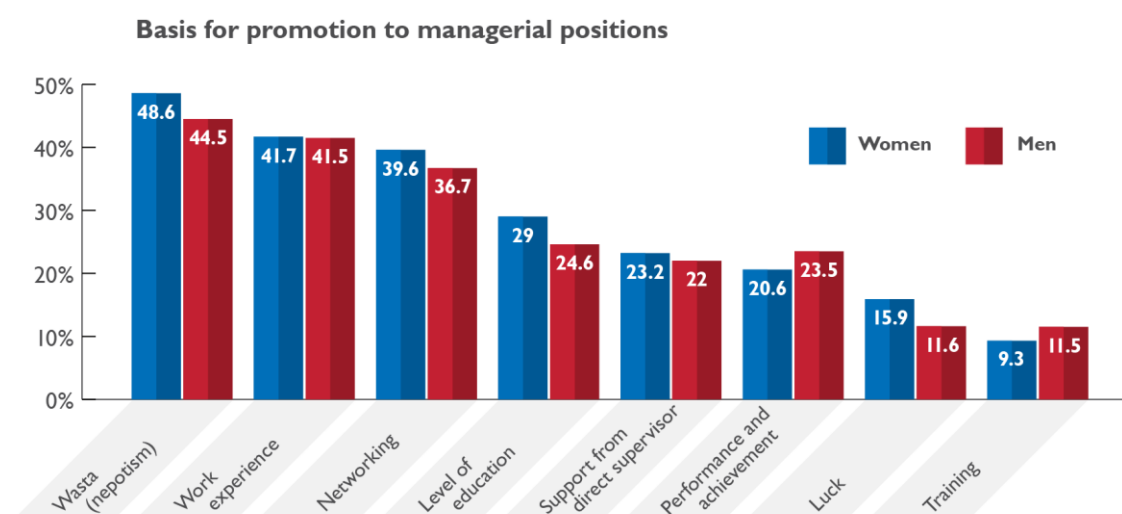
Overall, about 70.0% of all health professionals (70.7% of women and 70.5% of men) reported that opportunities for advancement are based on knowledge and skills. Men in the private sector (85.4%) were significantly more likely than men in the public sector (68.3%) and teaching hospitals (70.5%) to report that opportunities for advancement are based on knowledge and skills.

Figure 2. The percentages of female and male health professionals who reported that people should be rewarded based on their performance regardless of whether they are men or women



Despite the consensus among male and female professionals that employees should be rewarded and provided opportunities for advancement based on knowledge and skills, there was also broad recognition of the disproportionate impact of nepotism (“wasta”) in shaping career paths. Figure 3 shows the basis for promotion to managerial positions in the health institutions as perceived by male and female health professionals. From their experience, almost half of women (48.6%) and 44.5% of men reported that nepotism (“wasta”) is the main basis for promotion to managerial positions in their institutions, followed by work experience, networking, and connections to other senior leaders. Tellingly, fewer than a quarter of men and women cited performance and achievement as a factor in being promoted to managerial positions, and training was the least-mentioned basis.

Figure 3. The basis for promotion to managerial positions in the health institutions as reported by male and female health professionals



Female and male physicians, nurses, and pharmacists differed significantly in their response regarding the basis for promotion. However, all agreed that “wasta” is the main basis for promotion. Pharmacists were significantly more likely to report performance and achievement and training as the basis for promotion than other health professionals.

Women in the public sector and teaching hospitals were significantly less likely than women in the private sector to report level of education as a basis for promotion to managerial positions. However, they did not differ significantly in reporting other criteria of promotion. When asked about the basis for promotion to managerial positions in their health institutions, men in the public sector and teaching hospitals were significantly more likely than men in the private sector to report “wasta.”

Female health professionals' perception and involvement in networking and mentorships

One recurring theme that emerged in the data was the perceived importance of social interactions and networking outside the workplace. Roughly three quarters (75.8%) of female health professionals believed that networking and socializing outside of the work environment were important for future career advancement. Almost the same proportion (76.3%) also believed that having a mentor was important for future career advancement (**Table 5**). Despite this finding, women’s opinions on the importance and accessibility of supportive mentors varied by age, education level, and profession. Women under the age of 40, women with diplomas, women at any management level, and pharmacists were all significantly more likely to report that they had supportive mentors. Women with fewer than five years of experience were more likely to perceive that having a mentor was important for future career advancement compared with women with more years of experience.

Table 5. Female health professionals' perception and involvement in networking and mentorships

Women's response	Health profession						Total (N = 2082)		p-value
	Physicians (n = 317)		Nurses (n = 1429)		Pharmacists (n = 336)				
	n	%	n	%	n	%	n	%	
Networking and socializing outside work is important for future career advancement	258	82.7	1035	73.8	256	78.0	1549	75.8	0.002
Having a mentor is important for future career advancement	224	72.5	1057	75.7	268	83.0	1549	76.3	0.005
Participate in social activities outside the work setting with colleagues	196	62.4	874	62.2	240	72.7	1310	63.9	0.001
Have supportive mentors in the organization	140	45.2	605	43.2	170	52.5	915	45.0	0.011

Although a high number of respondents believed in the importance of networking and mentorship, only 63.9% reported that they participated in social activities with their colleagues outside of the work setting, and only 45.0% reported that they have mentors who support them in the organization.

Compared with physicians and nurses, female pharmacist respondents were significantly more likely to engage in networking and social activities outside of work (72.7%) and more likely to have mentors who support them. Additionally, most female pharmacists (83.0%) noted the importance of mentors for future career advancement.

Although the multivariable analysis showed no significant differences in women's involvement or perceptions of networking and mentorship across health sectors, education level did appear to influence the level of participation in social activities. Women who held a master's degree or higher were significantly more likely to participate in social activities outside the work setting with colleagues than women who had bachelor's degree or lower.

Practices of equity, equality, and nondiscrimination in health institutions

Women were significantly less likely to report equity, equality, and nondiscrimination practices in their health institutions than men (**Table 6**).

Overall, fewer than half of respondents (41.4% of women and 29.8% of men) agreed that women are less respected in the workplace than men. However, within the public sector, men were significantly more likely to report that women are less respected in the workplace than men. Nearly two-thirds of health professionals (60.1% of women and 68.8% of men) reported that there was an emphasis on reducing sources of unnecessary stress such as harassment and work-family conflict.

Despite this finding, there is great variance in how institutions address workplace issues. Fewer than half of women (45.8%) and two-thirds of men (63.3%) reported that equality between women and men is explicitly mentioned as an institutional value in strategic documents (e.g., reports, plans, and regulations). Men in the public sector were more likely to report that equality between women and men was mentioned as an institutional value in strategic documents than men working in other sectors.

Fewer than one-third of women (31.6%) and fewer than half (45.3%) of men stated that their institution follows formal procedures for presenting complaints of gender discrimination. Furthermore, fewer than one-third of women (27.2%) and just over one-third of men (37.9%) reported that their institutions kept information related to the recruitment and selection processes disaggregated according to gender.

There is acknowledgement among both male and female respondents that institutions frequently fail to create supportive working conditions. Only 40 percent (41.4%) of women and 54.3% of men reported that their workplaces institutions considered the different needs of male and female health professionals when attempting to reconcile their professional obligations with their family and personal life. Fewer than a third (32%) of women reported that their institution offers extended leave for child care, 26.1% reported flexible working hours are offered, and 17.2% noted part-time work as an option. Male health professionals also followed this digression roughly, though with higher reported percentages for each institutional consideration offered: shift scheduling based on female/male needs (54.3%), extended leave for child care (42.3%), flexible working hours (31.7%), and part-time work (23.5%).

Table 6. Health professionals' perception of practices of equity, equality and nondiscrimination in health institutions

	Women (N = 2082)		Men (N = 1100)		p-value
	n	%	n	%	
Women are less respected in the workplace than men.	852	41.4	328	29.8	<0.005
There is an emphasis on reducing sources of unnecessary stress such as harassment and work-family conflict	1227	60.1	757	68.8	<0.005
Access to education and training opportunities are equal for both genders	1449	71.3	869	79.0	<0.005
Equality between women and men is expressly mentioned as an institution value in strategic documents	954	45.8	696	63.3	<0.005
The institution keeps information, disaggregated according to gender, related to the recruitment and selection processes	564	27.2	417	37.9	<0.005
The institution follows formal procedures for presenting complaints in case of discrimination on the grounds of gender	649	31.6	498	45.3	<0.005
The institution consider the needs of both male and female workers when scheduling shifts to conciliate their professional, family and personal life	845	41.4	597	54.3	<0.005
The institution offers female workers leave that exceeds the period foreseen by the law to take care of their young or handicapped children	658	32	465	42.3	<0.005
The institution offers flexible working hours in order to conciliate professional, family and personal life	535	26.1	349	31.7	<0.005
The institution allow workers to work part-time	351	17.2	258	23.5	<0.005

Social barriers to women's career progression as perceived by health professionals

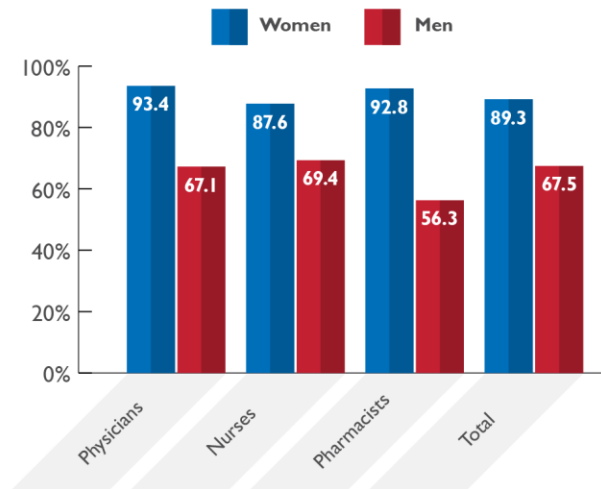
Impact of family responsibilities on work among female health professionals

Since women are often designated the primary caretaker of the household, the study also assesses the impact of family responsibilities on work among female health professionals. The majority of women (89.3%) and two-thirds of men (67.5%) reported that women are able to balance work with family responsibilities (Figure 4). Female physicians and pharmacists were significantly more likely to agree with the statement that women are able to balance work with family responsibilities and that a husband supports his spouse's career. Men working in teaching hospitals were more likely to report that women are able to balance work with family responsibilities.

Marital support also plays a critical role in advancing or hindering women's career progression, though perceptions of spousal sacrifice are split by gender. Almost three-fourths (73.0%) of

women and 81.9% of men reported that in general a husband supports his spouse's career. Husbands' support was reported by a higher proportion of women working in teaching hospitals (80.3% in teaching hospital, 74.4% in private sector, and 70.2% in public sector).

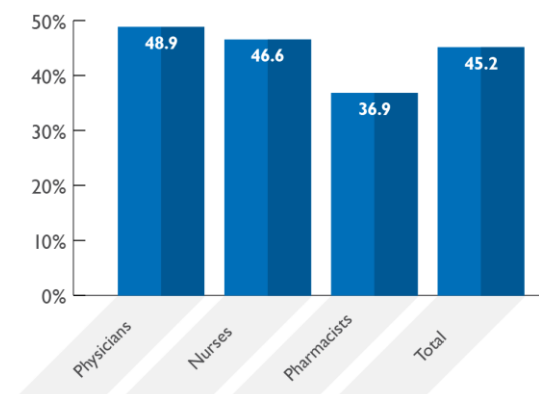
Figure 4. The percentage of health professionals who reported that women are able to balance work with family responsibilities



In this study, of all married women respondents, 30.1% reported that they themselves and their husbands had made career target compromises to balance work and family life. (Table 8). Married women were about five times more likely than married men to compromise career targets to give their spouse's career a priority (24.7% to 4.9%, as reported by married women). Women in the public sector were significantly more likely to report that they compromised their career targets for their spouse's career to take first priority, and women with children were 3.5 times more likely in that same regard.

On the other hand, 23.0% of married men had reported that their spouses had to make career target compromises to balance work and family life while their career has taken priority; 11.0% reported that they had to make career target compromises while their spouses' career has taken first priority; 21.5% reported that both had to compromise on their career targets; and 44.5% reported that no career target compromises had been made.

Figure 5. The percentage of female health professionals who reported that having children had permanently altered their career goals



Among married female health professionals with children, nearly half reported that having children had permanently altered their career goals (**Figure 5** and **Table 7**). Health professionals reported different answers across cadres — pharmacists (36.9%) were less likely to report that their career goals had been permanently altered by having children than physicians (48.9%) and nurses (46.6%). Although a higher proportion of women in the private sector reported that having children had permanently altered their career goals, this difference was not statistically significant.

Table 7. Women's experiences in balancing family responsibilities and work

Women's response	Health profession						Total (N = 2082)		p-value
	Physicians (n = 317)		Nurses (n = 1429)		Pharmacists (n = 336)				
	n	%	n	%	n	%	n	%	
Number of children									<0.005
No children	178	56.2	475	33.2	129	38.4	782	37.6	
1-2	78	24.6	456	31.9	90	26.8	624	30.0	
≥3	61	19.2	498	34.8	117	34.8	676	32.5	
Having children had permanently altered women career goals									0.016
No	71	51.1	509	53.4	132	63.8	712	54.8	
Yes	68	48.9	445	46.6	75	36.9	588	45.2	
The compromise between the women and her husband on career target in order to balance work and family life									0.428
No career target compromises	60	35.1	424	38.8	103	44.0	587	39.2	
Women compromised their career targets while the husband's career has taken first priority	52	30.4	274	25.1	59	25.2	385	25.7	
Husbands compromised while their wives' career has taken first priority	9	5.3	57	5.2	8	3.4	74	4.9	
Both, husband and wife, compromised	50	29.2	337	30.9	64	27.4	451	30.1	

Health professionals' perception of the effect of family responsibilities on career advancement

Several factors can impact health professionals' perception of the effect of family responsibilities on career advancement — many of which are tied to marital and familial status, as shown in Table 8. Women were significantly more likely to report that family responsibilities hindered their career progress. About two-thirds of women (67.5%) and 61.1% of men perceived that women of childbearing ages tend to be bypassed for promotions and other opportunities. Women in teaching hospitals (63.2%) were least likely to report that women of childbearing ages tend to be bypassed for promotion and other opportunities than women in the public sector (68.2%) or private sector (71.9%). Men in both the public (65%) and private sectors (65%) were significantly more likely than men in teaching hospitals (49.8%) to report that women of childbearing ages tend to be bypassed for promotion and other opportunities.

Table 8. Female and male health professionals' perception of the effect of family responsibilities on career advancement

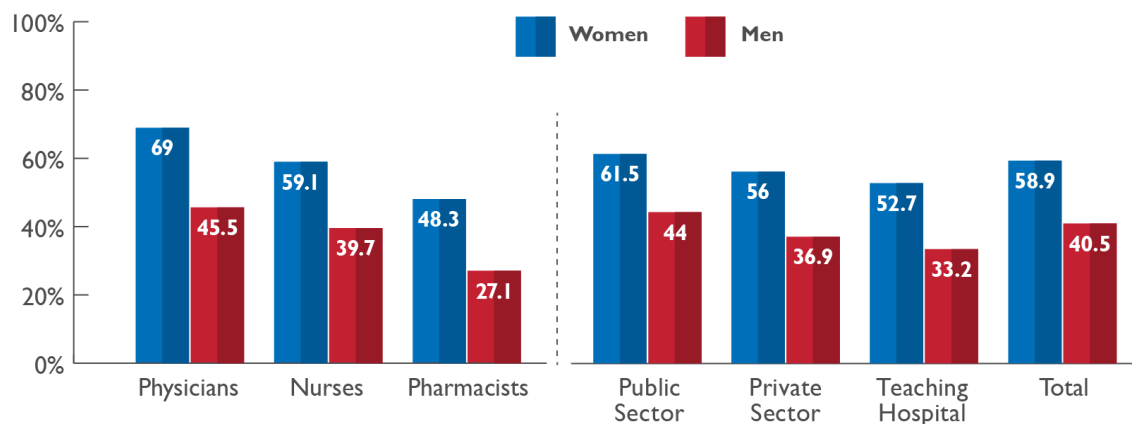
	Women (N = 2082)		Men (N = 1100)		p-value
	n	%	n	%	
Women of child bearing ages tend to be bypassed for promotion and other opportunities.	1385	67.5	672	61.1	<0.005
Women hesitate to take up promotional opportunities for fear of conflict with family and domestic responsibilities	1277	62.3	581	52.8	<0.005
Lack of support from family and friends impede women career progress.	1538	74.2	687	62.5	<0.005
Women have less freedom because of their family responsibilities	1402	67.7	701	63.7	0.023

Over sixty percent (62.3%) of women and 52.8% of men agreed that women hesitate to take up promotional opportunities for fear of conflict with family and domestic responsibilities. Men differed by health sector in reporting that women hesitate to take up promotional opportunities for fear of conflict with family and domestic responsibilities (public 57.4%, private 51.5%, and teaching hospital 41.7%). This is complemented by the perception that three-quarters of women (74.2%) and 62.5% of men agreed that lack of support from family and friends may impede women career progress. Over two-thirds (67.7%) of women and 63.7% of men reported that women have less freedom in their career due to their family responsibilities. Both female and male physicians were significantly more likely to perceive the effect of family responsibilities on impeding the women's career progress than nurses and pharmacists.

Institutional barriers to women's career progression as perceived by health professionals

Overall, 70% of women and men reported that opportunities for career advancement are based on knowledge and skills in their institutions. However, 58.9% of female and 40.5% of male health professionals reported that women are more likely to face barriers for career advancement than men in their workplace (**Figure 6**).

Figure 6. The percentages of female and male health professionals who reported that women are more likely to face the barriers for career advancement than men do in their workplace

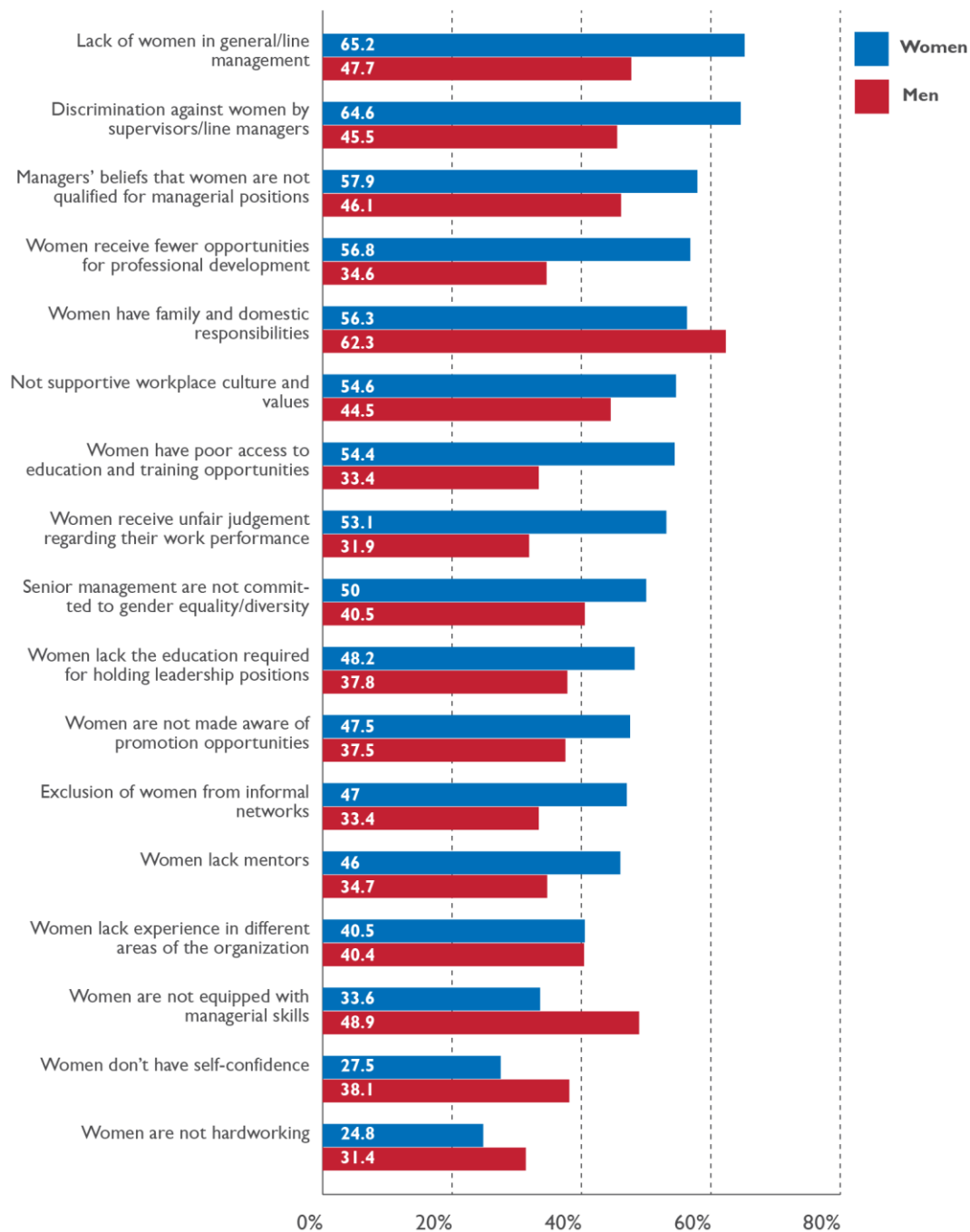


Furthermore, health professionals in the public sector (61.5% of women and 44.0% of men) were significantly more likely than those in the private sector (56.0% of women and 36.9% of men) and those in teaching hospitals (52.7% of women and 33.2% of men) to report that women are more likely to face the barriers for career advancement than men do in their workplace.

Figure 7 shows the individual perceived barrier to women's career progression and the percentage of female and male health professionals who reported these barriers. “Lack of women in general/line management” and “discrimination against women by supervisors/line managers at point of promotion” were the main barriers to women's career progression, as they were reported by almost two-thirds of women (65.2% and 64.6%, respectively). The two barriers were reported by almost half of men (47.7% and 45.5%, respectively). However, the main barrier as perceived by men was “women having family and domestic responsibilities,” which was reported by 62.3% of men (it was the fifth most-mentioned barrier by women at 56.3%).

The three least-mentioned barriers by women were “women are not hardworking” (24.8%), “women don’t have self-confidence” (27.5%), and “women are not equipped with the managerial skills” (33.6%). The lowest-mentioned barriers by men included “women are not hardworking” (31.4%) and “women receive unfair judgment regarding their work performance” (31.9%).

Figure 7. The individual perceived barrier to women's career progression and the percentage of female and male health professionals who reported these barriers



Factor analysis of barriers as perceived by female health professionals

The women's responses on a total of 24 potential barriers were subjected to factor analysis. The value of the Kaiser Meyer Olkin test for factor analysis is 0.90, which indicates excellent adequacy of the responses for factor analysis. The Bartlett's Test of Sphericity is significant ($p < 0.005$), which means that the correlation matrix is not an identity matrix. Based on the Scree plot, five factors have been retained. Five barrier factors explained more than 60% of the total variance in the correlation matrix of barriers' scores. Each barrier factor score was calculated by taking the average of the scores of individual items that loaded on each factor. Some items were reversed in coding before summing the items. **Table 9** shows the mean (SD) of main factors on a scale from 1 to 4, with a higher score indicating a stronger barrier. Interitem correlations within each factor/scale were moderate to strong. Indeed, all item-scale correlations exceeded the minimum correlation of 0.40 for adequate item internal consistency. While there was some overlap in correlations between items from one scale and other scales, this was minimal.

Based on items' loadings, the factors were named as "Inequity and discrimination in the workplace," "Negative views about women's abilities," "Lack of qualifications and training," "Hostile cultural beliefs," and "Family responsibilities." The distributions of the factors' scores are approximately normal. Repeated measures analysis showed that there is a significant difference between factors' scores. Hostile cultural beliefs had significantly the highest average scores, indicating that it is the most important barrier, while the negative views about the women's abilities factor has the lowest score. The three other factors had the same score, indicating that they are equally important.

Table 9. The average scores for eight barrier scales as perceived by female health professionals according to health profession*

Barrier scale	# Items	Health profession						Total (N = 2082)			p-value
		Physicians (n = 317)		Nurses (n = 1429)		Pharmacists (n = 336)					
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Med ian	
Inequity and discrimination in the workplace	6	2.7	0.6	2.6	0.6	2.6	0.6	2.6a	0.6	2.7	0.002
Negative views about women's abilities	4	2.2	0.7	2.2	0.7	2.2	0.7	2.2b	0.7	2.0	0.773
Lack of qualifications and training	5	2.6	0.5	2.6	0.6	2.5	0.6	2.6a	0.6	2.6	0.009
Hostile cultural beliefs	3	2.9	0.6	2.7	0.7	2.7	0.6	2.7c	0.7	2.7	0.004
Family responsibilities	5	2.8	0.5	2.6	0.5	2.6	0.5	2.6a	0.5	2.6	<0.005

*Pairs with different letters are significantly different

Factors associated with the perception of barriers

Table 10 shows the multivariable analysis of factors associated with the perception of barriers. Women aged under 30 years old perceived “Inequity and discrimination in the workplace” and “Negative views about women’s abilities” significantly as stronger barriers than older women (>40 years) did. Compared with women in teaching hospitals, those in public and private health sector were less likely to perceive “Negative views about women’s abilities” as a barrier. Women in the public health sector and physicians and nurses perceived “Lack of qualifications and training” as a barrier at a higher extent than women in teaching hospitals and pharmacists, respectively. Hence, women in the public health sector and physicians perceived “Cultural beliefs” as a barrier at a higher extent than women in teaching hospitals and pharmacists did, respectively, whereas female physicians perceived “Family responsibilities” as a barrier at a higher extent than pharmacists.

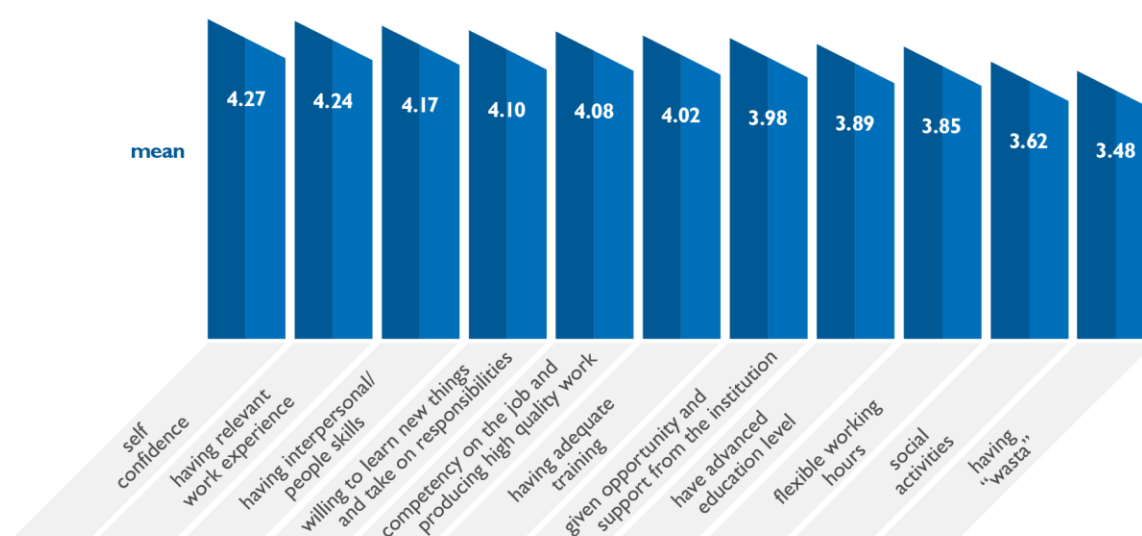
Table 10. The multivariable analysis of factors associated with the perception of barriers

Barrier scale	Inequity and discrimination in the workplace		Negative views about women’s abilities		Lack of qualifications and training		Cultural beliefs		Family responsibilities	
	B (95% CI)	p-value	B (95% CI)	p-value	B (95% CI)	p-value	B (95% CI)	p-value	B (95% CI)	p-value
Age (year)										
<30	0.11 (0.04, 0.17)	0.002	0.1 (0.02, 0.19)	0.013	0.02 (-0.05, 0.09)	0.592	0 (-0.08, 0.08)	0.984	0.02 (-0.04, 0.08)	0.451
30-39	0.05 (-0.01, 0.12)	0.103	0.07 (0.00, 0.15)	0.061	-0.03 (-0.09, 0.04)	0.413	-0.05 (-0.12, 0.02)	0.166	-0.02 (-0.08, 0.03)	0.448
≥40	Ref		Ref		Ref		Ref		Ref	
Health sector										
Public	0.02 (-0.04, 0.08)	0.54	-0.08 (-0.16, -0.01)	0.033	0.07 (0.01, 0.14)	0.020	0.11 (0.04, 0.19)	0.002	0.05 (0.00, 0.11)	0.071
Private	-0.03 (-0.12, 0.07)	0.58	-0.14 (-0.26, -0.03)	0.013	-0.02 (-0.11, 0.08)	0.722	0 (-0.11, 0.10)	0.962	0.07 (-0.02, 0.15)	0.117
Teaching Hospital	Ref		Ref		Ref		Ref		Ref	
Health profession										
Physician	0.06 (-0.03, 0.16)	0.177	0 (-0.11, 0.11)	0.988	0.13 (0.04, 0.23)	0.004	0.16 (0.05, 0.26)	0.003	0.15 (0.07, 0.23)	<0.005
Nurse/midwife	-0.05 (-0.12, 0.02)	0.147	0.02 (-0.06, 0.11)	0.600	0.10 (0.03, 0.17)	0.004	0.02 (-0.06, 0.10)	0.631	0 (-0.07, 0.06)	0.883
Pharmacist	Ref		Ref		Ref		Ref		Ref	

Tools that help to overcome the barriers to career advancement

Figure 8 shows the extent to which tools, resources, and initiatives had helped women with managerial positions to overcome the barriers to career advancement. More than three-quarters of women reported that “self-confidence,” “having relevant work experience,” “having high interpersonal/people skills,” and “willing to learn new things and take on responsibilities” had helped them to the highest extent. On the other hand, they perceived “flexible working hours,” “social activities,” and “having ‘wasta’” as helping them to a lower extent to overcome the barriers. No significant difference was reported among women’s responses according to health profession or health sector in regard to the tools that had helped them overcome career advancement barriers

Figure 8. The extent to which tools, resources and initiatives had helped women with managerial positions to overcome the barriers to career advancement



Enabling environment

Developing social networks and building professional mentor relationships were reported as factors that enabled women in achieving career advancement. Overall, 88.8% of women (93.1% of physicians, 87.0% of nurses, and 92.6% of pharmacists) reported that ambitious women develop social networks and enter mentoring relationships. Moreover, 79.3% of women (82.6% of physicians, 78.5% of nurses, and 79.2% of pharmacists) reported that successful women have influential mentors to support their challenging assignments and ensure that they consistently exceed performance expectation.

V. Qualitative Findings

Description of respondents

The qualitative research sample consisted of a total of 15 FGDs and 23 semistructured IDIs at seven hospitals and a public administrative health professional council. A total of 103 individuals participated in the qualitative component, 62 females and 41 males, including physicians, nurses, pharmacists, dentists, and lab technicians at different levels of position. Of the 103, 37 of them only participated in the qualitative, while 66 participated in both the quantitative and qualitative research. A breakdown of the qualitative research can be found in Table 11 below.

Table 11. Description of Respondents from Qualitative Research Sample

Public or Private Sector	Governorate	Number of FGDs and IDIs	Number of Female and Male Participants and Type of Profession/Position	Number Who Only Participated in the Qualitative Research
Private Hospital	Irbid	2 FGDs 4 IDIs	Females (9) including department heads, a deputy director and technicians Males (5) including managers, an administrative unit and technician	4
Public Hospital	Irbid	2 FGDs 3 IDIs	Females (12) including a department head and practitioners Males (4) including department heads, managers and practitioners	3
Teaching Hospital	Irbid	3 FGDs 1 IDI	Females (13): including department heads, practitioners, technicians and admin units Males (7): including department heads, practitioners, technicians	7
Private Hospital	Amman	5 IDIs	Females (3) including department heads and practitioners Males (2) including department heads and practitioners	3
Public Hospital	Irbid	8 IDIs	Females (4) including practitioners Males (4) including practitioners	5
Public Hospital	Amman	1 IDI	Females (12) including practitioners Males (8) including practitioners and technicians	8
Public Hospital	Karak	3 FGDs 1 IDI	Females (6) including departments heads, practitioners and admin units Males (11): including practitioners	4
Public Council	Amman	1 FGD	Females (2): including departments heads and practitioners Male (1): including departments heads	3

Career advancement

The majority of women responded that the lack of clarity around promotion criteria is a barrier to women's progression into top-level managerial positions in the workplace. Female nurses and lab technicians specifically stressed the point that clear criteria on staff promotions do not exist, therefore creating a barrier in their career path. However, the majority of males within the same hospitals and professions stated that there are clear criteria on staff promotions. Research observations showed that men have an advantage in understanding the criteria for promotions since they have more experience in being promoted and therefore possess the necessary workplace connections that clarify such criteria for them. Based on the input of the female participants, there is a demand for written, comprehensive criteria that should be made available to all.

Barriers to women's career progression as perceived by health professionals

Training

The discussions with health professionals highlighted that the lack of training opportunities, in particular training on subjects deemed to be significant for advancement, is one of the main barriers to promotion and hence overall career progression. Participants of the FGDs often referred to opportunities for promotions together with capacity building and training opportunities in the context of keeping oneself informed within their profession or training to make one more applicable to potential job opportunities.

Participants stated that when training is available, it is focused on developing specialty technical skills, and, as both male and female participants mentioned, there is a lack of training courses in several necessary subjects, such as leadership and management. Furthermore, one group of female nurses from a public hospital expressed the importance of trainings to keep up to date in one's profession and the need for department heads to inform all about such opportunities. They also expressed that they wanted such courses to be offered during working hours in order to be able to take care of their children after work.

In both the private and public hospitals in the north of Jordan, male participants noted a lack of training courses and opportunities. In a public teaching hospital, it was mentioned that educational events and seminars were occasionally organized and that practical skills were taught but that there is a need for employee capacity building, specifically in time management, crisis management, and negotiation skills. In the same hospital, female participants also expressed that they needed training courses on job promotion criteria, career paths, time management, crisis management, communication skills, and employee rights.

Promotions

While men and women were in agreement that the lack of available training is a barrier to career advancement, when asked about the availability and fairness of promotions, the responses from men and women were in great contrast. An FGD in a public hospital in the north with male participants including division heads and registered nurses expressed that all employees were knowledgeable about available career paths and that there is no gender discrimination in promotional opportunities and managerial positions as they are based on experience, competency, seniority, and employee assessment. They explained that the policies and regulations supported both male and female employees and that this was evident in the hospital as it employs several women in managerial positions.

In fact, the men in this hospital believed that women oftentimes had better promotional opportunities for positions of leadership and high work productivity in comparison with men, who were described as taking more breaks, lacking commitment, and even resorting to favoritism for promotional opportunities. In the same public hospital in the north, women believed that the greater number of females to males in the nursing department was due to the “community culture” which associates the nursing profession with females.

In one public teaching hospital in the north of Jordan, a group of male division heads and a registered nurse were asked what advice they would give to female colleagues to overcome challenges to promotional opportunities. The response was atypical to the dominating discourse as they expressed the importance of the support of the spouse, that the spouse of a female health professional must understand the nature of her work to be able to support her in her career.

Female nurses in all hospitals generally agreed upon one thing, that women must take the initiative to seek promotional opportunities. As one nurse from a private hospital in Amman stated, “To develop themselves, they [women] should seek self-development, because as I told you, opportunities in this regard are very limited, as well as career development opportunities. In my opinion, every woman should focus on her self-development and believe in her ambitions.”

In a public hospital in the south, one nurse (not married and with no children) gave her advice to women on self-promotion of ability, stating “You have to prove yourself and highlight your contributions because you will not have any support if your performance is good but you keep it to yourself inside your department only and with your patients... Show off your presence everywhere when you work, within any committee, workshop, any form of meeting, make yourself heard and recognized and let them know you can do your job.”

Other participants in this discussion were men, and all agreed that the (public) hospital was following the regulations of the Civil Service Bureau, and the concept of favoritism or nepotism had come to an end, “We are no longer stuck with this issue, no one now mediates for another person to be recruited because they are relatives, we have moved past the practice a long time ago, but at the same time no one will take your hand and put you in office unless you are heard and your work is recognized.”

Job descriptions and criteria

Participants, especially lab technicians and nurses in public hospitals, said employees are not motivated to seek higher positions due to a lack of official titles and/or other beneficial incentives.

Underappreciation is a challenge for women reaching a position of seniority, as the lack of recognition deprives them of an incentive for career progression. A female registered nurse in a public hospital also expressed this concept of underappreciation: “There are no incentives, nothing for us; whatever you do, it does not matter, nothing motivates you to work or inspires to reach higher positions, whether you study or not, whether you work hard or not, I am telling you, it is all the same when it comes to my occupational level...here if you put effort in your [professional] growth, no one will recognize your efforts and reward you, you have to follow up

with them continuously and learn how you can develop yourself. It's the only way because we cannot rely on the administration."

In a private hospital in the north, a male technician in an individual interview expressed the lack of systematic promotional opportunities due to unclear criteria and standards for jobs and productivity-based assessments. In fact, the technician expressed that promotions were based on personal connections ("wasta") and that no training opportunities were available, and no consideration was given to academic qualifications: "You can find someone with a diploma in charge of someone with a master's degree." In another FGD, a male participant from a public teaching hospital also similarly commented "I have a master's degree and it makes me no different than a legal nurse."

In the same hospital, male focus group discussants described a case where one of their female colleagues, whom they believed had met the criteria for a promotion and was more than capable of being promoted to a director position, had been passed for a promotion for years because "she kept getting pregnant." She was eventually promoted to deputy director after approximately five years, even though she was qualified enough to be the director. They explained that she was not given the director opportunity because it was believed that as a woman, and more specifically as a mother, she would never be able to fulfill her duties as a director. In this case, like so many others, gender inequality delayed and may have also prevented a promotional opportunity.

When asked to describe characteristic traits essential to managerial positions for either males or females, male participants in the FGD in a northern public hospital mentioned the importance of decency, reliability, leadership potential, honesty, continuous follow-up, and growth. The same male participants (which included a mix of division heads and registered nurses) believed that promotional opportunities were fair to women and that as long as a woman had the ambition, the hospital's criteria were clear, and she was aware of the criteria, she should be able to advance to a managerial position. They clearly stated that "if a male and a female were both applying for the same job, the people in charge will discuss the matter and see who is more suitable for the job based on their assessment and they will select the more competent applicant."

However, women in the same hospital had differing opinions. In a focus group with five female division heads, a department head, a quality coordinator, and two registered nurses, it was said that the criteria for managerial positions are unclear and that promotional opportunities for managerial positions were not provided to females: "There should be criteria governing how to move up the occupation ladder and make progress in your career path. Opportunities must be given to both males and females."

On the other hand, in a private hospital in the north, female department heads expressed in an FGD that managerial positions are awarded based on evaluations of the employee's work, whether male or female. "I am a deputy manager, it happened because they saw my work, not because of connections or favoritism." Like the female participants of the teaching hospital, they also expressed that the selection criteria for managerial positions were unclear. In one public hospital in the north, a female nurse expressed, "On what basis do they select the heads of departments? We have no idea, no one has ever showed up to explain to us what selection criteria are followed or asked us who wished to nominate herself based on such criteria."

One exception to this (notably the only exception that was given as an example in the discussions) was career paths in the maternity ward. It is more difficult for male physicians to advance in this ward, due to community culture and privacy issues, whereas in the surgery department, for example, men are the majority. This is consistent with the conceptual framework of the technical/care divide being associated with masculine and feminine traits: men holding the majority in a technical department (surgery), while women are able to progress in a health department perceived as more caring and nurturing, thus holding the majority in the maternity ward.

While many participants noted the challenge of unclear job criteria, one female pharmacist in a public hospital in the north said that the job criteria are now available online and thus easy for employees to access. She described that the “new generation of female employees” are well informed about their rights and the nature of their work, whereas “we, the older generation in this society, we had no knowledge of our rights, we did not understand them, did not know that our leave days are 30 [days] and not 21 [days].”. While she believed that there was no discrimination or difference in treatment based on gender, she said opportunities were based on power, favoritism, and/or connections: “Here, might makes right, the bigger fish eats the little fish.”

Overall, there was no consensus about understanding or clarity of job criteria. It differed based on type of health profession and the hospital itself. Most physicians, along with some nurses and technicians, found job criteria to be clear, with a few in public hospitals referring to civil service regulations which they said were clear. Technicians, nurses, and dentists in the same hospital as those physicians, as well as in others, felt that not only were the criteria vague, but that the overall career path options were unclear.

The impact of family responsibilities on work among female health professionals

Work/family life balance was identified by both men and women as a barrier to women’s career progression to top-level management positions in health, as it is generally considered to be a barrier in all sectors and professions for working women on a global scale. In Jordan, research participants specified that on the issues of marital status and pregnancy, there are some differences between the public and private sectors.

Marital status and pregnancy

The research showed that private hospitals do consider marital status when employing women; preference is clearly given to single women. This is not the case for public hospitals, though, explained four male managers in a private hospital. Two female lab technicians from the same private hospital (interviewed separately from the men) confirmed that preference is given to single women, which they thought was unfair.

There seemed to be a misunderstanding among many participants about maternity leave according to the Jordanian Labor Law and Social Security Corporation, which mandates 70 days paid maternity leave, after which women are entitled to request unpaid leave for up to one year while maintaining her job. One male participant noted he thought women took advantage of maternity leave benefits in the public sector as they “keep getting pregnant” so that they take “a whole year off” and thought this was the reason why “the cost of an employee in the public sector is three times the cost of an employee in the private sector”.

There is a clear preference for hiring single women by hospitals. Many women health professionals, whether physicians, technicians, or nurses, agree that they have more freedom to make decisions that advance their careers when they are single, without the spousal pressures or the feeling of sole responsibility for taking care of the household and children.

As mentioned in the discussion on opportunities for promotions for female employees, pregnancy is perceived, especially by men, as a barrier to career progression, but furthermore, just the possibility of pregnancy is also considered to be a barrier. This is underscored by the information provided by research participants on marital status, as the probability and expectations of pregnancy in Jordan are only associated with married women.

Family responsibilities

As was expressed by an unmarried female lab technician in a private hospital, unmarried women have fewer restrictions because of their freedom and the absence of heavy responsibilities at home and, therefore, better promotional opportunities. A married female lab technician from a public hospital explained that the lack of support from one's husband and/or society prevent women from accessing leadership and managerial positions, which is why the social status of the woman and her household "situation" need to be taken into consideration.

Spousal support for female health professionals was emphasized as important by both men and women in the health sector. In a private hospital, one engaged lab technician explained that if her future husband believed that she would not be able to balance work and family, she would indeed quit her job as currently they could afford to do so from an economic perspective. In this case, the woman succumbed to her husband's wishes by choice, however in other cases, women described their spouse making this decision as their "unnegotiable right."

In a very few hospitals, both men and women expressed cooperation with their spouses in carrying out household duties and taking care of family. "Any person, whatever he/she does, must set his or her priorities even at home, to decide what to do first, and when...if she does not inform and explain the nature of her work to her husband she will struggle with many problems. This should be communicated clearly during engagement, because some husbands do not accept their wives to work with male colleagues or on shift basis." Cooperation did not always mean that men were carrying out household chores but rather not standing in the way of the wife's employment, "Many times he tolerates that I don't make food every day and other specific details, and he accepts that life goes on."

Practices of equity, equality and nondiscrimination in health institutions

Another barrier to the career progression of women in the health sector is one that has been recognized as problematic for all working mothers in Jordan: the lack of child care. Notably, the idea that the lack of child care services is a barrier to working women only, rather than both men and women, is linked to the dominating discourse that children are their mother's responsibility; otherwise it would also be recognized as a challenge for both working parents. However, in the health sector this barrier may be further exacerbated by irregular working hours, the need to be on call or available, and/or the demands of particular health professions.

Policies and regulations

One female nurse explained that managers should be responsible for practicing understanding and acceptance and supporting the social issues raised by those they are responsible for, whether male or female. Managers should acknowledge the individual needs of their employees, as the social context, including family responsibilities, can never be fully separated from the working environment. Considering personal needs would increase employee loyalty and commitment to the workplace. In more than one discussion, it was mentioned that maternity leave should be for a longer period of time — paid maternity leave according to Jordanian labor law is for 70 days.

Work/family life balance is instilled in women as a responsibility because of their gender and the existing patriarchal society. However female participants felt that employers of health professionals could do more to support women in their attempt to balance their professional and personal responsibilities through the availability of child care services, shift scheduling, or flexibility for leave. A pharmacist at a public hospital expressed the inflexibility of the hospital in accommodating her situation as a parent: “For the night shifts you will be told ‘You have to take them, you are a public servant,’ ‘You are paid the same as your male colleagues. Aren’t you asking for equality? So you have to take night shift just as he does’.” In one private hospital, a female technician explained that no child care services are available. While her spouse does not contribute to their child care responsibilities, he does not stand in her way of working either. She feels fortunate because the hospital has been flexible with her leave requests. She credits her family as her main support. Still, she said the balance of it all is a struggle.

In a public hospital in the south, male nurses and physicians, both married and single, discussed the topic from a different perspective than men in other hospitals. They explained that the obstacle to women’s career progression is not family, rather the shift system (morning, afternoon, and night). However, they pointed out that the shifts are specific to the health sector and not specifically managerial positions. One participant said that he thought it could be helpful to female physicians in their path to a managerial position if the number of night shifts assigned to them was decreased. Ultimately, the shift system should be open for supervisor-health professional discussion so that all needs are met in the workplace and home.

Male physicians in a public hospital in Amman explained that based on its policies and regulations, the health sector does not differentiate or discriminate between men and women, but they found there are certain practices where women are given priority. As explained by female professionals in public and private hospitals, while policies may not discriminate, they do not necessarily accommodate the situation of working mothers to provide equitable opportunities for career advancement either, whether in the form of child care or shift schedules and leave.

One male physician in a public hospital mentioned that it would be helpful to have paternity leave as “it is important for the father to be present with his wife after the delivery.” Another man mentioned the importance of paternity leave, especially if the wife’s family is not around to support her: “My parents told me that fathers were entitled to two weeks of leave during the sixties and seventies.”³

³ The data were collected in December 2017. In 2018, the labor law was amended so that men now have two days paid paternity leave.

Child care services

Both men and women agree that having child care services within the hospital is practical for female health professionals, especially when the child is young. The working mother can be more efficient at work, being able to check in on her child easily as opposed to worrying about them in a different location. Similarly, when it comes to breastfeeding throughout the day during the first year after the child is born, female employees can save on transportation time by remaining within the hospital.

In a private hospital in Amman, six women in top-level managerial positions (department heads), discussed the anxiety they often felt from the pressure to carry out their work and family responsibilities. While they are at work, they are constantly worrying about their children and responsibilities at home while their male colleagues do not have the same worries. As one woman explained, “Men can take a break.” One department head said that she delayed her entire career for years until her children were old enough to take care of themselves.

Of note, availability of child care may differ based on profession. One female dental hygienist claimed that child care services were only available to nurses and that generally physicians’ needs are given priority and that other specialties and technicians tend to be marginalized. Male health professionals in a hospital in the south, some of whose spouses were also employed at the same hospital, expressed that they too would greatly benefit from child care services at the hospital.

In one public hospital, even though a child care service was available for the morning and afternoon shifts for female employees, the quality of the care for the children was said to be poor, possibly due to a lack of license. One woman chose to take her child out and look for another option. So the provision of child care may not be an easy answer in itself. For the services to be useful, child care facilities should be licensed, clean, and trustworthy.

Of all the hospitals that were included in the research, only one had 24-hour child care services, which proved to be beneficial to the female health professionals. The female nurses working at that hospital expressed that the presence of the child care and its 24-hour accessibility gave them the means to balance their professional and family responsibilities and played a significant role in stabilizing their careers. They also expressed that they are better able to focus on their work instead of worrying about their children, so their efficiency has increased and their overall stress has decreased. They noted a substantial difference from their earlier experience at the hospital before the child care services had opened, when many of the same women had resorted to taking unpaid leave or leaving their jobs altogether to take care of their children.

Feminine/masculine traits and the technical/care divide

Whether consciously or unconsciously, most research participants took part in a socially constructed gender discourse and therefore also made many of their professional judgments and decisions based on traits and characteristics they presume are associated with men and women: strong leadership and technical expertise being masculine and caring subservience and nurturing skills as feminine. While this was the consensus among most men, there were also those men who gave examples of women whom they considered to be “exceptions” to this idea.

In one discussion, four male doctors (all of whom are married) from a public hospital in the north described that generally, criteria for promotional opportunities for both males and

females were unclear and seniority and competency are what are taken into consideration when being promoted to a managerial position. But gender stereotypes were apparent in their examples, as they described that while leadership positions are based on competency, there are certain jobs women cannot do because of their household duties, so there should be a limit to what can be expected from female employees. They explained that there may be exceptions to this, such as a current director at the Ministry of Health, but the justification was because her children are older and can take care of themselves. Another example of an exception was a public hospital's assistant manager (responsible for maintenance, the kitchen, and the factory). Traditionally this position is viewed as "a man's job," but the male participants said that this woman was a fully capable and competent female manager.

One female nurse responsible for the improvement of care services in a private hospital in Amman described a very positive promotional experience: "To be honest, when I got the interview with our hospital manager, I found him to be a smart man, supportive for those who have the talent to lead others and willing to put them in leadership positions and as a first-line manager. So, from our first meeting when he reviewed my CV he told me 'We would like to have you join our team,' and the matter was discussed to select the job title because it was still new in the field of hospitals."

One married male dentist working at a public hospital in the north, explained that there are certain specializations in the health sector that are unsuitable for female health professions, such as surgery performed on male patients. He then went on to justify this by stating that women are unable to perform in certain specialties: "Women are easily affected by everything... they are scared of blood and such things," when, in reality, these views are based on socially constructed views on the abilities of women. He gave another example of being unable to contact a female colleague late at night, as this would be socially unacceptable. In this dentist's opinion, it was why there were no female managers at the hospital: "It won't work, but at the Ministry of Health they work in senior positions."

When a woman can balance the pressures of work and family responsibilities, men often attribute this to her "strong character," which enables her to "give each its due consideration; she can cook and perform household duties" while simultaneously having a career.

One male physician from a public hospital was not against women's participation in the workplace. However, his opinion was not based on the benefits of greater gender diversity to the health sector; instead, because "it must be boring [for her] to stay at home all the time, I am with the idea that women must interact with the community to have their own independent character and take their own decisions." The same physician pointed out that women should not discuss their personal lives at work and that they are unable to make this clear separation because they are entirely responsible for their household and children's care: "When we talk about work it is work, I don't care if I have a young daughter or family duties, I don't care and I should not hear such things. You are here now at work, and it's not about being male or female; therefore this separation is necessary."

As one divorced nurse in Amman expressed, "I mean for example they [men] keep comparing themselves to the woman's success and wonder why does she reach success faster than I do? If it means she exerts effort outside the household then she should exert more effort at home too, without complaining!...I feel this is how women are seen if they are successful in their professional life; the term we used to describe this back in the days is 'Ukht Reggal' (literally means 'Man's sister'), and so if she has to become a 'man's sister' at home then she should be a

superwoman outside the household.” One man in a hospital in the south gave an example of this type of endurance, “My wife is a lecturer at a university, she teaches nursing, and honestly, we have been married for 25 years. Yes, we have some problems, but I feel sorry for her because she has to exert double the effort; she is a housemaker and responsible for the household chores. Being a woman makes it her job too, while I do only one job as an anesthesiologist.”

Women generally recognize the burden of household duties as being the greatest obstacle to career advancement in leadership and managerial positions. Again, referring to spousal support, saying that even if the husband shares some of the responsibility at home, it is often not enough. Her “capacity to reconcile between her work and family duties” depends on his “masculine mentality,” whereas for her it is an “obligation” that often makes her anxious, stressed, and worried while she is at work.

Again, only in a few hospitals was it very clear that men had different perspective about the roles and responsibilities of men and women. At a public hospital in the south, male nurses and physicians claimed that household and family responsibilities were divided between men and women, and examples were mentioned that support this, but that there were certain roles that men found difficult, such as taking care of infants and toddlers. The men also raised the topic of the difficult economic conditions, which make cooperation of the spouses a necessity at home. Economic constraints in the household could bring forth the need for both the man and woman to earn an income to meet their financial needs. They expressed that for the couple to be productive at work, they also need to work together at home in caring for their family. At another public hospital in the north, male nurses and division heads said that due to the current economic situation, “99% of men want to marry employed women” as their contribution to the household income and expenditures was the main incentive. Long shifts are considered an obstacle for mothers due to the absence of childcare at the hospital. “The spouses should build an understanding concerning [household] responsibilities...It is not a big deal if I do the dishes.”

There were additional explanations by some men that could be understood as contradictory when it comes to masculine and feminine traits. Women are more caring and nurturing, and therefore their main priority should always be taking care of their family and home — “a women should not accept the idea of her husband doing the laundry at home for example, such a function was meant for women; my wife and I help each other at home, but there are certain tasks that I will never do, not because I can’t, but because they are tasks not meant to be done by me [as a man].” In the same discussion, it was expressed that the community at home and at work assumes that women are responsible for child care first but also that women are able to endure and exert more effort than men because they are able to carry out their household duties and raise children as well as work professionally.

VI. Discussion and Recommendations

Persistent gender inequality in health systems exists, preventing equitable opportunities for women and men to reach health management positions. Evidence suggests linkages between women's leadership in health and a more responsive health system with more equitable health outcomes, in particular for girls and women (Dhatt, et al., 2017). This research study aims to identify barriers and enablers of women's career progression to management positions in Jordan's health sector by exploring the experiences and perspectives of female and male health professionals. Although women compose approximately half of the health workforce in Jordan, they remain underrepresented in management and decision-making positions.⁴ It is clear from the findings that there are opportunities for evidence-based interventions to strengthen gender equity in health management and leadership.

The research findings suggest health professionals' perceptions are supportive of performance-based promotions irrespective of gender and that women exhibit qualifications needed for career advancement. The vast majority of health professionals surveyed (89.8% of women and 90.6% of men) agreed that people should be rewarded based on performance regardless of whether they are men or women. The qualitative data also support this principle, illustrated by a male health professional's statement that "if a male and female were both applying for the same job... they will select the more competent one." At the same time, nearly three-fourths (73.2%) of women noted they have the needed skills and abilities for career advancement to higher management positions, and 69.4% felt they deserved to be promoted to a higher management position.⁵ As one woman remarked, "Female employees have the required skills to reach management levels and do well." In one public hospital, men in an FGD stated that women had better promotional opportunities for leadership positions because of their numbers, commitment, and high work productivity compared with men.

However, 58.9% of female health professionals reported women are more likely to face barriers for career advancement, compared with only 40.5% of men who reported the same. There was a difference among health professionals among both genders, with physicians perceiving that women were more likely to face barriers in career advancement at a higher rate than nurses and pharmacists. A significant proportion (61.1%) of male health professionals believe that female managers are less capable of managing the organization, and most respondents (64% of men and 77.2% of women) reported that men do not like to share authority with women. One participant commented "When [a woman is] given a [management] position, people fight her...pushing her to resign." As a crosscutting qualitative finding, recognizing the challenging circumstances, female health professionals may not even seek out or apply for management positions and career advancement opportunities.

Many of the career obstacles faced by women in Jordan are tied to gender disparities rooted in the traditional patriarchal society and culture, primarily those related to expectations of

⁴ At the Ministry of Health, a recent gender audit reported that women comprise around 55% of their workforce yet fewer than one-third of low-level management positions and fewer than 10% of top-level management positions.

⁵ There was correlation between having only a diploma degree and fewer than 10 years of experience with decreased odds of reporting having the needed skills for further career advancement and of deserving to be promoted to a higher position.

women's responsibilities to the family and household. Despite these societal challenges, there are many ways to implement data-informed interventions to strengthen women's advancement into management positions within the health sector. Suggested activities are presented under the themes of promotion criteria and selection, professional development and training opportunities, mentoring and networking, institutional environment, work/life balance, marital status and children, and management versus specialization career progression.

Promotion criteria and selection

No significant difference was reported between men and women in the perception of performance-based rewards or opportunities for advancement. Ninety percent (89.8%) of female health professionals and 90.6% of male health professionals agreed that people should be rewarded based on performance regardless of their gender. Furthermore, about 70% of both male and female respondents agreed that opportunities for advancement are based on knowledge and skills.⁶

While most health professionals agreed with the principle of performance-based promotion, the actual practice was not reported as very common. When asked about the basis used for promotion, performance and achievement was the sixth most mentioned by women at 20.6% and the fifth most mentioned by men at 23.5%. In one public hospital, a female participant expressed, "On what basis do they select the heads of departments? We have no idea; no one has ever showed up to explain to us what selection criteria are followed or asked us who wished to nominate herself based on such criteria." While public sector participants often mentioned clear criteria for promotion under the Civil Service Bureau, "wasta" (nepotism) was the most reported basis for promotion by them, whereas in the private sector, work experience was perceived as the number one basis. In one private hospital, female department heads expressed that managerial positions are selected based on an employee's work, whether male or female, though still noting criteria were unclear.

Despite agreeing in principle to rewarding employees based on performance regardless of gender, in practice health professionals often perceive women to be at a disadvantage. Nearly half (47.5%) of female health professionals reported a lack of awareness of promotion opportunities as a barrier to their career progression. In a public hospital FGD with women, they noted that criteria for managerial positions are unclear and promotional opportunities for management are not provided to women. One participant stated that "there should be criteria governing how to move up the occupation ladder and make progress in your career path; opportunities must be given to both men and women."

Gender bias often appeared from the research regarding perceived qualifications for promotion and performance evaluation by managers. As a perceived barrier to women's career progression, 57.9% of women and 46.1% of men reported that managers believe women are not qualified for managerial positions. Furthermore, 53.1% of women and 31.9% of men feel women receive unfair judgment regarding their work performance. The consequences of these

⁶ Health professionals from the private sector agreed more strongly than those from the public sector or teaching hospitals that opportunities for advancement are based on knowledge and skills. From the private sector, 85.4% of men and 74.7% of women agreed with this principle, higher than the overall average of 70%.

perceptions can impede women's career advancement and are further exacerbated by the lack of women in line management.

While there was no clear consensus on the practice of promotions among respondents, the reported lack of clarity in criteria and selection practices poses a barrier to women's career progression. Many women, particularly nurses and lab technicians, stated that no clear criteria for promotions exist, but many men and some women contradicted this — it often depended upon the cadre of health professional and the hospital itself. In a private hospital, one male respondent noted that there are no systematic promotional opportunities due to the lack of or unclear criteria, job standards, and productivity-based assessments. Research observations revealed that men may have an advantage for better understanding promotion criteria (particularly if criteria are unwritten, subjective, or unavailable), as they may have more experience in either receiving promotions or knowing someone who has and are thus more likely to have the workplace connections to clarify the criteria. Studies on female nurses have also noted the widespread use of “wasta” (El-Jardali, et al., 2011), which is also empirically proven to have a significant impact on the career advancement of women in the Middle Eastern region (Tlaiss and Kauser, 2011).

Recommendations:

- Establish and make available to all employees clear and transparent competency-based models for career advancement to management positions, including objective and measurable criteria for promotion, corresponding job descriptions and levels, and avenues for openly announcing opportunities
- Review current performance management systems to ensure fair evaluations are based on required competencies from job descriptions, decreasing a chance for gender bias
- Provide training for managers on performance management and promotion selection, with attention to perceived gender bias in performance appraisal
- Ensure gender diversity on selection panels for management positions to reduce gender bias in promotions
- Advocate for high-level institutional buy-in to affirmatively promote qualified female health professionals into management positions and address the lack of women in line management; advocates should highlight the benefits of gender equity in management to further improve the health system and health outcomes.

Professional development and training opportunities

Both male and female health professionals in this study often mentioned the importance of training opportunities for promotions keeping them informed within their profession and more suitable for career advancement. Participants also noted challenges in their accessibility and availability, with one-third (33.4%) of men and over half (54.4%) of women reporting female health professionals' poor access to education and training opportunities as a barrier to their career progression.⁷ While most respondents (71.3% of women and 79% of men) perceived

⁷ In the quantitative survey, men were asked about their perceived barriers to women's career progression, not their own. In this case, 33.4% of men reported “women have poor access to education and training opportunities.” In the qualitative findings, both men and women voiced that the lack of available and accessible training opportunities impeded their career progression.

equal access to education and training opportunities for both genders at their workplace, 56.8% of female health professionals reported women receive fewer opportunities for professional development, compared with only one-third (34.6%) of men.

The distinction between men's and women's perceived equal access to education and training on the one hand and reported issues of women's poor access or receiving fewer opportunities on the other is important. For women, equal access does not translate to equitable opportunities for professional development. For instance, informal announcements from primarily male managers and the location or timing of training may disadvantage women. Female nurses from a public hospital stated that department heads should inform all staff about training opportunities and training should be offered during work hours to better balance their domestic responsibilities.

The training gap for women can also impact perceptions of women's managerial qualifications. Nearly half (48.9%) of male health professionals reported that women are not equipped with the managerial skills necessary for career progression, and 48.2% of female health professionals believed that lacking the requisite education for management positions is a barrier to their career progression. One nurse from a private hospital in Amman stated that "they [women] should seek self-development because ... opportunities in this regard are very limited, as well as career development opportunities." Adequate training is a factor for women's career progression, as women who reached management positions reported it as the sixth biggest tool or resource to overcome career barriers.

According to respondents, training opportunities, when available, are generally offered for developing specific clinical skills rather than management skills. Research findings suggest the type of training modules women feel they need for management positions. When asked what tools or resources helped women overcome barriers to career advancement, female managers reported self-confidence (first-ranked tool or resource) and interpersonal/people skills (third-ranked tool or resource). From the qualitative data, female participants in a public teaching hospital expressed the need for training on job promotion criteria, career paths, time management, crisis management, communication skills, and employee rights.

Although several participants stated that training increased the likelihood of promotions, training was the least-mentioned basis for promotions to managerial positions, with only 11.5% of men and 9.3% of women reporting it. The findings reveal a disconnect between the perception of training as preparing staff for promotions and its inclusion as a selection criterion for management positions. Reviewing practices of professional development in the areas of equitable access, relevant and adequate topics, and use in promotions may reduce career barriers faced by women.

Recommendations:

- Improve the accessibility, availability, and awareness of professional development and training, specifically informing all staff of opportunities and ensuring the timing of training considers women's needs
- Increase the number of courses offered during working hours on management and soft skills, such as interpersonal and communication skills, human resources (job criteria, career paths, employee rights), time management, and crisis management
- Provide targeted training for women to focus on building confidence and empowerment to take on new responsibilities

- Identify and link relevant training to career planning and the promotion process (criteria and selection) to management positions

Mentoring and networking

Mentoring and networking relationships are important for career progression (Burke and McKeen, 1997). Mentors are potentially valuable for women's career advancement as they participate in career progression through coaching, role modeling, and counseling in addition to developing a manager's sense of identity, providing emotional support, and boosting professional confidence (Raggins and Cotton, 1991). In this study, three-quarters (75.8%) of female health professionals reported that networking and socializing outside work are important for future career advancement. Approximately the same proportion (76.3%) reported that having a mentor is important for future career advancement.

Networking and connections to other senior leaders was the third most-mentioned basis for promotion to managerial positions in health institutions by both men (36.7%) and women (39.6%).⁸ However, only 45% of female health professionals reported having supportive mentors in the organization, and 47% reported being excluded from informal networks. Nearly half (46%) of women perceived that the lack of mentors is a barrier to their career progression. This perception is supported by existing research — one study (Al-Lamki, 1999) reported that the absence of role models and mentoring programs is a major organizational concern limiting women's access to top managerial positions.

Seventy-nine percent (79.3%) of female health professionals reported that successful women have influential mentors to support their challenging assignments and to ensure they consistently exceed performance expectations. Additionally, 88.8% reported that ambitious women develop social networks and enter mentoring relationships. Finding a mentor in Jordanian organizations can be difficult given that mixed-gender mentorships are less common, and there are few women in top-level management positions to provide support — the lack of women in general/line management was perceived as the biggest barrier to women's career progression, reported by 65.2% of female health professionals (men perceived it as the third biggest barrier at 47.7%). Avenues for increasing women's participation in networking and mentoring can serve as enablers for their career progression.

Recommendations:

- Form a national network for women's leadership in health to recognize the accomplishments of female health professionals; encourage collective and individual empowerment; and advocate for policy and practice change to address barriers for women's advancement into management positions
- Establish formal and informal institutional mentoring programs to expose lower- and middle-level female health professionals to management tasks, including attending meetings
- Provide targeted training for female health professionals on advocacy, successful networking, and effective mentorship relationships

⁸ The number one basis for promotion reported by both men and women was "wasta" (nepotism); the study made a distinction between nepotism and networking.

Institutional environment

Many health professionals in this study reported that policies and regulations do not discriminate between men and women; however, women noted that policies also do not consider the situation of working mothers to provide equitable opportunities for career advancement. Further, while policies may not discriminate, 64.6% of women and 45.5% of men perceived discrimination against women by supervisors/line managers as a barrier for women's career advancement. This issue is exacerbated as fewer than one-third (31.6%) of women, compared with 45.3% of men, reported that their institution follows formal procedures for employees to present gender discrimination complaints.

To improve the institutional environment, gender equity needs to be expressed as a workplace value, written in strategic documents, and committed to by leadership. Only 45.8% of women, compared with 63.3% of men, reported that equality between women and men is mentioned as an institutional value in strategic documents of their workplace. Strategic documents should be evidence based, and gender-disaggregated human resources information should be monitored and evaluated. However, only 27.2% of women and 37.9% of men reported that gender-disaggregated information related to recruitment and selection is kept by their institution. Additionally, 50% of women and 40.5% of men reported that the lack of commitment by senior management to gender equality/diversity is a barrier for women's career advancement. Gender bias may be reduced through revised policies, documents, and practices at health institutions and through committing to gender equity in institutional values by leaders and employees.

Recommendations:

- Review institutional policies and regulations to ensure for gender equity considerations, recognizing policies promoting equality do not always ensure parity in opportunity by men and women based on different constraints
- Establish formal complaint mechanisms to confidentially report gender discrimination, with competent and trained personnel to investigate reported violations
- Review institutional values and strategic documents with senior leadership to expressly mention gender, with senior leadership communicating their commitment to these values and strategy to all staff
- Establish human resources data systems with gender disaggregation, particularly for institutions to monitor and evaluate recruitment, hiring, performance management, succession planning, and promotion practices and inform senior leadership
- Provide gender bias training for employees and managers, utilizing gender-disaggregated data, instilling institutional values and strategies, emphasizing gender equity in policy implementation, and stressing senior leadership commitment to inform policy and decision-makers

Work/life balance

Female health professionals expressed that their employers could do more to support women in balancing their professional and personal responsibilities. Fewer than half (41.4%) of female health professionals reported that their institution considers the needs of both male and female workers when scheduling shifts to reconcile professional, family, and personal life. Male physicians and nurses in one public hospital also noted that the morning, evening, and night shift

system, which is particular to the health sector, is an obstacle for women's career progression. One female pharmacist in a public hospital commented that "for the night shifts you will be told 'You have to take them. You are a public servant. You are paid the same as your male colleagues. Aren't you asking for equality?' So you have to take the night shift just as he does."

In Jordan, where household and family duties are oftentimes considered a woman's obligation, even an effort to equally distribute or schedule shifts between men and women may disproportionately affect female health professionals. One married male participant noted about his working spouse, "I feel sorry for her because she has to exert double the effort; she is a housemaker and responsible for the household chores, being a woman makes it her job too, while I do only one job as an anesthesiologist." The need to consider work/life balance in shift scheduling is important to ensure that women are able to stay the course in their career and advance to managerial positions.

In addition to shift scheduling, other institutional work/life balance options offered were reported less. Fewer than a third (32%) of women reported that their institution offers extended leave for child care; 26.1% reported flexible working hours are offered; and 17.2% noted part-time work as an option. Male health professionals also followed this digression roughly, though with higher reported percentages for each institutional consideration offered: shift scheduling based on female/male needs (54.3%), extended leave for child care (42.3%), flexible working hours (31.7%), and part-time work (23.5%). Recognizing individual needs, as reported by a female nurse, would increase the employee's loyalty and commitment to the workplace. Offering different work/life balance considerations would also provide greater equity for women to seek out opportunities for career progression.

Recommendations:

- Advocate with decision-makers and managers to employ gender equity, not strict equality, when scheduling shifts for men and women to take into consideration their professional and family life needs
- Promote awareness of the flexible working hours bylaw signed in March 2017 and the related instructions issued in March 2018 to allow for additional options for work/life balance
- Explore options to offer part-time work within the current employment structures and labor law

Marital status and children

Closely related to the need for gender equity considerations when striving for work/life balance in the health sector (for instance, when scheduling shifts or determining flexible working hours), gender equity can be strengthened further by enhancing health employers' understanding of the potential impact of marital status and children on health professionals. There was a difference in perception between respondents, 89.3% of women and 67.5% of men, regarding women's ability to balance work with family responsibilities. However, the majority of both groups, 74.2% of women and 62.5% of men, agreed that a lack of support from family and friends impedes women's career progression. To explain further, while women may be able to balance work and family life, the burden to do so is often solely on her, leaving feelings of anxiousness and stress while she is at work. As six top-level female managers at a private hospital explained, male colleagues, on the other hand, "can take a break."

Health professionals, both male and female, generally recognized that the greatest obstacle to a woman's career advancement into management positions is her family and household obligations. Forty-five percent (45.2%) of women said that having children permanently altered their career goals, and married women were five times more likely than married men to compromise their career targets and give their spouse's career priority.⁹ Overall, 73% of women perceived that married men support their spouse's career. However, support does not necessarily mean sharing household duties but rather not standing in the way of his spouse's employment. In the qualitative data, some men, even when married to female health professionals, admitted that they don't help to alleviate this challenge. As one female nurse stated, "If it means she exerts effort outside the household then she should exert more effort at home too, without complaining! I feel this is how women are actually seen if they are successful in their professional life."

The fear of conflict with family and household responsibilities may cause women to hesitate to take up promotional opportunities, which was reported by 62.3% of women and 52.8% of men. The perceived barrier is closely tied to married women, and discrimination was reported in the practice of hiring and promoting single women, which from research evidence was higher in the private sector. Both men and women reported bias toward single women, though from different perspectives. Unmarried women reported fewer restrictions due to the absence of heavy marital and family responsibilities at home, which allows them greater freedom for career advancement. Alternatively, one man claimed that married women in the public sector "keep getting pregnant" so that they can take time off.

In Jordan, marital status is associated with the probability and expectation of pregnancy, and just its possibility is perceived as a barrier to women's career progression, especially by men. Not surprisingly, 67.5% of women and 61.1% of men reported that women of childbearing ages tend to be bypassed for promotion and other opportunities. There was a correlation between women continuously on the lookout for career advancement opportunities with having children; 58.8% of woman with no or one child reported it compared with only 37.7% of women with more than one child. One department head from a private hospital expressed that she "didn't go to work until [her] children got older and were able to take care of themselves."

Both women and men agree that child care services provided by the hospital are practical for female health care professionals, which would allow women to be more efficient at work. With onsite child care, she could easily check on her child and save transportation time, especially during the breastfeeding hour in the first year after a child is born. Male respondents from one hospital noted that they would benefit from child care centers too. Only one hospital included in the research had a 24-hour child care center. Female nurses in that hospital noted how access to the center's child care services allows them to focus on work, significantly stabilizes their career, increases efficiency, and decreases stress, leading them to better balance their work and family responsibilities. Prior to the child care center, they noted they resorted to taking unpaid leave or leaving their jobs completely to take care of children. In other hospitals, some child care services offered limited operational hours (morning and afternoon shifts only), quality of care was poor, and many child care centers were unlicensed.

⁹ 24.7% of married women reported compromising their career targets and prioritizing the career of their spouse, compared with only 4.9% of married women who reported that their spouse compromised his career targets for their career to take priority. The qualitative data showed that married men were more likely to support the career advancement of their spouse if there were financial incentives to do so or a strained family economic situation.

Recommendations:

- Establish, when feasible, 24-hour child care centers that are licensed within hospitals or seek an alternative employer contribution to child care services
- Review and create nondiscrimination policies for hiring and promotion based on marital and family status (current pregnancy and having children)
- Implement paternity leave to at least the minimal standard of the 2018 labor law amendment of two days paid leave to encourage male participation in child rearing¹⁰

Management career progression versus specialization

The qualitative data revealed an interesting issue of management career advancement versus specialized professional development, which was not fully explored in this study. Nurses and physicians emphasized the importance of professional classification and specialization for promotion and advancement within their specialty areas. This might be explained by the fact that professional development is linked to incentives and specialization titles; managerial positions in their view “are not worth it.” In addition, qualitative data indicated a strong preference for doctors in management positions, including perceptions that “it is a physician’s ministry” and that the person in a management position must be a doctor.

Recommendations:

- Conduct further studies on the policies and practices for career advancement in the health sector, comparing the emphasis on specialty training with managerial training and development
- Ensure incentives and training are tied to both clinical and managerial training and development

¹⁰ A few men noted in the qualitative data that “it is important for the father to be present with his wife after the delivery” and mentioned the need for paternity leave. To note, the labor law was amended in 2018 to include two days of paternity leave after the time of data collection in December 2017.

Conclusion

In Jordan's health sector, opportunities for women's career advancement exist, partly due to their high percentage in the workforce and nature of the job. In principle, health professionals agree that promotions should be merit based regardless of gender and that women have the capacity to succeed in career progression. While many obstacles are affected by sociocultural beliefs and attitudes, avenues for evidence-based interventions to address tangible barriers were highlighted in this study. Activities to promote women's career progression should focus on:

- Clarifying job promotion criteria and selection
- Improving equitable access to professional development and training
- Increasing women's participation in mentoring and networking
- Strengthening gender equity in institutional mechanisms and policies
- Offering work/life balance options
- Providing child care services

The findings are a step toward filling in knowledge gaps and addressing drivers behind the underrepresentation of women in management positions in Jordan's health sector. Greater gender diversity in decision-making will optimize Jordan's human resources for health, contributing to a more responsive health system with improved health outcomes.

VII. Annexes

Annex A. Research Proposal

Working Title: A Study of the Barriers and Enablers of Women's Career Progression to Management Positions in Jordan's Health Sector

I. Introduction

The underrepresentation of women in management positions in the health care sector persists as a global norm. Despite comprising 78% of the workforce in the health care sector in the USA (1) and more than 90% of the general nursing workforce in the UK (2), women are underrepresented in management positions in the health care system (3-5). In Jordan, according to Ministry of Health employee data, women comprise 55% of the ministry staff, yet only hold 27% of management positions across all levels. There still remains a gap in the literature regarding why so many women are not in managerial positions.

Studies on women in management positions in the health care sector in Jordan are lacking, including barriers that affect women's career progression. This proposed study seeks to explore the barriers and the enablers of women's career progression in the health care sector in Jordan. The proposed study is a step towards improving our understanding of the problem of underrepresentation of women in management positions, improving knowledge gaps, and addressing drivers behind troubling statistics regarding the lack of gender diversity in management positions.

Objectives

The purpose of this study is to examine why women lag behind men when it comes to careers in managerial positions in Jordan's public and private health sector. The experiences and perspectives of female and male health providers will be explored. The findings of this study will provide timely information for decision-makers and legislators to inform their policies and legislation to enhance women's advancement in health sector management positions. The research findings can provide vital information that can be used by the government to strategize ways that will enable women to ascend to top management positions in the health sector based on merit and to put in place policies that will reduce gender inequalities in the health sector. Specifically, the main objectives of the proposed study are to:

1. Identify and explore experiences, perspectives, barriers, and enablers to women's career progression to management positions in the health care sector
2. Establish individual characteristics that impede or support women's career progression to managerial positions
3. Analyze women's career path trends in the health care system, from hiring to senior management positions
4. Assess women's and men's perceptions of the policies and practices of the health care system with regard to equality and nondiscrimination between women and men

The proposed study is guided by the theoretical framework developed by the researcher based on the critical review of the literature and review of various models including:

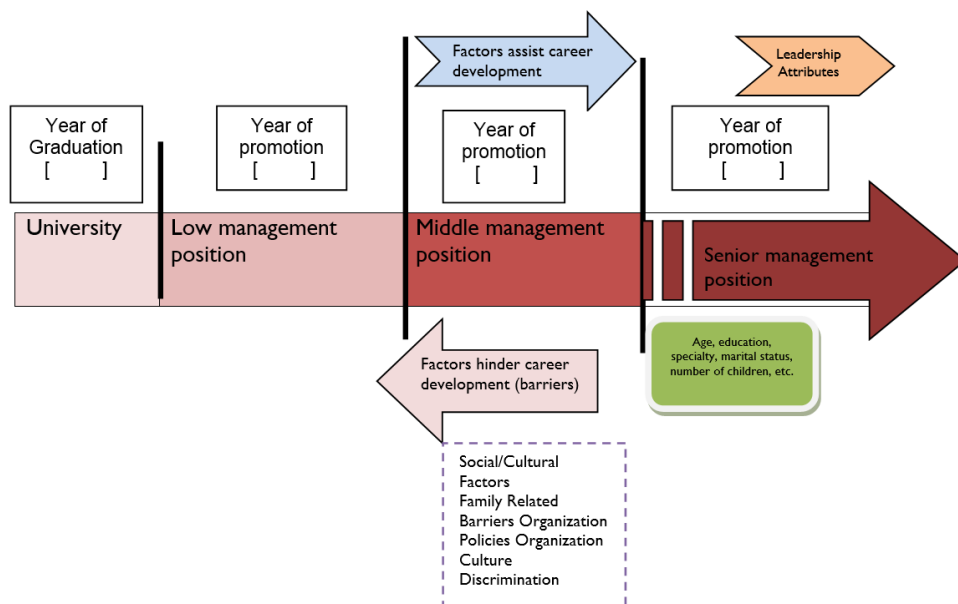
- Gendered Organizational Structure (GOS) Model: The GOS model of gender diversity explains the status and experience of women in organizations across organizational

structure (6). Specifically, this includes informal networking, diversity performance evaluation, stereotyping, and preferred leadership. According to Fagenson (7) and Cooper (6), organizational structures impede women's entry to and advancement in the workplace. That structure can include job recruitment, job assignment, mentoring, retention, and training; how work and family are balanced by employees; and promotions, pay, and reward systems. Moreover, Bajdo and Dickson (8) found that the greatest predictor of the number of women in management positions resulted from organizations that focus on the aspect of organizational culture relating to gender equity practices.

- **Promotional Opportunity Model:** Promotional policies and practices are designed to foster opportunities traditionally deemed essential for women to rise to executive level positions. Oakley (9) summarizes the significance of line experiences, performance-based feedback, training, and career development on the ability of women to rise to CEO and other senior-level positions.
- **Inclusionary Diversity Model:** Institution climate, including informal networks, has been cited as a cultural barrier to breaking the glass ceiling (Cooper [6]). Such barriers can influence women's performance evaluations and potentially contribute to an inhospitable and exclusionary environment (10).
- **Work/Family Partnership Model:** The work/family model presents opportunities for women to balance work and family responsibilities. The implementation of policies that help employees manage nonwork responsibilities such as dependent care services and flexible scheduling programs like various types of family leave practices yields a positive effect on the number of women in upper-level management.

The research presumes that women's progress to senior management positions and the time needed to progress to these positions is affected by two opposite and competitive groups of factors (factors hindering and factors assisting the advancement), leadership attributes, and underlying sociodemographic characteristics (Figure 1).

Figure 1. Women's Path to Senior Management Theoretical Framework



II. Literature review

The factors impacting the career progression of women in management and the underrepresentation of women in management positions have been studied by many researchers who attempted to understand the factors accounting for and explaining this status. Some studies showed that the advancement of women to managerial positions in the health care sector is often hindered by macro sociocultural factors (11). The effect of such factors is supported by the social role theory (12), which argues that societies are traditional by nature and thus produce and reinforce gender differences in values and interest between males and females (13). Gender configurations in Middle Eastern countries are highly impacted by the interplay between the patriarchy in these societies that give the male figure in the family the responsibility of providing for and protecting the family on one hand and the masculine aspect that draws sharp distinctions in gender roles between men and women on the other hand (14,15). They are also influenced by the teachings of Islam that grant men preeminence and authority over women in terms of financial responsibility, inheritance, marriage, and divorce, and prioritize the role of a woman to that of “mother” (16).

Other researchers considered that the career advancement of women in management is hindered by the structural and attitudinal barriers that are ingrained at the organizational meso level (17,18). The multitude of structural and attitudinal organizational barriers that women face in their managerial career progression is confirmed in many studies (19). Female health care providers in the Middle East countries confirmed gender discrimination at their workplaces, the absence of family-friendly policies that assist working mothers in achieving a minimum level of work/life balance (20), and inadequate organizational support in terms of policies that protect them from discrimination at work (21). Moreover, they highlighted the lack of support from supervisors, lack of training and developmental opportunities (22), and discrimination in recruitment and promotion. It is evident that males are given preference and priority in landing management positions and are promoted at a much faster pace when compared with female counterparts (20). Female nurses also complained about what is commonly known as “wasta” (nepotism) (22), a problem that is not only widely spread within organizational contexts across the Arab region (23) but is also empirically proven to have a significant impact on the career advancement of women in the Middle Eastern region (24).

Other studies showed that women are underrepresented in management because they lack the personality traits (17,18) and skills (25) needed to assume decision-making roles. Moreover, studies showed that women are more committed to their families, child care, and domestic responsibilities than to their careers, in comparison with their male colleagues (26). Women in the health care sector are more likely to suffer from the work-life balance challenge (27), given the prevalence of shift work for nurses (20) and the on-call nature of many jobs in health care (28). On the other hand, the assumption that Middle Eastern women are underrepresented in management because of their inadequate human capital is challenged, as the last years witnessed an increase in the human development index and educational attainment levels of Arab females (29).

Overview of health care sector in Jordan

Health service providers in Jordan are employed in the following organizations:

- Ministry of Health (MOH), responsible for managing the public health sector and supervising the whole health sector in the country
- Royal Medical Services (RMS), responsible for managing the armed forces health sector, also considered public

- University hospitals (King Abdullah and Jordan University Hospitals), also considered public
- Private sector
- United Nations Relief and Works Agency (UNRWA), international organizations, and NGOs

Health care services are provided in Jordan by the public and private sector hospitals in the various governorates of Jordan. There are 106 hospitals in Jordan with a total capacity of 12,681 beds. According to the annual statistical book of the MOH (30), the country has 29.4 doctors and 27.6 registered nurses per 10,000 people. Jordan has a good number of health cadres in most of the specialties. The nursing category represented the majority of human resources in Jordan in 2013 (39%), followed by medical doctors (25%), pharmacists (16%), dentists (15%), and finally midwives (5%).

Jordanian women's enrollment in the health workforce and management positions

Regarding female representation among graduates from the faculties of health sciences in Jordan, the High Health Council (HHC) 2015 data (31) showed that the number of females exceeded the number of males. In 2015, 56% of graduates from medical faculties, 66% of graduates from dental faculties, 73% of graduates from the pharmacy faculties, and 71% of graduates from the nursing faculties in Jordan were women.

On the other hand, the National Strategy for Health Sector in Jordan 2015 – 2019 (32) described few indicators related to health professions employed by the health sector and indicated that women constitute about 44% of the total workers in the health sector in Jordan. Most of these health workers in Jordan are aged less than 50 years (85%). The young health workers (30 years or less) constitute about 40% of the total health workforce in Jordan.

These statistics show that new graduates are in an overwhelming proportion female, but that proportion shrinks in the active workforce. This finding might be explained by the fact that Jordan is a patriarchal society, where religion plays an important role in the governance of society. The sociocultural structure of Jordanian society has a prominent role in determining the reason behind women's low participation in the workforce (33,34). Although many females receive a university education, they are still encouraged to find a husband and start a family rather than focus on a career (35). According to Kharouf (36), cultural constraints sometimes ban women from working in some areas, from jobs that require travel and contact with strangers, and from jobs with long working hours. Economic/legal factors in Jordan play a crucial role in defining the engagement of women in different kinds of professions. Because Jordan is an Islamic country, the laws are predominantly based on Sharia, which gives male family members guardianship over female family members. For example, culturally, a woman should live with her husband and move with him if he needs to change residence and a woman must have her husband's permission if she wants to work. This ties her career life and work choice to her husband's decisions and circumstances (37).

A recent review of women's enrollment in the health workforce in Jordan (prepared by Chemonics International [38]) showed that there is a lack of gender-disaggregated analysis of research data, a limited number of studies focusing on the female health workforce, and a lack of studies on other non-nursing disciplines. The unpublished audit of gender distribution of employees of the MOH supported by the USAID-funded Takamol Project (39) indicated that women's enrollment in terms of actual numbers was not an issue at the MOH; rather, this audit provided insights into nonenrollment factors (i.e., "participation") that affected women's experience in the MOH health workforce. The study, which was limited to MOH, showed that

females represented 51.8% of the cadre from January 2012 until the end of 2015. According to job category, among those who were still in office at the end of 2015, 15.3% of physicians, 46.0% of dentists, 74.9% of pharmacists, 69.8% of nurses, and 57.1% of allied medical professionals were females. Overall, 54.8% of physicians, pharmacists, and nurses were females.

Although there has been little research on gender diversity in management positions, there is evidence that it has many advantages. Such diversity can lead to increased innovation, more productivity, better problem solving, increased diversity of thought, and enhanced employee satisfaction (40). Interestingly, Jordanian women managers were reported to be more peaceful and friendly with their subordinates and were more patient, independent, committed, and hardworking than men (41).

Studies on women in management positions in the healthcare sector in Jordan are lacking. Though women make up more than half of the health care workforce and are the primary decision-makers when it comes to their families' health care needs, they are still underrepresented when it comes to management roles in the health care sector. According to the unpublished audit of the gender distribution of employees of the MOH supported by the USAID-funded Takamol Project (39), the proportional distribution of cadres who were still in office at the end of 2015 according to sex and administrative level is shown in Figure 2.

Figure 2. The proportional distribution of cadre who were still in office at the end of 2015 according to sex and administrative level ("executive management" equates to lower-level management)



Based on the MOH statistics in 2016 (personnel data), the MOH has 12,203 male and 15,724 female staff members. Of all male and female medical staff, 995 (8.2%) males and 373 females (2.4%) were in leadership positions. Although women comprise more than 50% of MOH staff, they only hold 27% of the higher positions. The percentage of women in management positions includes 20% of heads of nurses (nursing supervisor); 20% of heads of specialists (physicians); 37% of heads of sections; 41% of heads of units; 35% of heads of departments; 23% of assistant directors; and 11% of directors. About 76% of female managers are in middle-level management (department/section or unit heads).

Moreover, studies in other sectors showed that women have a minor presence in senior decision-making positions. In Jordan, one study showed that women hold only 21% of the senior

management positions in public companies (40). Even when looking at management structures, women appear to have supervisory roles and to hold lower-level management positions compared with male managers (41).

Although today's health care workforce is predominantly female, women in the field continue to experience career advancement problems and remain significantly underrepresented in chief executive officer (CEO) positions. Reports from USAID (2014) and UNDP (2012) (42,43) provided a relevant gender analysis of the public sector in Jordan. Although the reports do not focus on the health sector, the findings provide input for the identification of knowledge gaps and further research. In sum, they indicated that the majority of women, regardless of their positions, face issues that point to discrimination on the job. For example, female workers (as opposed to male workers) are criticized for staying late at work; they are expected to work extra hard to continue proving that they can do the job; female workers requesting vacation are required to give a more detailed justification than men; and women depend on the goodwill of their supervisors to be granted leave to take care of sick children, to take time to breastfeed (even though the law regulates this), or to transfer to another department if they are being harassed. Furthermore, female supervisors are hesitant to assign tasks to their male employees, which puts extra pressure on the female supervisor.

Another study on workplace challenges in the health sector (44) found that female nurses were particularly dissatisfied with disputes among work colleagues, the disrespectful treatment of patients towards female nurses, the weakness in social relationships, and their exclusion from decision-making. Women were furthermore faced with a lack of nurseries for their children; long working hours; lack of a working routine; the denial of their right for an hour of infant's breast-feeding; the rigidity of applying the vacation system; inappropriate offices and praying and resting places; and also lack of a secure and healthy facility for their children while they are on duty. So even if policies provide equal employment and benefit opportunities for men and women, in practice opportunities and benefits are not equally enjoyed.

Discrimination against women was identified in the public sector, demonstrated by the exclusion of women from important posts and participation and ignoring them when making important decisions related to their work (45). Moreover, studies in different sectors in Jordan showed that discrimination against women, especially when married, limits their opportunities to grow in their career, hence limiting their chance of rising to high management positions. Azzam et al. (46) identified a number of obstacles hindering women's advancement to higher leadership positions. The most significant of these obstacles were the negative official attitude towards leadership of women, social norms and stereotypes, sex discrimination against women for promotion to higher positions, as well as personal women's circumstances such as families' relations, husbands' lack of understanding of women's roles, and reluctance of employees to be headed by women.

III. Methodology

Overview

This study will employ a mixed-methods design utilizing quantitative and qualitative research methods. The study will include a selected group of health professionals of both genders including physicians, registered nurses/midwives, and pharmacists holding at least a bachelor's degree. The research tools used will be a structured questionnaire for the quantitative research, with semistructured tools for the qualitative in-depth interviews (IDIs) and focus groups discussions (FGDs).

The research will take part in three phases: first, a preparatory qualitative phase of one FGD with an affiliated local research advisory committee and three to five key informant IDs that will be used to inform the structured questionnaire and discussion guides. The quantitative tool will be pilot-tested on a random sample of 20 women, so that the quantitative tool is also finalized. A data analysis plan will be drafted allowing identical themes and similar codes for the quantitative and qualitative data analysis.

In the second phase, the quantitative and the majority of the qualitative data collection will be carried out concurrently yet separately. The quantitative and qualitative researchers will meet and coordinate regularly so that the qualitative covers all aspects and issues raised by the quantitative. Furthermore, the qualitative component will complement the quantitative by carrying out research with those intentionally excluded from the quantitative — for example, dentists and other health professional practitioners.

In the third research phase, any remaining qualitative data collection will be carried out to validate or probe further on issues determined by the preliminary analysis of the quantitative results. This will allow the research to capture any data on subjects or health professionals that may have been overlooked or are pertinent to the research (according to the specific needs, it will be determined whether this additional research will be in the form of FGDs or IDs).

The quantitative and qualitative findings will be integrated during the data analysis and writing of the report. Having agreed upon a data analysis plan, the quantitative results will be analyzed using SPSS software and the qualitative using Atlas.ti. The SPSS data will then be imported into Atlas.ti, which allows coding across both sets of data and therefore shows the relationships between both.

Study population

One-stage cluster sampling technique will be used to select the potential participants in the quantitative research component. Clusters include hospitals in public, private, and teaching sectors, councils, and other health institutions such as the Jordan Food and Drug Administration (JFDA) and pharmaceutical companies. A sample of hospitals was selected according to the following selection criteria that were set and agreed upon by the advisory committee.

1. Hospitals from three health sectors; Ministry of Health (MOH), private, and teaching hospitals
2. Hospitals covering the three regions in Jordan, namely, the south, middle, and north
3. The main and largest hospitals (according to the number of beds and workload) from MOH and private sectors in each region

The largest MOH hospital and private hospital in each region were selected. Accordingly, Prince Basma Hospital in the north, Al-Basheer Hospital in the middle, and Al-Karak Hospital in the south were selected from the MOH sector. From the private sector, Specialty Hospital in Amman and Specialty Hospital in Irbid were selected to represent the private hospitals. No private hospital will be selected from the south because all private hospitals in this region are small. The main two teaching hospitals in Jordan will be selected: King Abdullah University Hospital and Jordan University Hospital. This study will not include military hospitals because the promotion system in these hospitals differs and is determined by preset military regulations with unique gender drivers. The sample was extended to include Jordanian Nursing Council, Jordan Food and Drug Administration (JFDA), and Hikma Pharmaceuticals to ensure that the sample will include a sufficient number of female pharmacists. Dentists will be excluded from the sample because the vast majority of dentists have private practices and their career and

promotion paths are different from health professionals in the public, private, and teaching hospitals. Similarly, allied health professionals will be excluded from the quantitative sample. Table 1 shows the selected hospitals and health institutions.

Table 1. The hospitals and health institutions to be selected in the quantitative study

Hospitals			Councils	Other health-related institutions
Ministry of Health	Private	Teaching		
Basma Hospital	Specialty Hospital, Irbid	King Abdulla University Hospital	Jordanian Nursing Council	Jordan Food and Drug Administration (JFDA)
Al-Basheer Hospital	Specialty Hospital, Amman	Jordan University Hospital		Hikma Pharmaceuticals
Al-Karak Hospital				

From each selected hospital and health institution, women and men will be selected according to the following inclusion criteria:

1. All practicing female doctors and pharmacists with at least one year of experience, with or without managerial positions, currently working in the Jordanian hospitals and health institutions.
2. All managerial female nurses/midwives at any level of management will be included. To make sure that the abundant nonmanagerial nurses/midwives will not be predominant in the sample, one to three nursing employees (with no managerial roles) will be selected from each nursing section (the smallest administrative unit) in each hospital.
3. All managerial male doctors, pharmacists, and nurses at any level of management. Nonmanagerial male health professionals will be not included, as they are not decision-makers for women's career promotion.

Management Level of Health Professionals to Be Included in Quantitative Research	Females	Males
Senior Management Position	All	All
Middle Management Position	All	All
Low Management Position	All	All
Nonmanagerial Health Professionals	1-3 per section	None

Similar to the quantitative research, the majority of the target population in the qualitative sample includes female health professionals in any managerial position in the health care system across Jordan. For FGDs and IDIs, about half of the participants will be recruited from the same hospitals and health institutions using the same selection criteria used in the quantitative component of the study. The participants will be selected from each hospital at random. Once a group of potential participants has been established, they will be called by the research team to confirm their interest and availability.

Table 2. The study population of the qualitative research component

Phase 1	Phase 2	Phase 3
1 FGD with advisory committee	10-15 IDIs or FGDs with women in managerial positions in the health sector	5 FGDs and/or 10 IDIs for validation and further probing as determined by the advisory committee, HRH2030 team, and research consultants with both female and male health professionals.
3-5 key informant interviews with MOH	10-15 IDIs with men in managerial positions in the health sector	

It should be noted that these are estimates and whether an IDI or FGD will be conducted will be determined by the specific research objective and phase, as will be determined by the research consultants and HRH2030 team.

It is important to note that while female health professionals in managerial positions are the focus of this research, males in leadership and managerial positions may be identified as either career barriers or supporters to females and therefore will be included in the study population in order to understand their attitudes and practices towards their female colleagues in the health sector. The inclusion of male health professionals, though, will not diminish the focus on female health professionals. In the quantitative component, a separate, shorter, but similar tool to the female professionals' will be adapted for male professionals to have points of gender comparison.

Female employees in the health sector that do not have a health background (those in human resources, finance, administration, etc.) will not be included in the study population, neither in the quantitative nor qualitative components; their inclusion would make the sample too heterogeneous and not focused on health professionals. It is also believed that the enablers and barriers for these professionals will, for the most part, be the same across the various technical sectors; therefore they are not unique to the health sector. Furthermore, in Jordan, the general practice is that career progression to the highest levels in the health sector is reserved only for health professionals. In fact, for the most senior positions, the Jordanian Ministry of Health's policy says that one must have a health background. For this reason, the research consultants, advisory committee, and HRH2030 team agreed that female nonhealth professions will not be included in the study population, and it is believed that the common barriers they face will already be covered in the existing study population.

In order to make the study more comprehensive, the qualitative component will complement the quantitative by including those not covered in the quantitative study population. These include female dentists, nurses/midwives, pharmacists, and other allied health professionals not necessarily in managerial positions only.

Research (operational) definitions

Health care sector: It is the organization of people, institutions, and resources that deliver health care services to meet the health needs of target populations. In this study, those representing the health sector will be MOH, private and teaching hospitals, health-related councils, and pharmaceutical companies.

Health services managers: In this study, this definition is limited to physicians, nurses, and pharmacists who plan, direct, coordinate and supervise the delivery of health care in an entire facility or a single department. This definition includes those in medical schools because the

majority of staff in medical schools in Jordan have a dual role in the affiliated teaching hospitals. This definition excluded people with a nonmedical background because the common practice in the Jordanian health care system is to assign managerial roles to health care professionals rather than to persons with nonmedical backgrounds.

For the purpose of this study, managers are divided into three levels: low-level managers, middle-level managers, top-level managers. These managers are classified in a hierarchy of authority and perform different tasks.

- Top-level managers include directors, presidents, vice-presidents, CEOs, and assistant directors. These managers are responsible for controlling and overseeing the entire hospital or health institution. They develop goals, strategic plans, hospital policies, and make decisions on the direction of the business.
- Middle-level managers include department directors, department managers, and chiefs (clinical department). They are accountable to the top management for their department's function. Middle-level managers devote more time to organizational and directional functions than top-level managers.
- Low-level managers include department supervisors, section supervisors, and section leads. These managers focus on controlling and directing.

Quantitative study

Study design

A cross-sectional survey will be carried out in an attempt to investigate the barriers and enablers that women face in health care facilities when trying to advance their careers and to meet the other study objectives. The population for this study includes female physicians, registered nurses/midwives, and pharmacists with or without managerial positions and managerial male physicians, nurses, and pharmacists holding at least a bachelor's degree in the health care system.

Data collection

A structured, pretested, and self-reported paper questionnaire adapted from the previous studies and based on theoretical frameworks will be used to collect the data from women . Another shorter and adapted version of the questionnaire will be used to collect the data from managerial male health professionals. The development of the questionnaires was guided by different models including the Gendered Organizational Structure (GOS) Model, Promotional Opportunity Model, Inclusionary Diversity Model, and Work/ Family Partnership Model.

All questionnaires were reviewed and approved by the advisory committee. The questionnaires have specific instructions that aim to reduce the chance of making mistakes. Questions are grouped in sections, positioned in a logical order, and clearly numbered to lessen the chance of getting lost in using this survey. The developed questionnaire solicits information regarding the demographic variables of the respondents; career ambitions and perceptions; family-related barriers; social-cultural factors, norms, and beliefs; organization structure and culture; negative stereotypes about women; glass ceiling; gender bias; women's perception of equity, equality, and nondiscrimination in the workplace; and other barriers. The respondents will be asked to express the extent of their agreement with the given statements using a five-point Likert-type scale ranging from 1 - strongly disagree, to 5 - strongly agree. Some questions will be answered by "Yes" or "No" answers. Cronbach alpha coefficients will be calculated to determine the reliability of the instrument.

Data analysis

SPSS IBM version 20 will be used to analyze the data. Data will be analyzed for each gender, separately. Data will be described using means (SD) for continuous variables; medians and interquartile range for discrete variables; and frequencies and percentages for categorical variables. The differences between the women's and men's perception will be compared using parametric and nonparametric tests, wherever appropriate. Each specific question (or "item") will have its response analyzed separately and have it summed with other related items to create a score for different domains of barriers. Some items will be reversed in coding before summing the items. Cronbach alpha will be calculated for each domain to assess the internal consistency. The differences between proportions will be tested using Chi-square tests. Barriers and factors associated with career advancement to higher management level will be described separately for each level of management. The barriers and factors related to progression to management positions will be analyzed using multinomial logistic regression considering the hierarchical complexity of predictor variables. The outcome variable for this analysis is the level of management position (no management roles, low-level management, middle-level management, and top-level management). Cox-proportional hazard models will be used to determine the factors and barriers associated with the time to progression to higher levels of management. A p-value of less than 0.05 will be considered statistically significant.

Qualitative study

Study design

A qualitative study utilizing a focus group discussion (FGD) approach and in-depth interview (IDI) approach will be conducted using semistructured, open-ended interview questions. Interviews will be conducted based on FGDs or individually, depending on the availability of the respondents. If the respondents are not able to participate in the FGD, they will be visited and interviewed individually face to face. The FGDs and interviews aim to collect in-depth data to understand women's career paths in the health care system from enrollment to senior management positions and to provide a comprehensive understanding of the factors that hinder and assist the career development of women to senior management positions. For the focus groups, a small group of six to eight women will be led through an open discussion by a skilled moderator. The focus groups and IDIs will be structured around a set of carefully predetermined and pretested questions, but the discussion will be free-flowing. The number of focus groups is set to be at least three groups. However, a number of FGDs will be conducted until we reach sufficient and detailed data on the research questions. In addition to focus groups, 20 to 30 IDIs will be conducted. Based on previous studies, this number of FGDs and IDIs seems to be adequate.

Data collection

FGDs and IDIs will explore the participants' responses on women's career paths to senior management positions and the barriers and enablers to their career advancement in detail using a semistructured topic guide.

The focus group will be conducted by a team consisting of a female moderator and assistant moderator. The moderator facilitates the discussion; the assistant takes notes and runs the tape recorder. Once consent forms and demographic surveys are collected and reviewed for completeness, the questioning will begin. The moderator will use a prepared script to welcome participants, remind them of the purpose of the group, and set ground rules. The focus group moderator has a responsibility to adequately cover all prepared questions within the time allocated. She also has a responsibility to get all participants to talk and fully explain their

answers. For IDIs with female health professionals, a female researcher will carry out the interview. For male participants, either a male or female researcher will carry out the interview.

In this regard, all IDIs and FGDs will be tape-recorded and transcribed with the participants' informed consent. Study participants will be assured that the information they provide will be kept strictly confidential, and no comments would be attributed directly to them or their institution.

Data analysis

We will analyze the qualitative data after all transcripts are read several times and coded. Texts will be coded, clustered, and developed into themes and subthemes for analysis. Content analysis and comparison of themes will be performed, and key themes, phrases, and practices will be used to organize data in a logical format. Areas where there is either clear consensus or debate will be highlighted, and relationships arising out of the data (within the conceptual framework) will be explored. Preliminary interpretations will be sent to several participants to improve the validity of the result.

The quantitative data will be imported into the qualitative data analysis software, Atlas.ti, allowing for an additional layer of mixed-methods analysis to the separate qualitative and quantitative data analyses, based on the agreed-upon data analysis plan. Discussion between the researchers will allow for clarification, testing, and revision of the findings.

IV. Ethical considerations

The ethical approval needs to be obtained from the Ethical Committee at MOH. For each interview and FGD, informed consent to conduct the interview and to record the answers will be obtained. The privacy and confidentiality of each respondent will be guaranteed by assigning codes to each interview, by not recording the names of the participants, by interviewing in a private location, and by storing the data in a safe location to which only the principal investigator and the senior researchers will have access. The participants will be clearly informed about the nature of the study in accessible language as part of the informed consent process. A brief about the project with contact information of the research consultants as well as the HRH2030 team will be provided. It must be ensured that the participants are not unduly burdened by the data collection procedure and that no harm will come to them as a result of their participation in the research. We will inform participants that if for any reason they decide not to continue, they have the right to withdraw at any time. Every effort will be made to protect the confidentiality and anonymity of the respondents.

Similarly, consent will be obtained from all participants in the quantitative study, and all ethical issues previously discussed will also apply. All electronic data will have a password known by the lead researcher.

V. Quality assurance

In order to assure the quality of the research and credibility of the data we will:

- Pretest the study quantitative questionnaire and the FGD and IDI guides. The quantitative structured questionnaire will be pilot tested on 10 female and 10 male health professionals in the health sector. The FGD and IDI guides will be tested by organizing one FGD and three to five interviews to adapt and further develop existing instruments to ensure they are tailored to and appropriate for the situation in Jordan.
- The research will be conducted under the supervision of the advisory committee and with close involvement of the HRH2030 team. The tools and data collection

- instruments were jointly discussed and developed by the advisory committee and with close involvement of the HRH2030 team. The data collection instruments will be translated into Arabic for use in the field using forward-backward translation methods.
- The data collectors will be trained by the research team on how to administer the questionnaires and collect the data. With permission, the semistructured interviews and the FGDs will be recorded to avoid data loss.
 - We will triangulate data asking the same questions to different groups of respondents (female health workers who have different managerial positions and females with no managerial positions) and by asking the same type of questions to the same groups using different methods (interviews and FGDs).

VI. Open data policy

Data results collected from this study are valuable resources and strategic assets that will be made freely available to the public, barring any privacy, confidentiality, security, or legal restrictions. Audio recordings and transcripts of the qualitative data, however, will not be accessible to the public.

VII. Dissemination

The results of this study will be disseminated to all possible stakeholders including health care providers and policymakers at different governmental levels. Policy briefs will be communicated to key stakeholders to show how the research results can be used to help women in the health care sector to progress in their career. A dissemination workshop/meeting will be facilitated at the end of the project. This meeting will take place during the final stage to discuss how these findings could be used in the formulation of HRH Policy for Jordan. Summaries of the study results will be prepared in English and in Arabic for dissemination. A policy brief will be produced based on the feedback and recommendations in these meetings, which will then be disseminated to all relevant stakeholders. Recommendations will be organized according to those targeting policymakers in the government, as well as male and female managerial professionals in the health sector. The final results will be also presented in national and international conferences and will be published in international peer-reviewed journals.

The report and any other outputs from the research will be uploaded into the USAID Development Experience Clearinghouse (dec.usaid.gov); HAQQI (www.haqqi.info), an open-access database of information regarding development and human rights issues in Jordan; and specifically within its gender clearinghouse so that others can easily access it in the future.

VIII. Resources

Project staff

Name	Role in the project
Principal investigator	Conduct the quantitative study, assist in the qualitative study, and lead the project
Coinvestigator	Conduct the qualitative study and assist the senior manager
Data manager	Data entry
Three research assistants	Assist in data collection

Equipment: Computer, SPSS, Recorder, Atlas.ti

IX. Work plan and time frame

Deliverable	Date
Matrix and analysis of available data including source, variables, and estimated quality	July 2017
Finalized research proposal and Ethical Review Board approval	July 2017 (proposal) August 2017 (IRB approval)
Quantitative and qualitative data collection tools in English and Arabic	August 2017
Original transcripts of interviews in Arabic and coded interviews in agreed-upon software	August-October 2017
A draft study results report in English, inclusive of the following sections: <ul style="list-style-type: none"> • Executive summary and introduction • Methodology • Research findings • Discussion and recommendations • Complete bibliography (as needed) • Data collection tools • Tables with data (based on the developed collection tool) 	November 2017
Final study results report in English	December 2017
Research summary in English and Arabic	December 2017
Presentation of findings to HRH2030, USAID, and health sector stakeholders in Arabic	December 2017

References

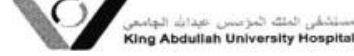
1. Kirchheimer B. Kirchheimer BA woman's place is in healthcare, as Modern Healthcare's Top 25 Women connote explosive growth in the number of female executives in C-suites. *Modern Healthcare*. 2007;37:6–7.
2. Davey B, Murrells T, Robinson S. Returning to work after maternity leave: UK nurses' motivations and preferences. *Work, Employment, and Society*. 2005;19:327–48.
3. Lantz PM. Gender and leadership in healthcare administration: 21st century progress and challenges. *Journal of Healthcare Management*. 2008;35:291–301.
4. Eiser JA, Morahan P. Fixing the system: Breaking the glass ceiling in health care. *LIA*. 2006;26:8–13.
5. Weil P, Mattis MC. To shatter the glass ceiling in healthcare management: who supports affirmative action and why? *Health Services Management Research*. 2003;16:224–33.
6. Cooper Jackson J Women middle managers' perception of the glass ceiling. *Women in Management Review*. 2011; 16(1):30-41.
7. Fagenson EA. *Diversity in Management: Introduction and The Importance Of Women In Management in Fagenson: Trends, Issues, and Challenges in Management Diversity*, Sage Newbury Park, CA, 1993

8. Bajido LM, Dicksonm MW. Perceptions of Organizational culture and women's advancement in Organizations: across- cultural examination. *Sex Roles* ,45:(5/6)
9. Oakley J. Gender-based barriers to senior management positions: understanding the scarcity of female CEOs. *J. Business Ethics*. 2000; 27(2)
10. Resign BR, Cotton. Easier said than done: Gender differences in perceived barriers to gaining a mentor. *Academy of Management*. 1998; 34(3):931-951
11. Eiser JA, Morahan P. Fixing the system: Breaking the glass ceiling in health care. *LIA*. 2006;26:8-13.
12. Eagly AH, Wood W, Diekmann AB. Social role theory of sex differences and similarities: A current appraisal. In *The developmental social psychology of gender*. Edited by Eckes T and Trautner HM, Mahwah, NJ: Erlbaum, 2000.
13. Loscocco K, Bird SR. Gendered paths: Why women lag behind in small business success. *Work and Occupation*. 2012;39:182-219.
14. Metcalfe BD. Women, management and globalization in the Middle East. *Journal of Business Ethics*. 2008;83:85-100.
15. Moghadam V. Patriarchy in transition: women and the changing family in the Middle East. *Journal of Comparative Family Studies*. 2004;35:137-52
16. Kazemi F. Gender, Islam and politics. *Social Research*. 2000;67:453-74.
17. Ely RJ, Ibarra H, Kolb D. Taking gender into account: Theory and design for women's leadership development programs. *Academy of Management Learning and Education*. 2011;10:474-93.
18. Ely RJ, Myerson DE. An organizational perspective undoing gender: The unlikely case of offshore oil platforms. *Research in Organizational Behavior*. 2010;30:3-34.
19. Tlaiss H, Kauser S. Perceived organizational barriers to women's career advancement in Lebanon. *An International Journal*. 2010;25:462-96.
20. Jamali D, Sidani Y, Kobeissi A. The gender pay gap revisited: insights from a developing country context. *An International Journal*. 2008;23:230-46.
21. Mansour M. Do women earn less than men? An empirical investigation in the Lebanese context. Master's Thesis. Beirut, Lebanon: American University of Lebanon; 2009.
22. El-Jardali F, Alameddine M, Dumit N, Dimassi H, Jamal D, Maalouf S. Nurses' work environment and intent to leave in Lebanese hospitals: Implication for policy and practice. *International Journal of Nursing Studies*. 2011;48:204-14.
23. Hutchings K, Weir D. Guanxi and Wasta: A comparison. *Thunderbird International Business Review*. 2006;48:141-56.
24. Tlaiss H, Kauser S. The importance of wasta in the career success of Middle Eastern managers. *Journal of European Industrial Training*. 2011;5:467-86.
25. Simpson R, Sturges J, Woods A, Altman Y. Career progress and career barriers: women MBA graduates in Canada and the UK. *Career Development International*. 2004;9:459-77.
26. Powell GN, Mainero LM. Cross-currents in the river of time: Conceptualizing the complexities in women's careers. *Journal of Management*. 1992;18:215-37
27. Lantz PM. Gender and leadership in healthcare administration: 21st century progress and challenges. *Journal of Healthcare Management*. 2008;35:291-301
28. Neubert MJ, Palmer LD. Emergence of women in healthcare leadership: transforming the impact of gender differences. *Journal of Men's Health and Gender*. 2004;1:383-7
29. Boutayeb A, Serghini M. Health indicators and human development in the Arab region. *Int J Health Geogr*. 2006;5:61.
30. Ministry of Health Annual Statistical Books.
<http://apps.MOH.gov.jo/MOH/En/publications.php>

31. High Health Council. The National Strategy for Health Sector in Jordan 2015-2019", 2015.
32. The Hashemite Kingdom of Jordan. The High Health Council. The National Strategy for Health Sector in Jordan 2015- 2019.
<http://www.hhc.gov.jo/uploadedimages/The%20National%20Strategy%20for%20Health%20Sector%20in%20Jordan%202015-2019.pdf>.
33. H. Hakki and S. Somach, Gender Analysis and Assessment, USAID/JORDAN, 2012.
34. R. Hendy, Investigating Female Labor Force Participation: A Dynamic Analysis for Egypt and Jordan, The Social-Economic Situation of Middle East Youth on the Eve of the Arab Spring Conference, Beirut. Workshop Discussion Paper, 2012.
35. M. Amer, The School-to-Work Transition of Jordanian Youth. Economic Research Forum, Working Paper 686, 2012
36. A. E. Kharouf, Factors Influencing the Employment of Women from the View of Employed and Non-Employed Women and Managers in Amman City, Unifem, 2000.
37. A. M. Majcher-Teleon and O. B. Slimène, "Women and work in Jordan: A case study of tourism and ICT sectors," European Training Foundation, 2009
38. HRH2030: Human Resources for Health in 2030. Women's Enrollment in the Health Workforce Literature Review.
39. USAID Takamol. Study of gender distribution of employees of the Ministry of Health, 2016
40. The Canadian Department of Foreign Affairs, Trade and Development, Switzerland's State Secretariat for Economic Affairs and UKaid. Gender Diversity in Jordan: Research on the Impact of Gender Diversity on the Economic Performance of Companies in Jordan
41. Al-Hmood, R. S. Arabic women: past problems and future challenges. Beirut: Al Ameen for publishing, 1994
42. USAID, "Jordan fiscal reform bridge activity (JFRBA) - Gender analysis," 2014.
43. UNDP. Report: Gender Equality and Women's Empowerment In Public Administration, Jordan case study, 2012.
44. M. Al-Mai'iah, "The Obstacles that Hinder the Nurses in Madaba's Hospitals," 2015
45. Al Adayleh, A. Administrative Problems confronting women working in public sector. Dirasat: University of Jordan. 1998; 14(4).
46. Azzam, A.-M., & Al- Shhab, I. Attitudes of women leaders in Jordan towards obstacles hindering women's reaching high leading position. Jordanian Journal for Applied Science - Human Sciences. 2003; 6(2), 114.

Annex B. Ethical Approval

جامعة العلوم والتكنولوجيا الأردنية
Jordan University of Science and Technology



لجنة أخلاقيات البحث على الإنسان
Institutional Review Board

Ref.:

الرقم: ٢٠١٧/١٠٥/٤١ تاريخ ٢٠١٧/٥/٤ م

التاريخ: هـ

الموافق: ٢٠١٧/٥/٤ م

Date:

الأستاذ الدكتور عميد كلية الطب المحترم
جامعة العلوم والتكنولوجيا الأردنية

تحية طيبة وبعد،،،

البحث العلمي المقدم من الأستاذ الدكتور يوسف خضر، بعنوان:

Women in management positions in the health sector

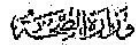
يرجى إعلامكم بموافقة لجنة أخلاقيات البحث على الإنسان على إجراء البحث العلمي المشار إليه أعلاه،
أن يتم التقيد بالشروط التالية:

١. الالتزام بسياسة البحث العلمي في المستشفى (رقم السياسة GM7601).
٢. الحفاظ على سرية المعلومات وأن لا تستخدم الا لغايات البحث العلمي.
٣. البحث يحتاج إلى استمارة الإقرار بالموافقة للمشاركين في البحث.
٤. تُعتبر الموافقة ملغاة تلقائياً بعد مرور عام من الحصول على موافقة لجنة أخلاقيات البحث على الإنسان (IRB)، أوفي حال عدم تزويد اللجنة بنتائج البحث. (مرفق مع القرار نموذج إغلاق البحث)

وتفضلوا بقبول فائق الاحترام،،،

رئيس لجنة البحث على الانسان

الأستاذ الدكتور يوسف القاعود



الرقم

التاريخ

الموافق

هاتف: ٠٢٠. ٩٦٦٦٦٠٠ فاكس: ٩٦٦٦٦٠٨٨٧٢٠ ص.ب ٨٦ عمان ١١١١٨ الأردن. الموقع الإلكتروني: www.moh.gov.jo

Annex C. Research Tools

I. Women's questionnaire – quantitative

City: _____

Name of Facility: _____

Department: _____

Section: _____

We are conducting a research to support the Ministry of Health (MOH) to develop strategies to enhance women's advancement in leadership positions. We are investigating why women lag behind men when it comes to promotions into managerial positions and would like to ask you a few question related to your experience. Participation is voluntary and we would very much appreciate your collaboration. Completing this questionnaire will cost you about 15 minutes. This questionnaire is anonymous; all results will be summarized in a report from all the facilities.

Do you agree to participate?

- Yes → Thank you! Please proceed to questions.
- No → Thank you for consideration. Please still complete questions A1 to A5.

A. Demographic and work characteristics

A1. What is your age? [] year

A2. What is your highest level of education?

1. Diploma	2. Bachelor's degree	3. Master's degree or high specialty	4. Doctoral degree or sub-specialty
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A3. What is the year at graduation from college? Year []

A4. Select your primary field of education.

1. Medicine	2. Nursing	3. Pharmacy
-------------	------------	-------------

A5. What is your current working title? _____

A6. Indicate your current marital status

1. Single	2. Married	3. Divorced	4. Widowed
-----------	------------	-------------	------------

A7. How many years of work experience do you have in this institution? []

A8. Indicate your highest current managerial level

- | | |
|--|---|
| 1. Has no managerial roles (Please skip to question A11) | 2. Low management level
(رؤساء جميع الشعب الطبية و التمريض و الخدمية) |
| 3. Middle management level
رؤساء جميع الأقسام الطبية و التمريض و الخدمية,
مدير الصيدلية, رئيس قسم الجودة, رئيس قسم
السجلات الطبية | 4. Top or Senior management
الإدارة العليا (المدراء: المدير التنفيذي, نائب المدير, مساعد المدير,
المدير الطبي, مدير التمريض, مدير الخدمات العامة, مدير الدائرة
الطبية المساندة أو الخدمات الطبية المساعدة) |

A9. At what year you were promoted to this management position? 1. Year [] 2. I have no managerial roles

A10. How many years have you been at your current position? []

A11. How many children do you have? 1. No children 2. One 3. Two
4. Three 5. Four 6. Five or more

A10. How many days you taken off work for family leave (maternity or care leave) in the last year? [] days

A11. Choose the option that best describes your husband's work status/organizational level? 1. My husband is at a lower managerial level than me
2. My husband is at the same managerial level as me
3. My husband is at a higher managerial level than me
4. My husband does not (currently) work

B. Career ambitions and perceptions					
B1. Are you continuously on the lookout for career advancement opportunities?		1. No	2. Yes		
B2. Do you have the needed skills and abilities for further career advancement to higher management positions?		1. No	2. Yes		
B3. Do you think that you deserve to be promoted to a higher management position?		1. No	2. Yes		
B4. Have you declined promotions in your current organization?	1. No, I have not been proposed any	2. No, I have accepted promotions		3. Yes	
B5. In what phase would you evaluate your career to be in?	1. Lowering	2. Stable	3. Rising		
C. Networking, mentorships and role models					
C1. Do you participate in social activities outside of the work setting with your colleagues?		1. No	2. Yes		
C2. Is networking and socializing outside of work important for future career advancement?		1. No	2. Yes		
C3. Do you have mentors who support you in this organization?		1. No	2. Yes		
C4. Is having a mentor important for future career advancement?		1. No	2. Yes		
D. Family and work					
D1. Has having children permanently altered your career goals?		1. No	2. Yes		
D2. Have you or your husband had to compromise on your career target in order to balance work and family life? (Select the option that best describes your experiences)	1. I have no husband				
	2. No, we have not had to make career target compromises				
	3. Yes, I have had to make career target compromises while my husband's career has taken first priority				
	4. Yes, my husband has had to make career target compromises while my career has taken first priority				
	5. Yes, we have both had to compromise on our career targets				
E. Norms, beliefs, and Glass ceiling "Glass ceiling describes the artificial barriers that prevent qualified women from advancing within their organization"					
Statement		Strongly disagree	Disagree	Agree	Strongly agree
E1. Men are more likely than women to hold managerial positions					
E2. Women are less interested than men in managerial positions					
E3. Women have less freedom because of their family responsibilities					

E4. Women and men are equally respected in the workplace.				
E5. People should be rewarded based on their performance, regardless of whether they are men or women.				
E6. In my opinion, in my workplace, women are more likely to face the barriers for career advancement than men do.				
F. SOCIAL CULTURAL FACTORS				
Statement	Strongly disagree	Disagree	Agree	Strongly agree
F1. Cultural beliefs are hostile to women career advancement				
F2. Men do not like sharing authority with women				
F3. Traditional attitude of women as weaker sex has an effect on their career progress				
G. ORGANIZATION POLICIES AND CULTURE				
Statement	Strongly disagree	Disagree	Agree	Strongly agree
G1. At my institution - opportunities for advancement are based on knowledge and skills				
G2. At my institution - There is an emphasis on reducing sources of unnecessary stress such as harassment and work-family conflict				
G3. At my institution - Access to education and training opportunities are equal for both genders				
G4. At my institution - there is family friendly work				
G5. Does your organization have a clear policy on maternity?	1. No	2. Yes		
H. FAMILY RESPONSIBILITIES				
Statement	Strongly disagree	Disagree	Agree	Strongly agree
H1. Women are able to balance work with family responsibilities				
H2. Husbands support their spouses' careers				
H3. Women of child bearing ages tend to be by passed for promotion and other opportunities.				
H4. Women hesitate to take up promotional opportunities for fear of conflict with family and domestic responsibilities				
H5. Lack of support from family and friends impede women career progress.				
I. INDIVIDUAL CHARACTERISTICS				
Statement	Strongly disagree	Disagree	Agree	Strongly agree
I1. Women don't hesitate to take up promotion opportunities				
I2. Women are able to gain credibility from peers, supervisors and senior managers				
I3. Women are pro-active and hardworking				
I4. Women are committed to their work				
I5. Women's traits are described as weak and passive				
I6. Women are supportive of other women				
J. DISCRIMINATION IN APPOINTMENTS				
Statement	Strongly disagree	Disagree	Agree	Strongly agree
J1. Promotions to the next management level is based on performance				
J2. Men are promoted faster than women				

J3. Women are not made aware of development and promotion opportunities within the organization					
K. COPING STRATEGIES					
Statement		Strongly disagree	Disagree	Agree	Strongly agree
K1. Where family demands are concerned, ambitious women seldom rely on organizational support					
K2. In career domain, ambitious women develop social networks and enter mentoring relationships					
K3. Successful women have influential mentors to support their challenging assignments and ensuring that they consistently exceed performance expectation					
L. From your experience working in this institution, on what basis people are promoted to managerial positions? (Select all that apply)					
1. Luck	2. Work Experience	3. Level of Education	4. Network and connections to other senior leaders		
5. Performance and achievement	6. Training	7. Support from direct supervisor	8. Wasta (nepotism)		
M. Please rate how strongly you agree or disagree with that each of the following factors act as a barrier to women career progression.					
Statement		Strongly disagree	Disagree	Agree	Strongly agree
M1. Discrimination against women by supervisors/line managers at point of promotion					
M2. Women receive fewer opportunities for professional development at work compared to what men receive					
M3. Women receive unfair judgment regarding their work performance					
M4. Manager's beliefs that women are not qualified for managerial positions as men					
M5. Workplace culture and values make it harder for women to succeed than men					
M6. Women lack mentors					
M7. Exclusion of women from informal networks					
M8. Lack of women in general/ line management					
M9. Senior management are not committed to gender equality/diversity					
M10. Women have poor access to education and training opportunities					
M11. Women have family and domestic responsibilities					
M12. Women Lack the education required for holding leadership positions					
M13. Women don't have self-confidence					
M14. Women are not equipped with the skills or temperament to handle the arduous role of a senior manager.					
M15. Women lack experience of the different areas of the organisation					
M16. Women are not made aware of development and promotion opportunities within the organization					

M17.	Women are not hardworking				
N. Women's perception of equity, equality and nondiscrimination in the workplace					
Statement		Yes	No	I don't Know	
N1. Is equality between women and men expressly mentioned as an institution value in strategic documents (e.g. reports, plans, and regulations)?					
N2. Does the institution keep information, disaggregated according to gender, related to the recruitment and selection processes?					
N3. Does the institution follow formal procedures for presenting complaints in case of discrimination on the grounds of gender?					
N4. When scheduling shifts, does the institution consider the need for both male and female workers to conciliate their professional, family and personal life?					
N5. Does the institution have its own facilities for sport activities or other health and well-being activities for male and female workers (e.g. gymnasium, swimming-pool)?					
N6. Does the institution have its own child care facilities for male and female workers' children (e.g. kindergarten)?					
N7. Does the institution offer female workers leave that exceeds the period foreseen by the law to take care of their young or handicapped children?					
N8. Does the institution offer flexible working hours in order to conciliate professional, family and personal life?					
N9. Does the institution allow workers to work part-time					

The next section is to be filled by women with managerial roles of any level only

O. To what extent have the following tools, resources and initiatives, if any, helped you to overcome the barriers to career advancement that females face? Please respond to each one:					
	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
O1. Having relevant work experience					
O2. Competency on the job and producing high quality work					
O3. Given opportunity and support from the institution					
O4. Have advanced education level					
O5. Have adequate training					
O6. Willing to learn new things and take on responsibilities					
O7. Have high interpersonal / people skills					
O8. Hard working					
O9. Self- confidence					
O10. Having Wasta					

II. Men's Questionnaire – quantitative

We are conducting research to support the Ministry of Health (MOH) to develop strategies to enhance women's advancement in leadership positions. We are investigating why women lag behind men when it comes to promotions into managerial positions and would like to ask you a few question related to your experience. Participation is voluntary and we would very much appreciate your collaboration. Completing this questionnaire will cost you about 15 minutes. This questionnaire is anonymous; all results will be summarized in a report from all the facilities. Do you agree to participate?

- Yes → Thank you! Please proceed to questions.
- No → Thank you for consideration. Please still complete questions A1 to A8.

Men's Questionnaire

City: _____

Name of Facility: _____

Department: _____

Section: _____

P. Demographic and work characteristics

A1. What is your age? [] year

A2. What is your highest level of education?

1. Diploma	2. Bachelor's degree	3. Master's degree or high specialty	4. Doctoral degree or sub-specialty
------------	----------------------	--------------------------------------	-------------------------------------

A3. Select your primary field of education.

1. Medicine	2. Nursing	3. Pharmacy
-------------	------------	-------------

A4. What is your current working title? _____

A5. How many years of work experience do you have in this institution? []

A6. Indicate your highest current managerial level

1. Low management level

2. Top or Senior management

(رؤساء جميع الشعب الطبية و التمريض و الخدمية) الإدارة العليا (المدراء: المدير التنفيذي, نائب المدير, مساعد المدير, مدير الطبي, مدير التمريض, مدير الخدمات العامة, مدير الدائرة الطبية المساندة أو الخدمات الطبية المساعدة)

3. Middle management level

(رؤساء جميع الأقسام الطبية و التمريض و الخدمية, مدير الصيدلية, رئيس قسم الجودة, رئيس قسم السجلات الطبية)

A7. Choose the option that best describes your wife's work status/organizational level

- My wife is at a lower managerial level than me
- My wife is at the same managerial level as me
- My wife is at a higher managerial level than me
- My wife does not (currently) work

A8. Have you or your wife had to compromise on your career target in order to balance work and family life? (Select the option that best describes your experiences)

1. I have no wife
2. No, we have not had to make career target compromises
3. Yes, I have had to make career target compromises while my wife's career has taken first priority
4. Yes, my wife has had to make career target compromises while my career has taken first priority
5. Yes, we have both had to compromise on our career targets

Statement				
B. Norms, beliefs, and glass ceiling	Strongly disagree	Disagree	Agree	Strongly agree
B1. People should be rewarded based on their performance, regardless of whether they are men or women.				
B2. Women and men are equally respected in the workplace.				
B3. On the average, women managers are less capable in contributing to an organization's overall goals than are men.				
B4. Women have less freedom because of their family responsibilities				
B5. Promotions to the next management level is based on performance				
C. Socio-cultural factors	Strongly disagree	Disagree	Agree	Strongly agree
C1. Cultural beliefs are hostile to women career advancement				
C2. Men do not like sharing authority with women				
D. Organizations policies and culture	Strongly disagree	Disagree	Agree	Strongly agree
D1. At my institution - opportunities for advancement are based on knowledge and skills				
D2. At my institution - There is an emphasis on reducing sources of unnecessary stress such as harassment and work-family conflict				
D3. At my institution – Women have less access to education and training opportunities than men				
D4. At my institution - There is family friendly work				
D5. At my institution - Women are less likely than men to hold managerial positions				
D6. At my institution - Men are promoted faster than women				
D7. At my institution - Women are more likely to face the barriers for career advancement than men are.				
E. Family responsibilities	Strongly disagree	Disagree	Agree	Strongly agree

E1. Women are not able to balance work with family responsibilities				
E2. Women are less committed to work because they often have family commitments				
E3. Women should be supported from family and friends to have career progress.				
F. Individual characteristics	Strongly disagree	Disagree	Agree	Strongly agree
F1. Women have the needed skills and abilities for further career advancement to higher management positions.				
F2. Women are pro-active and hardworking				
F3. Women are committed to their work				
F4. Women's traits are weak and passive				

F. From your experience working in this institution, on what basis are people promoted to managerial positions? (Select all that apply)

- | | |
|-----------------------------------|--|
| 1. Luck | 2. Work Experience |
| 3. Level of Education | 4. Network and connections to other senior leaders |
| 5. Performance and achievement | 6. Training |
| 7. Support from direct supervisor | 8. Wasta (nepotism) |

Statement	Strongly disagree	Disagree	Agree	Strongly agree
H1. Discrimination against women by supervisors/line managers at point of promotion				
H2. Women receive fewer opportunities for professional development at work compared to what men receive				
H3. Women receive unfair judgment regarding their work performance				
H4. Manager's beliefs that women are not qualified for managerial positions as men				
H5. Workplace culture and values make it harder for women to succeed than men				
H6. Women lack mentors				

H7. Exclusion of women from informal networks				
H8. Lack of women in general/ line management				
H9. Senior management are not committed to gender equality/diversity				
H10. Women have poor access to education and training opportunities				
H11. Women have family and domestic responsibilities				
H12. Women lack the education required for holding leadership positions				
H13. Women don't have self-confidence				
H14. Women are not equipped with the skills or temperament to handle the arduous role of a senior manager.				
H15. Women lack experience of the different areas of the organization				
H16. Women are not made aware of development and promotion opportunities within the organization				
H17. Women are not hardworking				
H. Men's perception of equity, equality and nondiscrimination in the workplace				
Statement	Yes	No	I don't Know	
11. Is equality between women and men expressly mentioned as an institution value in strategic documents (e.g. reports, plans, and regulations)?				
12. Does the institution keep information, disaggregated according to gender, related to the recruitment and selection processes?				
13. Does the institution follow formal procedures for presenting complaints in case of discrimination on the grounds of gender?				
14. When scheduling shifts, does the institution consider the need for both male and female workers to conciliate their professional, family and personal life?				
15. Does the institution have its own facilities for sport activities or other health and well-being activities for male and female workers (e.g. gymnasium, swimming-pool)?				
16. Does the institution have its own child care facilities for male and female workers' children (e.g. kindergarten)?				
17. Does the institution offer female workers leave that exceeds the period foreseen by the law to take care of their young or handicapped children?				
18. Does the institution offer flexible working hours in order to conciliate professional, family and personal life?				
19. Does the institution allow workers to work part-time?				

Focus Group Discussion and Semistructured Interviews – qualitative

1. What is your current age? [] year
2. What is your highest level of education?

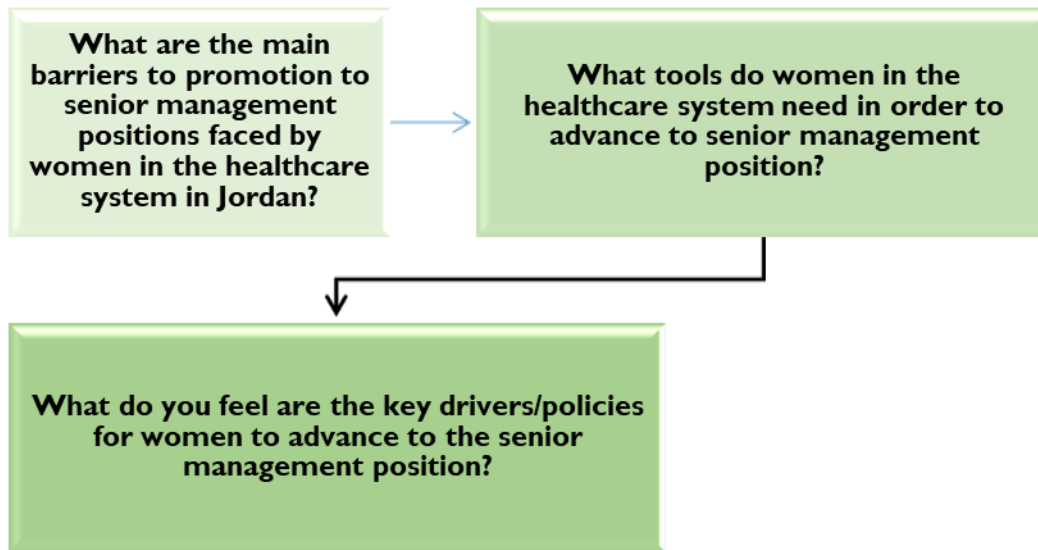
1. Diploma	2. Bachelor's degree	3. Master's degree or high specialty	4. Doctoral degree or sub-specialty
------------	----------------------	--------------------------------------	-------------------------------------
3. Select your primary field of education.

1. Medicine	2. Nursing	3. Pharmacy	4. Other
-------------	------------	-------------	----------
4. Indicate your current marital status

1. Single	2. Married	3. Divorced	4. widowed
-----------	------------	-------------	------------
5. If not single, how many children do you have? []
6. What is the title of your highest management position _____
7. How many years of work experience do you have? [] year
8. How many years have you been in management positions? [] year
9. Choose the option that best describes your husband's work status/organizational level

1. My husband is at a lower managerial level than me 2. My husband is at the same managerial level as me 3. My husband is at a higher managerial level than me 4. My husband does not (currently) work 5.	
---	--

Open-ended interview questions



III. Informed Consent – Focus Group Discussions with Staff

Introduction

Good morning/afternoon, my name is _____ and I work for _____. We are researchers recruited by a project called Human Resources for Health 2030 (HRH2030), to assist the Ministry of Health in developing policies to support health workers in their work. We will be conducting interviews and focus group discussions with female health professionals including nurses/midwives, midwives, pharmacists and doctors. We are conducting these activities with the aim to identify factors influencing female career progression in the health workforce. The information of this study is intended to be used for policy making by the Ministry of Health. Before we continue, we would like to ask you to read the consent form and to tell us if you agree to participate.

We have invited you to participate in a discussion with several other people with similar experiences. This enables you to discuss your experiences with each other. Your participation is voluntary and it will have no consequences for your work or your situation in this facility. During the discussion you can stop any time, even if you agreed to participate at the start of the focus group discussion. We will organize these discussions in several facilities. In addition, we will ask these questions to nurses, midwives, pharmacists and doctors in different facilities and we have a form with questions that will be filled out.

We expect that this focus group discussion will last for about one and a half hours. During this time, we will start by making sure that you are comfortable and we can answer any questions you might have. We then will ask questions about work in this facility and why women lag behind men when it comes to promotions into managerial positions and beyond. We ask you to express yourself freely. No one else but the other people participating and us researchers will be present. We will not ask you to share your personal experiences and you do not have to share any information you do not feel comfortable sharing. You do not have to give us a reason for your refusal. We request that everyone in this group not to tell others outside this group what was said during the discussion and keep what was said in the group confidential.

This study will not directly benefit you, but your participation is likely to help us find out more about how health workers working in the Ministry of Health facilities can be better supported in performing their tasks. The discussion is confidential and anonymous. We assure everyone that no one's name can be linked to the research and that instead of names we will use numbers. These numbers are only known to us, the researchers, and we will lock that information up with a lock and key. With your approval, this discussion will be recorded, and we will also make sure that your name is not mentioned on the recorded discussion. The notes and the recorded discussion will only be accessed by the research team. These will be stored in a safe place that is only accessible to the researchers. The recorded discussion will be destroyed when we have finalized our study.

The information you will give us today will not be shared with anyone outside the research team. When the results of the study are ready we will share a summary of the results with the facilities that participated. After this, the results will be made widely available to others, such as the Ministry of Health and the High Health Council.

Contact person

If you have any questions about the research you can contact (Prof. Yousef Al-Gaud, Tele: 0796802040).

Consent

I have read the information about the study and how it is conducted as described above. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant: _____

Signature of Participant: _____

Date: _____

Day/month/year

IV. Informed Consent – In-depth Interviews with Staff

Introduction

Good morning/afternoon, my name is _____ and I work for _____. We are researchers recruited by a project called Human Resources for Health 2030 (HRH2030), to assist the Ministry of Health in developing policies to support health workers in their work. We will be conducting interviews and focus group discussions with female health professionals including nurses, midwives, pharmacists and doctors. We are conducting these activities with the aim to identify factors influencing female career progression in the health workforce. The information of this study is intended to be used for policy making by the Ministry of Health. Before we continue, we would like to ask you to read the consent form and to tell us if you agree to participate.

We have invited you to participate as we can learn a lot from your experiences. Your participation is voluntary and it will have no consequences for your work or your situation in this facility. During the interview you can stop any time, even if you agree to be interviewed at the start of the interview.

We expect that our interview will last for about one hour and during this time, we will ask you questions about your work and what barriers you face that inhibit your career progression to high management positions. We will ask these questions to nurses, midwives, pharmacists and doctors in different facilities. In addition, we have a questionnaire for nurses, midwives, pharmacists and doctors with questions that you can answer on a form.

We ask you to be open and express yourself freely. No one else but the interviewer will be present unless you would like someone else to be there. If you feel that this environment is not private enough, we will look for another place, where you prefer to be interviewed. If you feel uncomfortable answering certain questions, you are free to refuse and we will continue the interview with the following questions.

The interview is confidential and anonymous. We assure that your name cannot be linked to the research and instead of names we will use numbers. These numbers are only known to us, the researchers, and we will lock that information up with a lock and key. With your approval, the interviews will be recorded, and we will also make sure that your name is not mentioned on the recorded interview. The interview notes and the recorded interview will only be accessed by the research team. These will be stored in a safe place that is only accessible to the researchers. The recorded interview will be destroyed after September, when we have finalized our study.

This study will not directly benefit you, but your participation is likely to help us find out more about how female health workers working in the Ministry of Health facilities can progress in their career.

The information you will give us today will not be shared with anyone outside the research team. We will review our notes after interview and when we are not sure if we understood your answers correctly we would like to ask your permission to come back and ask for clarification. When the results of the study are ready we will share a summary of the results with the facilities that participated. After this, the results will be made widely available to others, such as the Ministry of Health and the High Health Council.

Contact person

If you have any questions about the research you can contact (Prof. Yousef Al-Gaud, Tele: 0796802040).

Consent

I have read the information about the study and how it is conducted as described above. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant: _____

Signature of Participant: _____

Date: _____
Day/month/year

VIII. References of Research Report

1. Al Adayleh, A. (1998). "Administrative Problems Confronting Women Working in Public Sector." *Dirasat*, 14(4). University of Jordan.
2. E. Kharouf. (2000). "Factors Influencing the Employment of Women from the View of Employed and Non-Employed Women and Managers in Amman City." Unifem.
3. *Al Rai* newspaper. (May 21, 2017). "Anisa Conference for Health Professions."
4. Amer, M. (2012). "The School-to-Work Transition of Jordanian Youth." Economic Research Forum, Working Paper 686.
5. Azzam, A.-M. and Al-Shhab, I. (2003). "Attitudes of Women Leaders in Jordan Towards Obstacles Hindering Women's Reaching High Leading Position." *Jordanian Journal for Applied Science - Human Sciences*, 6(2), p. 114.
6. Bajido, L. M. and Dickson, M.W. (2001). "Perceptions of Organizational Culture and Women's Advancement in Organizations: Across Cultural Examination." *Sex Roles*, 45(5/6).
7. Bern, S. L. (1981). "Gender Schema Theory: A Cognitive Account of Sex Typing." *American Psychological Association Inc.*, 88(4): 354-364.
8. Block, C. J., et al. (2011). *Contending with Stereotype Threat at Work: A Model of Long-Term Responses*. p. 571 (referencing Steele, C. M., Spencer, S. J., and Aronson, J. [2002]).
9. Boutayeb, A. and Serghini M. (2006). "Health Indicators and Human Development in the Arab Region." *International Journal of Health Geographics*, 5, p. 61.
10. Brett, J.M. and Stroh, L.K. (2003). "Working 61 Plus Hours a Week: Why Do Managers Do It?" *Journal of Applied Psychology*, 88(1), pp. 67-78.
11. Broadbridge, A. and Hearn, J. (2008). "Gender and Management: New Directions in Research and Continuing Patterns in Practice." *British Journal of Management*, 9, pp. 38-49.
12. Burke, J. R. and McKeen, C. A. (1997). "Not Every Managerial Woman Who Makes It Has a Mentor." *Women in Management Review*, 12(4), pp. 136-139.
13. Canadian Department of Foreign Affairs, Trade and Development; Switzerland State Secretariat for Economic Affairs, and UKaid. (2015) "Gender Diversity in Jordan: Research on the Impact of Gender Diversity on the Economic Performance of Companies in Jordan."
14. Cooper Jackson, J. (2011). "Women Middle Managers' Perception of the Glass Ceiling." *Women in Management Review*, 16(1), pp. 30-41.
15. Cordano, M. and Scherer, O. C. (2002). "Attitude Towards Women as Managers." *Women in Management Review*, 17(2), pp. 51-60.
16. Coughlan, A (2002). *Women in Management in Ireland*. Dublin: Irish Business Employer's Confederation.
17. Cross, C. (2010). "Barriers to the Executive Suite Evidence from Ireland." *Leadership & Organization Development Journal*, 31(2), pp. 104-119.
18. Cross, C. and Linehan, M. (2006). "Advancing Females Career in the High-Tech Sector." *Women in Management Review*, 21(1), pp. 28-39.
19. Davey, B., Murrells, T., and Robinson, S. (2005). "Returning to Work After Maternity Leave: UK Nurses' Motivations and Preferences." *Work, Employment, and Society*, 19, pp. 327-348.
20. Davidson, M. J. and Burke, R. J. (2004). *Women in Management World Wide: Facts, Figures and Analysis*, Ashgate: Andover.

21. Dhatt, R., et al. (2017). "The Role of Women's Leadership and Gender Equity in Leadership and Health System Strengthening." *Global Health, Epidemiology and Genomics*, 2. doi:10.1017/gh.2016.22.
22. Eagly, A. H., Wood, W., and Diekmann, A. B. (2000). "Social Role Theory of Sex Differences and Similarities: A Current Appraisal." In Eckes, T. and Trautner, H. M. (Eds.), *The Developmental Social Psychology of Gender*. Mahwah, N. J.: Erlbaum.
23. Eiser, J. A. and Morahan, P. (2006). "Fixing the System: Breaking the Glass Ceiling in Health Care." *LIA*, 26, pp. 8-13.
24. Ely, R. J., Ibarra, H., and Kolb, D. (2011). "Taking Gender into Account: Theory and Design for Women's Leadership Development Programs." *Academy of Management Learning and Education*, 10, pp. 474-493.
25. Ely, R. J. and Myerson, D. E. (2010). "An Organizational Perspective Undoing Gender: The Unlikely Case of Offshore Oil Platforms." *Research in Organizational Behavior*, 30, pp. 3-34.
26. Fagenson, E. A. (1993). "Diversity in Management: Introduction and the Importance of Women In Management." In Fagenson, E.A. (Ed.), *Trends, Issues, and Challenges in Management Diversity*, Newbury Park, Calif.: Sage.
27. Flanders, M. L. (1994). *Breakthrough: The Career Women's Guide to Shattering the Glass Ceiling*. London: Paul Chapman Publishing.
28. Hakki, H. and Somach, S. (2012). "Gender Analysis and Assessment." USAID/Jordan.
29. Hendy, R. (2012). "Investigating Female Labor Force Participation: A Dynamic Analysis for Egypt and Jordan." Workshop discussion paper: The Social-Economic Situation of Middle East Youth on the Eve of the Arab Spring Conference, Beirut.
30. High Health Council, Hashemite Kingdom of Jordan. (2015). "The National Strategy for Health Sector in Jordan 2015-2019." <http://www.hhc.gov.jo/uploadedimages/The%20National%20Strategy%20for%20Health%20Sector%20in%20Jordan%202015-2019.pdf>.
31. Al-Hmood, R. S. (1994). *Arabic Women: Past Problems and Future Challenges*. Beirut: Al Ameen for Publishing.
32. HRH2030. (2016) "Women's Enrollment in the Health Workforce Literature Review." Unpublished paper prepared for USAID.
33. Hutchings, K. and Weir, D. (2006). "Guanxi and Wasta: A Comparison." *Thunderbird International Business Review*, 48(1), pp. 141-156.
34. Jamali, D., Sidani Y., and Kobeissi, A. (2008). "The Gender Pay Gap Revisited: Insights From A Developing Country Context." *Gender in Management: An International Journal*, 23, pp. 230-46.
35. Jamali, D., Sidani Y., and Safieddie, A. (2005). "Constraints Facing Working Women in Lebanon." *Women in Management*, 20(8), pp. 581-594.
36. El-Jardali, F., et al. (2011). "Nurses' Work Environment and Intent to Leave in Lebanese Hospitals: Implication for Policy And Practice." *International Journal of Nursing Studies*, 48, pp. 204-214.
37. Jordan MOH. "Annual Statistical Books." <http://apps.MOH.gov.jo/MOH/En/publications.php>
38. Jordan MOH. (2012) "Ministry of Health Strategic Plan 2013-2017."
39. Jordan MOPIC. (2015). "Jordan 2025: A National Vision and Strategy."
40. *Jordan Times*. (May 16, 2017). "SIGI to Hold Conference on Women in Health Sector Saturday."
41. Kazemi, F. (2000). "Gender, Islam and Politics." *Social Research*, 67, pp. 453-474.
42. Kirchheimer, B. and Kirchheimer, B. (2007). "A Woman's Place Is in Healthcare, as Modern Healthcare's Top 25 Women Connote Explosive Growth in the Number of Female Executives in C-Suites." *Modern Healthcare*, 37, pp. 67.

43. Klaile, A. (2013). "Why Are So Few Women Promoted into Top Management Positions?" Department of Economics. Hanken School of Economics.
44. Al-Lamki, S. (1999). "Paradigm Shift: A Perspective on Omani Women in Management in the Sultanate of Oman. *Advancing Women in Leadership*, 2(2), pp. 652-666.
45. Lantz, P. M. (2008). "Gender and Leadership in Healthcare Administration: 21st Century Progress and Challenges." *Journal of Healthcare Management*, 35, pp. 291-301.
46. LaPierre, T. A. and Zimmerman, M. K. (2012). "Career Advancement and Gender Equity in Healthcare Management." *Gender in Management: An International Journal*, 27(2), pp. 100-118.
47. Lopez-Claros, A. and Zahidi, A. (2005). *Women's Empowerment: Measuring the Global Gender Gap*. Geneva: World Economic Forum.
48. Loscocco, K. and Bird, S. R. (2012). "Gendered Paths: Why Women Lag Behind in Small Business Success." *Work and Occupation*, 39, pp. 182-219.
49. Lyness, S.K. and Madeline, E.H. (2006). "When Fit Is Fundamental: Performance Evaluations and Promotions of Upper-Level Female and Male Managers." *Journal of Applied Psychology*, 91(4), pp. 777-785.
50. Al-Mai'iah, M. (2015). "The Obstacles that Hinder the Nurses in Madaba's Hospitals."
51. Majcher-Teleon, M. and Slimène, O. B. (2009). "Women and Work in Jordan: A Case Study of Tourism and ICT Sectors." European Training Foundation..
52. Mansour M. (2009). "Do Women Earn Less Than Men? An Empirical Investigation in the Lebanese Context." Unpublished master's thesis, American University of Lebanon, Beirut.
53. Martin, C. L. and Halverson, C. F., Jr. (1983). "The Effects of Sex-Typing Schemas on Young Children's Memory." *Child Development*, 54(3), pp. 563-574.
54. McKimm, J., et al. (2015). "Women and Leadership in Medicine and Medical Education: International Perspectives." In Tsouroufli, M. (Ed.), *Gender, Careers and Inequalities in Medicine and Medical Education: International Perspectives* (pp. 69-98). London; Emerald Group Publishing.
55. Metcalfe B. D. (2008). "Women, Management and Globalization in the Middle East." *Journal of Business Ethics*, 83, pp. 85-100.
56. Moghadam, V. (2004). "Patriarchy in Transition: Women and the Changing Family in the Middle East." *Journal of Comparative Family Studies*, 35, pp. 137-152.
57. Neubert, M. J. and Palmer, L. D. (2004). "Emergence of Women in Healthcare Leadership: Transforming the Impact of Gender Differences. *Journal of Men's Health and Gender*, 1, pp. 383-387
58. Oakley, J. (2000). "Gender-Based Barriers to Senior Management Positions: Understanding the Scarcity of Females CEOs. *Journal of Business Ethics*, 27(2).
59. Powell, G. N. and Graves, L. M. (2003). *Women and Men in Management*. Newbury Park, Calif.: Sage.
60. Powell, G. N. and Mainero, L. M. (1992). "Cross-Currents in the River Of Time: Conceptualizing the Complexities in Women's Careers." *Journal of Management*, 18, pp. 215-237.
61. Raggins, B. R. and Cotton, J. (1991). "Easier Said Than Done: Gender Differences in Perceived Barriers to Gaining a Mentor." *Academy of Management Journal*, 34, pp. 931-951.
62. Rudman, L. A. and Phelan, J. E. (2010). "The Effect of Priming Gender Roles on Women's Implicit Gender Beliefs and Career Aspirations." *Social Psychology*, 41(3), pp. 192-202.
63. Rusaw, A. (1994). "Mobility for Federal Women Managers: Is Training Enough?" *Public Personnel Management*, 23(2), pp. 257-262.

64. Schein, V.E. (2001). "A Global Look at Psychological Barriers to Women's Progress in Management." *Journal of Social Issues*, 57(4), pp. 675-688.
65. Simpson, R., et al. (2004). "Career Progress and Career Barriers: Women MBA Graduates in Canada and the UK." *Career Development International*, 9, pp. 459-477.
66. Singh, V., Vinnicombe, S., and Kumra, S. (2006). Women in Formal Corporate Networks: An Organizational Citizenship Perspective. *Women in Management Review*, 21(6), pp. 458-482.
67. Smith, N., Smith, V., and Verner, M. (2012). "Why Are So Few Females Promoted into CEO and Vice-President Positions? Danish Empirical Evidence 1997-2007." *Industrial and Labor Relation Review*.
68. Swan, E. (2011). "A Testing Time, Full of Potential? Gender in Management, Histories and Futures." *Gender in Management: An International Journal*, 25(8), pp. 661-675.
69. Tlaiss, H. and Kauser, S. (2011). "The Importance of Wasta in the Career Success of Middle Eastern Managers. *Journal of European Industrial Training*, 5, pp. 467-486.
70. Tlaiss, H. and Kauser, S. (2010). "Perceived Organizational Barriers to Women's Career Advancement in Lebanon." *Gender in Management: An International Journal*, 25, pp. 462-496.
71. UNDP. (2012). "Gender Equality and Women's Empowerment in Public Administration: Jordan Case Study."
72. USAID. "Jordan Fiscal Reform Bridge Activity (JFRBA) - Gender Analysis."
73. USAID Takamol Project. (2016). "Study of Gender Distribution of Employees of the Ministry of Health."
74. Valian, V. (1998). *Why So Slow? The Advancement of Women*. Cambridge, Mass.: MIT Press.
75. Vinnicombe, S. and Singh, V. (2011). "Locks and Keys to the Boardroom." *Gender in Management: An International Journal*, 26(3), pp. 200-211.
76. Weil, P. and Mattis, M. C. (2003). "To Shatter the Glass Ceiling In Healthcare Management: Who Supports Affirmative Action and Why?" *Health Services Management Research*, 16, pp. 224-233.
77. Weir, D. T (2003). "Human Resource Development." In *The Arab Middle East: Fourth Paradigm HRD in a Complex World* (pp. 69-82).

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