

A Compensation System Framework for Medical Faculty Members

SOLEIMAN AHMADY¹, SHARIF TORKAMANNEJAD¹, SEYED ALI HOSSEINI², FATEMEH JAVIDAN¹✉, MOHAMMAD SADEGH DEHGHAN¹

¹School of Management and Medical Education Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran

²Social Determinants of Health Research Center and Occupational Therapy Dep., University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

Correspondence to Fatemeh Javidan, Email: drfjavidan@sbmu.ac.ir

ABSTRACT

Background: Developing an appropriate compensation system, focusing on professional activities and competencies of faculty members plays an important role in enhancing efficiency and retention of qualified and prominent academic staff in academic institutions.

Aim: To develop a framework for compensation system of medical faculty members.

Methods: A total of 12 documents were selected for critical review expected to have the most components and parts for compensation system of medical faculty members, and after analyzing and synthesizing critical review results, proposed components in studied texts were extracted for compensation system of faculty members and were used in developing the framework.

Results: Themes and subjects of compensation system of faculty members were integrated and synthesized into 9 core content themes forming the framework of faculty members' compensation system including theory, philosophy and policy, vision, mission, objectives, processes and procedures, strategies, tools, management and infrastructure of compensation system.

Conclusion: This study is unique in its kind, because it provided a framework for compensation system of faculty members, and can be used as a basis for developing and designing a faculty members' compensation model.

Keywords: Compensation; compensation system; compensation system framework; faculty member

INTRODUCTION

"Human resources are among the most important resources of any organization and its constituents are people with numerous needs who will employ their talents and skills for organization in case of meeting their needs and having sufficient motivation"¹.

"Faculty members are the most significant factor constituting the body of higher education in the country, and in fact the university will not be able to enhance the quality without having sufficient academic, professional, and motivated members"^{2,3}.

"Salaries and income are reported as an effective factor in job satisfaction; therefore, in order to increase job satisfaction, needs of faculty members should be met, because they willingly or unwillingly put teaching and transferring knowledge and skills to a secondary importance if they are concerned with meeting their financial needs, This will directly and immediately influence student's academic level, and in short term, will even lead to a declination in academic burden rapidly. Indeed, economic security and satisfaction are interlinked and can be referred to as underlying factors of self-flouring of faculty members"^{4,5,6}.

"Payment system or compensation system is an integral part of academic governance system"^{2,3,7,8}. "Designing and implementing a proper compensation system plays an important role in job satisfaction and also efficiency of faculty members"⁴.

"Higher education experts have long been discussing, explaining, and analyzing tasks of faculty members. These tasks are sometimes cited in universities of medical science as three categories of educational and research tasks, and providing professional services, and are sometimes

summarized into five main groups from a broader perspective by some experts:

1. Tasks related to research activities
2. Tasks related to teaching and education
3. Academic counseling and services inside and outside the university
4. Managerial, executive, and administrative services
5. Professional development activities

In relation to most of the research on workload of faculty members, researchers specifically have focused on balance in five main groups mentioned above, workload, and direct and logical relationship with its results in organization as well as efficiency of each faculty member"^{2,3}.

"Developing an appropriate compensation system focusing on professional activities and competencies of faculty members plays an important role in enhancing efficiency and retention of qualified and prominent scientific human resources in scientific institutions "^{2,3}.

"Compensation system" is referred to as internal and external rewards fairly and equally paid to employees in organization. Some interpret "compensation system" merely as a salary and wage, however, today's the concept is deeply ingrained encompassing a variety of work incentives as remuneration and benefits such as types of goods assistance, cases related to insurance and health services, retirement pension or social and communication interactions in workplace such as attentions and considerations of supervisors, job position, as well as content of the work done by an individual such as challenging nature of the type of job, and orientation towards success in performing the job. Employee compensation involves three main components: paying wages and salaries, incentives, and benefits"⁷. Therefore, "compensation is a broad concept covering the process of

designing payment systems, reward systems, job classification ,and evaluation as well as setting payroll tables, and is an important element effective in economic and social behavior and decisions of employees including staying in /quitting ajob”⁹.

“Compensation plans of faculty members encompass many purposes, according which high-performance individuals are rewarded and retained at the institute, new top talents are attracted, and specific behaviors and activities are encouraged or rejected. According to Smithson and Koster, an effective compensation plan must address both basic needs of faculty members and basic and foundational needs of the department and the institute. Therefore, meeting basic needs of both parties will win the trust of both parties ,and will create a kind of feeling that their goals and priorities are understood and respected,and expectations for compensation will be fair”¹⁰.

“Compensation system is a part of human resources retention system, and is the first objective pursued by every applicant when joining the organization and even during their service. “Compensation management” is equivalent term for “compensation system” in American books and it is referred to as "reward management" in English books”¹¹.

“Literature review has shown various approaches, procedures, strategies, and models regarding development of compensation system framework for academic human

resources or faculty members of universities and institutes”^{10,12,13,14}.However, there is no comprehensive compensation system or framework that can be used as a model for developing compensation system of faculty members.

In this regard, it is necessary to address the issue of compensation system of faculty members in management and development programs related to faculty members. The present study was carried out to develop a framework for compensation system of medical faculty members.

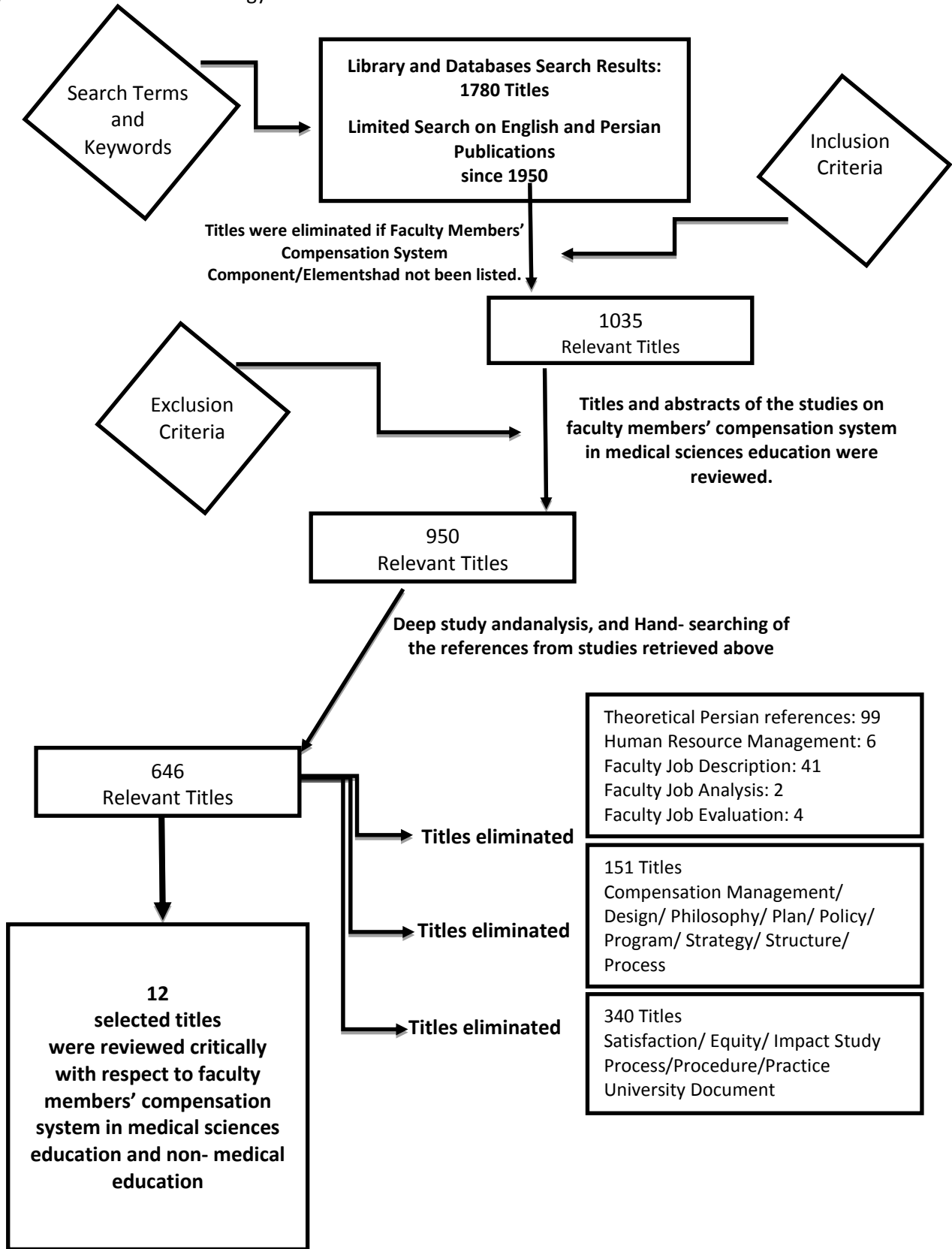
MATERIAL AND METHODS

This critical review study was inspired by the structure presented in the paper written by Carnwell and Dally in 2001¹⁵. First, keywords and inclusion and exclusion criteria of the study were determined. Then, using specialized keywords, the author made extensive searches in texts and resources. To extract basics, instances, and components of faculty compensation system, relevant resources were selected, categorized, and evaluated (Fig. 1).Eventually, a total of 12 documents were selected for critical review, expected to express the most frequent components and elements for compensation system of medical faculty members (Table 1)

Table 1: List of texts selected for critical review

	Ref. Selected	
1	[16]	Shea S, Nickerson KG, Tenenbaum J, Morris TQ, Rabinowitz D, O'Donnell K, Perez E, Weisfeldt ML. 1996. Compensation to a department of medicine and its faculty members for the teaching of medical students and house staff. <i>N Engl J Med</i> . 334(3):162-167. eng.
2	[17]	Guss DA. 2002. A simple plan--faculty compensation in an academic department of emergency medicine. <i>Acad Emerg Med</i> . 9(6):654-657. eng.
3	[18]	Andrae MC, Blad K, Cabana MD. 2006. Physician compensation programs in academic medical centers. <i>Health Care Manage Rev</i> . 31(3):251-258. eng.
4	[19]	Warner JJ, Herndon JH, Cole BJ. 2007. An academic compensation plan for an orthopaedic department. <i>Clin Orthop Relat Res</i> . 457:64-72. eng.
5	[20]	Virginia Commonwealth University. 2007. Medical School Faculty Appointment and Compensation Policy Virginia VCU School of Medicine; [accessed Jun, 1 2016]. https://medschool.vcu.edu/media/medschool/documents/fac_compensation.pdf
6	[21]	University of Massachusetts Medical School. 2008. Guidelines for Departmental Faculty Compensation Plans. Worcester, MA: University of Massachusetts Medical School; [accessed May 15, 2018]. https://www.umassmed.edu/uploadedFiles/Office_of_the_Deans/Faculty%20%20Compensation%20Guidelines%20FINAL.pdf
7	[22]	Jackson State Community College. 2011. Compensation Equity Plan Savannah, TN: Jackson State Community College; [accessed November 18, 2017]. https://www.jscc.edu/assets/forms2/compensation_equity_plan.pdf
8	[23]	University of Massachusetts Medical School. 2013. Faculty Compensation Plan. Department of Family Medicine and Community Health UMass Memorial Health Care/ University of Massachusetts Medical School. Worcester, MA: University of Massachusetts Medical School; [accessed April 1, 2018]. https://www.umassmed.edu/globalassets/family-medicine-and-community-health/fmch/files/department-resources/final-comp-plan-2013.pdf
9	[24]	The University of Texas Medical Branch at Galveston. 2016. Faculty Compensation and Incentive Plan. The University of Texas Medical Branch at Galveston, School of Health Professions, School of Medicine, and School of Nursing. Galveston, TX: The University of Texas Medical Branch at Galveston; [accessed May 18, 2018]. https://www.utsystem.edu/institutions/university-of-texas-medical-branch-at-galveston .
10	[25]	University of Florida. 2017. Faculty Compensation Plan. University Of Florida, College Of Medicine-Jacksonville. Gainesville, FL: University Of Florida; [accessed Jun 18, 2018]. http://hscj.ufl.edu/college-of-medicine/administrative-affairs/documents/fac_comp_plan.pdf
11	[26]	University of British Columbia. 2018. Clinical Faculty Compensation Terms for Teaching in the MD Undergraduate and Postgraduate Programs. University Of British Columbia, Faculty of Medicine. Vancouver, BC: University Of British Columbia; [accessed Jun 15, 2018]. https://www.med.ubc.ca/files/2015/07/Compensation-Terms-for-Clinical-Faculty-Teaching-in-the-MD-Undergraduate-and-Postgraduate-Programs.pdf
12	[27]	UNC-Chapel Hill School of Medicine. 2018. Clinical Department Compensation Plan. Chapel Hill, NC: UNC School of Medicine; [accessed September 15, 2018]. https://academicpersonnel.unc.edu/files/2018/07/School-of-Medicine-Clinical-Compensation-Plan-FY19.pdf

Fig. 1: Literature Search Strategy and Results



After analyzing and synthesizing results obtained from critical review, proposed themes in studied texts were extracted for compensation system of faculty members and were used in framework formulation.

Since, herein, selected method was chosen based on Carnwell and Dally's approach for critical review, critical review of the literature was conducted as below:

- Reviewing and describing the texts
- Critical review and extraction of author's criticisms or that of others on the document
- Researcher's criticism
- Application of study in the research question including extraction of components and elements of compensation system of faculty members, and specification of existing gaps.
- Identifying themes and subjects, and extracting primary concepts
- Developing a framework for compensation system of faculty members

RESULTS

Reviewing is not completed only in a step in a critical review. At each step of the task including quick review, short description, determining primary content themes, in-depth review, description, criticism, application of the text in research, general information of study knowledge in study area, identification of potential gaps in existing knowledge, identifying methodological limitations and application of texts in the study, identifying themes and subjects with forward and backward method, the researcher repeatedly referred to the literature and results of previous steps, and results were described, analyzed and evaluated more deeply, similar to the present study, the cycle of description, analysis, and evaluation was completed in each of phases defined for the study.

Characteristics of compensation system of faculty members were repeatedly reviewed, analyzed, evaluated, and synthesized. Similarities, overlaps, and contradictions were examined again, and finally main themes and subjects of compensation system of faculty members were incorporated into 9 core content themes forming the structure of faculty members' compensation system including:

1. The theory, philosophy, and policy of compensation system
2. The vision of compensation system
3. The mission of compensation system
4. The objectives of compensation system
5. The processes and procedures
6. The strategies of compensation system
7. The tools of compensation system
8. The management of compensation system
9. The infrastructure of compensation system

None of these themes are separate from each other, and they are all related to each other so that together, they constitute a compensation system for faculty members (Fig. 2).

Describing Components of Faculty Member's Compensation System Framework: In the following, there are some examples for components of faculty member's compensation system framework from some documents:

Vision and Mission: The vision and mission of compensation system should be tailored with respect to vision of the organization.

Objectives of Compensation System: "Main objectives of compensation system include preserving the quality of human resources and keeping them within the organization and motivating them to perform their duties. Compensation system should be consistent with the laws of the whole country, as well as laws of the state, and local and institutional laws"⁷.

Compensation System Theory: "Theories such as the Reinforcement and Expectancy Theory, Equity Theory, Agency Theory, as well as the Consequences of Pay Decisions are considered within the framework of these theories in relation to developing a compensation system program of the staffs"²⁸.

"This is while, the most important theories underlying the design in developing faculty members' compensation systems are: Demand and Supply Theory, Human Capital Theory, Efficiency Wage Theory, and Equity Theory"²⁹.

Compensation System Policy: "Policies provide guidance for decision making and action. For example, an organization may adopt a policy in which pay levels of the organization are adjusted relative to average market rates"³⁰.

Philosophy of Compensation System: "Compensation management is based on a rigorous philosophy, i.e. a set of guiding beliefs and principles consistent with values of the organization contributing to its implementation"³⁰.

Compensation System Strategy: "Compensation system strategies specify what the organization intends to do in long-term for presenting and implementing processes, methods, policies, and also the strategies facilitating and reinforcing advancement of the organization to business goals"³⁰.

Processes and Procedures of Compensation System: "Compensation system processes include methods through which, policies are implemented and measures are taken"³⁰.

"Compensation system methods include paying and grading the structures, according which techniques such as job evaluation, and schemas such as contingent pay are used to implement strategies and policies of a compensation system"³⁰

"Compensation procedures are implemented to preserve the system and ensure its effective and flexible performance and maximize monetary value such as the process used to conduct an annual payment review"³⁰.

Compensation System Tools: "Currently, there are three main classifications for compensation system tools including basic payment, performance incentives, and non-cash benefits, which can be integrated by the employers to encourage their employees to perform their tasks at high efficiency levels"³¹.

Compensation System Infrastructure: A proper infrastructure must be designed and implemented for a compensation system to achieve an effective, efficient, and cost-effective compensation management system.

Literature review indicates that depending on policy and philosophy of the organization for compensation system,

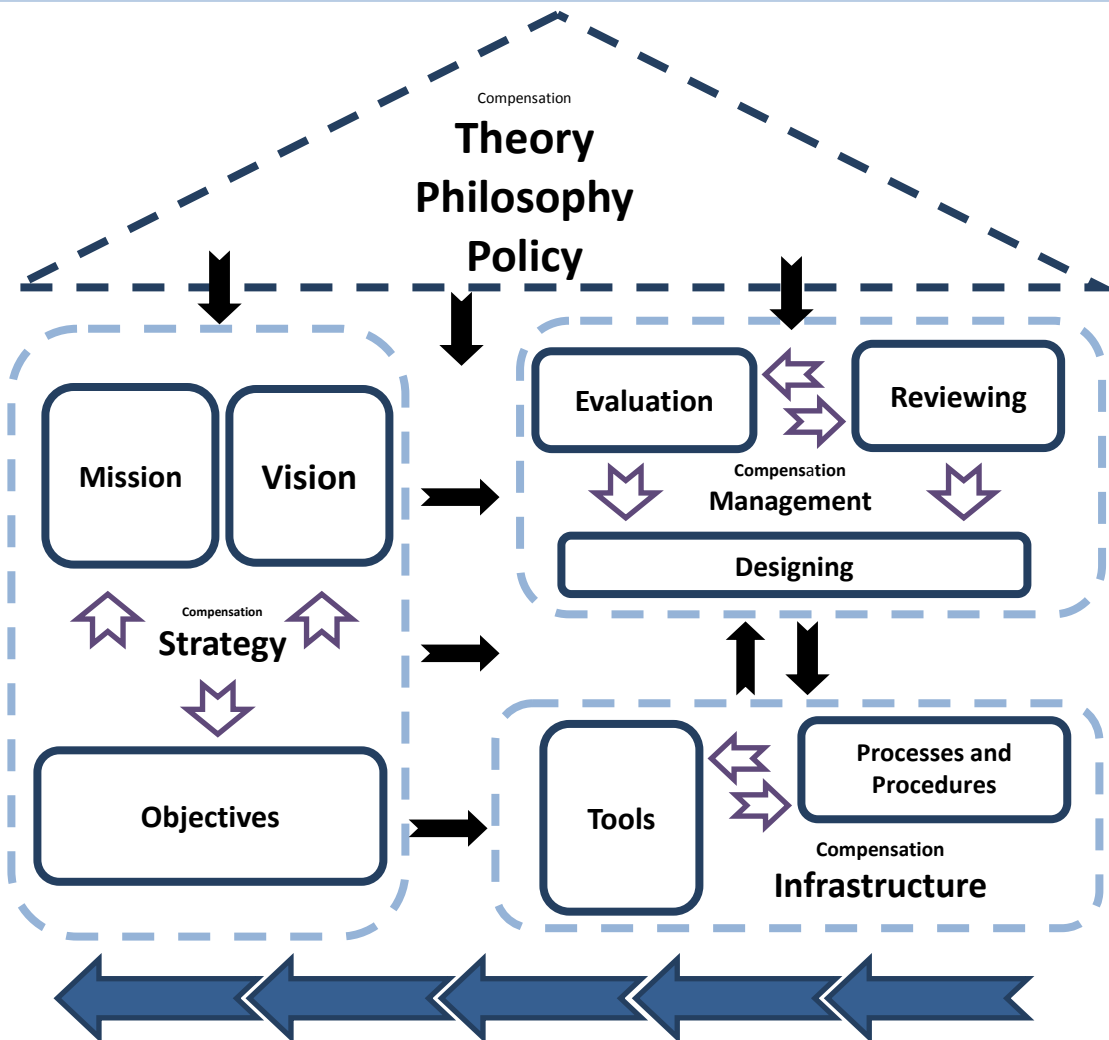
the infrastructure considered by the organization for compensation system may include:

- "Strategies, guidelines, policies, methods, and systems"³²
- "Domains, job evaluation procedures, compensation system tools, performance management tools etc."³³.
- "Compensation infrastructure at least includes:
 - The philosophy of compensation
 - A set of jobs covering roles of the organization
 - A set of pay ranges to guide managers in presenting employment offers and in relation to promotion, entitlement of bonuses ,and other payment increases"³⁴

Compensation Management: "Compensation management deals with strategies, policies, and processes compensating participation of individuals in the organization financially and non-financially. Compensation

management involves designing, implementing, and preserving compensation system including processes, performances, and procedures for compensation system aimed at meeting needs of the organization and its stakeholders. Compensation management mainly focuses on further achievement of strategic goals of the organization, and provision of fair, equitable, and coordinated rewards to individuals based on their contribution to the organization. Compensation management not only addresses payments and benefits, but also is related to non-financial rewards such as appreciation, learning ,and opportunities for growth and greater job responsibility"[30]. In this framework, evaluation of compensation system and reviewing of compensation program isa part of compensation management process.

Figure2. Faculty Members' Compensation System Framework



DISCUSSION

In the present study, main themes and subjects in studied texts were extracted after analyzing and synthesizing critical review results for the components constituting a compensation system, and were used in developing the framework.

There was a significant change in the content of the documents selected for criticism since 1996 by the end of 2018. Over the years, incentive of compensation has increased, and as we get closer to the present, a greater variety of documents and more details are mentioned as well.

Results of literature review over time revealed lack of a comprehensive compensation system, and it was found that various institutions and organizations have published scattered documents from different parts of their compensation system. Of course, content of most of these documents focused on implementation of compensation system (techniques, strategy, process, method, procedure, program, and model of compensation system design).

Among 12 documents selected for critical review, only in 2 documents, evidences of philosophy, policy, goals, techniques, strategy, process, method, procedure, program and model design, management, and evaluation of compensation system were found simultaneously. Moreover, only 3 documents could provide indirect evidence of a compensation philosophy. Obviously, that there should be a theory, philosophy, or policy in developing a compensation system program otherwise; there would be no trace of it in many documents. From a more optimistic view, one may assume that theory, philosophy, policy, and goals of compensation program are based on core theory, philosophy, policy, and goals of the organization / institution, but it is suggested to clearly state theory, philosophy, policy, goals, and objectives of compensation system of faculty members. As such, it may no longer be necessary to devote more time to study the documents on part-time compensation program addressing challenges and complaints of faculty members.

Having reviewed more documents, new documents were found to be more or less formulated with the same repetitive themes, but they had more components and elements to compensate for faculty member's compensation. That is, new documents continue to be published not involving new themes and subjects related to faculty member's compensation, but the same themes and subjects appear in greater details and transparency in the documents, probably due to knowledge gap or gaps that may exist in this regard. In the present study, no evidence was found in selected texts regarding a comprehensive and systematic compensation system for faculty members.

In selected literature, most of the documents were observed to focus solely on implementation of compensation and related calculations, and ultimately on diversity of each set of compensation methods, and no evidence was observed with respect to reinforcement of other elements associated with a compensation system.

Most of selected texts had only sufficed to presentation of a simple classification and categorization, and defining and describing validity or mathematical formulas of a variety of payment methods and models, and

a further need for future research works had been highlighted in discussion section of the literature and papers, without even providing a simple pattern or model representing the researchers' consensus on a compensation system.

Many methodological limitations were observed in studied texts, which can be divided into several categories from methodological point of view: Some of these texts were papers only reported on implementation or effects of implementing a "program" or a compensation plan.

A number of documents were related to theoretical foundations of human resource management and analysis, evaluation, and description of faculty members' job.

Another set of documents were developed focusing on strategy, management, planning, philosophy, structure, and model related to compensation for faculty members.

Other documents pertained to the studies on satisfaction, equity, fairness, compensation specificity, process, method, and procedure as well as compensation documents for faculty members in universities across the world.

Unfortunately, the texts, in which a compensation system or model is introduced are rarely found and are limited to theoretical books. No specific outline of compensation system was found in related documents, and most often the theme and subject of "implementing" and "operating" of compensation had been highlighted in reviewed texts.

CONCLUSIONS

As this study provides a framework for compensation system of medical faculty members, thus, it is considered to be unique in its kind, and can be used as a basis for developing and designing a faculty members' compensation model.

No comprehensive compensation system was found in the texts and documents selected for critical review, and all of them included either guidance or instructions, etc. where the researcher sought to trace for a comprehensive compensation system of that institution or department in content of the texts, or reviewed and reported the effects of a compensation plan or program.

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