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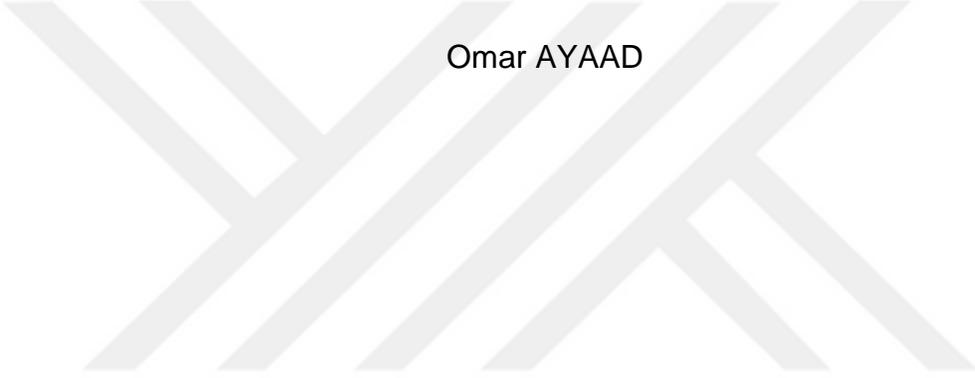
OUTSOURCING IN JORDANIAN HOSPITALS

Omar AYAAD

PH.D. Dissertation

Ankara, 2018

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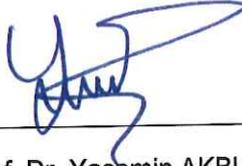
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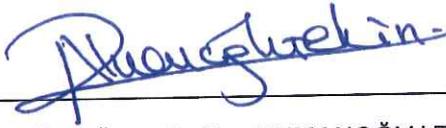
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31/12/2018

Omar AYAAD

Omar AYAAD

ETİK BEYAN

Bu çalışmadaki bütün bilgi ve belgeleri akademik kurallar çerçevesinde elde ettiğimi, görsel, işitsel ve yazılı tüm bilgi ve sonuçları bilimsel ahlak kurallarına uygun olarak sunduğumu, kullandığım verilerde herhangi bir tahrifat yapmadığımı, yararlandığım kaynaklara bilimsel normlara uygun olarak atıfta bulunduğumu, tezimin kaynak gösterilen durumlar dışında özgün olduğunu, Tez Danışmanının **Prof. Dr. Yusuf ÇELİK**danışmanlığında tarafımdan üretildiğini ve Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Yönergesine göre yazıldığını beyan ederim.

31/12/2018 *Omar AYAAD*

ABSTRACT

AYAAD, Omar. *Outsourcing in Jordanian Hospitals*, PH.D. Dissertation, Ankara, 2018.

Outsourcing in the healthcare system has been continuously extended and reached a significant financial size in developing countries' healthcare systems such as Jordan.

The primary aims of this study were to explore the current status of outsourcing adoption in Jordanian hospitals including the extent, reasons, advantages, disadvantages, barriers of currently outsourced services, and to identify the general perception of Jordanian hospital managers regarding the benefits, risks, and barriers for outsourcing. 83 hospitals (29 public hospitals, 2 university hospitals, and 49 private hospitals) were surveyed using a self-administered questionnaire. Sampling was not taken in order to reach the universe as a whole. The data was analyzed using SPSS version 21.

The results showed that all hospitals outsource one or more services. The waste disposal was the most outsourced service (n=79; 95%). The managers indicated that the currently outsourced services contributed positively in hospitals works mainly in decreasing the workforce (n=65; 78%), and contributed negatively mainly in the loss of privacy and confidentiality (n=34; 41). The primary challenge of the currently outsourcing processes was political interference (n=61, 73%). The most frequently used strategy for monitoring was the regular meetings with the supplier (n=61; 73%). The results showed that the managers strongly agree or agree (at least 76% of them) with the general benefits of outsourcing, and strongly agree or agree (6%-32% of them) with the general risks of outsourcing. The results concluded that outsourcing is widely adopted for both medical and supportive services, and it is perceived as a strategic advantage in Jordanian hospitals. Qualitative studies and financial analysis were recommended to be performed in order to complete the full picture of outsourcing process in Jordan.

Keywords:

Outsourcing, Hospitals, Services, Jordan, Perception, Senior Managers, Medical Services, Supportive Services.

ÖZET

AYAAD, Omar. Ürdün Hastanelerinde Dış Kaynak Kullanımı, Doktora Tezi, Ankara, 2018.

Dış kaynak kullanımı, karşılıklı sözleşme veya ortaklık yönetimine dayanan bir dış satıcıya iç hizmet sunmaktır. Sağlık hizmetlerinde dış kaynak kullanımı sürekli olarak artarak ve Ürdün gibi gelişmekte olan ülkelerin sağlık sistemleri de dahil olmak üzere üretim yönetimi sürecinde önemli bir finansal büyüklüğe ulaşmıştır.

Bu çalışmanın temel amaçları, Ürdün'deki hastanelerde mevcut dış kaynak kullanımının mevcut durumunu, kapsamını, nedenlerini, avantajlarını, dezavantajlarını, hâlihazırda dış kaynak kullanım hizmetlerinin önündeki engelleri de içerecek şekilde araştırmak ve Ürdündeki hastane yöneticilerinin, dış kaynak kullanımının faydaları, riskleri ve engelleri ile ilgili genel algılarını belirlemektir. Bu çalışma, bu hastanelerdeki üst düzey yöneticiler tarafından gerçekleştirilen anket formu kullanılarak incelenen 83 hastaneyi (29 devlet hastanesi, 2 üniversite hastanesi ve 49 özel hastane) kapsamaktadır. Bütün evrene ulaşmak için örneklem seçiminde bulunulmamıştır. Veriler SPSS 21 sürümü kullanılarak analiz edilmiştir.

Sonuçlar tüm hastanelerin (n = 83; % 100) bir veya daha fazla hizmet sunumu için dış kaynak kullandığını göstermiştir. Atık bertarafı en çok dış kaynaklı hizmettir (n = 79; % 95). Yöneticiler, hâlihazırda dış kaynak kullanım hizmetlerinin, temel olarak hizmet maliyetini azaltmada (n = 60; % 72) yönde etkilediğini belirtmişledir (n = 34; %41). Hastaneler tarafından dış kaynak kullanımına başlanması öncesinde en sık kullanılan süreç ilişki stratejisinin tedarikçi ile belirlenmesi (n = 45; % 54) olmuştur. Dış kaynak kullanım süreçlerinin öncelikli sorunu siyasi müdahaleler olarak karşımıza çıkmaktadır (n = 61; % 73). Sürekli izleme için en sık kullanılan strateji ise tedarikçi ile yapılan düzenli toplantılardır (n = 61; % 73). Sonuçlar yöneticilerin, katılıyorum ve kesinlikle katılıyorum şeklinde vermiş oldukları yanıtlarla (en az % 76'sı) dış kaynak kullanımının

genel faydaları ile dış kaynak kullanımına yönelik olumlu yönde güçlü bir fikir birliğine varmış olduklarını göstermektedir. Bununla birlikte yöneticiler gizliliğinin ihlali ve mahremiyetin korunmasının zayıflaması ile dış kaynak genel riskleri konusunda da kesinlikle katılıyorum ve katılıyorum diyerek görüş bildirmişlerdir (katılımcıların %6`sı ve %32`si). Sonuçlar, dış kaynak kullanımının hem tıbbi hem de destekleyici hizmetler için geniş çapta benimsendiği ve Ürdün hastanelerinde stratejik bir avantaj olarak algılandığı sonucuna varmıştır. Ürdün'de dış kaynak kullanımı sürecinin tam resmini tamamlamak için nitel çalışmalar ve finansal analiz yapılması önerildi.

 Anahtar Kelimeler:

Dış Kaynak Kullanımı, Hastaneler, Hizmetler, Ürdün, Algılama, Kıdemli Yöneticiler, Tıbbi Hizmetler, Destek Hizmetleri.

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ABBRIVIATION

ACT	**Agency Cost Theory**
CF	**Client Factors**
GDP	**Gross Domestic Product**
GGE	**General government expenditure**
GGHE	**General Government Health Expenditure**
HHC	**High Health Council**
KBT	**The Knowledge-Based Theory**
MOH	**Ministry of Health**
OC	**Outsourcing Contract Factors**
OOPS	**Out of Pocket Expenditure**
PF	**Political Factors**
PvtHE	**Private Health Expenditure**
RBT	**Resource-Based Theory**
RDT	**Resource Dependency Theory (**
RMS	**Royal Medical Services**
TCT	**Transaction Cost Theory**
THE	**Total Health Expenditure**
WHO	**World Health Organization**
UNRWA	**United Nations Relief and Works Agency**

Vendor Factors

VF

TABLE S

INTRODUCTION

Outsourcing is defined as an agreement with an external agent to afford services which could be prepared internally (Runar Edvardsson & Durst, 2014). Other definition of outsourcing is described as " the decision by an institution to contract out services to an external provider at an agreed fee for specified period" (Ikediashi, 2014). Various determinants have driven use of outsourcing. The most important outsourcing determinants are globalization (Hill & Jones, 2007; Mujasi, 2016), advancements in information and communication technologies, wide-ranging reforms happening in public sector organizations, and expanded the consumers' need and expectation (Mujasi, 2016).

Furthermore, well outlined outsourcing can offer a lot of significant benefits to organizations. These advantages are summarized as: Cost decline, increase focus on the core business, increase innovation, adaptability, and technology, increase reach to outside competencies, and improve a quality of works (Henley, 2006). Deposit of a lot of advantages of outsourcing implementation, several researchers explore specific risks and disadvantages associated with outsourcing. These include: not achieving the originally planned goals, the decline of core services and competencies, Increase dependency on the supplier, decrease quality, and loss of control (Mujasi, 2016).

Outsourcing adaptation is expanding quickly in this times with forecasts for more development. The characteristics and type of services being outsourced by healthcare institutions have expanded (Akbulut,Terekli, & Yıldırım, 2013; Dalton & Warren, 2016; Moschuris & Kondylis, 2006; Yigit, Tengilimoglu, Kisa, & Younis, 2007). Sometimes, outsourcing utilization fronts some significant difficulties such as deficiency policy for controlling the process and lack of needed resources (Hill & Jones, 2007; Mujasi, 2016).

Hospitals are especially rich settings for outsourcing due to their role in providing a wide and complicated collection of services. Many services could be outsourced by different organizations (Guimarães & Carvalho, 2011). However, hospitals have been faced a pressure of demographic variations and limited financial resources during the last years,

(Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016). For this reasons, many hospitals have utilized outsourcing to lessen expenses, enhance elasticity, reach the qualified expertise, enhance the quality of care, and enhance satisfaction (Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016).

Many studies were conducted to view the current status of outsourcing in developed countries (Martin, 1996; Moschuris & Kondylis, 2006; Young & Macinati, 2012).But Few studies address outsourcing from the viewpoint of developing countries like Jordan (Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016).

Jordan has insufficient natural resources and tremendous population growth rate, and is low middle-income country. Jordan, like many developing countries, is starting to sense demographic shifts and scarcity of financial resources. Moreover, there is a shortage of adequate talents in healthcare institutions. Furthermore, the issue of Syrian refugees in Jordan continues to raise the obligations of the health system (HHC, 2015; WHO, 2015). For this reason, outsourcing is considered a suggested approach to gain work productivity.

Limited researches and data as well as there is a deficiency of academic study regarding the outsourcing in Jordanian hospitals are considered the primary drivers of this research. This restricts any possible forces to improve the use of suitable outsourcing by Jordanian hospitals and calls for a well-organized research to contribute knowledge to facilitate evaluation of the suitability and workability of outsourcing, and to outline interventions to improve appropriation of outsourcing where relevantly is necessary. This led to the inquiry regarding contemporary outsourcing practices; in addition to motives and obstacles to outsourcing between Jordanian hospitals and what can be prepared to raise relevant and reasonable outsourcing by the hospitals.

CHAPTER 1: LITERATURE REVIEW

1.1 GENERAL OVERVIEW

It is almost impossible to recognize the root of outsourcing as a practice or a scientific concept (Awolusi, 2012). Many definitions regarding outsourcing are found in the literature, but initially, it is better to explore the outsourcing definitions based on popular dictionaries.

According to Collins English Dictionary (2014), the outsourcing concept is defined as "the act of subcontracting (work) to another company," and as purchase goods or service by contract from an external supplier according to Online Oxford English Dictionary (2016) and Longman Dictionary of Contemporary English (2003) (Dictionary.com, 2014; Dictionary, 2003; Online-Oxford-English-Dictionary, 2016).

The applying of outsourcing had begun in eighteenth-century in England and had been adopted in different production sectors when it accepted in the 1980s in the service sector (Cheon, Grover, & Teng, 1995). Consequently, outsourcing has been applied differently over the decades, according to enterprise type and organization works and faced difficulties and obligations. In 1989, the identification of outsourcing was as a market strategy was started to be used (Mullin, 1996).

Recently, the outsourcing has turned to services after focusing on good manufacturing at the earlier time (Hutzschenreuter, Lewin, & Ressler, 2011), and the outsourcing has appeared as an important strategic tool considering the new competitive market environment and based on adequate planning and process (Beaugency, Sakinç, & Talbot, 2015; Machado Guimarães & Crespo de Carvalho, 2013; Zhu, Hsu, & Lillie, 2001).

Outsourcing is more complicated than other kinds of agreements. The evolution of outsourcing models must represent its iterative nature (King, 2005). It consists of an agreement among institutions where both contractors are dependent on each other and directed by an accepted contract (Vagadia, 2012).

Kern and Willcocks (2000) defined outsourcing as a decision to contract the goods, human resources, processes, and ventures to an external party, who in transfer affords and operates good and services for financial benefits over an agreed term (Kern & Willcocks, 2000). Moreover, Elmuti and Kathawala (2000) recognized outsourcing is a process of restructuring of the organization and relationships around core competencies (Elmuti, Kathawala, & Monippallil, 1998).

Based on relational exchange theory, Goles and Chin (2005) defined the outsourcing as a continuous relation between the service provider of outsourcing and the user, and they recognized it as mutual recognition and a long-term orientation to achieve the benefits reliant on the other firm (Goles & Chin, 2005).

Various classifications of outsourcing are mentioned in previous studies. Outsourcing types were listed to"

- General outsourcing: one of outsourcing types which contains the three forms of outsourcing (selective outsourcing, value-added outsourcing, and corporative outsourcing).
- Process outsourcing: the agreement to manage the whole activities in the businesses by the external vendor
- Transitional outsourcing: the process of transforming the pattern of a technological program.
- Business benefit contracting refers to agreement that spelt out the outsourcing provider's contribution to the customers regarding benefits to the business and payments the customers to pay upon the outsourcing provider's ability to deliver those benefits (Bustinza, Molina, & Gutierrez-Gutierrez, 2010; Dibbern, Goles, Hirschheim, & Jayatilaka, 2004).

Bustinza and his colleagues (2010) address many forms such as:

- Creative contracting: it is an agreement to compass the individualized requirements are included in the contractual arrangement to serve particular client demands

- Spin-offs: the agreement of internal department to sell the good and services as a new company.

- Multi-sourcing: the agreement and contract between different suppliers;

- Equity holdings: the achievement of equity for one agent in the coupled agent;

- Value-added outsourcing: the agreement and cooperation between two suppliers for market purposes (Bustinza et al., 2010).

1.2 HISTORY OF OUTSOURCING

Many reports and studies stated about outsourcing in the past years. This unique process suddenly has attention and now it is under the focus of policymakers, publishers, and managers.

To acquire a satisfactory knowledge regarding the outsourcing, it is better to have a look at historical origins of outsourcing in different aspects and examine the various determinants that induce outsourcing in these days. The history of outsourcing is presented in Outsourcing: past, present and future in details (Gonzales, Dorwin, Gupta, Kiran, & Schimler, 2004), and we can summarize it as the following:

The late 1800s, some countries had been considered as wealth due to a list of technological advancements. These advancements include:

- Shifting of countries from highways to waterways, then finally to railroads;

- Advancements in communications sectors: The development of the telegraph and railroads motivated companies to extend to larger provincial and let institutions to be global.

The mentioned advancements lead to prepare the environment for outsourcing. The first utilization of outsourcing in current history was in the 1950s with time sharing. In the 1980s, major consulting companies designed distant management services. As a result, a customer's operations, systems, and applications were controlled and operated remotely from a Network Operations Center (NOC), and the client was guaranteed excellent service by the application of service level agreements (Gonzales et al., 2004).

New models of outsourcing appeared in the late 1980s and 1990s with the intellectual advance in internet technology and software. IT outsourcing was a sequence: companies desired to divest from specific departments, processes, and employees to focus on different business concerns. This was an improved of "division of labor" (Gonzales et al., 2004; Guimarães & Carvalho, 2011).

In outsourcing IT service, it has been shown in the literature that the maturity of outsourcing in the IT business as evolution through various stages:

- Enlarging functionality during the past century: Some firms produced several services which many people would have preferred to use, and few could produce services. This lead to the evolution of remote terminals and time-sharing that enabled remote places to use these facilities. In this situation, the clients outsourced extended functionality to the suppliers.

- Physical outsourcing during the 1960s and The 1970s: It is obvious that computers are going to perform a central role in decreasing costs over businesses because computers improve automate tasks in regular and functional based.

- Offshore and process outsourcing: As the industries comprised the newest technologies, many tasks enhanced to be standardized and ordinary. Moreover, as companies struggled to cope with globalization and the free trade economies of the 20th century, they converted to be more complex and hard to control. The clear way was to outsource support and maintenance duties of the department to local suppliers (Gonzales et al., 2004).

A marketing research organization states that India stills the popular acknowledged leader in offshore outsourcing. Based on this survey, in Europe only, outsourcing expanded by 40% in 2003, and 75% of large and medium-sized organizations have recognized the application of offshore services through 2004 (Gonzales et al., 2004).

There were many motivating factors argued organizations in twenty century to utilize outsourcing in their businesses such as human resource availability; advancement in English proficiency level, the education policy and foundation; increase the flexibility of governmental policies, and constitutional and legislative background; advancement in

infrastructure support such as telecom bandwidth; accessibility to IT enterprises. In addition to several economic factors and structure of the market such as tax environment including general business taxes, and non-wage costs: including worker protection and security such health insurance; increasing users demand, constitutional obligations, liberalization, and incentives (Gonzales et al., 2004; Guimarães & Carvalho, 2011).

Throughout the current decade, the globalization aspect has gradually, but regularly, become one dominant of the industrial processes and strategies of organizations throughout the world. In addition to rising technology and trade, Globalization has also issued in the globalization of technology. Since reviewed in Globalization and Technology, that manner proceeds in three steps:

- Universal exploitation of domestically manufactured assets.
- Global innovation creation – focusing on innovations created under a single owner crossed the earth.
- Collaborations - anywhere both the owner/domestic business and the international organization cooperate on the creation and marketing of innovations (Gonzales et al., 2004).

Gonzales and his colleagues (2004) summarized several conducted surveys, predicted that around 3.3 million business functions and $136 billion of cash might move to outsourcing in the next years; The real scope of the outsourcing will be shown in the subsequent 10-15 years; and continue the strengthening of the nations' market by bringing in workers that have a higher actual influence on the economy. The company will take the outsourcing more to the core and invest in outsourcing in tremendous areas, this increase the need to the availability of adequate framework and monitoring are needed to ensure proper implementation of outsourcing in future (Gonzales et al., 2004).

Additionally, outsourcing is suspected to increase eliminated of jobs, decrease employment rate and increase abuse for the national employer has stated if outsourcing extends to several areas by hiring one group over the other which will lead to force highly trained graduates to go out of the country; but in the same time, reducing costs

enable the organizations to get more benefits and lessens expenses, this lead to increase the demands for various goods and services, and generates different jobs (Gonzales et al., 2004; Guimarães & Carvalho, 2011; Runar Edvardsson & Durst, 2014).

Moreover, The level of governments' interventions to adapt the outsourcing should be so varied in the future to balance between an "interventionist" role to get benefits and a role to prevent market failures and build a comprehensive environment for outsourcing (Gonzales et al., 2004; Guimarães & Carvalho, 2011).

1.3 THEORIES OF OUTSOURCING

There are various theoretical approaches that investigated the outsourcing in the literature consisting Resource-Based Theory (RBT); Resource Dependency Theory (RDT); The Knowledge-Based Theory (KBT); Transaction Cost Theory (TCT); and Agency Cost Theory (ACT).

Each theory discusses a dilemma faced the adoption of outsourcing, but separately do not afford a holistic model for defining and discussing the forms of the uncertainty of outsourcing (Perunović, 2007).

1.3.1 Resource-Based Theory

RBT reveals the influence of organization resources on its production and operation, and the results of competitive advantage on businesses work (Barney, 1991). A resource is described as anything that supplements the power of companies to be valuable (Wernerfelt, 1984). The characteristics of resource were defined as imitate, valuable, relevant; rare and efficiently designed, hard to be duplicated by competitors, and non-substitutability (Barney, 1991; Cheon et al., 1995; Paravastu, 2007). According to RBT, every business is supposed to form its in-house tactics to earn business benefits (Ikediashi, Ogunlana, & Bowles, 2012).

By outsourcing, the resource should enhance the capability to maximize the profits (Ikediashi & Mbamali, 2014). Moreover, the outsourced services and goods are expected to be unique or accessible in a cost smaller than same services. By outsourcing, maintained competitive advantage might not be feasible all the time and process based

on the resource-based framework, this entails the resource to be unique, inappropriate duplicated. Nonetheless, it could be reached by a different combination of the outsourced and in-house resources (Cheon et al., 1995) .

1.3.2 Resource Dependency Theory

RTD was initiated by Emerson (1962) and developed by Pfeffer and Salancik (1978) (Emerson, 1962; Pfeffer & Salancik, 1978). Resource Dependency Theory (RDT) indicates that companies should depend on the environment to get and sustain the resources (Pfeffer & Salancik, 1978). According to Paravastu (2007), task environments possess three dimensions; broadly disseminated of the power and the authority in the environment, availability of crucial resources, and the design of connection and inter-relations between organizations. These aspects constitute the resource importance, discretion, and alternatives (Paravastu, 2007).

In outsourcing researches, RTD presents not only an analysis of the reasons for outsourcing but also why control is required and performed by parent companies (Pathirage, Amaratunga, & Haigh, 2008; Vagadia, 2012). RDT is found to be suitable for testing the outsourcing agreements because the businesses utilized the outsourcing to obtain relevant resources that they do not have (Chen & Chen, 2003; Vagadia, 2012).

Based on that, the companies should utilize policies to obtain the important resources, organize the resource-dependent relations with the outside atmosphere to guarantee the continuation. The created environment may have an impact on arrangements and approaches to adopt one of the appropriate outsourcing types (Vagadia, 2012).

1.3.3 The Knowledge-Based Theory

The Knowledge-Based Theory (KBT) declares that the knowledge is a primary capacity of the organization that differentiates between groups and affords advantage for competition (Leonard-Barton, 1992). It takes different forms such as worker, technical and managerial skills, and standards and values (Kroes & Ghosh, 2010).

Based on that, the organizations should utilize strategies to get the necessary knowledge, create the relations with the external environment to ensure the continuation

of benefits and development. This situation may have an impact on arrangements and approaches to adopt one or more of the appropriate outsourcing approaches.

1.3.4 Transaction Cost Theory

TCA is a method that explicitly examines the sequences of the decision to execute a transaction or venture within the companies or in the market. TCA includes four costs linked to transacting: research costs which are used collect the information to know and choice outsourcing providers, contracting costs which are used to discuss and write the contract, monitoring costs which are used   to ensure that the outsourcing supplier according to the agreed agreement; and enforcement costs which associated with the outsourcing providers when it deviated from the contract (Vagadia, 2012; Williamson, 1991). Moreover, Transaction costs are influenced by several factors including a level of unpredictability, frequency, and specificity (Paravastu, 2007).

Aubert et al. (2003) examining the properties of outsourcing agreements; noticed that optimal contract is the result of a trade-off between the costs of writing a contract and the proposed costs related with the level of advantage (B. Aubert, Houde, Patry, & Rivard, 2003).

1.3.5 Agency Cost Theory

An agency relationship defined as a contract supporting by one or more persons (the principal(s)) involve different body (the agent) to execute service on their behalf including the delegating some decisions and giving authority to the agent. This relationship focuses on determining the most effective associations given opinions about people (Jensen & Meckling, 1976; Vagadia, 2012).

ACT describes the relationship and cost of a deal (Eisenhardt, 1989). Agency costs are the expenses acquired through the master to guarantee that the company will operate in the principal's affair (Cheon et al., 1995).

 Business expenses are the expenses acquired through the master to guarantee the principal's affair of company operation. Agency costs comprise three elements; monitoring costs, bonding costs and residual losses. The affected factors of the agency

costs are consequence risk, ability to organize, the ability of performance measurement (Cheon et al., 1995).

1.3.6 Contingency Theory

Organizations face a tremendous point of uncertainty in their environments due to variations in revenues. This seeks to assure remarkable stability via beginning outsourcing agreements (Koberg & Ungson, 1987). Regarding outsourcing, it is seen in the context of resources needed on the organization; whereby an institution has decided, received and coupled a kit of resources that were accessible in the environment. The resources may not be adequate for it to satisfy its purposes. That makes the system to notice a difference between current and needed abilities. This may also be generated through the dynamics of the outside conditions. The dynamic setting may display different chances and risks facing the company (Cheon et al., 1995).

Contingency theory would divine the outsourcing arrangement to be a consequence of the fit among environmental and organization. In the uncertain environment, the company cannot expect whether the resource would be required in the future. The firm may choose to be more adaptability which may be accomplished throughout getting the resource over short-period outsourcing rather than by internalizing by large expenses if the resource miss benefit and would no longer be able to produce revenues or matches or substitutes of the resource may be accessible that may have a greater advantage. Based on the aspect of contingency theory, environmental uncertainty is a predecessor to outsourcing (Cheon et al., 1995; Vagadia, 2012)

1.4 OUTSOURCING RELATED CONCEPTS

Many concepts related to outsourcing concept development such as core competencies, network organizations, lean, and downsizing concepts. This section discuss these concepts and their relation with outsourcing.

1.4.1 Core Competencies

Actually, the concept of core competencies is not a new concept. It is most frequently defined as knowledge, skills, and abilities that differentiate one organization from other

and play a key role in achieving the vision (Schmitt, Blue, Aschenbrener, & Viggiano, 2011). As reported by Leonard-Barton (1992), the core competencies concept have named in different ways such as distinctive abilities; invisible beings; and basic or organizational abilities (Leonard-Barton, 1992). There are three basic features that distinguish core competencies from the other. First, a core competency provides the potential to reach a wide variety of markets. Second, a core competency makes a significant contribution to the perceived benefit that the customer has achieved from the final product. Finally, it is very difficult to imitate a basic ability by competitors (Prahalad & Hamid, 2007).

Given the core competence and outsourcing perspective, it will be a stepping stone to focus on the basic skills of hospitals such as diagnosis, treatment and rehabilitation services, and to transfer all other services outside it to external suppliers. This approach could bring many opportunities to gain all the possible benefits of outsourcing to hospitals (Akyürek, 2013; Belohlav, Cook, Olson, & Drehmer, 2010; Okumuş & İsfendiyaroğlu, 2010).

Today, healthcare institutions frequently provide supportive services such as security, food, cleaning, and laundry services to other suppliers. However, there are now many new areas of outsourcing that push the boundaries of core competencies concept. These areas include radiology, pathology, pharmacy and other general applications related to health services (Akyürek, 2013).

1.4.2 Network Organizations:

The regulation of business activities in the form of networking is developing together with other approaches such as outsourcing, core competences and lean management. It is not possible to think about these concepts separately.

Network organizations consist of organizations that carry out all the business functions independently from each other in the structure of a traditional and hierarchical organization. Network organizations include not only an organizational structure but also a network of relationships among many organizations. Each organization is a flexible

structure that can use its own independent competence (Bettis & Hitt, 1995; Podolny & Page, 1998; Vega-Redondo, 2013).

From the point of view of a management style, network organizations can be described as: structures in which more than one actor is repeating with others, pursuing permanent change relations and at the same time there is no official organizational authority to mediate and mediate disputes that may arise during this change (Podolny & Page, 1998; Tseng, Yu, & Seetoo, 2002).

Many types of network organization types can be defined based on the characteristics of contractual relationships and interaction relationships between network members. The most noteworthy of these is the classification that Miles and Snow developed in 1992. In this classification, network organizations are divided into internal, balanced and dynamic (Tseng et al., 2002).

1.4.3 Lean Management:

The basis of lean management is identifying and removing all activities that may be considered unnecessary or wasteful. By selecting and eliminating the steps that do not create added value in the processes, the irregularity of the flow between the activities will become more linear by decreasing the flow, and the problems and defects can be easily identified and removed from the process (Marley, 2006). Outsourcing is considered as one of the lean tools to decrease waste and improve the efficiency of the works by giving the services to whom carry out efficiently (Machado Guimarães & Crespo de Carvalho, 2013).

1.5 OUTSOURCING DECISION FORCES

Many inter-related factors in the external business environment have driven the utilization of outsourcing. These include:

1.5.1 Cost and Financial Forces

The needed expertise employment in the organization by proper contractual arrangements is considered essential factors improve the financial profits of organization (Aubert, Houde, Rivard, & Patry, 2017). The organizations prefer doing

outsourcing for their process and services when the adequate external agent can offer them with same or higher quality and low cost and waste (Useem & Bryce, 1998).

Cost savings is recognized as the essential drives for most organizations, although it can not be guaranteed (Kroes & Ghosh, 2010). Moreover, weak management and availability of indirect and social expenses may affect the cost-saving (Gillett, 1994).

Based on previous   literature, we can conclude that the outsourcing can be utilized to create cost transparent; transform fixed cost to variable cost; decrease cost; improve cost efficiency; drop planned payment for staff who work internally; decrease investment cost in non-main purposes; manage the cost of operation; evaluate external provider's lower cost structure; and preserve the property of organization (Bustinza et al., 2010; Hietalahti & Kuoppala, 2005; Hsiao et al., 2009; Jiang, Frazier, & Prater, 2006; Kroes & Ghosh, 2010).

1.5.2 Strategical Forces

The main idea of outsourcing is to enhance the effectiveness and efficiency of work by employ the externally found specialized expertise, knowledge, means, and abilities (Harland, Knight, Lamming, & Walker, 2005; Kenyon & Meixell, 2011). Furthermore, strategically driven outsourcing actions help works and offer the strategic and competitive benefits.   The strategic interests defined outsourcing decision as the capability of a firm to focus on core process by outsourcing activities (Quinn, 1999; Quinn & Hilmer, 1994). The common strategic goals to outsource services is to increase the focus on essence competencies (Arnold, 2000), and to get the proper co-worker with strategic benefits (Arnold, 2000; Quinn, 1999).

From the literature, it can be concluded that the outsourcing can be utilized to advance strategic positioning; focus market growth and strategies opportunities; increase the trust organization product and services; be more dynamic with encountered problems and risks; focus on core competencies; manage the variation of demand ; rise elasticity and profits; control and handle the operational process; and access new markets in different areas (Belohlav et al., 2010; Ghodeswar & Vaidyanathan, 2008; Hietalahti & Kuoppala, 2005; Kroes & Ghosh, 2010).

1.5.3 Political Forces

The outsourcing through public institutions may be launched for purposes quite different from the private one (Hietalahti & Kuoppala, 2005). Nevertheless, the political motives vary between the developing and developed countries (Gale & Luo, 2004).

Addressing laws and regulations are perceived to be a different reason for outsourcing by public corporations (Kakabadse & Kakabadse, 2000). For instance, the performance of the public laboratory does not depend on profitability. The ideas are considered as social due to political stresses impact on public sector organizations (Avery, 2000).

 Organization ın in public sector, in general, was less efficient than the private sector due to increase competition to improve the efficiency and consequently will be shown in the value they present to residents (Dunleavy, Margetts, Bastow, & Tinkler, 2011).

This lets organizations seeking to cope with contemporary national or international aims by governmental parties. Also, political stakeholders may support outsourcing opinions, to express the needs to perform positive developments in the community (Hietalahti & Kuoppala, 2005).

1.5.4 Accessibility to Knowledge Forces

Access to knowledge and information has recognized in today's highly-competitive global economy (Bustinza et al., 2010). Human resource strategies are outlined to generate and reinforce the views of intellectual resources and knowledge management which encourage strategy development (Snell, Shadur, & Wright, 2005). Also, access to knowledge is fundamental to national security and economic maturity in all nations especially in the developing countries where access to knowledge becomes a distinctive interest.

The access to knowledge is broadly recognized as the main factor toward organization improvement. Moreover, the workforce can enhance shareholder value by 10 to 20 percent if it was planned efficiently and strategically (Becker & Huselid, 2003). Some businesses can gain high income and advanced competitive profits due to possessing the access to high-experienced workers in knowledge-intensive businesses (Runar

Edvardsson & Durst, 2014).   Nevertheless, to obtain such advantages, long-term outsourcing agreements are required in developing countries (Lam & Chua, 2009)

From the literature, it can be concluded that the outsourcing can be utilized to obtain expertise, skills and innovative ideas; get the new knowledge about technologies which not ready in-house; expand the knowledge markets; enhance innovation amongst workers; permit quicker response to new needs by utilizing the up to date information about the market, product, and services; predetermine policy to improve competition (Ghodeswar & Vaidyanathan, 2008; Harland et al., 2005; Kroes & Ghosh, 2010; Lam & Chua, 2009).

1.5.5 Globalization Forces

During the last few years, the external conditions have become more global for many industries. Many businesses are struggling on a worldwide basis. Frequently, there has been a turn away from national businesses as separate existences, preserved from each other by trade obstacles and length and time limitations, towards an arrangement in which public markets are joining into one global market (Hill & Jones, 2007; Vagadia, 2012). This has lets organizations to extend the geographic range of their operations regarding the businesses. These developments have shown institutions with meaningful chances. In several market sectors, consumers have shifted to be more mature and demanding as result of becoming more knowledgeable about market processes. So businesses are now required to be extra reacting to client demands in a variety fields (Vagadia, 2012).

1.6   APPLICATION OF OUTSOURCING

Application of the outsourcing requires an investigation of outsourcing and determination if it is suitable for the business or not, if so, how the outsourcing should be directed. According to McIvor framework for understanding the outsourcing process (2000), each organization may conduct different steps and phases to ensure proper operation of outsourcing (McIvor, 2000).

1.6.1 Defining the Current Extent of Organization

This stage in outsourcing evaluation and management is focused on recognizing the significant actions that should be implemented to produce products and services given by the company to its clients. That will be done by classifying the critical processes that should be executed within the organization as well as those conducted by outside experts to determine a frame and range of the company with knowing the current boundary of the business (McIvor, 2000).

1.6.2 Activities' Importance Analysis

This stage in outsourcing evaluation includes defining the importance of the operations and actions that should be done to satisfy client needs and have a competitive advantage. An analysis of the competitive situation and client needs can have an essential role to classify the activities which are significant for success in the business environment (McIvor, 2000).

1.6.3 Capability Analysis

A vital element of outsourcing analysis is to decide if businesses can gain continuous higher performance levels internally by conducting important activities. If the company can utilize these activities in an effective way, they should remain to be performed inside the business without needs to be done by external suppliers. So the organization should rigorously assess their abilities comparing with both suppliers and competitors before deciding to outsource. This investigation can recognize origins of competitive advantage (McIvor, 2000).

1.6.4 Strategic Sourcing Options Analysis

The analysis of sourcing options identifies the dimensions of important activities and organizational capability to outsourcing. These two dimensions determine the strategic sourcing choices. Sourcing options are affected by different factors such as the variation in performance between the organization and supplier; possessing a sufficient knowledge regarding these differences and excellent performance can afford a substantial evidence of the sustainability of higher achievement. Technology and its impact on sourcing decision should also be analyzed in addition to the external

environment which includes all determinants in the outside setting such as the legal context, business growth rates, and the degree of competition and obstacles. Many of behavioral issues can restrict the decision of businesses if they need to implement outsourcing or not such as workforce resistance. Besides, the degree of risk related to supply market has to be surveyed if outsourcing is considered (McIvor, 2000).

1.6.5 Developing Relationship Strategy

Identifying the outsourcing process and relationship is essential to adequate implementation of outsourcing approach. The decision of the relationship type should consider all goals and purpose of outsourcing implementation. The lack of obvious objectives can generate significant challenges in utilizing the outsourcing in many fields especially in the choice of supply relationship type, forming the deal and manipulating the relationship with the supplier (McIvor, 2000).

1.6.6 Monitoring Outsourcing Process and Relationship

McIvor (2000) identified several strategies the managers should keep in place for regular monitoring the outsourcing relationship and process such as meetings with supplier to evaluate the performance in continuous; tracing the expenses of the services and their operation on a regular basis; study the customer satisfaction with services; review the market by conducting researches to identify supplier availability and capabilities; benchmark the services with the best organization; and analysis the benefits of the outsourced service to an organization(McIvor, 2000).

1.6.7 Contracting Issues

Organizations who are acknowledging outsourcing should know the business and legal issues linked with outsourcing, and how many of these issues can be apportioned in a contract. An outsourcing agreement will carry many aspects such as service level agreement. The transfers of personnel; the shift of assets; price and payment terms which should be accepted in the agreement; contract termination; and flexibility (McIvor, 2000).

1.7 FACTORS AFFECTING OUTSOURCING

Several factors affect the implementation and using the outsourcing decisions. The below is the most affected determinants found in the literature.

1.7.1 The Stability of Country and Organization

The availability of security, stability and maturity are considered important factors for improving investment in country. The country situation has been recognized as a great effect on stability and survival of the organizations (Mitchell, 1994). Additionally, environmental risk and political security in developing countries face financial difficulties due to the advancement in practice and rules (Lagomarsino, Garabrant, Adyas, Muga, & Otoo, 2012). Consequently, the development of political stability leads the improvement of economic in the region.

Many nations in this region enrolled in fights such as Syria, Iraq and Yemen. For this reason, reforming health financing is not considered as a primary issue (Alexander, 2010). This presents the significance of environmental aspect in country or institution stability. As a consequence, it may have a real influence on the commitment to the relationship between partners and accurate determination of technology agents were recognized to promote regional economic.

1.7.2 Outsourcing Control Strategies and Commitment to Outsourcing Agreement

The methods of how firms to design a control process is an important determinant for using outsourcing in developing countries. Accordingly, most international businesses require a high level of control for outsourcing (Calantone & Zhao, 2001). Furthermore, the international business researchers prove that control is considered as a significant challenge that business front when using outsourcing. Mangers recognized it as a critical role in successes or failures of outsourcing in healthcare system (Geringer & Hebert, 1989).The commitment to the outsourcing agreement is recognized a relevant factor to increase the outsourcing success; the commitment indicates the value of a relationship between partners (Gray & Kim, 2009).

1.7.3 Mutual Trust and Cooperation

Outsourcing partners' trust, willingness to commitment and partnership have continuously been acknowledged as the fundamental motivators for any outsourcing agreements success. Moreover, the base of evolution of the outsourcing focus on trust, interchange, advantage and patience, these could definitely give the required theoretical foundation for recognizing their achievement or failure (Parkhe, 1993).a financially successful outsourcing may fail due to a loss of trust and agreement (Murray, Frenk, & Evans, 2007). Furthermore, trust increases over time but it is a fundamental point of outsourcing relationship (Kim, Park, Ryoo, & Park, 2010).

1.7.4 Culture Characteristics

The cultural variation among co-workers and its influence on outsourcing results are common concern detected in outsourcing research (Li et al., 2001). The cultural identity may assist the outsourcing parties to overcome obstacles and promote cooperation between parties (Meschi & Riccio, 2008). A study on the effect of culture on outsourcing process shows the cultural variations induce misunderstanding and mistrust between partners (Pothukuchi, Damanpour, Choi, Chen, & Park, 2002).

In Contrast, a comparable culture between parties is not always the effective means in outsourcing success. It may not have any impact on partners' performance at all (Fey & Beamish, 2001). For instance, notwithstanding the considerable cultural gap between Chinese partners and western partners, the outsourcing results are amazing (Meschi & Riccio, 2008).

1.7.5 Partner's Contribution and Parent Firm's Experience

The faced difficulties during the outsourcing vary according to the partner's contributing and establishing the objectives. Moreover, the partner's contribution was the common challenging points throughout consultations. The contribution by the external outsourcing partner depends on the business. The occurred obstacles have resulted from the problems in manipulating them, especially when more than one agent is available due to the variation in used managerial styles and models (Meschi & Riccio, 2008). The involved parties in outsourcing need to not only know the basics of the

arrangement but also know the purposes, commercial offerings, the status of resources and the agreement periods (Amurgo-Pacheco & Pierola, 2008).

1.7.6 Environment Uncertainty

When attempting using of outsourcing, the institutions should consider evaluating environmental risk as necessary. The uncertainties are due to the particular environmental risk of developing nations. In special, a notable relationship of these uncertainties is linked to the political and financial difficulty of the countries: instability, political disturbance, debt failure or rescheduling, varying of currency proportion, inequitable tax policies and corruption (Meschi & Riccio, 2008). Regarding the government policy, it has profoundly influence on environmental change which designs all characteristics of law, policies and contractual arrangements which lead to increase the autonomy of transacting, safety of property fairness and government and legal transparency (Kaufmann, Kraay, & Mastruzzi, 2009).

1.7.7 Other Classification of Outsourcing Factors

Ikediashi (2014) divided the factors that affect utilizing outsourcing in healthcare sectors into the client factors (CF); outsourcing contract forces (OC); vendor forces (VF); political forces (PF); and general forces (GF).

Client factors (CF) include conflict of interest; adequate planning of outsourcing policies; loss of control level by organization; monitoring of performance; core knowledge by hospitals; morale of employees; internal coherence; Selective discrimination of vendors; organizational competence; management strength; and management overheads level (Ikediashi & Mbamali, 2014).

Outsourcing contract factors (OC) which include adequacy of the standard form of contract; definition of scope and content; the system for rewarding performance; availability of benchmark for quality; Confidentiality level; favorable contract terms; trust; and business uncertainties (Ikediashi & Mbamali, 2014).

Vendor factors (VF) include vendor locked in long-term agreement; vendor opportunism; financial status of vendor; quality of vendor services; proper invoicing; adequate staffing

by vendor; possibility of cheating by vendor; requisite experience and skills (Ikediashi & Mbamali, 2014).

Political factors (PF) include intellectual rights; political stability; and confiscation of vendor properties. General factors (GF) include interruption to supply of services; natural disasters; cultural rejection; and security concerns (Ikediashi & Mbamali, 2014).

1.8 BENEFITS OF OUTSOURCING

1.8.1 Greater Focus on Core Competencies

Outsourcing of non-core actions reduces the struggle required to handle non-relevant activities, excluding the requirement to control the relationship among providers. This it is obliged affords administrators the chance to focus on the significant parts of the business (Gray & Kim, 2009; Gunasekaran, Irani, Choy, Filippi, & Papadopoulos, 2015; N. Kakabadse & Kakabadse, 2000; McIvor, 2000). This constitutes a need for contributing much attention to recognizing what the main competency (A. Kakabadse & Kakabadse, 2005). A fast-changing business, the description of core and non-core should be revisited on a regular basis (McIvor, 2000).

1.8.2 Cost Reduction

Cost saving can be achieved either by the savings of effort costs or from advanced productivity due to the utilization of technology or means. The decline in operating expenses is according to the hypothesis whatever a supplier can afford a particular service more efficiently as result of their experiences with fewer input sources (N. Kakabadse & Kakabadse, 2000; McIvor, 2000; Mishra & Mahanty, 2016). As results of substantial economies of scale accessible to most of the outsourcing vendors, outsourcing can also give a further cost-effective mean for outsourcing customers. Nevertheless, this cost saving could be achieved at the cost of quality of the service presented.

1.8.3 Supplier Investment and Innovation

Technological advancement is urging organizations to utilize the outsourcing depending on the availability of excellence the service suppliers. Cooperation with providers can

afford entrance to high-quality products and very valuable services without needs in new employees, practice, equipment or information technology to reach the expected level of skill (Aubert, Kishore, & Iriyama, 2015; Henley, 2006).

1.8.4 Increased Flexibility

Outsourcing can present higher elasticity, enabling businesses to combine the advanced technology and react to developments in the market context faster and at a cheaper expense than vertically mixed companies (Deavers, 1997). Internal activities may improve commitment to a particular kind of technology and may restrain flexibility during the long period (Quinn, 1999; Scherrer-Rathje, Deflorin, & Anand, 2014).

1.8.5 Access to External Competencies

By utilizing outsourcing, it may enable the organizations to obtain proper levels of services, because firms can obtain a way to higher abilities sourced by their vendors (Quélin & Duhamel, 2003). By offshore outsourcing, organizations may profit by increase ability to contact skilled IT staff (McIvor, 2005).

In summary, these benefits are considered only possible. Turning them into real benefits expects a real recognition of the possible uncertainties and likely methods to handling them through the process of outsourcing.

1.9 RISK OF OUTSOURCING

Several researchers have addressed definite uncertainties related to outsourcing utilization such as strategic, operational, commercial, and human resource and communication.

- o Strategic risk which includes non-obtaining of the purposed goals (Adeleye, Annansingh, & Nunes, 2004); and decline of core actions and competencies by contracting with an external provider to carry out secondary and core services to become outside its scope of control (Kakabadse & Kakabadse, 2000)
- o Operational risk which includes the increasing dependence on the external vendors (Quinn & Hilmer, 1995) increases in cost (Lacity, Solomon, Yan, &

Willcocks, 2011); decreased the quality of service (Aubert, Patry, & Rivard, 2005); and decrease the control of the internal management (McIvor, 2005).

- o Commercial risk which includes security breaches and Customer lock-in (Quinn, 1999).

- o Human resource and communication risk which includes the decrease the integration and connection within and with internal human resource (Quinn, 1999) and communication mismatches (Earl, 1996; Kern & Willcocks, 2000).

1.10 BARREIRS OF OUTSOURCING

The utilization of outsourcing is always facing many barriers involves the following:

- o Lacks the needed infrastructure and foundation such as lack of optimum computerization, management financial data, standardization of a process, and the required managerial skills to ensure sufficient and proper outsourcing (Sabri, Sulaiman, Ahmad, & Tang, 2015).
- o Regulatory and policy limitations which include acquirement directions, MOH policy, and organization board policy which make organizations work challenging to outsource (Currie & Seddon, 2014).
- o Resistance from current employees and employee associations due to worry of personnel changes (e.g. layoffs) which may occur from the organization utilizing outsourcing make it hard for the company to outsource (Zoghbi-Manrique-de-Lara, Ting-Ding, & Guerra-Báez, 2017)
- o The size and scale of the organization make it hard for the organization to outsource (Currie & Seddon, 2014).
- o The absence of matured suppliers reflected by non-availability of quality outsourcing suppliers makes it hard for the organization to outsource (Holweg, Reichhart, & Hong, 2011).

1.11 OUTSOURCING IN HEALTH SECTOR

Arrangements to adopt outsourcing have grown worldwide involving outsourcing applications in the healthcare area. By the time, application of outsourcing in health,

finance and legal sectors had the largest growth rate comparing with other sectors (Brown & Wilson, 2012). The adopting of outsourcing by health organizations is aimed to do more works with less cost; reduce cost reduction and risk possibility, and ensure immediate adjustments without negatively effect on internal resources (Machado Guimarães & Crespo de Carvalho, 2013).

Healthcare organizations choose to outsource services for the same purposes as in another area. They try to ensure profitability, efficiency, and quality of their work. Previously, outsourcing in health organization addressed only the non-critical activities and services such as cleaning and catering security. Recently, the outsourcing turned to involve the core services and activities. Furthermore, the outsourcing in the healthcare sector has developed to involve several areas: organizational, strategic, and supervisory and technological areas (Machado Guimarães & Crespo de Carvalho, 2013).

Nevertheless, outsourcing is recognized as one of the flexible strategies in order to react to demand variations, the complexity of the process and the jointing clinical works. Additionally, by agreements between private and public, healthcare systems waited for many several advantages such as quality and efficiency of provided care. Utilization of outsourcing by healthcare organizations generates a market of agents that let different agencies satisfy their requirements (Weidenbaum, 2005).

The outsourcing in healthcare business is a pattern for expanding demand for outsourcing; the expense of healthcare in the USA continues to grow rapidly rate passing $1.5 trillion (Vora, 2010). Due to this, healthcare organizations are applying outsourcing as one solution to decline, stop or maintain these expenses (J. Roberts, Henderson, Olive, & Obaka, 2013).

1.11.1 Reasons of Outsourcing in Health Care Sector

There are several reasons to use outsourcing in healthcare, one of the many researchers who discuss the reason for outsourcing is Mujasi (2016). He presents five major purposes motivate healthcare managers to conducted the outsourcing in their institutions. They purposes includes saving costs (45% of managers); allowing to

hospital focus on servicing patients adequately (55% of managers); Gaining high-quality service delivered by another organization' expertise (68% of managers); needed to enhance flexibility by employed a contracted workforce (32% of managers), and desired to decrease worker size (22% of managers) (Mujasi, 2016).

Al-Mazroei in 2015 classified the drivers of outsourcing in healthcare sectors according to their importance to healthcare managers into six categories: decreasing risks; reducing costs; acquiring new skills; decreasing the competition; meeting healthcare demands; and advancing new technologies (Al-Mazroei, 2015).

Other study conducted in Australian hospitals showed the reasons for outsourcing are: reducing the direct costs, enhancing the flexibility with changes; enhancing staff innovation; enable healthcare managers to focus on fundamental issues, and unavailability of expertise not in-house (Martin, 1996).

The below table summarized the Reasons of outsourcing in healthcare sector

Table 1: Reasons for Adoption Outsourcing in Health sector

Reason	References
Saving Costs	(Al-Mazroei, 2015; Gaspareniene, Remeikiene, & Startiene, 2014; Hsiao et al., 2009; Martin, 1996; Masoud et al., 2013; Moschuris & Kondylis, 2006; Mujasi, 2016)
Increase focusing on Patients	(Czerw, Kowalska, & Religioni, 2014; Mujasi, 2016)
High-Quality Service	(Agwu, 2016; Machado Guimarães & Crespo de Carvalho, 2013; Moschuris & Kondylis, 2006; Mujasi, 2016; Otani, Kurz, & Harris, 2005; Tiwari & Tiwari, 2014)
Increase Flexibility	(Mardis et al., 2017; Mujasi, 2016; Young & Macinati, 2012)
Decrease Worker Size	(Hsiao et al., 2009; Masoud et al., 2013; Mujasi, 2016)
Decreasing Environmental Risks	(Al-Mazroei, 2015; Guimarães & Carvalho, 2011; Hsiao et al., 2009; Machado Guimarães & Crespo de Carvalho, 2013)
Acquiring New Skills and Experiences	(Al-Mazroei, 2015; Lamas Barreiro, Alonso Suárez, Saavedra Alonso, & Gándara Martínez, 2011; NAZLIOĞLU & YAR, 2016)
Meeting healthcare demands	(Kenyon & Meixell, 2011)

Access to New Technologies	(Al-Mazroei, 2015; Masoud et al., 2013)
Enhancing Staff Innovation	(Altman & Gunderman, 2008; O. Jones, 2000; Lowman, Trott, Hoecht, & Sellam, 2012; Martin, 1996)
Focusing in Core Competences	(Martin, 1996)
Lack of Internal Expertise	(Martin, 1996)

1.11.2 Advantages and Disadvantages of Outsourcing in Health Sector

The fundamental drivers in outsourcing utilization in healthcare organizations are a competitive tension and their concerning regarding needs of improving quality of services, enhancing the productivity of work, and containing cost (Foxx, Bunn, & McCay, 2009). Nevertheless, the direct advantage of outsourcing application in health care system is the decline in expenses of the outsourced duties regarding education and staffing. The other joined advantage is the improvement in quality that may end by improving in patients and workers satisfaction (Kremic, Icmeli Tukel, & Rom, 2006).

The current incentives drive changing of healthcare technology and outsourcing solutions use are granting a chance for healthcare organizations to review the all current practices (Motahari-Nezhad, Stephenson, & Singhal, 2009). The center of outsourcing utilization in the health system is suggested to be application of telemedicine which is defined as the provision of healthcare from distant places by adopting information and communication technologies for the information exchange between parties regarding disease investigation, therapy and prevention, research and performance evaluation and the health education (Belcourt, 2006). Moreover, outsourcing allows payments and profits to healthcare organizations (Hazelwood, Hazelwood, & Cook, 2005).

The victory of outsourcing depends on handling the outsourcing arrangement and relations properly (Mustapa, Muzani, Ismail, & Ali, 2006).The outsourcing processes are the principal measures. Furthermore, outsourcing can be identified as a taken solution to decrease the workload of the organization by leasing its duties or responsibilities to another agent (Menachemi, Burkhardt, Shewchuk, Burke, & Brooks, 2007).

The advantages of outsourcing are not only regarding enhancing staffing process but also with limited costs associated with employers' wages, wellness and interests, education, managing expenses and retirement's plans which should be considered (Martin, 1996). The benefits of outsourcing need up to two years before institutions begin to gain any economic benefits. Additionally, the benefits of outsourcing classified to three categories; personal, organizational and national which should be identified (Jones, Knights, Sinclair, & Baraitser, 2013).

Regarding non-clinical services, various researchers emphasized on the value of performance evaluation and supervision (Machado Guimarães & Crespo de Carvalho, 2013). Furthermore, the organization managers should recognize any quality challenges (infection, dissatisfaction); and hidden expenses related to non-core activities such as cleaning, washing services (Liyanage & Egbu, 2006) and catering services (Hwang, Eves, & Desombre, 2003)

Mujasi (2016) studied the healthcare managers' perceptions regarding outsourcing and presented several advantages and disadvantages for using of outsourcing in healthcare sectors. The advantages of outsourcing are summarized accordingly as the following: to obtain cost saving and to control expenses; to transform fixed costs to variable costs connected with predefined yields by the entrepreneur; to gain improvement in productivity of its services; to focus resources on the core job of looking after patients; to be able to present well service to the patients ; to improve its inside process via restructuring, re-engineering, standardization of methods service ; to afford hospital management with flexibility and convenience for scaling up services; decreasing risk of poor service and limited or over capacity; to obtain immediate and continuous access to the latest technological developments; to be innovative, develop service and rapidly expand new means of performing services; and to bring in vendors with newer capabilities and knowledge which can.

Regarding disadvantages of using outsourcing in healthcare sectors. They can be summarized the following: outsourcing could lead to regulatory violations (e.g., violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital ; outsourcing by the hospital can lead to over-reliance on

vendors which may be risky to the hospital in case the vendor performs poorly; outsourcing can lead to loss of confidentiality, and possible breach of privacy since the contractor gets to know the internal operations of the hospital; outsourcing by the hospital creates complexity in vendor relationship management ; outsourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor; and sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits (Mujasi, 2016).

Table 2: Advantages of Outsourcing in Health Sector

Advantage	References
Saving Costs	(Al-Mazroei, 2015; Gaspareniene et al., 2014; Hsiao et al., 2009; Martin, 1996; Masoud et al., 2013; Moschuris & Kondylis, 2006; Mujasi, 2016)
High-Quality Service and Productivity	(Czerw et al., 2014; Mujasi, 2016)
Increase Flexibility	(Mardis et al., 2017; Mujasi, 2016; Young & Macinati, 2012)
Decrease Worker Size	(Hsiao et al., 2009; Masoud et al., 2013; Mujasi, 2016)
Acquiring New Skills and Experiences	(Al-Mazroei, 2015; Lamas Barreiro et al., 2011; Mujasi, 2016)
Access to New Technologies	(Al-Mazroei, 2015; Masoud et al., 2013)
Focusing in Core Competences	(Martin, 1996)

Table 3: Disadvantages of Outsourcing in Healthcare Sector

Disadvantage	References
Regulatory and Legal Violations	(Al-Mazroei, 2015; Lorence & Spink, 2004; Mujasi, 2016)
Over-reliance on Vendors	(Al-Mazroei, 2015; Mujasi, 2016)
Ethical Problems	(Al-Mazroei, 2015; Lorence & Spink, 2004; Mujasi, 2016)
Increase Complexity of Work	(Al-Mazroei, 2015; Mujasi, 2016)
Decrease the Quality	(Al-Mazroei, 2015; Czerw et al., 2014; Mujasi, 2016)
Not achieve the Planned Goals	(Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016)

1.11.3 Challenges of Outsourcing in Health Sector

Despite outsourcing yields very benefits to healthcare organizations, they should accurately assess and analysis their outsourcing decision. Even they perform a wonderful work with the current outsourcing process to overcome the challenges that may face. Some of these challenges are decreased worker morale, the decline of society support because of new turnover rate, difficulties related to monitoring the outsourcing arrangement and practice and questionable constitutional accountability for mistakes. In this regards, there are specific features corresponded with the outsourcing choice that can elaborate the level of risk to the organizations such as the recognition the dangers confronting the healthcare institutions and the impact of determination criteria on the outsourcing decisions (Foxx et al., 2009).

Although there are several definite features of outsourcing that appear so enticing to hospital managers, there are various possibly adverse perspectives to consider before outsourcing decision such as ethical, legal and moral perspectives (Hazelwood et al., 2005). In other words, Outsourcing requires admiration and agreement between the both companies. This admiration and agreement may create a win-win relationship between both organizations (J. Roberts et al., 2013). Truly, the outsourcing choices in healthcare systems is determined by several factors such as: (i) the type and nature of activity; (ii) the nature of agreement; (iii) contract duration; (iv) characteristics of performance demands and, lastly (v) reimbursement means (Liu, Hotchkiss, & Bose, 2007).

Barriers to adequate outsourcing are various in healthcare as noted by Roberts et al. (2013): the management style and model, individual perceptions that influence the judgment to utilize the outsourcing in the healthcare system. Mujasi (2016) noticed that the barriers were divided into internal barriers which are due to determinants within the hospital and external barriers which are due to determinants within the hospital's environment. According to the hospital administrators' opinion, the significant obstacle of outsourcing was come from outside environment. Most of the hospital directors (69%) noted that the lack of a matured suppliers as the most challenging barrier indicated by non-availability of quality suppliers that let hospitals face significant difficulty to use

outsourcing. The other obstacle is related to the limited number of service providers (57% of managers). The next most commonly mentioned restraint was internal and correlates to the absence of the needed foundation (e.g. process standardization, level of computerization, data management,) and the administrative abilities to adequately outsource. According to the hospital managers' view, the smallest indicated difficulty was supervisory and policy limitations with about (33%) of hospital managers.

Table 3: Obstacles of outsourcing in health sector

Barriers	References
Lack of a matured suppliers	(Al-Mazroei, 2015; Foxx et al., 2009; Liu et al., 2007; Mujasi, 2016a)
Limited number of service providers	(Al-Mazroei, 2015; Foxx et al., 2009; Mujasi, 2016a)
Inadequate infrastructure	(Al-Mazroei, 2015; Lorence & Spink, 2004; Mujasi, 2016)
Policy limitations	(Al-Mazroei, 2015; Foxx et al., 2009; Mujasi, 2016; Roberts et al., 2013)
Resistance from current employees	(Al-Mazroei, 2015; Czerw et al., 2014; Mujasi, 2016)
Size and scale of organization	(Al-Mazroei, 2015; Foxx et al., 2009; Hsiao et al., 2009; Lowman et al., 2012; Mujasi, 2016)

1.11.4   Areas of Outsourcing in Health Sector

A study revealed the criteria to classify the services outsourced to hospitals based on the level of to be contracted. They can be one service versus various services, services with the open level of demand, services association or not with consequences, and services with or without guidelines or simple or complicated. it was shown that outsourcing in US hospitals had moved away from common fields (food services and housekeeping) to core services such as emergency and facilities maintenance (Curristine, Lonti, & Joumard, 2007).

A study presented the most common outsourced services. He summarized these services as security; cleaning; IT services; catering; accounting; receptions; public relations; quality auditing (JCI..); technical support (electric, water….); laboratory services; nursing services; laundry services; waste disposal services; communication and telecommunıcation ; sterilization services; ambulance services; anesthesia; pharmacy services; radiology services (Akyürek, 2013).

The study on outsourced services in Greek hospitals noticed nine common outsourced services as cleaning (97.7%), security (51.2%), catering (32.6%), legal services (25.6%), machinery maintenance (25.6%), information technology (23.3%), laundry (18.6%) and laboratory (16.3%) (Moschuris & Kondylis, 2006).

1.11.5 Outsourcing in Developing Countries' Health Sectors

Contracting is frequently seen in growing nations for the acquisition of defined private sector' services (Jack, 2003) and independent public providers (Williams, Flynn, & Pickard, 1997). Contracting is an essential component of the health system in several nations to afford governments the means to enhance performance and raise the accountability (Jack, 2003)Current studies have proposed that contracting with external vendors could increase the productivity of health services; support community purposes, and formulate contributory conditions to public-private collaboration (Liu et al., 2007). This demands properly outlined arrangements, transparent bid, cleared responsibilities and credible funding tools. In extension, regulations require being prepared to control deals and possess the character of implying an honest co-worker (Siddiqi, Masud, & Sabri, 2006).

Siddiqi (2006) conducted a multi-country analysis to evaluate the extent of contract out health services, and revealed the means of contracting and the influencing determinants in ten countries of the Eastern Mediterranean Region: Afghanistan, Bahrain, Egypt, Lebanon, Morocco, Pakistan, the Syrian Arab Republic, Islamic Republic of Iran, Jordan, and Tunisia. The study noted that Afghanistan, Egypt, Islamic Republic of Iran and Pakistan had involvement with the outsourcing of primary care services; Jordan, Lebanon, and Tunisia greatly contracted out the hospital and ambulatory care services; while Bahrain, Morocco, and the Syrian Arab Republic outsourced essentially non-

clinical services. Utmost nations preferred bargaining among the private sector, the legal and bureaucratic assistance in nations diversified with the span of background with contracting. The uncertainties manifest in the contracting means were dependence on contributor funds, insufficient quantity of suppliers are available in rural regions, parties with fixed care increasing control across the contracting process, inadequate monitoring and evaluation tools. Contracting presents the chance to possess higher control overhead private providers in nations with the weak supervisory capability (Siddiqi et al., 2006).

1.12 JORDANIAN HEALTH CARE SYSTEM AND OUTSOURCING

1.12.1 Geographic Location and Administrative Structure

Jordan is a small nation. It has area extends 89 342 square kilometers. Three-quarters are a desert. The land has restricted natural resources especially water insufficiency; it is rated as one of the five countries with most water scarcity in the world (United Nations, 2011). Jordan is a constitutional monarchy and has a parliamentary system constituted of a selected and appointed representatives. The nation is subdivided into twelve governorates, each run by a governor selected by the king (WHO, 2010).

1.12.2 Population Overview

Jordan is one of developing countries. Jordanian population estimated 9.798000 in 2016. More than 80% of them placed in urban, the 70% of people in urban placed in the only three cities (15.7% of the total area of Jordan): central Amman, Zarka, and Irbid cities (MOH, 2017).

As shown in table 5 .Jordan is facing notable demographic transition, with a moderately high total fertility rate of 3.38, crude birth rate of 23 per 1000 population, death rate of 6.1 per 1000 population and an annual population growth rate of 2.4%, (MOH, 2017).

Table 5:   Demographic and Health Indicators In Jordan

Item	2016

Population	9798000
Adult Male Illiteracy Rate (%of 15+yrs of age)	3.4
Adult Female Illiteracy Rate (%of 15+yrs of age)	9.4
Crude Birth Rate (per 1000.pop)	23.0
Newborns >= 2500 grams	91.4
Population Growth Rate (%)	2.4
Average Persons Per Family	4.8
Total Fertility Rate	3.38
Life Expectancy At Birth (Yrs) Male	72.5
Life Expectancy At Birth (Yrs) Female	74.0

Source: (MOH, 2017)

On the other hand, Jordan's location makes the country more visible to suffering from several results of various struggles in the area. Nearly, whole neighboring nations have experienced crises. For this reason, it has received a high number of foreigners from neighboring nations such as Iraq, Syria. This causes a significant pressures on Jordanian healthcare system and negatively altered the economic, social and health improvement in the country (HHC, 2015)

As mentioned above, the challenges with demographic status in Jordan can be summarized as the followings:

- o High population growth rate
- o The rates of migrations are high.
- o The changing in the age formation of the population to be more aging.
- o The asymmetry of population distribution between the regions,
- o Lack of taken advantage of the demographic opportunity (HHC, 2015).

1.12.3 Economic and Social Development

According to World Bank report (2017), Jordan has been seen as a lower-middle income country with a per capita GDP of US$ 2950.0 for 2016. Real GDP growth for 2017 is expected to be 2.3 percent, the unemployment rate predicted at 13%. The public sector uses 38.6% of the workforce, and (48.2%) of them are female (World Bank, 2017).

Jordan's economy remains sluggish as growth slowed down in 2016 for the second year in a row—to a predicted 2% from 2.4% in 2015—more diverging from its potential. The

several factors are associated with this, spillovers from the Syria crisis, distinctly the closing of trading ways to Iraq and Syria and reduces tourism amid security conflicts are considered the primary causes of slow growth (World Bank, 2017).

Jordan's economy is supposed to pick-up marginally to 2.3% growth in 2017; a lightly larger uptick is anticipated in the medium-periods to average 2.6% over 2017-2019. The influence of improvements associated to motivating private-sector investments and greater exports as results of the European Union's facilitator rules (World Bank, 2017).

1.12.4 Governance

A claim and stable are the most common characteristics of governance in Jordan that recognizes and allocates duties within parties. The government is concerned toward overseeing, controlling and establishing legislation for the safekeeping of fairness and equity among the residents. A health committee designated in the parliament for the update the regulations and health issue, following the needs of the community and civilians, and ensuring the validation of made decisions.

The health system in Jordan has several of providers including public, private, and international and charity sectors. The public sector includes three kinds of hospitals: The Ministry of Health, the Royal Medical Services (14 hospitals) and university hospitals (2 hospitals). The private sector provides the services through private hospitals (62 hospitals), private clinics, and other diagnostic and therapeutic centers. The international sector and charitable sectors include mainly from UNRWA clinics for Palestinian refugees and King Hussein Cancer Center (MOH, 2017)

The Ministry of Health is considered as the major the healthcare provider that all health concerns have been its responsibility consisting health protection and enhancement of health, management of the domestic insurance plans, the direction of health services afforded through all sectors, and organizing the needed health-related training and educational courses and conferences (HHC, 2015).

The Royal Medical Services (RMS) affords the care and health insurance to military workers and their relatives. Furthermore, RMS accepts the uninsured patients who

referred from the ministry of Health and the private hospitals based on a fee-for-service principle (HHC, 2015).

Jordan University Hospitals afford secondary and tertiary healthcare services to the patients from university workers and their relatives, registered universities' students, referrals from the other sectors such as Ministry of Health and RMS, and private cases. They are recognized as teaching facilities for health professionals' students (HHC, 2015)

The private sector comprises satisfactory of the nation's healthcare expertise, and advanced technological equipment and machine and high quality of care. It brings a notable quantity of neighboring countries patients (HHC, 2015)

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) runs health plans concerned with the affording basic health services to the recorded Palestinian refugee in Jordan (WHO, 2010)

Furthermore, organizations and councils participating health policy development are seen in healthcare systems. These are the Jordanian Medical Council, the Supreme Council of the population, the Joint procurement Department, Jordan Food and Drug Administration, the National Council for Family Affairs and the Jordanian Nursing Council (HHC, 2015).

The Joint Procurement Department proposes to coordinate a standardized means for procurement of medicines and medical supplies, models of cooperation and propositions, and monitoring implementation of agreed contracts. It also carries the requisite investigations for the promotion of this process (HHC, 2015)

A lot of difficulties correlated with governance are seen and must be recognized and approached to overcome reduced ineffectiveness in the healthcare. These difficulties are summarized as the followings:

- o grown in the operational expenses,
- o the absence of adequate referral system,

o   poor understanding of fiscal duty by the providers and customers concerning the utilization of healthcare services,

o   the weak arrangement among the public and private sectors,

o   immigration of qualified healthcare professionals,

o   improper utilization of primary health care,

o   the absence of adequate prescription of medications, and

o   shortage of evidence-based health protocols (HHC, 2015).

1.12.5 Health Financing and Coverage

Despite Jordan is classified as one of the middle-income nations, it finances yearly for every person around double of the spending of other middle-income countries (HHC, 2015).

As indicated in table 6, the volume of the cumulative health spending of GDP has progressively declined from 8.5 % in 1995 to 7.5% in 2014. The percentage of General Government Health Expenditure (GGHE) (GGHE) from General government expenditure (GGE) decreased from 16% in 2008 to 14% in 2014. The percentage of General Government Health Expenditure (GGHE) from Total Health Expenditure increased from 62 in 2008 to 70 in 2014 (WHO, 2017)

Table 6: Major Indicators of National Health Accounts in Jordan 2008- 2014

Indicators	2008	2009	2010	2011	2012	2013	2014
	Value	Value	Value	Value	Value	Value	Value
Total Health Expenditure (THE) % Gross Domestic Product (GDP)	9	10	8	8	8	7	7
General Government Health Expenditure (GGHE) as % of Total Health Expenditure	62	70	70	70	69	67	70
Private Health Expenditure (PvtHE) as % of Total Health Expenditure (THE)	38	30	30	30	31	33	30
General Government Health Expenditure (GGHE) as % of General government expenditure (GGE)	16	19	19	18	17	14	14
External Resources on Health as % of Total Health	1	4	5	4	6	7	6

Indicators							
Expenditure (THE)							
Social Security Funds as % of General Government Health Expenditure (GGHE)	22	26	26	28	6	9	9
Out of Pocket Expenditure (OOPS) as % of Total Health Expenditure (THE)	32	23	22	21	22	22	21
Out of Pocket Expenditure (OOPS) as % of Private Health Expenditure (PvtHE)	84	76	73	70	69	69	69
Total Health Expenditure (THE) per Capita in US$	321	363	341	358	354	337	359
Total Health Expenditure (THE) per Capita in Int$ (Purchasing Power Parity)	884	980	861	866	835	763	798
General Government Health Expenditure (GGHE) per Capita in US$	199	255	240	252	244	227	250
General Government Health Expenditure per Capita in Int$ (Purchasing Power Parity)	547	688	606	610	574	514	556
Out of Pocket Expenditure (OOPS) per Capita in US$	102	82	74	74	76	76	75

Table 6: Major Indicators of National Health Accounts in Jordan 2008- 2014 (Continue)

Indicators	2008	2009	2010	2011	2012	2013	2014
	Value	Value	Value	Value	Value	Value	Value
General Government Health Expenditure (GGHE) as % of Gross Domestic Product (GDP)	5	7	6	6	6	5	5
Private Insurance as % of Private Health Expenditure (PvtHE)	13	18	21	24	23	23	23
Rest of the world funds / External resources (million dollar)	28	81	105	106	154	168	159
Total expenditure on health (million dollar)	1,928	2,273	2,224	2,419	2,476	2,430	2,662
General government expenditure on health(million dollar)	1,193	1,595	1,565	1,703	1,704	1,637	1,855

Ministry of Health (million dollar)	489	638	637	600	827	1,013	1,149
Social security funds (million dollar)	265	418	404	481	107	142	161
Private expenditure on health (million dollar)	735	678	660	715	772	793	807
Private insurance (million dollar)	98	121	135	168	177	181	184
Out of pocket expenditure (million dollar)	614	514	485	502	534	547	555
Non-profit institutions serving households (e.g. NGOs) (million dollar)	6	10	11	14	28	29	29
Gross Domestic Product (million dollar)	21,973	23,820	26,425	28,840	30,937	33,594	35,713
General government expenditure (million dollar)	7,547	8,330	8,041	9,580	9,759	11,956	13,562

Source: (WHO, 2017)

The universal health insurance for all residents has listed as one of the necessary strategic goals and it's perceived by all continuous governments for last years.

Health insurance in Jordan has risen continuously during the preceding ages till it ended about 86% of all Jordanian in 2014. Nevertheless, this does not constitute the cases which are contributed through the non-insured Patients Affairs Unit at the (Royal Court). 8% of citizens of the insured population hold more than one kind of health insurance, the actual rate of the insured residents does not more than 78% without the residents who have more than one kind of coverage (HHC, 2015)

MOH health insurance covers 48% of all insured Jordanian. The Royal Medical Services Military insurance covers 22% of the insured population. The university hospitals insurance covers 2.3% of the insured population, and the private health insurance covers 9.9% of the insured population. The reminded insured population covered by health insurance companies and health insurance funds of the trade unions and some institutions (HHC, 2015)

There are significant difficulties for the Jordanian health insurance system. They can be summarized as the followings:

- Absent of a satisfactory administration to publish reliable statistics regarding Jordanian health coverage. This affects the implementation of policies which are aimed to achieve the universal health coverage for all population.
- High rate of uninsured population (around 25% of the population)
- Absent of compulsory health insurance. This got a notable part of the population out of health coverage.
- Financial contribution of the citizens is shown unfair.
- Various insurance organizations in the public area and the duplication of government health insurance
- Absent of a mandatory health insurance law (HHC, 2015).

1.12.6 Human Resources for Health

Human resources are considered a significant central generator to satisfy the health demands of the residents efficiently and productively. That needs considerable consistency among the outlining and controlling of those resources to gain equity in providing of healthcare and improve the efficiently of the healthcare sector.

Jordan owns a sufficient number of health personnel in most of the specialties. The quantity of these forces has notably risen corresponded to the number of the people during the past five years (2009 – 2013). 85% of them do not exceed 50 years of age. But, there is a deficiency of many health specialties, such as anesthesia, family medicine, psychological and others. Despite the percentage of personnel serving in the nursing service in Jordan is bigger than the percentage found in other Arab nations, there is a deficiency in the female nursing in some specialties. Nursing and doctors are recognized as the biggest in the region according to the population of Jordan (The High Health Council, 2015; The High Health Council, 2016).The table 7 showed the number of health personnel in different health sector in 2015.

Table 7:   The Number of Health Personnel by Selected Category & Health Sectors in Jordan 2015

Job	Ministry Of Health	Royal Medical services	King Abdullah Hospital	Jordan University Hospital	Private Sector	UNRWA	Total

Physicians	4809	1552	521	548	18469	120	26019
Dentists	692	275	0	37	5771	31	6806
Pharmacist	622	286	28	22	11116	2	12076
Registered Nurses	5152	3389	658	499	3126	48	12872
Midwives	1399	236	16	10	228	34	1923
Assistant Nurses	2017	0	42	59	1549	194	3861

Source: Ministry of Health (2015)

The most critical difficulties confronting the human resources for health in Jordan are summarized as the followings:

o   The absence of a nationwide plan for the progression and improvement of health workers

o   Gap in the training means in management and strategic planning

o   The hard attraction of unique talent.

o   The absence of health education policy

o   The large variation in wages and incentives for personnel in the public sector organizations

o   Absence of justice in the allocation of human health resources between the governorates

o   Inadequate information systems on human health personnel, particularly in the private sector (The High Health Council, 2013; The High Health Council, 2016).

1.12.7 Health Technology

Jordan is performing regular moves to improve health technology in the pharmaceutical manufacturing, medical equipment and machines, assessment, interventional and operational health procedures in addition to the computerization in health departments to enhance the quality of healthcare services. Nevertheless, this process is not well-organized and does not promote evidence-based judgments. It doesn't consider the availability of resources in Jordan, mainly in the private organizations which are affected the bill negatively, which could be funded by the customers. It is reported that the Jordanian authority has executed many health technological projects. The newest lead

was health technology assessment project with cooperation with the World Health Organization, intended to promote understanding about the value of evaluating technology in healthcare sectors and its consequences on the health sector. And afford adequate information to be utilized in the decision-making process to ensure cost-effectiveness and productivity of healthcare services (The High Health Council, 2015).

There are several difficulties confronting the utilization of technology in health sectors that should be viewed in the strategic plan such as raised medications related expenditures; increased waste in the pharmaceuticals; failure to utilize measures of pharmaceutical economy to deliver evidence-based choices; and insufficient data to be utilized in decision-making (The High Health Council, 2015).

1.12.8 The Influence of Syrian Refugees on Health Sector

The 2.5 million people of non-Jordanians are residing in Jordan in 2014 including 1.4 million of Syrian refuges. 20% of them exist in the camps. 80% of them exist in throughout the country, especially in the northern regions of Jordan. The refugee's age group 18- 59 composes the highest among them (44.4%) (The Higher Population Council, 2014).

The high quantity of Syrian refugees developed a difficulty and a heavy responsibility on the health system, particularly in the Northern cities, wherever refugees weighed. Jordan continues its commitment to affording compassionate support to refugees notwithstanding the evidence that it poses a dangerous influence on the health sector especially in the public organization due to the absence of sufficient funding, the inadequate quantity of health workforces, and the shortage of required place to afford services to refugees (Ministry of Planning and International Cooperation, 2013).

These impacts are summarized as the followings:

o   An unnatural level of developing the need for health services which surpasses the capability of health division. For example, the amount of job in health stations has grown from 9% to 50 %, and the bed occupancy rate in northern Public Hospitals become 100%.

o   Extraordinary demand for health workforces,

- o   The inadequacy of human resources and medical equipment.
- o   Contradictory influence on the Jordanian sufferers and struggling with them on the insufficient resources.
- o   Load on the financial resources
- o   The financial shortage as a consequence of the scarcity of essential financial resources and the breakdown of donor countries to afford the expected funding.
- o   Expanded risks of the extent of the disease among Jordanians.
- o   Adverse results on the attainment of the health-related Millennium Development Goals (Ministry of Planning and International Cooperation, 2013).

1.13 HEALTH SERVICES OUTSOURCING IN JORDAN

Despite the shortage of studies or reports regarding health services outsourcing in Jordan. One study was conducted by Siddiqi (2006) entitled "Contracting but not without caution: experience with outsourcing of health services in countries of the Eastern Mediterranean Region" showed that reasons for contracting out in Jordan are to improve the investments in the public sector; enhance approachability and productivity; reduce waiting lists at hospitals; employ additional capability; support of natural origin of funds; and improve trustworthiness by connection with MOH. The environmental conditions for health services outsourcing Jordan are summarized as the availability of stable political environment and constitutional structure; inflexible of the bureaucratic structure; lack of Knowledge in contracting out and cost and price analysis; Shortage of proficient and expert managers; delay in the fund from the MOH; Anxieties about quality; Inadequate monitoring mechanisms (Siddiqi et al., 2006).

CHAPTER 2: RESEARCH METHODOLOGY

2.1 RESEARCH PROBLEM

The use of outsourcing is expanding quickly in health sectors due to the expansion in both characteristics and type of afforded services (Akbulut, Terekli, & Yıldırım, 2013; Dalton & Warren, 2016; Moschuris & Kondylis, 2006; Yigit, Tengilimoglu, Kisa, & Younis, 2007). At the same time, health sectors faces many challenges such as increased the pressure of demographic and limited financial resources during the last years (Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016) which makes the adoption of outsourcing one of strategic solutions to overcome these challenges (Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016).

Despite of that, there are few studies address outsourcing in health sectors especially in developing countries like Jordan (Al-Mazroei, 2015; Hsiao et al., 2009; Mujasi, 2016).Jordan has insufficient natural resources and tremendous population growth rate, and is low middle-income country. Jordan, like many developing countries, is starting to sense demographic shifts and scarcity of financial resources. Moreover, there is a shortage of adequate talents in healthcare institutions. Furthermore, the issue of Syrian refugees in Jordan continues to raise the obligations of the health system (HHC, 2015; WHO, 2015). For this reason, outsourcing is considered a suggested approach to gain work productivity.

Limited researches and data and deficiency of academic studies as well as the absence of clear statistics and data regarding the outsourcing in Jordanian hospitals are considered the main restrictions for proper policy and framework development to facilitate adoption of outsourcing, measure its effectiveness.

2.1 PURPOSE OF STUDY

The purpose of this study is to explore the current status of outsourcing adoption in Jordanian hospitals including the extent of outsourcing, the reasons for current service outsourcing, advantages, disadvantages of current service outsourcing, satisfaction level of current service outsourcing; current practice of outsourcing including conducted

analysis to decide to outsource; outsourcing management and monitoring process; and causes of managers' decisions to not outsource services.

Moreover, the study aims to identify the overall hospital managers perception regarding the benefits, risks, barriers, proper services characteristics for outsourcing, in addition, to determine the differences regarding the managers' perception according to hospital location, accreditation status, hospital ownership, and hospital beds and staff size.

2.3 SIGNIFICANCE OF STUDY

The results of this research might be used to enrich the present knowledge and awareness regarding outsourcing in developing countries, and particularly in Jordan. The study investigates relevant data regarding the practice, motives, and obstacles to outsourcing adaptation in Jordanian hospitals. It improves the governmental authorities and health managers' awareness level regarding outsourcing.

The study findings could offer scientific guidance for hospitals' managers to select appropriate the outsourcing's decisions. Additionally, the findings will be helpful for hospitals managers in outlining actions to promote hospitals' use of outsourcing, and for other researchers in creating a framework for adoption of outsourcing adoption. This makes the study useful not only in Jordan but also in other nations both within and outside the Middle East.

2.4 RESEARCH METHOD

2.4.1 Research Design

A quantitative research design was utilized in this study. Quantitative research is a systematic method for identifying the characteristics and examining associations and relations between factors. Quantitative research is distinguished by the employment of interviews, questionnaires to produce numbers. Then, conducting the statistical analyses to manage data, define meaningful of relations and recognize inequalities between subjects (Sekaran & Bougie, 2016).

2.4.2 Research Population and Sample

The population for this study are the senior managers of all government owned general, private and educational hospitals in Jordan. The senior managers are defined as the managers who are at the top level of management (general managers). They are selected due to ability of provide overall feedback and perception regarding study variables. One senior manager was selected from each hospitals in the sample of this research. The senior managers in Royal Medical hospitals were excluded due to the difficulty in achieving the data collection acceptance.

Eighty three senior managers were included in the sample, and there was no attempt to use a sampling technique because all senior managers in target population of 94 were aimed to reach. They were selected based on the following criteria: awareness regarding outsourced services, willingness to participate in the study, and working in one of government owned general hospitals, private hospitals, and university hospitals.

2.4.3 Data Collection Method

The research utilized a structured tool for data collection using a developed valid and reliable closed-ended self-administered questionnaire titled "Hospital Support Services Outsourcing Survey" developed by Mujasi (2016).

The degree of face, content, the internal and external validity of the instrument were determined and ensured by Mujasi, (2016) using various approaches for the intended purpose and the context where the study was conducted. Reliability testing was carried out by Mujasi, (2016) using the Cronbach's alpha coefficient to test the reliability of the survey instrument. The list of services in importance was modified to include medical services and not available supportive services. the services were added based on Jordanian health sector and available literature review (Akyürek, 2013; Curristine et al., 2007; Moschuris & Kondylis, 2006)

The data collection tool comprised of the following nine sections:

- The information section on the facilities and respondents who participated in the survey. This part was slightly modified in order to be compatible with our research such as hospital ownership and accreditation agencies (10 items).

- The second section on hospital's strategic planning process and the respondent's opinion and knowledge about outsourcing (4 items).

- The third section is about the hospitals current outsourcing practices (9 items).

- Fourth section is about advantages/benefits or disadvantages/ drawbacks that the hospital has experienced from their outsourcing practices (7 items).

- Fifth section process is about why the hospital was not currently outsourcing if they intended to use outsourcing in the future (3 items). .

- Sixth section is about the general perception of benefits/advantages, risks/disadvantages (1 item). .

- Seventh section is about the general perception of risks/disadvantages of outsourcing (1 item). .

- Eight section is about the general perception of barriers/roadblocks of outsourcing (1 item).

- Ninth section on the respondent's perception of the characteristics of outsourced services (1 item). .

2.4.4 Data Collection Procedure

Initially, the researcher requested a permission to collect data from the managerial level of the different hospitals in the study population. Then the researcher asked about the senior manager who met the selection criteria. The researcher distributed the questionnaire to the respondents at the various hospitals. Data collection tool was prepared in both English and Arabic language. However, the English version was commonly used since al managers preferred to complete the questionnaire in English since they were more familiar with English terms of outsourcing and able to read and understand English.

2.4.5 Data Analysis

After completing the data collection, the collected data was analyzed using SPSS software version 21. Descriptive statistics including mean, standard deviations, frequency, contingency tables and percentages were used to explore the current status of outsourcing adoption in Jordanian hospitals including the extent of outsourcing, the reasons for current service outsourcing, advantages, disadvantages of current service

outsourcing, satisfaction level of current service outsourcing; current practice of outsourcing including conducted analysis to decide to outsource; outsourcing management and monitoring process; causes of managers' decisions to not outsource services, and the overall hospital managers perception regarding the benefits, risks, barriers, proper services characteristics for outsourcing

The mean and total score (in percentage) for each item were used to indicate the importance level of services, level of satisfaction with currently outsourced services, and the perception of outsourcing's benefits, risks, and obstacles, and characteristic of services.

Accordingly, the total score for each item calculated in percentage using the following equation:

Total score for each item= $\frac{\sum(number\ of\ agreement\ for\ each\ likert\ group * likert\ score)}{sample\ size} * 20\%$

This method could reflect the overall agreement for each item in simple and understandable way in percentage in addition to mean which measure the level of agreement up to 5 according to Likert scale. These methods were used to present the results and data in different forms of measure in order to ensure proper understanding.

Moreover, Mann–Whitney U and Kruskal-Wallis tests were used to determine the differences regarding the means of managers' perceptions according to hospital location, accreditation status, hospital ownership, and hospital beds and staff size. These nonparametric tests were used for comparing the groups that have low sample size (Cooper & Schindler, 2014).

2.4.6 Research Limitation

There are many limitations challenged the researcher during conducting this study. The difficulty to access the senior managers was considered the main limitation which forced that researcher to visit the hospitals more than one time. Moreover, the other limitation was the physical distance of hospitals especially rural and hospitals which are outside the Amman restrict conducting research because it's consumed the time. The third limitation was the length period to take the hospital permissions especially the

educational hospitals which increase the time of data collection. Finally, the use of qualitative questionnaire to collect the data restrict proper understanding of why and how the managers use outsourcing.

2.4.7 Ethical Consideration

Protecting the rights of the participants was taken into the consideration during the study preparation by doing the following actions:

- Informed consent was taken from data collection and after explaining the study's goal and benefits.
- The hospitals' names and collected data was not be shared with anyone to ensure data confidentiality.
- The right to self-determination and the right to full disclosure or withdraw were respected,
- Hacettepe University Ethical Board Permission approval (Number: 35853172/433-4238) was obtained.
- Administrative permission of Jordan Ministry of health and educational and private Institution were taken before data collection.

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CHAPTER 3: RESULTS

This chapter presents the results of studies including hospital characteristics; the perception regarding outsourcing and service importance; currently outsourced services, reasons for outsourcing, process of selection, monitoring strategies, advantages and disadvantages; and general perception of outsourcing benefits, risks and barriers.

Finally, this chapter presents the differences regarding the managers' perception of outsourcing benefit, risks, and barriers according to hospital location, accreditation status, hospital ownership, and hospital beds and staff size.

3.1 HOSPITAL CHARACTERISTICS

This part displays summary characteristics for the surveyed hospitals and participants. These characteristics comprise the hospital ownership, location, and accreditation status.

Table 8 showed some information about the hospitals where the participants of this study worked. As explained previously 86% (83/ of 96 hospital managers met the criteria to be included in this research) agreed to participate to this study. The majority of the 83 hospital managers were the managers working in private hospitals (N=52, 62%), and the managers of hospitals located in urban areas (N=75, 90.40%). 39 managers (47%) were working in hospitals in Amman. All respondents were general managers. Most of hospitals where the participants worked were not accredited (N=57, 69%) while 26 mangers (29%) stated they were managers of accredited hospitals. Of accredited hospitals, 18 had HCAC accreditation.

Table 8: Hospitals Characteristics Where The Participants Worked in

Characteristics	Number (n)	Percentage (%)
Total number of participants	83	100%
Hospital ownership/type		
○ MOH	29	34.94%
○ Private	52	62.65%
○ Educational	2	2.41%
Hospital location		0.00%
○ Rural	8	9.64%
○ Urban	75	90.36%
City		0.00%
○ Amman	39	46.99%
○ Zarqa	7	8.43%
○ Irbid	14	16.87%
○ Blaqa	4	4.82%
○ Mafraq	4	4.82%
○ Maan	1	1.20%
○ Jarash	2	2.41%
○ Karak	2	2.41%
○ Aqaba	1	1.20%
Accreditation Status		0.00%
○ No	57	68.67%
○ Yes	26	31.33%
▪ JCI	8	9.64%
▪ HCAC	18	21.69%
▪ ISO	21	25.30%

As shown in table 9, all participants stated that their hospitals had business/strategic plan. 14 (17%) of them also said that outsourcing had been used as one of the strategies for improving hospital performance.

Table 9: Strategic Plan and Outsourcing

Statement	Yes	No
Does your hospital have a strategic or business plan?	(83) 100%	(0) 0%
Does the strategic plan include outsourcing as one of the strategies for improving hospital performance?	(14) 17%	(69) 83%

3.2 THE RESPONDENTS' OPINION AND KNOWLEDGE REGARDING

OUTSURCING

This part displays a summary of the hospitals' managers' opinion and knowledge regarding outsourcing. The table 10 showed that 86% of managers agreed that the outsourcing is one approach that hospital management can use to improve the work performance of their hospitals. 92% of managers know at least one hospital that is currently outsourcing one or more of the services.

Table 10: Managers' Opinion and Knowledge Regarding Outsourcing

Statement	Strongly Disagree	Disagree	Natural	Agree	Strongly Agree	Total Score	Mean
Outsourcing is one approach that can be used by hospital management to improve performance	(0) 0%	(0) 0%	(14) 17%	(18) 21%	(53) 62%	91.40%	4.57
Know at least one hospital that is currently outsourcing one or more of the services it requires	(0) 0%	(0) 0%	(7) 8%	(38) 46%	(38) 46%	87.47%	4.37

3.3 THE REPONDENTS' PERCEPTION ABOUT SERVICES' IMPORTANCE FOR

HOSPITAL'S DELIIVERING HEALTHCARE

This part displays a summary of the hospitals' managers' perception about services' importance for delivering health care. The table 11 reveals the managers' perception regarding the services' importance score. The results showed that the importance level ranged from 71% to 100% for listed services. However, many services are perceived as very high such as radiology (mean=5, 100%), pharmacy (mean=4.98, 100%), ambulance (mean=4.94, 99%). The least importance services which are perceived are public relation (mean=3.81, 76%), Security (mean=3.72, 74%), and waste disposal (mean=3.54, 71%).

Table 11: Services' Importance For Delivering Health Care According to Participant
Managers

Services	Very Important		Of Little Importance		Moderately Important		Of Little Unimportant		Unimportant		Overall Score	Mean
	n	%	n	%	n	%	n	%	n	%	%	
Radiology	83	100%	0	0%	0	0%	0	0%	0	0%	100%	5.00
Pharmacy	81	98%	2	2%	0	0%	0	0%	0	0%	100%	4.98
Ambulance	79	95%	4	5%	0	0%	0	0%	0	0%	99%	4.95
Anesthesia	77	93%	6	7%	0	0%	0	0%	0	0%	99%	4.93
Nursing	72	87%	11	13%	0	0%	0	0%	0	0%	97%	4.87
Laboratory	64	77%	15	18%	4	5%	0	0%	0	0%	94%	4.72
Laundry	35	42%	14	17%	34	41%	0	0%	0	0%	80%	4.01
Communication and telecommunication	30	36%	22	27%	31	37%	0	0%		0%	80%	3.99
Information Technology	21	25%	39	47%	23	28%	0	0%	0	0%	80%	3.98
Sterilization	20	24%	40	48%	23	28%	0	0%	0	0%	79%	3.96
Catering	24	29%	31	37%	28	34%	0	0%	0	0%	79%	3.95
Cleaning	7	8%	65	78%	10	12%	1	1%	0	0%	79%	3.94
Technical Support	12	14%	53	64%	18	22%	0	0%	0	0%	79%	3.93
Accounting	21	25%	32	39%	30	36%	0	0%	0	0%	78%	3.89
Receptions	12	14%	46	55%	25	30%	0	0%	0	0%	77%	3.84
Public relations	27	33%	13	16%	43	52%	0	0%	0	0%	76%	3.81
Security	22	27%	20	24%	37	45%	4	5%	0	0%	74%	3.72
Waste disposal	1	1%	43	52%	39	47%	0	0%	0	0%	71%	3.54

3.4 CURRENT OUTSOURCING DESCRIPTION: EXTENT, ADVANTAGES,

DISADVANTAGES, REASONS, SATISFACTION

This part aimed to show the results of current outsourcing practices in Jordanian
hospitals including the extent of outsourcing in the hospitals, the reasons and drivers
which argue the hospitals' managers to adopt the outsourcing, the level of satisfaction
with outsourcing, and achieved advantages and disadvantages, challenges of the

outsourcing. Moreover, the methods and strategies of outsourcing decision and monitoring were showed.

3.4.1 Extent Of Outsourcing

This part indicated the extent of the services outsourcing by Jordanian hospitals. As the table 12 displays, all hospitals outsource (n=83; 100%) one or more services. The waste disposal was the most outsourced service (n=79; 95%). The other common outsourced services among all surveyed hospitals were communication and telecommunication (n=50; 60%), laundry (n=50; 60%), technical support (n=49; 59%), catering (n=36; 43%), information technology (n=43; 52%) and laboratory (n=42; 51%).

The least frequent outsourced services among all surveyed hospitals were nursing services (n=2; 2,41%), anesthesia (n=1; 1,21%) and sterilization (n=1; 1,21%). Moreover, the results showed that no hospitals outsource the receptions and public relations services.

	Number (n)	Percentage (%)
Hospital currently outsourcing any of the services		
• Yes	83	100%
• No	0	0%
Services currently being outsourced		
• Waste disposal	79	95.2%
• Communication and telecommunication	50	60.2%
• Laundry	50	60.2%
• Technical Support	49	59.0%
• Information Technology	43	51.8%
• Laboratory	42	50.6%
• Radiology	37	44.6%
• Catering	36	43.4%
• Cleaning	30	36.1%
• Pharmacy	30	36.1%
• Security	29	34.9%
• Accounting	19	22.9%
• Ambulance	10	12.0%
• Nursing	2	2.4%
• Sterilization	1	1.2%
• Anesthesia	1	1.2%
• Receptions	0	0.0%
• Public relations	0	0.0%

Table 12: Extent of Outsourcing in Jordanian Hospitals

3.4.2 Duration and Cost of Currently Outsourced Services

This part indicated the duration and cost of the currently outsourced services in Jordanian hospitals. As the table 13 showed, there were many services were outsourced for more than five years such as waste disposal (mean= 10.5 years), information technology (9 years), communication and telecommunication (9 years), and technical support (7.5 years).

Service	Duration Mean (Years)
• Waste disposal	10.5
• Information Technology	9.0
• Communication and telecommunication	7.5
• Technical Support	7.5
• Laundry	7.0
• Laboratory	5.0
• Radiology	4.5
• Catering	4.5
• Security	4.5
• Accounting	4.0
• Cleaning	4.0
• Pharmacy	3.5
• Ambulance	3.0
• Sterilization services	2.0
• Anesthesia	1.5
• Nursing	1.0

Table 13: Duration Currently Outsourced Services

Moreover, as seen in the table 14, the most of hospitals' managers (n=65, %78.3) indicated that the cost of currently outsourced services was ranged from 10,000-20,000 Jordanian Dinar (1 JD =1.35 $).

Cost (Annual)	Number	Percentage
• Less than 200 JD	0	0.00%
• 200-2,000 JD	1	1.20%
• 2,001-10,000 JD	17	20.48%
• 10,001-20,000 JD	65	78.31%

Table 14: Cost of Currently

Outsourced Services in Jordanian Hospitals

3.4.3 Current Outsourcing Advantages And Disadvantages

This part showed the advantages and disadvantages of currently outsourced services according to the participant managers. As shown in table 15, the managers indicated that the currently outsourced services contributed positively in decreasing the workforce (n=65; 78%), decreasing the cost of services (n=60; 72%), and improving the client service (n=58; 70).

Moreover, the managers indicated that the currently outsourced services contributed negatively in the loss of privacy and confidentiality (n=34; 41%), increasing the cost of services (n=23; 28%), loss of control and flexibility over outsourced service (n=20; 24%), and decline in hospital's capacity to provide the outsourced service (n=15; 18%).

Table 15: Current Outsourcing Advantages and Disadvantages

Current Outsourcing Advantages	Number (n)	Percentage (%)
Smaller workforce which is easy to manage	65	78.3%
Reduced Costs of service	60	72.3%
Improved client service	58	69.9%
Current outsourcing Disadvantages	Number (n)	Percentage (%)
Loss of privacy/confidentiality regarding hospital operations	34	41.00%
Cost of service has gone up	23	27.70%
Loss of control and flexibility over outsourced service	20	24.10%
Quality of service has worsened	17	20.50%
Decline in hospital's capacity to provide the outsourced service	15	18.10%
Staff dis-satisfaction due to laying off of staff to accommodate contractor	11	13.30%

3.4.4 Satisfaction with Currently Outsourced Services

This part showed the level of manager satisfaction with currently outsourced services and reasons for satisfaction and dissatisfaction with currently outsourced services. The

satisfaction score in this study was considered meaningful in the services which were outsourced at least in 10 hospitals

As seen in the table (16), the hospital manager satisfaction score with currently outsourced services were high especially for catering (n=37, 99%), ambulance (n=10, 98%), radiology (n=37, 97%), ambulance services (n=10, 96%), and information technology (n=42, 93%). Moreover, the satisfaction score with outsourcing the accounting services (n=37, 85%) was the lowest.

Table 16: Overall Level of Satisfaction with Currently Outsourced Services

Services	Very Satisfied		Satisfied		Moderately Satisfied		Dis-satisfied		Very Dis-Satisfied		Overall Score	Mean
	n	%	n	%	n	%	n	%	n	%	%	
Nursing	2	100%	0	0%	0	0%	0	0%	0	0%	100%	5.00
Sterilization	1	100%	0	0%	0	0%	0	0%	0	0%	100%	5.00
Anesthesia	1	100%	0	0%	0	0%	0	0%	0	0%	100%	5.00
Catering	33	92%	3	8%	1	3%	0	0%	0	0%	99%	4.86
Ambulance	9	90%	1	10%	0	0%	0	0%	0	0%	98%	4.90
Radiology	34	92%	2	5%	1	3%	0	0%	0	0%	97%	4.89
Pharmacy	27	90%	2	7%	1	3%	0	0%	0	0%	97%	4.87
Laboratory	33	79%	9	21%	0	0%	0	0%	0	0%	96%	4.79
Communication and telecommunication	39	78%	11	22%	0	0%	0	0%	0	0%	96%	4.78
Cleaning	24	80%	5	17%	1	3%	0	0%	0	0%	95%	4.77
Laundry	38	76%	10	20%	2	4%	0	0%	0	0%	94%	4.72
Waste disposal	60	75%	20	22%	1	1%	0	0%	0	0%	94%	4.73
IT Services	31	72%	11	26%	1	2%	0	0%	0	0%	93%	4.70
Technical Support	34	69%	14	29%	1	2%	0	0%	0	0%	93%	4.67
Security	21	72%	6	21%	2	7%	0	0%	0	0%	92%	4.66

As table 17 showed, the indicated reasons for managers' satisfaction with currently outsourced services according to participants' perception were mostly due to a good relationship with the supplier (n=53, 64%), reduction in costs (n=51, 61%), then the improving the quality of service (n=38, 46%). Contrarily, the main reasons for

dissatisfaction were problematic contract management (n=23, 28%), the complaints by staff and clients (n=20, 24%), and unrealized cost reduction (n=17, 20%).

Table 17: Reasons of Satisfaction and Dissatisfaction

Reasons for Satisfaction	Number (n)	Percentage (%)
Good relationship with supplier	53	63.90%
Anticipated reduction in costs has been realized	51	61.40%
Anticipated improvement quality of service has been realized	38	48.50%
Reasons for Dissatisfaction	Number (n)	Percentage (%)
Contract management with the supplier has been problematic	23	27.70%
Complaints by staff and clients	20	24.10%
Anticipated cost reduction has not been realized	17	20.50%
Reduction in quality of service	11	13.30%

3.4.5 Internal Processes/Analysis to Decide Start Outsourcing

This part presented the internal process and analysis which are performed to decide to outsource the services or not in Jordanian hospitals. As the table 18 showed, The most frequent processes were performed by hospitals to start outsourcing the services were Analysis of the importance level of the activity to the hospital's mandate (n=47, 57%), the determination of the relationship strategy with supplier (n=45, 54%), market analysis for the services to be outsourced (n=39, 47%), and determination of how the relationship with supplier will be established, managed, monitored and evaluated (n=36, 43%).

Furthermore, the results showed that the least performed analysis was the determination of the appropriate strategic sourcing options (n=25, 30%), and no hospitals decided to outsource intuitively.

Table 18: Internal Processes/Analysis to Decide Start Outsourcing

Process	Number (n)	Percentage (%)
Analysis of the importance level of activity to the hospital's mandate	47	56.60%
Determination of the relationship strategy with supplier.	45	54.20%
Market analysis for the services to be outsourced	39	47.00%
Determination of how the relationship with supplier will be established, managed, monitored and evaluated	36	43.40%
Analysis of the relative capability of the hospital to provide the service Vs outside suppliers	33	39.80%
Determination of the appropriate strategic sourcing options	33	39.80%
None, decision was made intuitively	25	30.10%

3.4.6 Reasons to Begin Outsourcing

This part presented the main reasons and drivers to start currently outsourcing process in Jordanian hospitals based on managers' perceptions. The results showed in table 19, the reducing the employee size was the most common perceived outsourcing reason (n=48, 57%), and the least perceived outsourcing reason was to increase the flexibility by using a contracted workforce (n=30, 36%) and to enhance the quality service from another firms' expertise (n=30, 36%).

Table 19: Reasons to Begin Outsourcing

Reasons	Number (n)	Percentage (%)
To reduce employee size	48	57.80%
To save costs	46	55.40%
To enable the hospital focus on servicing patients	43	51.80%
Quality service from another firms' expertise	30	36.10%
To increase flexibility by using a contracted work force	30	36.10%

3.4.7 Challenges During Current Outsourcing

This part presented the main challenges that face the Jordanian hospitals during the outsourcing process.   The   table 20 presented the data regarding the main challenges based on the managers' perception in the surveyed hospitals.

continuous internal capability analysis to deliver the outsourced (n=56; 67%), regularly tracking the costs of the sourced services (n=56; 67%), and continuous internal analysis regarding the importance of the outsourced service to hospital performance (n=55; 66%).

The least selected monitoring strategies were regular satisfaction surveys with outsourced services among staff and clients (n=40; 48%), and market surveys to determine changes in supplier availability and capabilities (n=48; 58%).

Table 21: Current Outsourcing Monitoring

	Number (n)	Percentage (%)
Did you have strategies for continuously monitoring outsourcing program?		
• Yes	83	100%
• No	0	0%
The aspects of your outsourcing program are you continuously monitoring		
• Supplier performance	76	92%
• Continued feasibility of outsourcing	68	82%
• Continued need for outsourcing	58	70%
The strategies for continuously monitoring		
• Regular meetings with supplier to review performance	61	73.5%
• Benchmarking our out sourced service quality with quality of the service in the best hospitals in the country	58	69.9%
• Regularly tracking the costs of the sourced services	56	67.5%
• Continuous internal capability analysis to deliver the outsourced	56	67.5%
• Continuous internal analysis regarding importance of the outsourced service to hospital performance	55	66.3%
• Market surveys to determine changes in supplier availability and capabilities	48	57.8%
• Regular satisfaction surveys with outsourced services among staff and clients	47	56.6%

3.5 HOSPITAL MANAGERS' PERCEPTION

This part presents the results of the hospitals managers' general perception regarding the adoption of outsourcing in hospitals' benefits, risks, challenges, and services' characteristics.

3.5.1 Hospital Managers' Perception of Outsourcing Benefits

As table 22 showed, the managers' agreement level with the benefits of outsourcing in the hospitals. The results showed that the participants perceived many benefits of outsourcing. The most common perceived benefits were the role of outsourcing in enabling the hospitals to deliver improved service to the patients (mean=4.6, 91%), taking away unwanted load off the hospital management and enable them to focus all energies/ resources on the core business capabilities/ competencies of looking after patients (mean=4.45, 89%), and improving the productivity of its operations (mean=4.37, 87%).

Moreover, the least common perceived benefits were the role of outsourcing in hospitals' innovative, expanding service and developing of new ways of delivering services e.g. catering services that are currently being delivered in-house (mean=4.13, 83%), making things flexible and convenient for the management by enabling them to scale up the out sourced service and also reduce the risk of poor service or having limited or over capacity internally for the outsourced service (mean=4.08, 82%), and achieving the cost saving and controlling the costs (mean=4.05, 81%).

Table 22: Hospital Managers' Perception of Outsourcing Benefits

Benefits	Strongly Agree		Agree		Not sure		Disagree		Strongly Disagree		Total Score	Mean
	n	%	n	%	n	%	n	%	n	%	%	
Outsourcing can be used to deliver improved service to the patients	56	67%	21	25%	6	7%	0	0%	0	0%	91%	4.60
Outsourcing can take away unwanted load off the hospital management and focus all energies/ resources on the core business	46	55%	28	34%	9	11%	0	0%	0	0%	89%	4.45
Outsourcing can be used to achieve improvement in productivity	46	55%	22	27%	15	18%	0	0%	0	0%	87%	4.37
Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments to variable costs	37	45%	33	40%	13	16%	0	0%	0	0%	86%	4.29
Outsourcing can be used by the hospital for internal process improvement	28	34%	49	59%	6	7%	0	0%	0	0%	85%	4.27
Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments	28	34%	39	47%	16	19%	0	0%	0	0%	83%	4.14
Outsourcing can be	18	22%	58	70%	7	8%	0	0%	0	0%	83%	4.13

used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services												
Outsourcing by the hospital will make things flexible and convenient for the management	12	14%	66	80%	5	6%	0	0%	0	0%	82%	4.08
Outsourcing can be used by a hospital to achieve cost saving and to control costs	24	29%	39	47%	20	24%	0	0%	0	0%	81%	4.05

3.5.2 Hospital Managers' Perception of Outsourcing Risks

As table 23 showed, the managers' agreement level with the risks of outsourcing in the hospitals. The results showed that the participants perceived many risks of outsourcing. The most common perceived risks were the loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital (mean=3.01, 60%), regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital (mean=2.83, 57%), and increased management complexities since it requires special skills to successfully outsource and manage the vendor (mean=2.83, 57%).

Moreover, the least common perceived risk were over reliance on vendors which may be risky to the hospital in case the vendor performs poorly (mean=4.41, 48%) and sometime, not leading to the expected deliverables/benefits (mean=4.40, 48%).

Table 23: Managers' Perception of General Outsourcing Risks

Risks	Strongly Agree		Agree		Not sure		Disagree		Strongly Disagree		Total Score	Mean
	n	%	n	%	n	%	n	%	n	%	%	
Out sourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy	7	8%	20	24%	26	31%	27	33%	3	4%	60%	3.01
During the out sourcing process by the hospital, there can be regulatory violations and creation of legal obligations	5	6%	18	22%	23	28%	32	39%	5	6%	57%	2.83
Out sourcing by the hospital leads to increased management complexities	0	0%	5	6%	60	72%	17	20%	1	1%	57%	2.83
Outsourcing by the hospital creates complexity in vendor relationship management	0	0%	12	14%	41	49%	26	31%	4	5%	55%	2.73
Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service	5	6%	10	12%	29	35%	29	35%	10	12%	53%	2.65
Out sourcing by the hospital can lead to over reliance on vendors	0	0%	10	12%	22	27%	43	52%	8	10%	48%	2.41
Out sourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy	0	0%	8	10%	17	20%	58	70%	0	0%	48%	2.40

3.5.3 Hospital Managers' Perception of Outsourcing Barriers

As table 24 showed, the managers' agreement level with the barriers of outsourcing in the hospitals. The results showed that the participants perceived many barriers of outsourcing. The most common perceived barriers were the lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it

requires in its mandate of delivering health care to patients (84%), Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource (83%), and regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house (69%).

Moreover, the least common perceived barriers were The size and scale of our hospital operations/organization make it difficult for the hospital to outsource (66%) and Resistance from current employees and employee unions due to fear of staff changes which may result from the hospital adopting outsourcing make it difficult for the hospital to outsource (53%).

Table 24: Mangers' Perception of General Outsourcing Barriers

Barriers	Strongly Agree		Agree		Not sure		Disagree		Strongly Disagree		Total Score	Mean
	n	%	n	%	n	%	n	%	n	%	%	
My hospital lacks the required infrastructure and the management skills	50	60%	2	2%	28	34%	3	4%	0	0%	84%	4.19
Absence of matured vendor market	53	64%	7	8%	6	7%	17	20%	0	0%	83%	4.16
Regulatory and policy restrictions under which the hospital operates	31	37%	3	4%	20	24%	29	35%	0	0%	69%	3.43
The size and scale of our hospital operations/organization	25	30%	5	6%	28	34%	20	24%	5	6%	66%	3.30
Resistance from current employees and employee unions due to fear of staff changes	13	16%	1	1%	18	22%	48	58%	3	4%	53%	2.67

3.5.4 Hospital Managers' Perception of Services Characteristics for Outsourcing

As the table 25 showed, the managers' agreement level with the proper service characteristics for outsourcing in the hospitals. The results showed that the participants

perceived many needed characteristics for proper outsourcing. The most common perceived characteristics were the services should be easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored (95%), it should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices (92%), and they should be core/critical to the hospital's mission of delivering health services (68%), and they should be services that are frequently needed by the hospital for example on a daily basis (58%).

Table 25: Perception of Services Characteristics for Ideal Outsourcing

Barriers	Strongly Agree		Agree		Not sure		Disagree		Strongly Disagree		Total Score	Mean
	n	%	n	%	n	%	n	%	n	%	%	
For hospital services to be outsourced, they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored	61	73%	22	27%	0	0%	0	0%	0	0%	95%	4.73
For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices	65	78%	7	8%	5	6%	6	7%	0	0%	92%	4.58
For services to be outsourced by the hospital , they should be core/critical to the hospital's mission of delivering health services	31	37%	16	19%	11	13%	7	8%	18	22%	68%	3.42
For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis	17	20%	8	10%	24	29%	17	20%	17	20%	58%	2.89

3.6 HOSPITAL CHARACTERSTICS AND MANAGERS' PERCEPTION

This section presented if there were a differences in the perception of hospital managers based on the hospital characteristics. The studied hospital characteristics include hospital ownership, accreditation status, hospital location, and bed and staff size. The studied perception of hospital managers includes the perception the proper characteristics of services for outsourcing, and the outsourcing benefits, risks, and barriers.

The researcher carried an analysis to determine if there is a variety in the perception of hospital managers based on the hospital characteristics. Contingency tables with Man-Whitney U test and Kruskall Wallis Variance Analysis were used to measure the difference between the variables groups' means.

3.6.1 Hospital Characteristics and Outsourcing Benefits

This section displays the differences in the perception of hospital managers regarding the managers' perception of outsourcing benefits according to certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size).

The table 26 showed the differences in managers' perception regarding the benefits of outsourcing according to hospital location (rural and urban). The results indicated that there are no significant differences (p>0.05 for studied benefits) between the perceptions of hospitals managers regarding outsourcing benefits according to hospital location except the benefit of outsourcing in allowing the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals (p value=0.007).

Table 26: Hospital Location and Perception Outsourcing Benefits

	Hospital Location					
	Urban (n=75)		Rural (n=8)			P
Benefit	Mean	STD	Mean	SD	U	value
Out sourcing can be used by a hospital to achieve cost saving and to control costs	4.07	0.7	3.88	0.99	260.5	0.511
Outsourcing can be used by a hospital to achieve improvement in productivity of its operations	4.36	0.78	4.5	0.76	272.5	0.636
Outsourcing can be used by a hospital to be able to deliver improved service to the patients	4.57	0.64	4.88	0.35	230.5	0.192
Outsourcing can take away unwanted load off the hospital management and enable them to focus all energies/resources on the core business capabilities /competencies of looking after patients	4.4	0.7	4.88	0.35	189.0	0.054
Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments (e.g. support staff salaries to) variable costs linked with Predefined deliverables / results/ output by the contractor of an outsourced service	4.25	0.74	4.63	0.52	221.0	0.185
Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments relevant for the business e.g. modern cleaning equipment	4.16	0.72	4.00	0.76	264.5	0.547
Outsourcing can be used by the hospital for internal process improvement by way of restructuring, re-engineering, standardization of processes for the outsourced service	4.27	0.6	4.25	0.46	289.5	0.845
Outsourcing can be used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services e.g. catering services that are currently being delivered in-house	4.49	0.69	4.85	0.37	224.0	0.148
Outsourcing by the hospital will make things flexible and convenient for the management by enabling them to scale up the out sourced service and also reduce the risk of poor	4.42	0.72	4.56	0.51	211.0	0.051

service or having limited or over capacity internally for the outsourced service					
Out sourcing can allow the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals	4.00	0.60	4.30	0.57	143.5	0.007*

*Significant at α≤0.05.

Moreover, the table 27 showed the differences in managers' perception regarding the benefits of outsourcing according to accreditation status (accredited hospitals and non-accredited hospitals). The results showed that there are significant differences between the perceptions of hospitals managers regarding outsourcing benefits according accreditation status in outsourcing role in achieving cost saving and controlling costs (p value=0.008), improving patient services (p value=0.019), improving the internal process by way of restructuring, re-engineering, standardization of processes for the outsourced service (p value=0.015), and allowing the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals (p value=0.015).

Table 27: Hospital's Accreditation Status and Perception Outsourcing Benefits

| | Accreditation status | | | | | |
| | No (n=57) | | Yes (n=26) | | | |
Benefit	Mean	SD	Mean	SD	U	P value
Out sourcing can be used by a hospital to achieve cost saving and to control costs	4.19	0.67	3.73	0.78	492.5	0.008*
Outsourcing can be used by a hospital to achieve improvement in productivity of its operations	4.35	0.77	4.42	0.81	692.5	0.596
Outsourcing can be used by a hospital to be able to deliver improved service to the patients	4.49	0.69	4.85	0.37	544.0	0.019*
Outsourcing can take away unwanted load off the hospital management and enable them to focus all energies/resources on the core business capabilities /competencies of looking after patients	4.42	0.71	4.50	0.65	704.0	0.683
Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments variable costs linked with Predefined deliverables / results/ output by the contractor of an outsourced service	4.32	0.74	4.23	0.71	687.0	0.564
Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments relevant for the business e.g. modern cleaning equipment	4.18	0.71	4.08	0.74	688.0	0.573
Outsourcing can be used by the hospital for internal process improvement by way of restructuring, re-engineering, standardization of processes for the outsourced service	4.16	0.59	4.50	0.51	526.5	0.015*
Outsourcing can be used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services e.g. catering services that are currently being delivered in-house	4.12	0.57	4.15	0.46	726.5	0.860
Outsourcing by the hospital will make things flexible and convenient for the management by enabling them to scale up the out sourced service and also reduce the risk of poor service or having limited or over capacity internally for the outsourced service	4.14	0.40	3.96	0.53	625.0	0.105
Out sourcing can allow the hospital to bring in	4.40	0.56	3.77	0.65	380.5	0.015*

| vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals | | | | | | |

*Significant at α≤0.05.

Table 28 showed the differences in managers' perception regarding the benefits of outsourcing according to the hospitals' bed size (bed size ≤ 119 and bed size > 119). The results indicated that there are no significant differences (p>0.05 for studied benefits) between the perceptions of hospitals managers regarding outsourcing benefits according to hospitals' beds except the benefit of outsourcing in achieving cost saving and controlling costs (p value=0.004).

Table 28: Number of Beds and Perception Outsourcing Benefits

| Services | Number of Beds | | | | U | P value |
| | ≤ 119 (n=44) | | > 119 (n=39) | | | |
	Mean	SD	Mean	SD		
Out sourcing can be used by a hospital to achieve cost saving and to control costs	4.19	0.67	3.73	0.78	380.5	0.004*
Outsourcing can be used by a hospital to achieve improvement in productivity of its operations	4.35	0.77	4.42	0.81	516.5	0.178
Outsourcing can be used by a hospital to be able to deliver improved service to the patients	4.49	0.69	4.85	0.37	591.5	0.614
Outsourcing can take away unwanted load off the hospital management and enable them to focus all energies/resources on the core capabilities	4.42	0.71	4.50	0.65	611.5	0.825
Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments variable costs linked with Predefined deliverables / results/ output by the contractor of an outsourced service	4.32	0.74	4.23	0.71	509.5	0.161
Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments	4.18	0.71	4.08	0.74	601.0	0.738
Outsourcing can be used by the hospital for internal process improvement by way of restructuring, re-engineering for the outsourced service	4.16	0.59	4.50	0.51	608.0	0.788
Outsourcing can be used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services	4.12	0.57	4.15	0.46	607.0	0.761
Outsourcing by the hospital will make things flexible and convenient for the management	4.14	0.40	3.96	0.53	501.5	0.052

Out sourcing can allow the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals	4.40	0.56	3.77	0.65	594.5	0.675

*Significant at α≤0.05.

The table 29 showed the differences in managers' perception regarding the benefits of outsourcing according to the number of staff (hospitals with total number of staff ≤ 437 and hospitals with total number of staff > 437). The results indicated that there are no significant differences (p>0.05 for studied benefits) between the perceptions of hospitals managers regarding outsourcing benefits according to the number of staff except the benefit of outsourcing in achieving cost saving and controlling costs (p value=0.042).

Table 29: Number of Staff and Perception Outsourcing Benefits

	Number of Hospital Staff					P value
	≤ 437 (n=38)		> 437 (n=45)		U	
Services	Mean	SD	Mean	SD		
Out sourcing can be used by a hospital to achieve cost saving and to control costs	3.97	0.70	4.38	0.81	373.0	0.042*
Outsourcing can be used by a hospital to achieve improvement in productivity of its operations	4.31	0.80	4.63	0.62	428.5	0.167
Outsourcing can be used by a hospital to be able to deliver improved service to the patients	4.57	0.66	4.75	0.45	474.0	0.384
Outsourcing can take away unwanted load off the hospital management and enable them to focus all energies/resources on the core capabilities	4.42	0.72	4.56	0.51	499.0	0.631
Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments variable costs linked with Predefined deliverables / results/ output by the contractor of an outsourced service	4.34	0.69	4.06	0.85	439.0	0.223
Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments	4.16	0.73	4.06	0.68	491.5	0.578
Outsourcing can be used by the hospital for internal process improvement by way of restructuring, re-engineering for the outsourced service	4.24	0.58	4.38	0.62	470.0	0.381
Outsourcing can be used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services	4.13	0.52	4.13	0.62	535.0	0.989
Outsourcing by the hospital will make things flexible and convenient for the management	4.06	0.42	4.19	0.54	471.5	0.289

Out sourcing can allow the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals	4.22	0.65	4.13	0.72	497.5	0.622

*Significant at α≤0.05.

The table 30 showed the differences in managers' perception regarding the benefits of outsourcing according to hospital ownership (public, private, and educational). The results indicated that there are no significant differences (p>0.05 for studied benefits) between the perceptions of hospitals managers regarding outsourcing benefits according to the hospital ownership except the benefit of outsourcing in gaining quick and continuous access to the latest technological developments relevant for the business e.g. modern cleaning equipment (p value=0.02).

Table 30: Hospital Ownership and Perception Outsourcing Benefits

	Hospital Ownership							
	Public (n=29)		Private (n=52)		Educational (n=2)			P
Services	Mean	SD	Mean	SD	Mean	SD	X2	value
Out sourcing can be used by a hospital to achieve cost saving and to control costs	3.86	0.83	4.17	0.65	3.50	0.71	4.340	0.114
Outsourcing can be used by a hospital to achieve improvement in productivity of its operations	4.45	0.78	4.33	0.79	4.50	0.71	0.590	0.745
Outsourcing can be used by a hospital to be able to deliver improved service to the patients	4.66	0.61	4.60	0.63	4.00	0.00	3.463	0.177
Outsourcing can take away unwanted load off the hospital management and enable them to focus all energies/resources on the core capabilities	4.48	0.69	4.42	0.70	4.50	0.71	0.160	0.921
Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments variable costs linked with Predefined deliverables / results/ output by the contractor of an outsourced service	4.31	0.71	4.25	0.74	5.00	0.00	2.317	0.314
Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments	3.90	0.67	4.25	0.71	5.00**	0.00	7.783	0.02*
Outsourcing can be used by the hospital for internal process improvement by way of restructuring, re-engineering for the outsourced service	4.34	0.48	4.21	0.64	4.50	0.71	0.950	0.662
Outsourcing can be used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services	4.14	0.52	4.13	0.56	4.00	0.00	0.165	0.921
Outsourcing by the hospital will make things flexible and convenient for the management	4.03	0.50	4.12	0.43	4.00	0.00	0.643	0.725
Out sourcing can allow the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service	4.24	0.74	4.21	0.61	3.50	0.71	2.272	0.321

| giving the hospital competitive advantage over other hospitals | | | | | | | |

*Significant at α≤0.05.

** This group may cause the difference.

3.6.2 Hospital Characteristics and Outsourcing Risks

This section displayed the differences in the perceptions of hospital managers regarding the managers' perception of outsourcing risks based on certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size).

The table 31 showed the differences in managers' perception regarding the risks of outsourcing according to hospital location (rural and urban). The results indicated that there are no significant differences (p>0.05 for studied risks) between the perceptions of hospitals managers regarding outsourcing risks.

Table 31: Hospital Location and Perception Outsourcing Risks

	Hospital Location					P value
	Urban (n=75)		Rural (n=8)			
Services	Mean	STD	Mean	SD	U	P value
Outsourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital	2.99	1.06	3.25	0.71	245.50	0.381
Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service	2.64	1.06	2.75	0.89	262.50	0.539
During the out sourcing process by the hospital, there can be regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital	2.83	1.03	2.88	1.13	298.50	0.981
Outsourcing by the hospital creates complexity in vendor relationship management	2.75	0.79	2.63	0.52	271.50	0.633
Out sourcing by the hospital can lead to over reliance on vendors which may be risky to the hospital in case the vendor performs poorly	2.37	0.84	2.75	0.71	286.50	0.165
Out sourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor	2.83	0.55	2.88	0.35	287.50	0.790
Sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits	2.4	0.66	2.38	0.74	168.00	0.811

*Significant at α≤0.05.

The table 32 showed the differences in managers' perception regarding the risks of outsourcing according to Hospital's Accreditation. The results indicated that there are no

significant differences (p>0.05 for studied risks) between the perceptions of hospitals managers regarding outsourcing risks.

Table 32: Hospital's Accreditation Status and Perception Outsourcing Risks

| Services | Accreditation status | | | | U | P value |
| | Non (n=57) | | Accredited(n=26) | | | |
	Mean	SD	Mean	SD		
Outsourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital	2.89	0.92	3.27	1.22	618.00	0.208
Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service	2.74	1.06	2.46	0.99	616.00	0.199
During the out sourcing process by the hospital, there can be regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital	2.93	1.08	2.62	0.90	597.00	0.139
Outsourcing by the hospital creates complexity in vendor relationship management	2.65	0.74	2.92	0.80	623.50	0.208
Out sourcing by the hospital can lead to over reliance on vendors which may be risky to the hospital in case the vendor performs poorly	2.44	0.78	2.35	0.94	683.50	0.538
Out sourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor	2.81	0.55	2.88	0.52	699.500	0.603
Sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits	2.37	0.62	2.46	0.76	716.00	0.761

*Significant at α≤0.05.

The table 33 showed the differences in managers' perception regarding the risks of outsourcing according to the hospitals' bed size (bed size ≤ 119 and bed size > 119). The results indicated that there are no significant differences (p>0.05 for studied risks) between the perceptions of hospitals managers regarding outsourcing risks according to hospitals' beds except the risk of outsourcing in losing the process control for delivery of the outsourced service (p value=0.016).

Table 33: Number of Beds and Perception Outsourcing Risks

| Services | Number of Beds | | | | U | P value |
| | ≤ 119 (n=44) | | > 119 (n=39) | | | |
	Mean	SD	Mean	SD		
Outsourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital	2.97	1.03	3.15	1.04	559.50	0.434
Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service	2.81	1.05	2.15	0.88	415.00	0.016*
During the out sourcing process by the hospital, there can be regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital	2.86	1.06	2.75	0.97	615.50	0.871
Outsourcing by the hospital creates complexity in vendor relationship management	2.75	0.74	2.70	0.87	625.00	0.954
Out sourcing by the hospital can lead to over reliance on vendors which may be risky to the hospital in case the vendor performs poorly	2.40	0.81	2.45	0.89	613.00	0.843
Out sourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor	2.81	0.54	2.90	0.55	589.00	0.577
Sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits	2.38	0.66	2.45	0.69	592.50	0.620

*Significant at α≤0.05.

The table 34 showed the differences in managers' perception regarding the risks of outsourcing according to the number of staff (hospitals with total number of staff ≤ 437 and hospitals with total number of staff > 437). The results indicated that there are no significant differences (p>0.05 for studied risks) between the perceptions of hospitals managers regarding outsourcing risks according to the number of staff.

Table 34: Number of Hospital Staff and Perception Outsourcing Risks

| Services | Number of Hospital Staff | | | | U | P value |
| | ≤ 437 (n=38) | | > 437 (n=45) | | | |
	Mean	SD	Mean	SD		
Outsourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital	2.93	1.02	3.38	1.03	392.00	0.083
Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service	2.75	1.05	2.25	0.93	408.50	0.123
During the out sourcing process by the hospital, there can be regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital	2.87	1.04	2.69	1.01	500.50	0.668
Outsourcing by the hospital creates complexity in vendor relationship management	2.73	0.73	2.75	0.93	510.00	0.744
Out sourcing by the hospital can lead to over reliance on vendors which may be risky to the hospital in case the vendor performs poorly	2.40	0.80	2.44	0.96	536.00	1.00
Out sourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor	2.81	0.53	2.94	0.57	482.50	0.430
Sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits	2.36	0.64	2.56	0.73	448.50	0.210

*Significant at α≤0.05.

The table 35 showed the differences in managers' perception regarding the risks of outsourcing according to hospital ownership (public, private, and educational). The results indicated that there are no significant differences (p>0.05 for studied risks) between the perceptions of hospitals managers regarding outsourcing risks according to the hospital ownership except the risk of outsourcing in increased management complexities since it requires special skills to successfully outsource and manage the vendor (p value=0.035).

Table 35: Hospital Ownership and Perception Outsourcing Risks

	Hospital Ownership							
	Public (n=29)		Private (n=52)		Educational (n=2)		X2	P value
Services	Mean	SD	Mean	SD	Mean	SD		
Outsourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital	3.03	0.91	3.02	1.11	2.50	0.71	0.649	0.723
Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service	2.83	1.31	2.58	0.87	2.35	0.00	1.327	0.515
During the out sourcing process by the hospital, there can be regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital	3.17	1.17	2.67	0.92	2.00	0.00	4.909	0.086
Outsourcing by the hospital creates complexity in vendor relationship management	2.83	0.80	2.71	0.75	2.00	0.00	2.804	0.246
Out sourcing by the hospital can lead to over reliance on vendors which may be risky to the hospital in case the vendor performs poorly	2.24	0.83	2.52	0.83	2.00	0.00	2.383	0.304
Out sourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor	2.90	0.49	2.83	0.55	2.00**	0.00	6.703	0.035*
Sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits	2.48	0.74	2.37	0.63	2.00	0.00	1.257	0.533

*Significant at α≤0.05.

** This group may cause the difference.

3.6.3 Hospital Characteristics and Outsourcing Barriers

This section displayed the differences in the perception of hospital managers regarding the managers' perception of outsourcing barriers based on certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size).

The table 36 showed the differences in managers' perception regarding the barriers of outsourcing according to hospital location (rural and urban). The results showed that there is a significant difference between the perceptions of hospitals managers regarding outsourcing barriers according to hospital location in lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients (p value=0.018). However, there are no differences on the perception of other barriers.

Table 36: Hospital Location and Perception Outsourcing Barriers

Services	Hospital Location				U	P value
	Urban (n=75)		Rural (n=8)			
	Mean	STD	Mean	SD		
My hospital lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients	4.11	1.05	5.00	0	259.0	0.018*
Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house	3.41	1.33	3.63	1.19	283.5	0.503
Resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to out source	2.71	1.17	2.38	0.52	168.5	0.768
The size and scale of our hospital operations/organization make it difficult for the hospital to out source	3.28	1.3	3.5	1.31	259.0	0.670
Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource.	4.09	1.28	4.75	0.46	283.5	0.279

*Significant at p≤0.05.

The table 37 showed the differences in managers' perception regarding the barriers of outsourcing according to hospital accreditation status. The results showed that there is a significant difference between the perceptions of hospitals managers regarding outsourcing barriers according to accreditation status in The size and scale of our hospital operations/organization make it difficult for the hospital to outsource (p value=0.001). However, there are no differences on the perception of other barriers.

Table 37: Hospital's Accreditation Status and Perception Outsourcing Barriers

| Services | Accreditation status | | | | U | P value |
| | Non (n=57) | | Accredited(n=26) | | | |
	Mean	SD	Mean	SD		
My hospital lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients	4.19	1.06	4.19	0.98	734.00	0.936
Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house	3.40	1.28	3.50	1.39	726.00	0.876
Resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to out source	2.72	1.13	2.58	1.14	668.50	0.424
The size and scale of our hospital operations/organization make it difficult for the hospital to out source	3.65	1.23	2.54	1.10	405.00	0.001*
Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource.	4.19	1.22	4.08	1.29	710.00	0.722

*Significant at p≤0.05.

The table 38 showed the differences in managers' perception regarding the barriers of outsourcing according to bed size (bed size ≤ 119 and bed size > 119). The results showed that there are a significant differences between the perceptions of hospitals managers regarding outsourcing barriers according to bed size in lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients (p value=0.041), The size and scale of our hospital operations/organization make it difficult for the hospital to outsource (p value=0.049), and Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource (p value=0.017). However, there are no differences on the perception of other barriers.

Table 38: Number of Beds and Perception Outsourcing Barriers

| | Number of Beds | | | | | |
| | ≤ 119 (n=44) | | > 119 (n=39) | | | P |
Services	Mean	SD	Mean	SD	U	value
My hospital lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients	4.22	1.02	4.10	1.07	590.0	0.626
Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house	3.60	1.31	2.90	1.17	449.0	0.041*
Resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to out source	2.56	1.06	3.05	1.28	467.0	0.051
The size and scale of our hospital operations/organization make it difficult for the hospital to out source	3.46	1.26	2.80	1.32	452.5	0.049*
Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource.	3.97	1.31	4.75	0.72	438.0	0.017*

*Significant at p≤0.05.

The table 39 showed the differences in managers' perception regarding the barriers of outsourcing according to staff size. The results showed that there are a significant differences between the perceptions of hospitals managers regarding outsourcing barriers according to staff size in regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house (p value=0.029), and Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource (p value=0.007) . However, there are no differences on the perception of other barriers.

Table 39: Number of Hospital Staff and Perception Outsourcing Barriers

	Number of Hospital Staff					P value
	≤ 437 (n=38)		> 437 (n=45)		U	
Services	Mean	SD	Mean	SD		
My hospital lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients	2.36	0.64	2.56	0.73	518.5	0.815
Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house	4.18	1.03	4.25	1.07	357.0	0.029*
Resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to out source	3.60	1.33	2.75	1.00	315.0	0.004*
The size and scale of our hospital operations/organization make it difficult for the hospital to out source	2.52	1.04	3.31	1.30	385.0	0.069
Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource.	3.43	1.26	2.75	1.34	404.0	0.075

*Significant at p≤0.05.

The table 40 showed the differences in managers' perception regarding the barriers of outsourcing according to number of hospital staff. The results showed that there are a significant differences between the perceptions of hospitals managers regarding outsourcing barriers according to number of hospital staff in resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to outsource (p value=0.00).

Table 40: Number Ownership and Perception Outsourcing Barriers

| Services | Number Ownership | | | | | | X2 | P value |
| | Public (n=29) | | Private (n=52) | | Educational (n=2) | | | |
	Mean	SD	Mean	SD	Mean	SD		
My hospital lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients	4.45	0.91	4.06	1.07	4.00	1.41	2.788	0.248
Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house	3.83	1.28	3.25	1.30	2.50	0.71	4.904	0.086
Resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to out source	2.00	0.46	3.08**	1.22	2.00	0.00	20.38	0.00*
The size and scale of our hospital operations/organization make it difficult for the hospital to out source	3.38	1.24	3.33	1.31	1.50	0.71	4.114	0.128
Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource.	4.41	0.98	4.04	1.33	3.50	2.12	0.978	0.613

*Significant at α≤0.05.
** This group may cause the difference.

3.6.4 Hospital Characteristics And Services Characteristics For Outsourcing

This section displayed the differences in the perception of hospital managers regarding the managers' perception of outsourcing barriers according to certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size).

The table 41 showed the differences in managers' perception regarding the services characteristics for outsourcing according to hospital location (rural and urban). The results indicated that there are no significant differences (p>0.05 for studied characteristics) between the perceptions of hospitals managers regarding the services characteristics for outsourcing.

Table 41: Hospital Location and Services Characteristics For Outsourcing

| | Hospital Location | | | | | |
| | Urban (n=75) | | Rural (n=8) | | | |
Services	Mean	SD	Mean	SD	U	P value
For services to be outsourced by the hospital , they should be core/critical to the hospital's mission of delivering health services	3.51	1.56	2.63	1.6	202.50	0.118
For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis	2.95	1.4	2.38	1.3	228.50	0.254
For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices	4.57	0.89	4.63	1.06	275.50	0.60
For hospital services to be outsourced, they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored	4.73	0.45	4.75	0.46	295.00	0.920

*Significant at p≤0.05.

The table 42 showed the differences in managers' perception regarding the services characteristics for outsourcing according to accreditation status. The results indicated that there are no significant differences (p>0.05 for studied characteristics) between the perceptions of hospitals managers regarding the services characteristics for outsourcing according to accreditation status.

Table 42: Hospital's Accreditation Status and Services Characteristics For Outsourcing

| | Accreditation status | | | | | |
| | Non (n=57) | | Accredited(n=26) | | | |
Services	Mean	SD	Mean	SD	U	P value
For services to be outsourced by the hospital , they should be core/critical to the hospital's mission of delivering health services	3.41	1.60	3.45	1.54	710.0	0.753
For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis	2.95	1.39	2.70	1.46	618.5	0.217
For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices	4.56	0.91	4.65	0.88	730.0	0.881
For hospital services to be outsourced, they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored	4.70	0.46	4.85	0.37	704.0	0.635

*Significant at p≤0.05.

The table 43 showed the differences in managers' perception regarding the services characteristics for outsourcing according to bed size. The results indicated that there are no significant differences (p>0.05 for studied characteristics) between the perceptions of hospitals managers regarding the services characteristics for outsourcing according to bed size.

Table 43: Number of Beds and Services characteristics for Outsourcing

	Number of Beds					
	≤ 119 (n=44)		> 119 (n=39)			
Services	Mean	SD	Mean	SD	U	P value
For services to be outsourced by the hospital , they should be core/critical to the hospital's mission of delivering health services	3.41	1.60	3.45	1.54	622,50	0.934
For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis	2.95	1.39	2.70	1.46	559.00	0.438
For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices	4.56	0.91	4.65	0.88	581.50	0.473
For hospital services to be outsourced, they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored	4.70	0.46	4.85	0.37	534.50	0.183

*Significant at p≤0.05.

The table 44 showed managers' perception regarding the services characteristics for outsourcing according to staff size. The results indicated that there are no significant differences (p>0.05 for studied characteristics) between the perceptions of hospitals managers regarding the services characteristics for outsourcing according to staff size.

Table 44: Number of Hospital Staff and Services characteristics for Outsourcing

| Services | Number of Hospital Staff | | | | U | P value |
| | ≤ 437 (n=38) | | > 437 (n=45) | | | |
	Mean	SD	Mean	SD		
For services to be outsourced by the hospital , they should be core/critical to the hospital's mission of delivering health services	3.45	1.62	3.31	1.45	483.00	0.525
For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis	2.94	1.38	2.69	1.493	473.00	0.455
For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices	4.72	0.45	4.81	0.4	481.50	0.382
For hospital services to be outsourced, they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored	4.72	0.45	4.81	0.4	484.50	0.437

*Significant at p≤0.05.

The table 45 showed the differences in managers' perception regarding the services characteristics for outsourcing according to ownership. The results indicated that there are no significant differences (p>0.05 for studied characteristics) between the perceptions of hospitals managers regarding the services characteristics for outsourcing according to ownership.

Table 45: Hospital Ownership and Services Characteristics For Outsourcing

| Services | Hospital Ownership | | | | | | X2 | P value |
| | Public (n=29) | | Private(n=52) | | Educational(n=2) | | | |
	Mean	SD	Mean	SD	Mean	SD		
For services to be outsourced by the hospital , they should be core/critical to the hospital's mission of delivering health services	4.05	0.91	4.06	1.07	4.00	1.41	10.702	0.005
For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis	3.83	1.28	3.25	1.30	2.50	0.71	3.984	0.136
For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices	2.00	0.46	3.08	1.22	2.00	0.00	0.756	0.685
they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored	3.38	1.24	3.33	1.31	1.50	0.71	0.940	0.625

CHAPTAR 4: DISCUSSION

This study aims to explore the current status of outsourcing adoption in Jordanian hospitals including the extent of outsourcing, the reasons for current service outsourcing, advantages, disadvantages of current service outsourcing, satisfaction level of current service outsourcing; current practice of outsourcing including conducted analysis to decide to outsource; outsourcing management and monitoring process; and causes of managers' decisions to not outsource services. Moreover, the study aims to identify the overall hospital managers perception regarding the benefits, risks, barriers, proper services characteristics for outsourcing, in addition, to determine the differences regarding the managers' perception according to hospital location, accreditation status, hospital ownership, and hospital beds and staff size.

This chapter tries to explain the results based on other research and author opinion and to compare the results of the study with the results of others' studies. Moreover, the study aims to identify the overall hospital managers perception regarding the benefits, risks, barriers, proper services characteristics for outsourcing, in addition, to determine the differences regarding the managers' perception according to hospital location, accreditation status, hospital ownership, and hospital beds and staff size.

4.1 CURRENT OUTSOURCING PROCESS

The results showed that all surveyed hospitals have business/strategic plan which means that the hospitals in Jordan are thinking in strategic ways for achieving the main goals. This result is considered highest when comparing it with other studies such as Mujasi's study which showed that only 70% of surveyed Nigerian hospitals have business/strategic plan (Mujasi, 2016).

 Although all surveyed hospitals use outsourcing and 82% of managers agreed that the outsourcing as one approach that hospital management can use to improve the work performance of hospitals, only 14 hospitals (17%) include outsourcing as one of the strategies for improving hospital performance. It may be as results of unclear understanding of outsourcing and strategic outsourcing concepts among health managers, or because of lack of sufficient policies and regulation for outsourcing

adoption in health sectors which was perceived as a significant barrier by 69% of Jordanian hospital managers. According to many studies, these result may negatively affect the results of outsourcing such as decreasing the focus on core competencies, capabilities and skills acquirements, ability to manage the risks and redirect the resources; and flexibility (Machado Guimarães & Crespo de Carvalho, 2013; Momme, 2002; Teece, 2010; Verner & Abdullah, 2012). Moreover, these result was considered highest when comparing it with other studies such as Mujasi's study which showed that only 72% of hospitals have included the outsourcing business/strategic plan (Mujasi, 2016).

Furthermore, the results showed that the managers scored the importance level of the listed services as high important (above 71%). This results indicated that the Jordanian hospitals managers perceived the role and scope of all services in improving the performance and achieving the intended goals. Moreover, the Jordanian hospitals' managers recognized the supportive services such as laundry, catering, IT services as important services, slightly below the scores of the medical services. This means that the managers perceived the role of supportive services to enhance the performance and quality of overall hospitals performance.

Moreover, the results indicated that all surveyed hospitals outsourced one or more services. These results are not unexpected because the most managers (85%) perceived of outsourcing as one approach that hospital management can use to improve the work performance of hospitals and the highest scores of managers' perceptions regarding the medical and supportive services' importance.

The results showed that the outsourcing of supportive services is relatively higher than medical services. These results support the idea to keep the services which bring significant competitive advantages in-house (Warner & Hefetz, 2012).

The waste disposal services disposal service was the most outsourced services in Jordanian hospitals (95%). This may be due to the nature of this service (implementation outside the hospitals) and the complicated medical disposal policy and regulations which argue the managers to find another expert vendor to manage and operate this services. Outsourcing of waste disposal services can serve the hospitals by

decreasing the waste and costs, avoiding the environmental liability for the hospitals, keeping adhering to compliance standards (Liao & Ho, 2014).

Moreover, the outsourcing of supportive services such as communication and telecommunication (n=50; 60%), laundry services (n=50; 60%). technical support (n=50; 60%), catering (n=36; 43%), IT services 60%) was relatively high. This may be because these services required skilled and qualified staff to operate particularly the IT, telecommunication and technical support services. This results are consistent with other studies (Moschuris & Kondylis, 2006; Yigit, Tengilimoglu, Kisa, & Younis, 2007). Many studies discussed the reasons for increasing outsourcing supportive services and they concluded that the main reasons are to reduce costs, improve flexibility and share risk, increase the focus on core services and enhance the quality of services (Rahim, Baldry, & Amaratunga, 2010; Young & Macinati, 2012).

Furthermore, the medical services such as laboratory services, pharmacy services, and radiology services were showed as the highest. These services includes many products and tasks which are suspected to outsource partially for special products and tasks such as chemotherapy preparation, cytogenetics analysis, and positron emission tomography (PET) scan. This happened as results of political factors that affect the decision making due to certain problems with handling staff or changing to external funding (Young & Macinati, 2012), and may be interpreted by the impacts of limited of resources and funds, and lack of experiences in public and private hospitals which restrict their abilities to operate certain tasks and products.

The anesthesia, sterilization, and nursing services were the least frequent outsourced medical services in all surveyed hospitals. This may be resulted from the needs of these services in the hospitals on daily basis which the many mangers preferred to be controlled totally to ensure continues provision of care.

The results showed that the hospitals' managers used one or more analyses to start the outsourcing due to increasing the variety of outsourcing's services in Jordanian hospitals. The activity importance analysis was considered the most commonly used strategies for initiate the outsourcing in Jordanian hospitals is considered as the main analysis in many outsourcing framework such as Meme's framework (2002) and

McIvor's framework (2002) (Perunović, 2007). The analysis of the importance level of the activity involves the controlling how much this service contribute to achieving strategic goals. This analysis was combined with other analysis for identifying the services to identify the gaps and needs that argued the hospitals to find the solution to cover this gaps and determine if the outsourcing is appropriate to cover this gaps.

The determination of the relationship strategy with the supplier is the second utilized strategies for outsourcing decision. This analysis involves the determination what type of collaboration, its advantages, and disadvantages that will be taken in place to achieve specific goals. Accordingly, the decision for outsourcing will be considered if it is appropriate.

Market analysis is the third utilized strategies for outsourcing decision. It includes the identifying the opportunities and risks in the market. This analysis can help the managers in hospitals to determine if the outsourcing can help to achieve the opportunity and avoid the risks.

To ensure proper adoption of outsourcing, proper monitoring strategies are required (Perunović, 2007). However, the results showed that all surveyed hospitals utilized one or more strategies to monitor the current outsourcing process in Jordanian hospitals. The most common strategies have been the regular meetings with the vendors and benchmarking of their outsourced service, tracking the costs, and internal capability analysis

The regular meeting is considered as the simplest strategy for monitoring the outsourcing. By using this strategy, the parties can exchange the opinions and current status, and how to improve the performance of works (Vora, 2010). The second popular strategy was the using benchmarking technique which is used to evaluate the quality of services compared with others (Franceschini, Galetto, Pignatelli, & Varetto, 2003). It is commonly used based on annual reports that are generated by the ministry of health. It is also seen obviously in the accredited hospitals. Tracking the costs are used to identify the changes in the services costs during the outsourcing. Generally. This strategy is commonly combined with another strategy because it concerns only with cost.

The effectiveness of the utilized analyses before and during outsourcing is measured according to the attained benefits and outcome and satisfaction results with currently outsourced services (Perunović, 2007). Accordingly, the results showed that the managers perceived the currently adopted outsourcing process as an opportunity for improvement more than as a risk. For this reasons, the satisfaction results were very high with the outsourced services (more than 80%).

The results showed that the outsourced services contributed positively in improving the client service (n=58; 70%), decreasing the services cost (n=60; 72%), and decreasing the workforce (n=65; 78%). These benefits were also considered the main reasons for starting outsourcing in Jordanian hospitals based on the hospitals' managers' perspectives.

 These results were consistent with Jordanian health strategies goals to control the health expenditure and salaries of health workforce, and increase the needs to improve the quality of health care (HHC, 2015). These results were also consistent with other performed studies (Dalton & Warren, 2016; Moschuris & Kondylis, 2006; Young & Macinati, 2012).

Although of all outsourcing benefits in Jordanian hospitals, the manager perceived many outsourcing risks. The results showed that less than 30% of managers indicated that the currently outsourced services contributed negatively in the loss of privacy and confidentiality, increasing the services cost, loss of control and flexibility over outsourced service, and decline in hospital's capacity to provide the outsourced service. The results are considered acceptable when comparing with many reports discussing the risk of outsourcing such as the "Outsourcing in Europe" and "Outsourcing Public Services "s report which showed that outsourcing has negative impacts on the quality and cost of outsourced services (Butterworth, Kuchler, & Westdijk, 2014; TUC, 2015).

At the same time, identifying the barriers of currently outsourced services can help and guide the governments and health sectors to decrease the burden of this barriers. Our study showed that the managers recognized many barriers faced outsourcing in Jordanian hospitals. The most common difficulties were political interference in the

currently outsourcing process, the limited number of service providers, and the limited in-house capacity to outsource.

The political interference can restrict the outsourcing adoption in Jordan as results of changing the uncertain situation in the Middle East and increasing the immigration (HHC, 2015). This could argue the government to develop many strategies to control the newly transferred companies from other regions to Jordan and protect the national companies and to manage the problems that may affect the overall performance of health system. Moreover, it may as results of importance of health care on stability of the country and welfare which encourage the politicians to interfere continuously in the outsourcing process.

The limited number of service providers was considered other challenges that can restrict the outsourcing adoption in Jordanian hospitals especially in rural areas in which the companies do not prefer to open in due to lack of resources including the human resources. Limited in-house capacity to outsource is the third challenge that faced the adoption of outsourcing in Jordanian hospitals. This challenge include lack of limited space to receive the external resources and inadequate infrastructure such as networking, and required equipment.

4.2 GENERAL PERCEPTION OF OUTSOURCING IN HOSPITALS

Regarding the general perception of Jordanian hospitals managers toward the benefit, risks, and barriers of outsourcing, the results showed that the managers strongly agree or agree (at least 76% of them) with the many benefits of outsourcing. These benefits include reducing the service cost, improve the productivity, enhance the client services, decrease the unwanted loads, and increasing the access to the latest technology. The results are expected based on the manager perception of benefits and satisfaction results for currently outsourcing process. These results are consistent with a lot of studies (Harland et al., 2005; Moschuris & Kondylis, 2006; Quinn & Hilmer, 1994). Based on this results, it is expected to increase the extent of outsourcing to include more services in the future.

Despite the many benefits of outsourcing are perceived, many risks are recognized by Jordanian hospitals' managers. The score of outsourcing risks was considered low (6%-32%), but it was very important to identify and guide the prospective outsourcing process. These risks include mainly: loss of confidentiality and sometimes breach of privacy since the contractor gets to know the internal operations of the hospital espically, regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital, and increased management complexities since it requires special skills to successfully outsource and manage the vendor. These results are consistent with a lot of studies (Akyürek, 2013; Harland et al., 2005; Mujasi, 2016).

At the same time, the results indicated the main barriers for starting outsourcing are the lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients, absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource, and Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house. These results are consistent with Mujasi results (2016).

Finally, the results showed that the most important characteristics of services to be ideally outsourced are the availability of competent vendors which is essential to start outsourcing, and whose output is easy to monitor and track to measure the outsourcing benefits and do it properly.

Furthermore, the results showed a significant difference in the perception of hospital managers regarding some outsourcing benefits, risks, barriers, and characteristics of services to be ideally outsourced according to certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size). The results showed that there are a significant difference between hospitals in rural and urban areas in the perception of outsourcing benefit in bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive

advantage over other hospitals. These result can be interpreted by the lack of required and new capabilities and knowledge in hospitals which located in rural areas which argue the hospitals to find other strategy to access these capabilities and knowledge.

Moreover, the results showed that there are a significant difference the accredited and non-accredited hospitals in the outsourcing benefit in bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals, improving the provided service to the patients, improving the internal process by way of restructuring, re-engineering, standardization of processes for the outsourced service, and achieving cost saving. Generally, the accredited hospitals intends to providing the high quality of services by improving the internal process more than controlling the cost and seeking for new capabilities and knowledge regarding services.

At the sometime, the results indicated that there are no significant differences (p>0.05) between the perception of managers in most of the studied benefits according to hospital bed and staff sizes (bed size ≤ 119 and bed size > 119) regarding the general benefits of outsourcing except the role of outsourcing to achieve cost saving and to control costs. It can be interpreted as that the perception of cost saving may be obvious and significant in large hospitals more than in the small hospitals.

Likewise, the results indicated that there are no significant differences (p>0.05) between the perception of managers in most of the studied benefits according to hospital ownership regarding the general benefits of outsourcing except the role of outsourcing to gain quick and continuous access to the latest technological developments relevant for the business e.g. modern cleaning equipment which can be interpreted by the variation of technological needs between educational, private, and public hospitals which may lead to vary the perception regarding outsourcing role in increasing the access to technology.

Moreover, the differences in the perception of hospital managers regarding outsourcing risks based on certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size) are analyzed. The results showed there are no significant differences (p>0.05) between the perceptions of hospitals managers

regarding outsourcing risks according to hospital location, hospital location, staff size, and accreditation status.

At the same time, the results show that there are significant differences between the perception of the managers according to bed size and hospital ownership to loss of process control for delivery of the outsourced service according to bed size regarding the outsourcing risks in especially in low size hospitals which may be due to the model and hierarchy of management in small hospitals that are characterized by centralization and high span of command, and regarding the outsourcing risks in increasing the management complexities since it requires special skills to successfully outsource and manage the vendor according to hospital ownership especially in private hospitals due to have a lot of relationship and agreements with external vendors such as ministry of health, insurance agency, employee committees , and other hospitals.

The differences in the perception of hospital managers regarding outsourcing barriers based on certain hospital characteristics (hospital ownership, accreditation status, hospital location, and bed and staff size) are analyzed. The results showed that there are significant differences between the perceptions of hospitals managers regarding some of outsourcing barriers according to hospital ownership, accreditation status, hospital location, and bed and staff size. The results showed that there are significant differences ($p<0.05$) between the perceptions of the managers according to hospital location regarding the lack of the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively outsource the services especially in hospital that located in urban areas which is expected due to in adequate infrastructure in these areas.

Moreover, the results showed that there is a significant difference between the perceptions of hospitals managers regarding outsourcing barriers according to accreditation status in the size and scale of our hospital operations/organization make it difficult for the hospital to outsource. Additionally, there are a significant differences according to bed size in regulatory and policy restrictions due to the policy limitation for small hospitals, resistance from current employees to avoid leaving the works especially

in private hospitals, absence of matured vendor market that able to manage the outsourcing in big hospitals.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

This study was aimed to explore the current status of outsourcing adoption in Jordanian hospitals including the extent of outsourcing, the reasons for current service outsourcing, advantages, disadvantages of current service outsourcing, satisfaction level of current service outsourcing; current practice of outsourcing including conducted analysis to decide to outsource; and outsourcing management and monitoring process.

The results indicated that outsourcing in Jordanian hospitals is widely adopted for both medical and supportive services. And the main reasons for current outsourcing process were to reduce the workforce size, decrease the costs, and increase the focus on the patients.

Moreover, the results showed that the outsourcing in Jordanian hospitals is perceived as an opportunity to decrease the cost and improve the quality of care rather than as the risks. The main barriers to outsourcing adoption were the political interferences, the limited number of service providers, and the limited in-house capacity to outsource.

The results indicated that the most common processes were performed by hospitals to start outsourcing the services were the analysis of the importance level of the activity, the determination of the relationship strategy with the supplier, and market analysis. The most common strategies were performed by hospitals to monitor the outsourcing process were regular meetings with the vendors and benchmarking of their outsourced service, tracking the costs, and internal capability analysis.

Moreover, this study aimed to identify the overall hospital managers perception regarding the benefits, risks, barriers, proper services characteristics for outsourcing, in addition, to determine the differences regarding the managers' perception according to hospital location, accreditation status, hospital ownership, and hospital beds and staff size.

The results showed that the managers strongly agree or agree (at least 76% of them) with the many benefits of outsourcing. These benefits include reducing the service cost, improve the productivity, enhance the client services, decrease the unwanted loads, and increasing the access to the latest technology. The results showed that there are

significant differences between the perceptions of managers in most of the studied benefits according to many hospital characteristics in different benefits.

Although the many benefits of outsourcing are perceived, many risks are recognized by Jordanian hospitals' managers. The score of outsourcing risks was considered low (6%-32%). These risks include mainly: the loss of confidentiality, violation, loss of control, and over-dependence. Moreover, the results show that there are significant differences between the perceptions of the managers according to many hospital characteristics in different risks.

At the same time, the results indicated the main barriers for starting outsourcing are the lack of adequate infrastructure and internal hospital capabilities, limited qualified, and policies and regulatory restrictions. It also showed that there are significant differences between the perceptions of the managers according to many hospital characteristics in different barriers.

Finally, the results showed that the main characteristics of services to be outsourced are the availability of enough competent suppliers and whose output is easy to measure. Moreover, the results concluded that there are significant differences between the managers' perceptions according to many hospital characteristics in different characteristics.

Based on all mentioned findings, there are many recommendation which can be summarized in the below points:

Accordingly, there are many recommendations that could are raised such as:

- Increasing adoption of outsourcing if feasible as a way of improving the hospital performance by enhancing information sharing and sharing of experiences between managers regarding the services outsourcing.
- The hospital managers should ensure proper financing for hospitals' services and increase their infrastructure capability.
- The hospital managers should negotiate and establish clear and full detailed the contract with the vendor to decrease the risk of conflicts and overcome the possible risks and barriers during the outsourcing process.

- The hospitals should be developed proper key performance indicators and include them in the contract. Based on that, the vendors should monitor the day-to-day performance of its working, and the hospital managers should monitor the key performance indicators to evaluate the compliance.

- The hospital should perform quantitative and financial analyses techniques for monitoring process for outsourcing and ensuring if the outsourcing is comparable with the hospitals' needs.

- The managers should develop a clear framework and policies for the outsourcing agreements, procedures, and responsibilities to overcome outsourcing barriers

- The government should monitor the application of outsourcing in their hospitals to prevent any violation and political violation.

- The hospitals should develop their infrastructure to be suitable for outsourcing.

- The government should develop a policy includes minimal requirements to be a vendor for the hospitals

- The government should try to encourage the outsourcing by decreasing the taxation for the venders who achieved high points of good services and developing the minimal requirement and standards for approving the vendors. Accordingly, many recommendations are developed for future research such as

- Performing financial analyses studies for outsourcing in Jordanian hospitals to measure the impact of outsourcing properly.

- Performing Studies include the Jordanian military hospitals are recommended to complete the picture of outsourcing in Jordan.

- Using qualitative design to expand the understanding of why and how the outsourcing is utilized.

- Performing studies to measure the perception for outsourcing in each service

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

Cover Page

Good day. I am Omar Ayaad, a doctoral student at the Hacettepe University in Turkey. He is conducting a study on outsourcing by hospitals in Jordan. I am is carrying out a survey on out sourcing practices by various hospitals, hospital manager's opinions about the benefits and risks of outsourcing and the services outsourced. We are visiting hospitals throughout the country and this hospital was selected to be in the survey.

The results of this national survey will add to the existing body of knowledge and understanding of the subject of outsourcing, particularly in the health sector in developing countries and specifically on the context of hospitals in Jordan; and will be useful to health planners, policy makers and health services managers.

I would like to ask you a series of questions about your hospital's current outsourcing practices and your personal opinion about various aspects of outsourcing. I might want to request for a follow on interview with you in the near

future to further explore your responses to this survey; and I would like to know your willingness to be contacted for that purpose in the future.

Can we continue?

- o Yes
- o No

If 'Yes' go to next questions, if '**No'** end the survey

Section One: The facility identification section

1- Name of the Hospital _____
2- City: _____
3- Dicrict:_____
4- Hospital Ownership:
   - o _____ Government/Ministry of Health
   - o _____ Private Hospital
   - o _____ University Hospital
5- Number of beds in Hospital_____
6- -Total Staff in Hospital……………………….
   - ▪ Clinical Staff………………………………………….
   - ▪ Non Clinical Staff……………………………………
7- Number of Bed day in 2016 _____
8- Accreditation status
   - o JCI
   - o HCAC
   - o ISO
   - o HACAP
   - o CAP
   - o Other _____
9- Data of survey _____
10- Names and Title of People Interviewed
   - o _____General managers
   - o _____CMO
   - o _____COO
   - o _____ CFO
   - o Others _____

Section Two: the respondent's opinion and knowledge about outsourcing

(About your hospital's strategic planning; your opinion about some aspects of outsourcing and the importance of certain services that your hospital needs to deliver health care to your patients)

12	Does your hospital have a strategic or business plan?	o_____ Yes o_____ No **(if answer is No go to question 14)**
13	Does the strategic plan include outsourcing as one of the strategies for improving hospital performance?	o_____ Yes o_____ No

14- Please indicate your level of agreement with the statements below regarding outsourcing by hospitals

		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
-	Outsourcing is one approach that hospital management can use to improve performance of their hospitals					
-	know at least one hospital that is currently outsourcing one or more of the services it requires to deliver health care to its patients					
-	the MOH Public Private Partnership (PPP) policy 2015, can be used as a basis by hospitals to outsource					

15- Compared to clinical services, how important would you say the following services are to your mandate of delivering health care?

		Very Important	Important	Moderately Important	Of Little Unimportant	Un important
-	Security					
-	Cleaning					
-	IT Services					
-	Catering					
-	Accounting					
-	Receptions					
-	Public relations					
-	Technical Support (electric, water….)					
-	Laboratory services					
-	Nursing Services					
-	Laundry Services					
-	Waste disposal Services					
-	Communication and telecommunication					
-	Sterilization services					
-	Ambulance Services					
-	Anesthesia					
-	Pharmacy Services					
-	Radiology Services					
-	Other :					
-						
-						

Section Three: the hospitals current outsourcing practices and experienced the advantages or disadvantages

(Now am going to ask you some questions about your hospital's current outsourcing practices and the advantages or disadvantages you have encountered from outsourcing)

16	Is your hospital currently outsourcing any of the services you need to run the	o_____ Yes o_____ No **(if your answer is No go to question 33)**

17	Which of the following services is your hospital currently outsourcing?	o _____Security o _____Cleaning o _____IT Services o _____Catering o _____Accounting o _____Receptions o _____Public relations o _____Technical Support (electric, water….) o _____Laboratory services o _____Nursing Services o _____Laundry Services o _____Waste disposal Services o _____Communication and telecommunication o _____Sterilization services o _____Ambulance Services o _____Anesthesia o _____Pharmacy Services o _____Radiology Services o _____Other :
18	What is the approximate annual value of the outsourcing contract for these services	o _____ less than 200 JD o _____ 200-2000 JD o _____ 2001-10000 JD o _____ 10000-20000 JD o _____ More than 20000 JD
19	Are you willing to share some documents and financial information about your outsourced services?	o_____ Yes o_____ No

20	For the services currently being outsourced, for how many months has the hospital been outsourcing those services?

Services	Months	Years
Security		
Cleaning		
IT Services		
Catering		
Accounting		
Receptions		
Public relations		
Technical Support (electric, water….)		
Laboratory services		
Nursing Services		
Laundry Services		

		Waste disposal Services		
		Communication and telecommunıcatıon		
		Sterilization services		
		Ambulance Services		
		Anesthesia		
		Pharmacy Services		
		Radiology Services		
		Other:		
21	What have been the benefits/advantages to the hospital of outsourcing the services it currently outsources? **(Circle all that apply)**	o _____Improved client service o _____Reduced Costs of service o _____Smaller work force which is easy to manage o Others (Specify)		
22	What have been some of the drawbacks/disadvantages of outsourcing to the hospital **(Circle all that apply)**	o _____Quality of service has worsened o _____Cost of service has gone up o _____Staff dis-satisfaction due to laying off of staff to accommodate contractor o _____Loss of control and flexibility over outsourced service o _____Decline in hospital's capacity to provide the outsourced service o _____Loss of privacy/confidentiality regarding hospital operations o Others (Specify):		

23- What would you say is the hospital's management overall level of satisfaction with your currently outsourced services? (Only for currently outsourced servıces)

		Very Satisfied	Satisfied	Neither Satisfied, Nor Dissatisfied	Dis-satisfied	Very dissatisfied
-	Security					
-	Cleaning					
-	IT Services					
-	Catering					
-	Accounting					
-	Receptions					
-	Public relations					
-	Quality auditing (JCI..)					
-	Food services					
-	Technical Support (electric, water….)					
-	Laboratory services					
-	Nursing Services					
-	Laundry Services					
-	Waste disposal Services					
-	Communication and telecommunication					
-	Sterilization services					
-	Ambulance Services					
-	Anesthesia					
-	Pharmacy Services					
-	Radiology Services					
-	Other:					
-						
-						

24	For the services for which you are satisfied, what are the reasons for your satisfaction? **(Circle all that apply)**	o_____ Anticipated reduction in costs has been realized o_____ Good relationship with supplier o_____ Anticipated improvement quality of service has been realized o Other (Specify)

| 25 | For the services for which you are dis-satisfied, what are the reasons for dissatisfaction? **(Circle all that apply)** | o_____ Anticipated cost reduction has not been realized
o_____ Contract management with the supplier has been problematic
o_____ Reduction in quality of service
o_____ Complaints by staff about laying off staff Complaints from clients Other (Specify) |

Section Four: the hospitals current outsourcing practices and experienced the advantages or disadvantages

(Now am going to ask you some questions about the process your hospital went through to decide about outsourcing your currently outsourced services and how you are managing and monitoring the outsourcing process)

26	What internal processes/analysis did the hospital go through to decide whether or not to begin outsourcing some of its required services **(Circle all that apply)**	o_____ None, decision was made intuitively o_____ Analysis of the importance level of the activity to the hospital's mandate o_____ Analysis of the relative capability of the hospital to provide the service Vs outside suppliers o_____ Market analysis for the services to be outsourced o_____ Determination of the appropriate strategic sourcing options o_____ Determination of the relationship strategy with supplier. o_____ Determination of how the relationship with supplier will be established, managed, monitored and evaluated
27	Why did the hospital decide to begin outsourcing the services that it currently out sources? **(Circle all that apply)**	o_____ To save costs o_____ To enable the hospital focus on servicing patients o_____ quality service from another firms' expertise o_____ To increase flexibility by using a contracted work force o_____ Wanted to reduce employee size o Other (Specify)………………………..
28	By what procurement method was the service	o_____ Open domestic bidding o_____ Restricted domestic bidding

	provider for the outsourced service selected?	o_____ Through a Request for Proposals o_____ Direct procurement
29	What challenges did you face during the out sourcing process? **(Circle all that apply)**	o_____ Limited in house capacity to outsource o_____ Limited number of service providers o_____ Contractual issues o_____ Law/owning authority could not allow it and had to negotiate o_____ Political interference in the outsourcing process o Other (Specify)
30	Have you put in place strategies for continuously monitoring the feasibility and cost effectiveness of your outsourcing program?	o_____ Yes o_____ No **(if your answer is "No' go to question 35)**
31	What aspects of your outsourcing program are you continuously monitoring? **(Circle all that apply)**	o_____ Supplier performance o_____ Continued feasibility of outsourcing o_____ Continued need for outsourcing
32	What strategies have you put in place for continuously monitoring the performance feasibility and cost effectiveness of your outsourcing? **(After answering this question go to question 35)**	o_____ Regular meetings with supplier to review performance o_____ Regularly tracking the costs of the sourced services o_____ Regular satisfaction surveys with outsourced services among staff and clients o_____ Market surveys to determine changes in supplier availability and capabilities o_____ Benchmarking our out sourced service quality with quality of the service in the best hospitals in the country o_____ Continuous internal analysis regarding importance of the outsourced service to hospital performance o_____ Continuous internal capability analysis to deliver the outsourced

Section Five: REASONS FOR NOT OUT SOURCING AND FUTURE INTENTIONS REGARDING OUT SOURCING

33	Why are you currently NOT outsourcing any of your	o_____ Hospital policy/Law doesn't allow it

	hospital services like cleaning, laundry, security, IT services? **(Circle all that apply)**	o_____ Don't have the expertise o_____ Don't think it would be of benefit to the hospital o_____ No qualified service providers o_____ Think its quite risky and prefer to provide services in-house Other(Specify)
34	Do you currently have plans/intend to outsource any of your services like cleaning, laundry; IT services in the next one year? **(Circle all that apply)**	o_____ Yes o_____ No **(if your answer is "No" go to question 35)**

35 What is the likelihood that you your hospital will outsource the following services?
(Tick what applies for each service, After answering this question go to 35)

		Definitely	Very probably	Probably	Probably Not	Very Probably Not
-	Security					
-	Cleaning					
-	IT Services					
-	Catering					
-	Accounting					
-	Receptions					
-	Public relations					
-	Technical Support (electric, water….)					
-	Laboratory services					
-	Nursing Services					
-	Laundry Services					
-	Waste disposal Services					
-	Communication and telecommunication					
-	Sterilization services					
-	Ambulance Services					
-	Anesthesia					
-	Pharmacy Services					

-	Radiology Services				
-	Other:				
-					
-					

SECTION SIX: PERCEIVED BENEFITS/ADVANTAGES OF OUTSOURCING

35 indicate your level of agreement with the statements about the potential out sourcing benefits						
		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
-	Out sourcing can be used by a hospital to achieve cost saving and to control costs					
-	Outsourcing can be used by a hospital to achieve improvement in productivity of its operations					
-	Outsourcing can be used by a hospital to be able to deliver improved service to the patients					
-	Out sourcing can take away unwanted load off the hospital management and enable them to focus all energies/resources on the core business capabilities/competencies of looking after patients					
-	Outsourcing can be used by the hospital to enable the conversion of fixed cost commitments (e.g. support staff salaries to) variable costs linked with Predefined deliverables/results/output by the contractor of an outsourced service					
-	Outsourcing can be used by the hospital to gain quick and continuous access to the latest technological developments relevant for					

	the business e.g. modern cleaning equipment					
-	Outsourcing can be used by the hospital for internal process improvement by way of restructuring, re-engineering, standardization of processes for the outsourced service					
-	Outsourcing can be used by the hospital to be innovative, expand service and rapidly develop new ways of delivering services e.g. catering services that are currently being delivered in-house					
-	Outsourcing by the hospital will make things flexible and convenient for the management by enabling them to scale up the out sourced service and also reduce the risk of poor service or having limited or over capacity internally for the outsourced service					
-	Out sourcing can allow the hospital to bring in vendors with newer capabilities and knowledge for delivery of the outsourced service giving the hospital competitive advantage over other hospitals					

SECTION SEVEN : PERCEIVED RISKS/DISADVANTAGES OF OUTSOURCING

35 indicate your level of agreement with the statements about the potential out sourcing risks						
		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
-	Out sourcing by the hospital can lead to loss of confidentiality and sometimes breach of privacy					

	since the contractor gets to know the internal operations of the hospital					
-	Out sourcing by the hospital can lead to loss of process control for delivery of the outsourced service					
-	During the out sourcing process by the hospital, there can be regulatory violations (e.g. violation of procurement act, corruption) and creation of legal obligations which may not be favorable to the hospital					
-	Outsourcing by the hospital creates complexity in vendor relationship management					
-	Out sourcing by the hospital can lead to over reliance on vendors which may be risky to the hospital in case the vendor performs poorly					
-	Out sourcing by the hospital leads to increased management complexities since it requires special skills to successfully outsource and manage the vendor					
-	Sometimes outsourcing by the hospital may not lead to the expected deliverables/benefits					

SECTION EIGHT: PERCEIVED ROAD BLOCKS /BARRIERS TO OUT SOURCING

36 indicate to what extent you perceive these apply to your situation/hospital						
		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree

-	My hospital lacks the required infrastructure (e.g. low level of computerization, financial data management, process standardization,) and the management skills to effectively out source of the services it requires in its mandate of delivering health care to patients					
-	Regulatory and policy restrictions under which the hospital operates make it difficult to outsource any of the services currently being produced in-house					
-	Resistance from current employees and employee unions due to fear of staff changes (eg layoffs) which may result from the hospital adopting outsourcing make it difficult for the hospital to out source					
-	The size and scale of our hospital operations/organization make it difficult for the hospital to out source					
-	Absence of matured vendor market reflected by non-availability of quality outsourcing vendors makes it difficult for the hospital to outsource,					

SECTION NINE: PERCEPTIONS ABOUT OUT SOURCED SERVICES CHARACTERISTICS

37 indicate your level agreement with the statements regarding characteristics of services that should ideally be outsourced by the hospital						
		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
-	For services to be outsourced by the hospital , they should be					

	core/critical to the hospital's mission of delivering health services					
-	For services to be outsourced, they should be services that are frequently needed by the hospital for example on a daily basis					
-	For services to be out sourced by the hospital , they should be services for which there are enough competent suppliers for the hospital to be able to get competitive prices					
-	For hospital services to be outsourced, they must be services whose output is easy to measure so that a tight contract can be written and the performance/output of the vendor can be easily monitored					

APPENDIX 2: PERMISSION TO USE QUESTIONNAIRE

Omar Aiad

From:	paschal mujasi <pmujasi@yahoo.co.uk>
Sent:	أب، ٢٠١٧ ٢٠١٤ ١:٤٤ م 20
To:	Omar Aiad
Subject:	Re: Hospital support services outsourcing survey

Dear Omar,
Thanks for getting in touch regarding this.
I hereby grant you permission to use my tool as long as i am acknowledged for developing the tool in your dissertation.
Good luck with your dissertation.

Regards,
Dr. Mujasi Paschal

On Wednesday, 16 August 2017, 12:01, Omar Aiad <OA.08084@KHCC.JO> wrote:

Dear Dr. Mujasi,
Hope this email finds you well,
I would like to thank you for preparing important questionnaire titled " outsourcing "Hospital support services outsourcing survey'. And I would like to take your kind permission to use this tool in my Ph.D. dissertation titled "outsourcing among Jordanian Hospital" .
Please for your kind approval .
Regards

Omar Ayaad, RN , MPH , PHD©
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Lets Excel To Lead

APPENDIX 3: JORDANIAN MINSTRY OF HEALTH APPROVAL

بسم الله الرحمن الرحيم

وزارة الصحة

CODE : MOH REC 170154

الرقــم ....
التاريخ ....
الموافق ....

قرار لجنة اخلاقيات البحث العلمي

اجتمعت لجنة اخلاقيات البحث العلمي بتاريخ6/ 12 / 2017 لمناقشة و دراسة البحث العلمي المقدم من قبل طالب الدكتوراه/عمر عبد الحكيم عياد.
بعنوان :

الاستعانة بالمصادر الخارجية في المستشفيات الاردنية
وقد قررت اللجنه بالاجماع الموافقه على اجراء البحث المشار اليه اعلاه.

وعليه تم التوقيع من قبل اعضاء اللجنه حسب الاصول .

عضو اللجنه
رئيس قسم الاشعة العلاجية

الدكتور / رسمي مبيضين

عضو اللجنه
رئيس قسم الجراحة العامة

الدكتور/ فايز الحمود

عضو اللجنه
المساعد لشؤون التمريض

الدكتور/ هاني القضاه

عضو اللجنه
رئيس قسم النسائية والتوليد

الدكتور /عبد الملك السليمات

عضو اللجنه
رئيس قسم الباطني

الدكتور /عباس منصور

عضو اللجنه
رئيس قسم الاطفال

الدكتوره/باسمه مزار

رئيس اللجنه
مدير مستشفى البشير

الدكتور/عمار نعيم الشرفا

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HEALTH MANAGEMENT DEPARTMENT

Date: 31/12/2018

Thesis Title: OUTSOURCING IN JORDANIAN HOSPITALS

My thesis work related to the title above:

1. Does not perform experimentation on animals or people.
2. Does not necessitate the use of biological material (blood, urine, biological fluids and samples, etc.).
3. Does not involve any interference of the body's integrity.
4. Is not based on observational and descriptive research (survey, interview, measures/scales, data scanning, system-model development).

I declare, I have carefully read Hacettepe University's Ethics Regulations and the Commission's Guidelines, and in order to proceed with my thesis according to these regulations I do not have to get permission from the Ethics Board/Commission for anything; in any infringement of the regulations I accept all legal responsibility and I declare that all the information I have provided is true.

I respectfully submit this for approval.

Date and Signature

31/12/2018

Name Surname:	Omar AYAAD
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ADVISER COMMENTS AND APPROVAL

Prof. Dr. Yusuf ÇELİK

(Title, Name Surname, Signature)

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
Ph.D. DISSERTATION ORIGINALITY REPORT

Date: 31/12/2018

Thesis Title : OUTSOURCING IN JORDANIAN HOSPITALS

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I declare that I have carefully read Hacettepe University Graduate School of Social Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

Date and Signature

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31/12/2018

ADVISOR APPROVAL

APPROVED.

Prof. Dr. Yusuf ÇELİK

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