Human Resource Management Practices as a Success Factor of Knowledge Management Implementation at Health Care Sector in Jordan

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Abstract

The purpose of this paper is to the association between human resource management (HRM) practices and knowledge Management Implementation from the Jordanian Health Care Sector. The study uses qualitative methodology, a face to face survey was conducted to test the hypothesis, private hospitals were chosen in Jordan with their employees acting as respondents to survey, a sample includes 289employees of Jordanian private hospitals. The researcher finds that the order of importance of the HRM practices tested here is: Training and Development, compensation and reward, Performance Appraisal, and Recruitment and selection. The results also indicate that training and development, performance appraisal, compensation and reward, and recruitment and selection showed a positive impact with knowledge Management Implementation, as perceived by the employees in the Jordanian private hospitals. Managers and decision makers may put their efforts to effectively manage and leverage the knowledge and expertise embedded in individual minds which make them able to create more value and achieve superior competitive advantage. Recruitment and selection should be carefully designed to ensure validity and reliability in selecting the pro-knowledge employee.

Keywords: human resource management, Critical success factors, Knowledge management, private hospitals, Jordan.

1. Introduction

The rapid development of information and communication technologies, growing globalization, the acceleration in the rate of technological change, and the need to share best practices business environments have become much more complicated (Shu-Mei, 2008), traditional business models must continue to meet the changing business environment in order to survive, and thus risen the importance of knowledge management within organizations (Ruiz-Mercader et al., 2006; Chattopadhyay, 2007; Tseng, 2011; Mehta, 2008). Organizations are becoming more knowledge intensive, they are hiring "minds" more than "hands", and the needs for leveraging the value of knowledge are increasing. There is growing recognition in the business community about the importance of knowledge as a critical resource for organizations (Prahalad and Hamel, 1990; Drucker, 1993). In recent years, knowledge management (KM) has been recognized as a key instrument for the improvement of organizational effectiveness and performance (Zack et al., 2009). It has become one of the critical driving forces for business success.

Knowledge management (KM) is a common concept in management theory. It has been practiced in many fields such as business, human resource management, engineering, medicine and science (Muhammad & David, 2011). In strategic management, knowledge has been increasingly regarded as an important strategic asset and increasingly managed in several sectors in order to sustain a firm's competitive advantage (Lai & Lee, 2007). Knowledge is embedded in multiple entities within the firm, such as the organizational culture, routines, policies, systems, and documents, as well as individuals and teams (Hargadon, 1998). There has been a call for increased attention on people management issues in KM.

Successful organizations are those which are able to manage uncertainty through knowledge creation and dissemination across all levels throughout the organization (Deepak and Himanshu, 2011). Knowledge shapes the firm's core competences (Prahalad and Hamel, 1990) and therefore determines value creation (Grant, 1996b). As a result, knowledge has been treated systematically much like other tangible resources and many organizations are exploring the field of knowledge management (KM) in order to improve and sustain their competitiveness. On the other hand, scholars of KM have noticed that KM involves not only a set of software and hardware infrastructures but also corresponding organizational arrangements such as culture and people (Meso and Smith, 2000). It is well recognized that human resources are critical inputs in the production process. It has become largely accepted today that a firm's competitive advantage may be generated from firm human resources (HR) (Yao-Sheng, 2011). Organizations manage human resources through establishing human resource (HR) departments in a functional organizational structure.

Human resource management (HRM) practices are widely recognized as playing a crucial role in creating and sustaining organizational performance (Becker and Gerhart, 1996). Okunoye and Karsten (2002) stated that KM has indeed become the underlying sources for successful organizations regardless of their size, activity and geographical locations. Prior researches about KM excessively stress the operational and technological aspects of KM; however, people management (e.g. human resource management) is the approach that truly contributes to KM (Hsu-Hsin et al., 2011). Since 1990s the success of organizations is closely related with KM implementation Working on this assumption, several studies have been carried out to identify factors that affect successful KM implementation These factors are called critical success factors (CSFs) of KM.

In Jordan Organizations need to be cognizant and aware of the factors that will influence the success of a KM initiative. Therefore, the need for a more systematic and deliberate study on the critical success factors (CSFs) for implementing KM is crucial. During the past few decades human resource management (HRM) has been important topics in management and business research due to their potential to impact a range of organizational and individual performance (Ooi et al., 2007). Scholars have argued recently that knowledge is dependent on people and that HRM issues, such as recruitment and selection, education and development, performance management, pay and reward, as well as the creation of a learning culture are vital for managing knowledge within firms (Evans, 2003; Currie and Kerrin, 2003).

Therefore, a better understanding of human resources management as CSF for implementing knowledge management in health care organizations is needed in order to ensure the success of their efforts. So this study came with objective to examine human resources management as a critical success factor (CSF) for implementing KM Supported by the above rationale, this paper is designed to carry out an empirical study with the core objective of investigating the relationship between HRM practices and knowledge implementation behavior as perceived by managers in Jordanian health care organizations . The remaining sections of this empirical paper are arranged in the following manner. The literature review of HRM practices in section 2 discusses the concept and theory of knowledge implementation, and the effect of HRM practices on knowledge implementation behavior. The Model of the research is presented in section 3. The research methodology is discussed in section 4, including detailed information on the measures, sample, Data Gathering, Reliability and validity of the survey instrument, and analysis performed in this study; this is followed by a presentation of the results discussed in section 5, followed by discussion in section 6, Managerial implications discussed in section 7, consideration of the research limitations and future research are provided in section 8.

2. Literature Review and hypotheses formalization

2.1 Knowledge management

Although many authors have written about the significance of knowledge in management, relatively little interest has been focused on how knowledge is created. According to Earl (1999) there is a great deal of interest in knowledge management (KM), a variety of different definitions in the academic literature exits, but no universally accepted definition of KM exists, as different perspectives or schools of KM can yield different dimensions and meaning (Salleh and Goh, 2002). In order to understand KM, it is important to first define knowledge. Nonaka and von Krogh (2009: 636) explain that "knowledge (…) is the actuality of skillful action (…) and (…) the potentiality of defining a situation so as to permit (skillful) action.".

Knowledge is conceptualized as codified information including insight, interpretation, context, experience, wisdom, and so forth (Davenport and Volpel, 2001). Koskinen and Philanto (2008: 43) consider "knowledge (as) an individual's perception, skills and experience. Which are all dependent on what experiences the individual's worldview contains in the form of meanings." On the other hand, knowledge management (KM) is generally known as a discipline for identifying, gathering, organizing, storing, sharing, and applying knowledge. Polanyi (1962: 1966) divided knowledge into two categories: explicit, is technical or academic data or information that can be transferred in formal and semantic language. And tacit knowledge is the knowledge for which we do not have words. That is hard to formalize and show in a philosophical context, it helps organizations to determine how they make decisions and influence the collective behavior of their members (Smith, 2001). However, knowledge management must be considered holistically in leveraging both explicit and tacit knowledge to achieve organizational goals and stimulate innovation (Keskin, 2005; Uziene, 2010). Knowledge is viewed as the most important property of an organization.

Hence, managing knowledge plays the key role in achieving success in any organization (Peyman et al, 2009). Management researchers, on the other hand, address knowledge as processed based on individual and organisational competencies such as skills and know-how (Choi, 2000). Thus, different perspectives on the concepts of knowledge can lead to different definitions of KM. As explained in the previous literature review, KM is "a systemized and integrated managerial strategy, which combines information technology with the organizational process. Knowledge management is a managerial activity which develops, transfers, transmits, stores and applies knowledge, as well as providing the members of the organization with real information to react and make the right decisions, in order to attain the organization's goals" (Yu-Chung et al , 2005).

Knowledge management (KM) is an integrated, systematic approach to identify, manage, and share all of the department's information assets, including databases, documents, policies and procedures, as well as previously unarticulated expertise and experience resident in individual officers (Jones, 2003). Yao-Sheng (2011) defined Knowledge management (KM) as a set of interdependent activities aimed at developing and properly managing an organization's knowledge. Holsapple and Joshi (2000) found that an operational objective of KM is to ensure that "the right knowledge is available to the right processors, in the right representations and at the right times, for performing their knowledge activities (and to accomplish this for the right cost)."

2.2 HRM Practices

Human resource management (HRM) has been an important theme in management and business research for the past few decades due to its potential to affect a range of organizationally and individually desired outcomes. Strait forward definitions of human resource management are difficult to find. Nickels, et al (2008: 288) defines HRM as "The process of determining human resource needs and then recruiting, selecting, developing, evaluating, compensating, and scheduling employees to achieve organizational goals". Ferris et al. (1995) gave a very exhaustive definition of HRM as follows: "Human resource management is the science and the practice that deal with the nature of the employment relationship and all of the decisions, actions, and issues that relate to that relationship". Armstrong (2000) defines HRM as strategic personnel management emphasizing the acquisition, organization and motivation of human resources.

Human resource management (HRM) is defined as the productive use of people in achieving the organization's strategic business objectives (Stone, 2009). Mondy (2010) pointed that HRM practices deployed by organizations are staffing i.e. HR planning, recruitment and selection; HR development i.e. training, development and career planning and development; compensation i.e. direct and indirect financial compensation and nonfinancial compensation; safety and health; and employee and labor relations. Certainly, KM practitioners cannot afford to ignore the value that can be gained from HRM. After all, people are the sole originators of knowledge (Kuan, 2005). Human capital, with their knowledge, expertise, and skills, is a valuable resource of firms (Wright et al., 2001; Collins and Clark, 2003). Knowledge management is a task performed by human resource management professionals to effectively manage knowledge for the benefit of the organization (Smith et.al, 2009). As stated by Davenport and Volpel (2001), "managing knowledge is managing people; managing people is managing knowledge". Although a substantial amount of research (Fleetwood & Hesketh, 2006; Gubbins & Garavan, 2005; Parise, 2007; Henard & Mcfayden, 2008; Hendrichson, 2003; Schein, 2004; Ulrich & Beatty, 2001) has been conducted in the area of human resource management and knowledge management. The study of the relationship of HRM with KM activities has not been studied in any greater depth (Molina et al., 2004).

Correctly managing HRM towards achieving KM value change activities are strategically and tactically important for gaining a competitive advantage (Molina et al., 2004). Managing knowledge successfully has become one of the greatest organizational challenges for human resource management professionals (Hinds & Pfeffer, 2003; Smith et al., 2009). Organizations that effectively manage and leverage the knowledge and expertise embedded in individual minds will be able to create more value and achieve superior competitive advantage (Scarbrough, 2003). Small and Sage (2006) challenged human resource management professionals to create continuous learning opportunities for knowledge workers as they are the lifeblood of knowledge age organizations.

Scholars have argued recently that knowledge is dependent on people and that HRM issues, such as recruitment and selection, education and development, performance management, pay and reward are vital for managing knowledge within firms (Evans, 2003; Currie and Kerrin, 2003). Several dimensions of HRM practices are selected from the previous studies in relation to the KM activities, namely Recruitment and selection, training and development, compensation and reward, performance appraisal. An in depth literature review indicated that numerous HRM practices had been identified as important for accomplishing KM.

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An in depth literature review indicated that numerous HRM practices had been identified as important for accomplishing KM. These factors are shown in Table

Table I: The list below presents the factors together with their sources

No	Dimensions of critical factors	Related research studies
.1	Recruitment and selection	(Pangil and Nasurdin, 2005; Cabrera and Cabrera, 2005; Currie and Kerrin, 2003)
.2	compensation and reward	(Cabrera and Cabrera, 2005; Pangil and Nasurdin, 2005; Ipe, 2003; Goh, 2006; Yu et al., 2004; Argote et al., 2003; Scarbrough, 2003; Collins and Clark, 2003)
.3	Training and education	(Wong, 2005; Akhavan et al. , 2006; Moffett et al. ,2003; Pangil and Nasurdin, 2005; Cabrera and Cabrera, 2005; Ipe, 2003; Ramirez and Li , 2009; Rhodes et al., 2008).
.4	Performance appraisal	(Hasanali, 2002; Moffett et al. ,2003;; Oldham, 2003; Cabrera and Cabrera, 2005).

2.2.1 Recruitment and selection

In organizations, recruitment and selection are two activities of the staffing function of HRM carried out to acquire the right quantity and quality of employees. Staffing procedures aim to bring into vacant positions people with the identified skills and knowledge (Dana, 2005). An effective staffing system can help firms in selecting and allocating competent and qualified workforce to do the required tasks. Acquiring employees with particular knowledge and expertise is crucial for firms to operate knowledge management tools and activities (Dana, 2005). Recruitment is a process of attracting a pool of high quality applicants so as to select the best among them (Kulik, 2004). The selection process determines the decisions as to which candidates will get employment offers.

The aim of these practices is to improve the fit between employees and the organization, teams, and work requirements, and thus, to create a better work environment (Shay, 2006). Given that KM is often adopted by organizations in complex, unpredictable environments, traditional selection and recruitment practices have more often than not to be modified. Most studies highlight the importance of a fit between new recruits and the organization's knowledge culture. The Recruitment and selection should be carefully designed to ensure validity and reliability in selecting the pro-knowledge employee In this regard; recruitment and selection are anticipated to be associated with knowledge implementation. The following hypothesis is proposed accordingly

H1. Recruitment and selection practices have a significant positive association with knowledge management implementation.

2.2.2 Training and development

Training and development have been recognized as essential to the implementation of HRM (Snape et al., 1995), and should also has priority. According to Noe et al. (2008), training is described as a planned effort designed by the organization in assisting its employees in the learning process of job related competencies, such as knowledge, skills, or behaviors that are vital for the success of individual's job performances. Training is a ''planned and systematic effort to develop knowledge through learning experience in order to achieve effective performance in an activity or range of KM activities'' (Buckley and Caple, 1992: 17). Whereas development refers to formal education, job experiences enhancement, assessment of personality and abilities that help employees prepare for the future (Noe et al., 2008). Training must be viewed as an important investment for future success (Zeithmal and Bitner, 2004).

Training and development is another important consideration for successful KM. In a basic sense, organizational members need to be aware of the needs to manage knowledge and to recognize. Continuous professional training and development is considered to be essential to professional and knowledge workers (Robertson and Hammersley, 2000). Such training programs would stimulate employees to share their expertise and experience, acquire new knowledge, and utilize what they learn subsequently in the work. In addition, employee training is also likely to affect the development of knowledge management capacity. Thus, when employees know that their company has development programs to enhance their personal competencies, this increases the value and specificity of the human capital of the organization, and the employees will tend to match their knowledge and skills to the needs of the organization.

Accordingly training programs are crucial for employees in the knowledge management process (Argote et al., 2003). The review above indicates that an organization's HRM has significant effects on KM implementation. Therefore, we propose the following hypothesis:

H2. Training and development have a significant positive impact on knowledge management implementation.

2.2.3 Compensation and Reward

Compensation is the primary strategic HR practice that firms can use to reinforce employees' behaviors and induce them to comply with organizational goals (Collins and Clark, 2003; Scarbrough, 2003).Compensation is all forms of financial returns and tangible services and benefits employees receive as part of an employment relationship (Milkovich and Newman, 1999). Firm employees require organizational incentives to enhance the innovation process. Reward and recognition can be defined as benefits, such as increased salary, bonuses and promotion resulting from the annual review of performance, which is conferred for public acknowledgement of superior performance with respects to goals (Juran and Gryna, 1993). Reward systems indicate what the organization values and shapes individuals' behavior (Cabrera and Bonache, 1999).

Having the right reward and reward systems is also vital in making every employee involved in the process of knowledge sharing, knowledge acquisition and knowledge dissemination. In general, there are two purposes of any organizational compensation scheme, namely, employees will be rewarded by performing knowledge-sharing practices in organization, and incentives are given to those who continue to perform the desirable practices (Pangil and Nasurdin, 2005). Studies on knowledge workers have found that they tend to have a high need for autonomy, significant drives for achievement, stronger identity and affiliation with a profession than a company, and a greater sense of self-direction. For the above reasons, reward systems are vital for KM activities (Pangil and Nasurdin, 2005; Ipe, 2003).

For many knowledge workers it is as motivating to have free time to work on knowledge-building projects, going to conferences or spending time on interesting projects, as monetary rewards (Evans, 2003; Despres and Hiltrop, 1995). Appropriate compensation and reward can support and promote the development of organizational environment conducive to knowledge management activities. According to the above reasoning, compensation and reward are helpful to motivate employees' willingness to apply knowledge within organizations. In this regard, compensation and reward are anticipated to be associated with knowledge management implementation. Therefore, we propose the following hypothesis:

H3. Compensation and reward have a significant positive impact on knowledge management implementation.

2.2.4 Performance Appraisal

Performance appraisal (or performance management) systems provide employees with feedbacks on their performance and competencies, and give directions for enhancing their competencies to meet the needs of the organization (Dana, 2005). Performance is defined as the record of outcomes produced on a specified job function or activity during a specified time period (Bernardin and Russell, 1993). Appraisals are used widely for tying pay to performance (Schellhardt, 1996). Regarding the appraisal processes, managers should provide feedback to overcome performance problems and foster ongoing learning from the development and assessment of new solutions (London and Smither, 1999). An effective appraisal system evaluates accomplishments of work performance and the information gathered can be used for recruitment, training and development, compensation and internal employee relations (Mondy, 2010).

Appraisal is considered as an important step towards the development of human resources and their performance (Khoury and Analoui, 2004). In terms of performance appraisal, if firms want to elicit desired behaviors from employees, they must provide feedback and incentives that reinforce the desired behaviors (Collins and Clark, 2003). Performance appraisal (PA) is defined as a formal system of review and evaluation of individual or team task performance (Mondy, 2010). Performance management systems can inhibit knowledge sharing, as much of the conflict between different functions can be due to the divergent objectives set out for employees in the performance agreements. Performance appraisal systems, based on organizational performance or group and stock ownership programs, will reinforce collective goals and mutual cooperation that should lead to a higher level of trust necessary for knowledge exchanges (Cabrera and Cabrera, 2005).

Appropriate Performance appraisal systems can support and promote the development of organizational environment conducive to knowledge management activities. In this regard, Performance appraisal is anticipated to be associated with knowledge management implementation. Therefore, we propose the following hypothesis: H4. Performance appraisal has a significant positive impact on knowledge management implementation.

2.   *Research Model*

Based on study hypothesis, the theoretical framework shown in Figure 1 was proposed in order to show the relationships among independent and dependent variables.
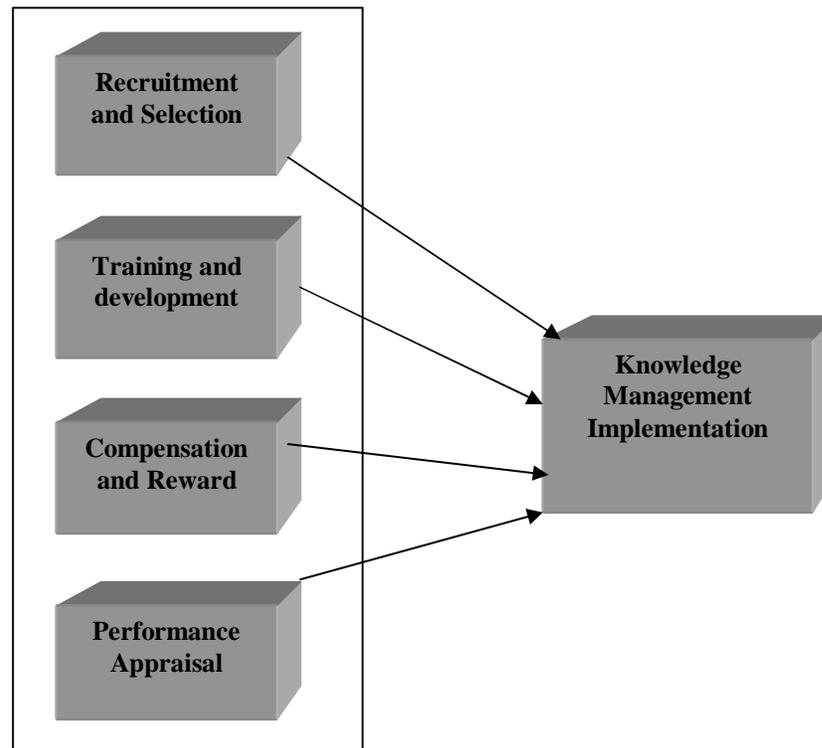
Fig.1 Theoretical Model

4. *Methodology*

The purpose of this study was to explore the relationship between human resources management practices and knowledge management implementation. Specifically, this research sought to determine what human resources management practice related to knowledge management implementation in private Health Care Sector in Jordan. In this section, we discuss measures, sample and data collection as well as the statistical tests used to evaluate the hypothesis.

4.1   Measures

This section discusses the instruments included in the questionnaire of this study. The constructs in this study were developed by using measurement scales adopted from prior studies. Modifications were made to the scale to fit the purpose of the study. All constructs were measured using five-point Likert scales with anchors strongly disagree (= 1) and strongly agree (= 5). All items were positively worded. The questionnaire consisted of three sections: Section A consisted of a list of questions intended to probe the demographic variables of the respondents such as age, sex, income.

Section B contained questions aimed at gauging the respondents' attitude to a range of variables across the four practices synthesized from the general literature and which could possibly influence. The measures of HRM Practices were based on the four dimensions was adopted from previous empirical studies by Pangil and Nasurdin (2005), Cabrera and Cabrera (2005) Recruitment and selection dimension, Cabrera and Cabrera (2005), Zarraga and Bonache (2003) compensation and reward dimension. Davenport and Probst (2002), Wong (2005) Training and education dimension, and Moffett et al. (2003), Oldham (2003) Performance appraisal dimension (2) Carter and Scarbrough (2001), and Currie and Kerrin (2003).

The four dimensions, namely, Recruitment and selection, Training and Development, Performance Appraisal, and compensation and reward, consisted of 24 items. The 24 items questions developed from (Conner & Ulrich, 1996; Delaney & Huselid, 1996; Geringer et.al, 2002; Martell & Carroll, 1995; Intan et al, 2011).

Section C contained questions aimed at evaluating the level of Knowledge Management implementation synthesized from the general literature. The measures of Knowledge Management were based on the four dimensions was adopted from previous empirical studies consisted of 14 items. The four dimensions, namely, Capturing knowledge, Sharing, Storing, and Applying. The 14 items questions developed from Marinah et al. (2011).

4.2   Sample

A sample of 300 was randomly taken from the population of private hospitals in Amman (capital city of Jordan). The unit of analysis of this study was employees of the private hospitals in Amman. Were the questionnaires, with instructions of how to complete them, were distributed to respondents by an interviewer. Subjects were asked to assess their perceptions of various items of different constructs. Assessments were based on A Five-point Likert scale ranging from "strongly disagree (1) to "strongly agree (5) was used to measure the 38 items. In order to minimize possible response bias, instructions emphasized that the study focused only on their personal opinions. After completion, the questionnaires were checked and collected by the interviewer. However, due to some invalid questionnaires which were removed from the sample. The total sample size was 289,

Table II shows the characteristics of the sample.

Variable		Frequency	%
Age group	25-less than 30	89	30.8
	30- less than 40	94	32.5
	40- less than 50	68	23.5
	50 years and more	38	13.1
Experience Level	less than 5 years	76	26.3
	5- less than10	81	28.0
	10- less than 15	69	23.9
	15- less than 20	48	16.6
	25 years and more	15	5.2
Gender	Male	157	54.3
	Female	132	45.7
Educational level	Diploma	23	8.0
	Bachelor	234	81.0
	Master	32	11.1

4.3. Data Gathering

The research data was collected through the questionnaire. The questionnaire began with an introductory statement that asked respondents to administer their own responses, assured them of confidentiality, and so forth. This was followed by a request for demographic information and the measures. Data were collected through questionnaires. The sampling frames consist of randomly selected 289 employees.

4.4   Reliability and validity of the survey instrument

The survey instrument with 38 items was developed based on the four variables as independent variables: Recruitment and selection (RS 1- RS 6), Training and Development (TD1-TD7), Performance Appraisal (PA 1-PA 6), and compensation and reward (CR1-CR5), and one dependent variable, Knowledge Management (KM1-KM14).The instrument was evaluated for reliability and validity. Reliability refers to the instrument's ability to provide consistent results in repeated uses (Gatewood & Field, 1990). Validity refers to the degree to which the instrument measures the concept the researcher wants to measure (Bagozzi & Phillips, 1982).

Table III. Factor analysis of HRM practices

Variables	Mean	Loadings	Eigenvalue	Variance	Reliability
Recruitment and selection (RS)	**3.49**		3.090	51.496	.8109
Job vacancies are filled from within the organization	3.54	.747			
Employees are hired or promoted on the basis of their job knowledge and experience.	3.61	.727			
Employees are hired or promoted on the basis of their ability to collaborate and work with others.	3.65	.734			
Employees are hired or promoted on the basis of their potential to learn.	3.45	.754			
Employees are hired or promoted on the basis of their fit with the organization's culture.	3.01	.720			
In hiring or promoting, employees are assessed against criteria set by the organization, rather than on the manager's personal preference.	3.66	.614			
Training and Development (TD)	**3.71**		4.759	67.985	.9181
There are formal training programs to teach new employees the skills they need to perform their jobs.	3.75	.847			
Employees receive training to perform multiple tasks so that they can fill in for others if necessary.	4.04	.835			
Employees receive training on team building and interpersonal relations.	3.88	.882			
Employees receive training on our organization's values and ways of doing things.	3.66	.862			
Employees receive training in order to understand our business.	3.31	.594			
Training programs are developed on the basis of assessed training needs of the organization.	3.79	.848			
Training is available to any employee who is interested.	3.55	.867			
Performance Appraisal (PA)	**3.56**		3.498	58.306	.8548
Performance appraisals are based on input from multiple sources (supervisors, peers, subordinates, customers, etc.).	3.79	.738			
Performance appraisals are based on objective quantifiable results.	3.53	.841			
The performance appraisal process is standardized and documented.	3.66	.732			
The performance appraisal is discussed with the employee.	3.47	.831			
The performance appraisal is used to determine an employee's pay.	3.36	.628			
The performance appraisal is used to determine an employee's training needs.	3.56	.792			
compensation and reward (CR)	**3.63**		3.103	62.059	.8430
Incentives and bonuses are given on the basis of the individual's job performance.	3.56	.869			
Incentives and bonuses are given on the basis of how well our organization performs.	3.75	.886			
Seniority or length of service, rather than merit or performance, determines increases in base pay.	3.54	.796			
Cost-of-living adjustments or legislated wage adjustments determine increases in base pay.	3.24	.608			
An employee's base pay depends on the importance of his or her job to the organization.	4.04	.748			

Table IV. Factor analysis of Knowledge management

Variables	Mean	Loadings	Eigenvalue	Variance	Reliability
Knowledge management (**KM**)	**3.60**		8.262	59.013	.9451
Knowledge application can increase an individual's Experience	3.12	.633			
In this Hospital knowledge is applied through problem solving	3.52	.668			
Knowledge can be applied when people ask for advice	3.41	.828			
In this Hospital knowledge is applied through work task and work instruction given by the management	3.52	.664			
Knowledge application can increase an individual's Experience	4.04	.776			
In this Hospital knowledge is applied through problem solving	3.79	.815			
Knowledge can be applied when people ask for advice	3.57	.858			
In this Hospital knowledge is applied through work task and work instruction given by the management	3.65	.845			
Knowledge application can increase an individual's Experience	3.65	.821			
In this Hospital knowledge is applied through problem solving	3.25	.599			
Knowledge can be applied when people ask for advice	3.74	.839			
In this Hospital knowledge is applied through work task and work instruction given by the management	3.88	.846			
Knowledge application can increase an individual's Experience	3.57	.857			
In this Hospital knowledge is applied through problem solving	3.61	.622			

Factor analysis and reliability analysis were used in order to determine the data reliability for the HRM practices, and Knowledge management measures. A within factor, factor analysis was performed to assess convergent validity. The results of the factor analysis and reliability tests are presented in Table II and Table III. All individual loadings were above the minimum of 0.5 recommended by Hair et al. (1998). For exploratory research, a Chronbach greater than 0.70 is generally considerate reliable (Nunnally, 1994). Chronbach statistics for the study contracts are shown in table II. Thus it can be concluded that the measures used in this study are valid and reliable. On the basis of Cattel (1966) and Hair et al. (1998) criterion, factors with eigenvalues greater than 1.0 and factor loadings that are equal to or greater than 0.50 were retained. 38 items, loading under five factors, were extracted from the analysis.

4.5 Psychometric properties and dimensions of the revised HRM scale and Knowledge management

Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity has been used as Pre-analysis testing for the suitability of the entire sample for factor analysis as recommended by Comrey (1978), the value of The Kaiser-Meyer-Olkin measure was used to assess the suitability of the sample for each unifactorial determination. The KMO values found (see Table IV) are generally considered acceptable (Kim and Charles, 1978). All factors in each unifactorial test accounted for more than 50 per cent of the variance of the respective variable sets. This suggests that only a small amount of the total variance for each group of variables is associated with causes other than the factor itself, and the Bartlet tests of sphericity was significant at p □0:01, thus, indicating that the sample was suitable for factor analytic procedures (see Table IV).

Table V. Kaiser-Meyer-Olkin and the Bartlett's Test of Sphericity

Variables	Kaiser-Meyer-Olkin Values	Bartlett's Test of Sphericity		
		Approx.Chi-Square	df	Sig.
Recruitment and selection	.828	494.958	15	.000
Training and Development	.877	1507.288	21	.000
Performance Appraisal	.795	828.034	15	.000
compensation and reward	.837	625.581	10	.000
Knowledge management	.889	5458.519	91	.000

5.   The results

Multiple regression analysis was employed to test the hypotheses. It is a useful technique that can be used to analyze the relationship between a single dependent variable and several independent variables (Hair et al., 1998). The detail of the regression output was shown in Table V. Each of the variables had a tolerance value of more than 0.10 and a variance inflation factor (VIF) of less than ten. The finding indicated that the models had no serious multicollinearity problem (Hair et al., 1998). From these analyses, it can be concluded that regression model of this study met the assumptions required to ensure validity of its significance test.

In this model, Knowledge management acts as the dependent variable and HRM Practices, as the independent variables. From the result as shown in Table V, The regression model was statistically significant (F = 1594.555; R2 =. 0.957; P = .000). The R2 is 0.957, which means that 95.7 per cent of the variation in Knowledge management can be explained by Recruitment and selection, Training and Development, Performance Appraisal, and compensation and reward. The proposed model was adequate as the F-statistic = 1594.555were significant at the 5% level (p < 0.05).

This indicates that the overall model was reasonable fit and there was a statistically significant association between HRM Practices and Knowledge management. Regression analysis indicated that, Recruitment and selection (p<0, 05; ß =0.099). Training and Development (p<0, 01; ß =0,498). Performance Appraisal (p<0, 01; ß =0,262). And compensation and reward (p<0, 01; ß =0,171)had significantly positive effect on Knowledge management. Based on the values, Training and Development has the highest impact on Knowledge management followed by Performance Appraisal, compensation and reward, and subsequently Recruitment and selection.

Table VI. Regression results between HRM practices and Knowledge management

Independent variables	Standardized beta	t	Sig.	Tolerance	VIF
Recruitment and selection	.099	3.355	.001	.174	5.749
Training and Development	.498	15.410	.000	.144	6.963
Performance Appraisal	.262	10.241	.000	.230	4.350
compensation and reward	.171	4.562	.000	.107	9.375
Notes: R 2 = 0.957; Adj. R 2 = 0.957; Sig. F = 0.000; F-value = 1594.555; dependent variable, Knowledge management; p < 0.05					

6.   Discussion

The aim of this result was to investigate the effect of HRM practices on Knowledge management implementation in Jordanian private hospitals. First, the results of descriptive statistics of HRM practices in Jordanian private hospitals showed that Training and Development has the highest score followed by Compensation), Performance Appraisal practice comes in the third rank, followed by Staffing, respectively. The overall results of the regression analysis indicate that HRM practices have a significant positive impact on knowledge management implementation. The results show that four HRM practices (staffing, performance appraisal, training and development, and compensation) are significant factors in predicting knowledge management implementation within Jordanian private hospitals. This finding supported by the findings of several studies (Smith et al., 2009; Fleetwood & Hesketh, 2006; Gubbins & Garavan, 2005; Parise, 2007; Henard & Mcfayden, 2008; Hendrichson, 2003; Schein, 2004; Ulrich & Beatty, 2001).

The result of the study indicates that human resource management (HRM)is considered as an important issue when implementing KM in the Jordanian private hospitals, HRM practices enable the shaping of employees' skills, abilities, culture through hiring, socializing and developing a firm's pool of human. (Chee-Yang et.al, 2011). HRM is responsible for equipping employees in the organization, who are the best source of knowledge creation through the exchange of ideas, skills, abilities, thoughts, opinions and experiences. Chen and Huang (2009) found that HRM practices, which include training, compensation, performance appraisal, and staffing, are able to contribute to successful KM implementation. In terms of staffing, it is found that staffing does have an impact on KM implementation and it is able to contribute to successful KM implementation in certain ways. This result is consistent with the findings of (Cabrera and Cabrera, 2005). Recruitment is a process of attracting a pool of high quality applicants so as to select the best among them (Kulik, 2004).

An effective staffing system can help firms in acquiring competent and qualified employees with particular knowledge and expertise to operate knowledge management tools and activities. In terms of training and development, it is found that training and development does have an impact on KM implementation and it is able to contribute to successful KM implementation in certain ways. This result is consistent with the findings of (Pangil and Nasurdin, 2005; Snape et al., 1995). According to Noe et al. (2008), training is described as a planned effort designed by the organization in assisting its employees in the learning process of job related competencies, such as knowledge, skills, or behaviors that are vital for the success of individual's job performances. Such training programs would stimulate employees to share their expertise and experience, acquire new knowledge, and utilize what they learn subsequently in the work.

In terms of performance appraisal, it is found that performance appraisal does have an impact on KM implementation and it is able to contribute to successful KM implementation in certain ways. This result is consistent with the findings of (Oldham, 2003; Cabrera and Cabrera, 2005). An effective appraisal system evaluates accomplishments of work performance and the information gathered can be used for recruitment, training and development, compensation and internal employee relations (Mondy, 2010).

In terms of compensation, it is found that compensation does have an impact on KM implementation and it is able to contribute to successful KM implementation in certain ways. This result is consistent with the findings of (Ipe, 2003; Pangil and Nasurdin, 2005). Having the right reward and reward systems is also vital in making every employee involved in the process of knowledge sharing, knowledge acquisition and knowledge dissemination. Appropriate compensation and reward can support and promote the development of organizational environment conducive to knowledge management activities.

7. *Managerial implications*

The result of this study provided several important implications for managers and decision makers of Jordanian private hospitals. The findings generally confirm the overall hypotheses that there is a significant impact of HRM practices on knowledge management implementation. The model in this paper identifies HRM practices as a strong determinant of knowledge management implementation of Jordan
The contribution of this study is threefold.

Firstly, the study provides a better understanding of the relationships between HRM practices and knowledge management implementation. It integrates the concepts of Recruitment and selection, Training and Development, Performance Appraisal, and compensation and reward, with knowledge management implementation. Earlier studies rarely examined such relationship.

Secondly, this research have gives a deeper understanding of the factors that can knowledge management implementation and helps managers and decision makers to better understand their work environment and also help them to better basic requirements of implementing knowledge management in order to ensure the success of their efforts . So future research may build upon the findings of this study and attempt to provide further insight into the nature of these relationships.

Finally the theoretical implication of the study contributes to the body of knowledge by filling gaps in the management literature and by substantiating the findings of previous research. While the study generates considerable theoretical and practical contributions.

The study found that HRM practices may be considered as critical factors for knowledge management implementation. This finding suggests that managers and decision makers may put their efforts to effectively manage and leverage the knowledge and expertise embedded in individual minds which make them able to create more value and achieve superior competitive advantage. Recruitment and selection should be carefully designed to ensure validity and reliability in selecting the pro-knowledge employee. Organizational members need to be aware of the needs to manage knowledge and to recognize, which may be viewed as an important investment for future success. Knowledge workers should have free time to work on knowledge-building projects, going to conferences or spending time on interesting projects, as monetary rewards. Finally, managers should provide feedback to overcome performance problems and foster ongoing learning from the development and assessment of new solutions.

8. Limitations and directions for future research

The study suffers from a number or shortcomings that must be considered and possibly addressed in future research. First, the sample used for analysis was drawn only from Amman, the biggest city in Jordan, and the generalizability of the result remains to be tested. Future research, therefore, can expand the present study by attempting a nationwide survey. Second, we note in particular our small sample size. With smaller samples, the power of the tests decreases. A replication of our analysis with larger sample sizes would facilitate a more precise description of these phenomena. Third, the data were collected from private hospitals in Jordan, which may restrict to some extent generalizability of findings to other industries, further research in needed to test the proposed model in various industries. Forth, the links between HRM practices and knowledge management implementation need to be extended by considering other variables such as information technology, Culture, and Leadership to be examined as a success factors for knowledge management implementation. Finally, the use of sample from only one country also constitutes another study limitation. Consequently, in order to be able to make generalizations with confidence about the relations revealed here, further research in needed to test the proposed model in various countries.

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