

Impact of Medical Insurance Contracts Elements on the Profitability of Hospitals

Dr. Mohyedin Hamza*

Associate Professor/Department of Accounting/Zarqa University, Jordan

Dr. Tarek Almbaidin

Associate Professor/Department of Accounting/Zarqa University, Jordan

Emad Al-Rabi

Researcher/Department of Accounting/Zarqa University, Jordan

Abstract

This study aims at identifying the impact of the elements of medical insurance contracts on the profitability of hospitals- a case study. To this end, the researchers collected the financial statements and the analytical reports of medical claims and the determinants of the origin of these claims (the actual deduction) from the accounts of the Islamic Hospital as well as the contracts and agreements signed between the Islamic Hospital and insurance companies showing the agreed contractual deduction on the hospital services, (The Medical Laboratories Department, Radiology Department, Pharmacy Department, Medical Procedures Department, and Medical Supplies Department) for the period 2006-2016. A set of appropriate statistical methods were applied through the SPSS program. The study results show that the study variable has, to a large extent, an impact on the profitability of the Islamic Hospital. The study provided a set of recommendations, mainly: establishing a division of medical approvals and audits that coordinates between the insured and the insurance company to guarantee the veracity of medical procedures.

Keywords: Medical insurance; Contracts elements; Profitability of hospitals.



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1. Preface

Hospitals are an indispensable sector of services through its role in the society in elements of: providing care and health to individuals, alleviating their pain and ensuring health protection, thus boosting and supporting the national economy by attracting external investments and relevant parties. Governments have a role to play by building hospitals, health centers and clinics that provide services to people unable to pay the high cost of treatment to hospitals and medical centers. In this regard, health insurance companies have provided people with medical services at lower prices.

As health needs and requirements increase, the need for parties with common interests based on certain principles emerges to manage the health insurance process, represented by insurance companies on one hand, and medical service providers on the other hand: hospitals, laboratories, radiology, pharmacies, and other related parties), through the medical insurance contracts between the related parties, and subsequently affecting, through the financial transactions and claims, the financial repayments values between them. This affects the net operating savings, reflected in the financial reports and statements. In the light of the above mentioned, this study is conducted to reveal the impact of the elements of medical insurance contracts on net operating savings.

1.1. The Study Problems and Questions

Insurance companies seek to attract a wide range of insured through a quality of performance, and meeting the needs of the latter. Hospitals across the Hashemite Kingdom of Jordan are the main contracting parties with insurance companies, being their mainstay since hospitals are a tool that draws individuals (patients). The work mechanism between insurance companies and hospitals is through contracts or agreements. Hospitals submit the financial claims showing the costs of service provided to patients, to insurance companies as per the agreements signed between both. The financial department, represented by the Medical Insurance Accounting Department, matches the insurance companies payments to the origin of these claims after discounting the contractual deduction. It has been noted that insurance companies have deducted the difference outside of the insurance contract, known as financial claims settlements. That's the problem between the financial claims submitted by the hospital and what has been recognized by the insurance companies, which may affect the net operating savings of the Islamic Hospital through the elements of the medical insurance contracts concluded with the insurance companies.

Through the above, the researcher presents the study problem through the following question:

- Is there a statistically significant effect of the difference between the contractual deduction and the actual deduction of the elements of medical insurance contracts on the net operating savings of the Islamic Hospital?

1.2. The Study Hypothesis

"There is no statistically significant effect of the difference between the contractual deduction and the actual deduction of the elements of medical insurance contracts on the net operating savings of the Islamic Hospital at the level of significance ($0.05 \alpha \geq$)."

1.3. The Objectives of the Study

The study aims at shedding light on the medical services provided by the elements of the medical insurance contracts concluded between the insurance companies and the Islamic Hospital, which affect the net operating savings of the Islamic Hospital. It examines the financial claims and their actual deductions and calculates the difference between the actual and contractual deduction of these claims and how it affects the Islamic Hospital net operating savings.

Based on the above, the objectives of the study can be defined as follows:

1. Evaluate the impact of medical insurance contracts on the net operating savings of the Islamic Hospital.
2. Identify the elements of the medical insurance contract between the insurance companies and the Islamic Hospital.

1.4. The Significance of the Study

This study is of importance as it tackles the elements of medical insurance contracts and their impact on the net operating savings of the Islamic Hospital. It aims to shed light on the impact of the elements of medical insurance contracts on the net operating savings of the Islamic Hospital through the medical services provided and contracted between the insurance companies and the Islamic Hospital. On the other hand, the insurance companies are moving towards achieving the greatest possible returns through the conclusion of medical insurance contracts, thus, generating revenues for the hospital and consequently reflecting positively on the net operating savings of the Islamic Hospital. Being a branch of the Islamic Charity Center in Amman, this hospital enjoys financial and administrative independence. Therefore, the study aims to fulfill the practical side, represented in the difference between the contractual deduction and the actual deduction on the financial claims submitted by the Islamic Hospital to insurance companies, the financial receipts of these claims, and its impact on the net operating savings.

1.5. Procedural Definitions

Insurance contracts: "The contract whereby a party (insurance company) accepts an important insurance risk from another party (the policy holder) and agrees to compensate the policyholder for an uncertain definite future occurrence (insured event) that adversely affects the policyholder (IFRs 4).

Insurance companies: A type of financial and insurance institution that has a dual role since it provides the insurance service to those interested, and collects money from the insured to reinvest for a return.

Profitability of Hospital (Net Operating Savings): It represents the net output of the operations executed by the economic unit.

Net operating savings is achieved by subtracting the cost of operating expenses from the total income.

Contractual deduction: It refers to the agreed deduction of the elements of the insurance contracts represented by the Medical Laboratories Department, the Radiology Department, the Pharmacy Department, the Medical Procedures Department, and the Medical Supplies Department, as per the agreement signed between the service provider (the Islamic Hospital) and the insurance company.

The actual deduction: It is the deduction on the total claims as stated in the payment details statements issued by the insurance companies and including the contractual and non-contractual deduction and the net payment of the origin of the financial claim.

The hospital: The hospital is one of the most important service and professional facilities that provides integrated medical and therapeutic services through its multiple departments, aiming to serve present and future patients. Medical services are intangible assets, including all services provided to fulfill medical needs, whether these are therapeutic, diagnostic or nursing medical services offered through a variety of means, the most important of which are hospitals. The International Committee of Health Experts has defined the hospital as "an essential part of a social and health organization that provides full therapeutic or preventive, health care to individuals. It is also a center for the training of health workers as well as conducting social biological research.

1.5.1. The Definition of Insurance

Insurance has become one of the basic and essential pillars of social, economic and national life in societies. Since the beginning of time, humans have been working hard to mitigate the damage and dangers that surround and threaten them, in their attempt to reach a state of security and stability for their lives and properties. Insurance is defined as a cooperative venture designed to protect individuals and groups exposed to a specific risk. The risk burden is distributed only among members who cooperate and participate in the insurance process, aiming at mitigating the financial consequences of risk materialization (Hilali *et al.*, 2007).

1.5.2. The Concept of Health Insurance and its Objectives

Health insurance is defined as: "A contract under which the insurance premiums are paid to the insurer who pledges to pay a specific amount or in installments to the insured. The insurer pays all or part of the expenses

regarding treatment and medicine in case of illness from the part of the insured” (Abdul Hadi and Al-Sayyd, 2003). Health insurance aims to:

1. Achieve the highest possible level of health and boost the spirit of social solidarity through the provision of comprehensive and integrated medical services to all the community.
2. Set the general principles of how to contribute to alleviating the cost of treatment for families and the State.
- 3 - Participate in bearing the burden of health risks with the needy, based on social values and norms.

2. Literature

The researchers have faced some difficulty in their search for previous relevant studies, due to the novelty of the subject. The following are studies in Arabic and foreign languages considered by the researchers to be closest to the subject of the study.

2.1. A Study by Sahim *et al.* (2007), Entitled

(Factors affecting impatient satisfaction: Structural equation modeling)

This study aims to determine the factors affecting patient satisfaction in a training hospital in Turkey. The sample included 302 patients residing in the hospital. The factors were analyzed to measure patient satisfaction, and the structural equation was formulated to determine the effect of the patient characteristics (patient satisfaction). Results show that the patient's level of education and the nature of the treatment provided have an effect on his level of satisfaction. This level is high among surgical patients and patients with a low level of education whereas low among patients with high academic degrees and nonsurgical patients.

2.2. A study by Gupta and Denton (2008) Entitled

(Appointment Scheduling in health care: Challenges and opportunities)

The study aims to determine the factors influencing the appointment scheduling and its impact on the provision of health services through the arrangement of medical schedules, since this is the policy used in specialized clinics and hospitals primary clinics to facilitate patients access, select appointments easily, be there when service is provided and set the preferable time for both the service provider and recipients, through the use of advanced methods and the experience of the hospital employee. The study succeeded in organizing a schedule for choosing the right time in a scientific and practical way.

2.3. A Study by Akotey (2012) Entitled

(The financial performance of life insurance companies in Ghana)

The study aims at evaluating the financial performance of the insurance industry on the emerging economic life. In his study, the researcher relied on the main determinants such as the profitability of life insurance industry. The study concluded that the total premiums are positively related to the profitability of the insurance companies, and that there is a complementary relation between insurance profits and the investment income of life insurance companies. This study addresses the urgent need to meet the objectives that are critical to the survival, growth and profitability of life insurance companies in emerging economies.

2.4. A Study by Abu-Khalifa (2013) Entitled

(The Impact of Quality on Health Care).

This study aims to identify the main obstacles that led to the failure to introduce quality applications and to identify their causes. It also sheds light on the effective role of quality and its effectiveness in improving the performance of the health facility and how this is reflected in the profitability of these facilities owners.. The study concluded that there is a certain amount of interest and personal care for patients, but this interest is weak from the part of the management and employees. The study recommends to enhance confidence between patients and employees through continuous training; to reassure patients that they are in safe hands, work to increase interaction between the medical staff, employees and patients by improving mutual understanding and develop training programs to increase the skill of technical workers in the completion of work through merit, civility and credibility.

2.5. A Study by Lewezuk (2015) Entitled

Insurance contracts project for accounting

In this study, the researcher relied on presenting the problem of the insurance contracts project as it was before and how to develop this project the(IFRS4) standard as an interim criterion for insurance contracts. The insurance contracts were evaluated with the so called current flows value. The study concluded the main challenges in relation to the insurance contracts project, including measurement problems of insurance assets and problems related to the impact of insurance risks on insurance results. The study recommends that attention should be paid to preparing the insurance contracts standard project regarding the quality of the information and the contents obtained through the accounting system.

3. Methodology

The researchers used the descriptive analytical approach based on a set of research tools for the purpose of completing the research requirements in both theoretical and field aspects by relying on the data needed to test the

research hypothesis through the annual reports issued by the Islamic Hospital for the years 2006-2016 as well as the analytical statements of the actual deductions on the financial claims, and the contracts concluded between the Islamic Hospital and the insurance companies for the purposes of the contractual deduction.

3.1. Descriptive Statistical Analysis Results

The main indicators of the annual reports issued by the Jordanian Islamic Hospital for the years (2006 - 2016).

1- Islamic Hospital Claims to Insurance Companies for the years (2006-2016).

Results in Table 1 indicate that there has been a significant increase in the financial claims sent to insurance companies, which reflects the importance of the contracts concluded between the Islamic Hospital and insurance companies and their impact on the net operating savings of the Islamic Hospital. It is noted that the average of the claims of the Islamic Hospital to insurance companies for the years (2006 - 2016) was JD (1942.51), with a standard deviation of JD 514.59. The Islamic Hospital claims of the Department of Pharmacy came first with an average of JD (3201.64) and a standard deviation of JD(896) whereas those of the Department of Medical Laboratories ranked second with an average of JD (2103.45) and a standard deviation of JD(521.20). The claims of the Medical Procedures Department came in third place with an average of JD (2066.64), and a standard deviation of JD(1006.81) while those of the Department of Radiology came fourth with an average of JD (1669.27) and a standard deviation of JD (440.28). The claims of the Department of Medical Supplies ranked fifth (last) with an average of JD(671.55) and a standard deviation of JD(211.40).

Table-1. Islamic Hospital analytical sheet to insurance companies for the years (2006-2016) Figures in thousands/ Jordanian dinar

Year	Medical Laboratories	Radiology	Pharmacy	Medical procedures	Medical Supplies	Total
2006	1414	1105	2072	1306	681	6578
2007	1705	1281	2466	1593	404	7449
2008	1532	1314	2328	1534	636	7344
2009	1679	1539	2492	1639	462	7811
2010	1698	1409	2498	1629	381	7615
2011	2181	1634	3208	1940	540	9503
2012	2612	1929	4434	1708	762	11445
2013	2419	1848	4236	954	930	10387
2014	2268	1569	3259	3476	814	11386
2015	2754	2072	3798	4292	1028	13944
2016	2876	2662	4427	2662	749	13376
Average	2103.45	1669.27	3201.64	2066.64	671.55	1942.51
Standard deviation	521.20	440.28	896.00	1006.81	211.40	514.59

3.2. Contractual Deduction of Islamic Hospital Claims to Insurance Companies for (2006-2016)

Results in Table (2) indicate that the value of the contractual deduction has increased in an ascending order. This is explained by the increase in the value of the financial claims for the years under study and analysis, leading to greater attention on the elements of the contractual deduction due to its effect on the Islamic Hospital net operating savings. It is noted that the contractual deduction average of the Islamic Hospital claims to insurance companies for (2006-2016) was JD (193.73), with a standard deviation of JD (51.14). The contractual deduction of the Islamic Hospital claims to insurance companies for the Department of Medical Laboratories came first with an average of JD (252.45) with a standard deviation of JD(62.25) while the Radiology Department's claims were second with an average of JD (250.36) and a standard deviation of JD (65.89). The claims of the Medical Procedures Department came third, with an average of JD(206.64), and a standard deviation of JD(100.52). The claims of the Pharmacy Department ranked fourth, with an average of JD(192.09) and a standard deviation of JD (53.84). The claims of the Department of Medical Supplies ranked fifth (last), with an average of JD (67.09) and a standard deviation of JD (21.09).

Table-2. The contractual deduction analytical sheet of the Islamic Hospital claims to insurance companies for (2006-2016) Figures in thousands/ Jordanian dinar

Year	Medical Laboratories	Radiology	Pharmacy	Medical Procedures	Medical Supplies	Total
2006	170	166	124	131	68	659
2007	205	193	148	159	40	745
2008	184	197	140	154	64	739
2009	202	231	149	164	46	792
2010	204	211	150	163	38	766
2011	262	245	192	194	54	947
2012	313	289	266	171	76	1115
2013	290	277	254	95	93	1009
2014	272	235	196	347	81	1131
2015	330	311	228	429	102	1400
2016	345	399	266	266	76	1352
Average	252.45	250.36	192.09	206.64	67.09	193.73
Standard deviation	62.25	65.89	53.84	100.52	21.09	51.14

Table (1) and Table (2) show that the contractual deduction of the Islamic Hospital claims to insurance companies for (2006-2016) was 15% for the Radiology Department, 12% for the Medical Laboratory Department, 10% for the Medical Procedures Department and the Medical Supplies Department, and 6% for the Pharmacy Department.

3.3. The Actual Deduction of the Islamic Hospital Claims to Insurance Companies for (2006-2016)

Results in Table (3) indicate that the actual deduction of financial claims is high, and is increasing continuously, which indicates that there are several problems in the actual deduction of the Islamic Hospital claims. It is noted that the actual deduction average for the Islamic Hospital claims to insurance companies for the years (2006 - 2016) was JD (492,80), with a standard deviation of JD (158.78). The actual deduction of the Islamic Hospital claims for the Medical Laboratories Department came first with an average of JD (651)thousand and a standard deviation of JD (201.09) thousand while the claims of the Medical Procedures Department ranked second with an average of JD (600.82) thousand, and a standard deviation of JD (194.83) thousand. The Department of Radiology came third with an average of JD (584.36) thousand, and a standard deviation of JD (204.12) thousand. The claims of the Pharmacy Department ranked fourth, with an average of JD (430.91) thousand, and a standard deviation of JD (135.96) thousand followed by the Department of Medical Supplies claims which ranked fifth (last), with an average of JD (196.91) thousand, and a standard deviation of JD (69.87) thousand.

Table-3. The actual deduction analytical sheet of the Islamic Hospital claims to insurance companies for (2006-2016) Figures in thousands/ Jordanian dinar

Year	Medical Laboratories	Radiology	Pharmacy	Medical Procedures	Medical Supplies	Total
2006	383	301	220	331	98	1333
2007	453	391	309	415	133	1701
2008	534	475	336	514	150	2009
2009	521	516	343	476	168	2024
2010	424	404	297	406	133	1664
2011	600	527	431	571	162	2292
2012	768	697	557	697	254	2973
2013	838	628	541	660	243	2909
2014	838	655	510	746	231	2980
2015	900	864	579	868	293	3504
2016	902	970	617	925	301	3714
Average	651	584.36	430.91	600.82	196.91	492.80
Standard deviation	201.09	204.12	135.96	194.83	69.87	158.78

Table (1) and Table (3) show that the actual deduction of the Islamic Hospital claims to insurance companies for the period (2006-2016) was 30.6% for the Medical Laboratories Department, 34.4% for the Radiology Department and 13.4% for the Pharmacy Department. 32.2% for the Medical Procedures Department and 29.9% for the Medical Supplies, and 25% for all the hospitals Departments.

4. The Difference Between the Contractual Deduction and the Actual Deduction of the Islamic Hospital Claims to Insurance Companies for the Years (2006-2016)

Results in Table (4) indicate that the average of the difference between the contractual deduction and the actual deduction of the Islamic Hospital claims to insurance companies for the years (2006-2016) was JD (299.05) thousand with a standard deviation of JD (109.55) thousand. The difference between the contractual deduction and the actual deduction of Islamic Hospital claims to insurance companies for (2006-2016) for the Medical Laboratories Department ranked first, with an average of JD (398.36) thousand and a standard deviation of JD (144.08) thousand while the claims of the Department of Medical Procedures ranked second with an average of JD (394.27) thousand and a standard deviation of JD(143.58) thousand. The Department of Radiology came third with an average of JD(333.82) thousand and a standard deviation of JD (142.29) thousand. The claims of the Pharmacy Department ranked fourth, with an average of JD (239) thousand and a standard deviation of JD(86.48) thousand. The claims of the Department of Medical Supplies ranked fifth (last), with an average of JD(129.82) thousand, and a standard deviation of JD(55.96) thousand.

Table-4. An analytical sheet of the difference between the contractual deduction and the actual deduction of the Islamic Hospital claims to insurance companies for (2006-2016) Figures in thousands/ Jordanian dinar

Year	Medical Laboratories	Radiology	Pharmacy	Medical Procedures	Medical Supplies	Total
2006	214	136	96	201	29	676
2007	248	199	161	256	93	957
2008	350	278	197	360	86	1271
2009	319	285	194	312	122	1232
2010	221	192	147	243	95	898
2011	338	282	239	378	108	1345
2012	454	407	291	526	178	1856
2013	547	350	286	565	150	1898
2014	565	420	315	398	150	1848
2015	569	553	352	439	191	2104
2016	557	570	351	659	226	2363
Average	398.36	333.82	239	394.27	129.82	299.05
Standard deviation	144.08	142.29	86.48	143.58	55.96	109.55

Table (4) shows that the difference between the contractual deduction and the actual deduction for the Islamic Hospital claims to insurance companies for (2006-2016) was 18.6% for the Medical Laboratory Department, 19.4% for the Radiology Department and 7.3% for the Pharmacy Department. 22.2% for the Medical Procedures Department and 19.9% for the Medical Supplies, and 15% for all the hospital Departments.

5. The Islamic Hospital Net Operating Savings for the Years (2006-2016)

Results in Table (5) indicate that the Islamic Hospital net operating savings for the years (2006-2016) was JD (3286) thousand, with a standard deviation of JD (1917.99) thousand. The net operating savings of the Islamic Hospital for 2016 came first with JD(6796) thousand while 2015 ranked second with JD(6626) thousand. The year 2012 came in third place with JD(3681) thousand while 2009 came in fourth place with JD(3599) thousand. 2013 came in fifth place with JD(3475) thousand followed by year 2008 in sixth place with JD(3451) thousand. The year 2010 came in seventh place with JD (1983) thousand followed by 2007 in the eighth rank with JD(1888) thousand and 2011 in the ninth place with JD (1774) thousand. . 2014 came in tenth place with JD(1764) thousand and 2006 came at the last rank with JD (1109) thousand.

Table-5. An analytical sheet of the net operating savings for the Islamic Hospital for (2006-2016) Figures in thousands/ Jordanian dinar

Year	Net operating savings
2006	1109
2007	1888
2008	3451
2009	3599
2010	1983
2011	1774
2012	3681
2013	3475
2014	1764
2015	6626
2016	6796
Average	3286
Standard deviation	1917.99

5.1. Hypothesis Testing

"There is no statistically significant effect of the difference between the contractual deduction and the actual deduction of the medical insurance contracts elements on the net operating savings of the Islamic Hospital at a level of significance ($\alpha \geq 0.05$)"

To test this hypothesis, the researcher uses multiple regression analysis to measure the effect of the difference between the contractual deduction and the actual deduction of the medical insurance contracts elements on the net operating savings of the Jordan Islamic Hospital at a level of significance ($\alpha \leq 0.05$). The results in Table (6) include the following:

Table-6. The results of selecting multiple regression analysis to measure the effect of the difference between the contractual deduction and the actual deduction of the medical insurance contracts elements on the net operating savings of the Islamic Hospital

Independent variable	R value	R ² value	F value	Level of significance	Statistical resolution
The difference between the contractual deduction and the actual deduction of medical insurance contracts elements	0.941	0.886	7.78	0.021	Rejection of the null hypothesis

Level of significance ($\alpha \leq 0.05$)

The data in the previous table clearly shows that the level of significance value ($0.021 = \alpha$) is less than the level of significance ($\alpha \leq 0.05$), and by comparing the values obtained in testing this hypothesis, the null hypothesis is rejected and the alternative hypothesis stating that "There is a statistically significant effect of the difference between the contractual deduction and the actual deduction of the medical insurance contracts elements on the net operating savings of the Islamic Hospital at a level of significance ($\alpha \geq 0.05$)" is accepted. The table also indicates that the variance in the independent variable (R^2) explains a percentage of (0.886) of the variance in the net operating savings of the Jordan Islamic Hospital.

6. Conclusions

Based on the results of the statistical analysis, the researchers reached a number of conclusions as follows:

This hypothesis researched the effect of the difference between the contractual deduction and the actual deduction of the medical insurance contracts elements on the net operating savings of the Islamic Hospital. The results of the statistical analysis of this hypothesis showed a statistically significant effect of the difference between the contractual deduction and the actual deduction of the medical insurance contracts elements on the Islamic Hospital net operating savings at a level of significance ($\alpha \geq 0.05$). This may be justified by many reasons, including the following in its general form:

- Lack of prior approvals from the insurance company.
- Lack of full coverage for the insured (the patient).
- Case and diagnosis not covered by insurance.
- The insurance company's failure to comply with the contract elements in the right way.

Here are some examples of the above:

- Many laboratory tests outside the scope of health insurance were considered by the hospital within the scope of insurance, which led to the exclusion of the claim dismissal value, and thus the hospital has covered this value.
- Some procedures related to medical tests, radiographs and medicines were not commensurate with the medical diagnosis, as well as not approved by the insurance company, which led to the exclusion of all procedures associated with the claim, which affected the net operating savings.
- By studying the settlement of the claims paid by the insurance companies, the researcher found that there were deductions for some radiographs that did not cover the insured (the patient) in whole but in part, as per the insurance policy agreement between the client and the insurance company.

6.1. Recommendations

According to the findings based on the results of the statistical analysis, the main recommendations can be summarized as follows:

1. The creation of a special division, independent of medical approvals and audits, which coordinates between the insured and the insurance company to ensure the validity of the medical procedures, as well as the related claims through the presence of a full-time doctor for the purpose of medical approvals and follow-up medical procedures.
2. Following up the adjustment of the value of invoices issued by the hospital according to the contract, and sending the invoice to the insurance company stating the net value after discounting the contractual deduction value to ensure non-effect on the net operating savings..
3. Allocating a department to examine the reasons behind the rejection of some financial claims; to find out the real value to be claimed by the insurance company, and to resolve the differences between the hospital and the insurance company.

References

- Abdul Hadi and Al-Sayyd (2003). *Insurance Contract, Reality and Legitimacy*. Halabi Publications: Beirut.
- Abu-Khalifa, A. (2013). *Impact of quality in health care*. Master Thesis, Faculty of Management Arab Open University of North America.
- Akotey, J. (2012). The financial performance of life insurance companies in Ghana. *J. of Risk Finance*, 14(3):286-302.
- Gupta, D. and Denton, B. (2008). Appointment Scheduling in Health Care, Challenges and Opportunities. *IIE Transactions*, 40(9): 800-19.
- Hilali, M., Shehadeh and Abdul Razak (2007). *Accounting of Financial Institutions, Commercial Banks and Insurance Companies*. Dar Al-Manahej for Publishing and Distribution.
- Lewezuk, M. (2015). Insurance contracts project for accounting. *Quantitative Methods in Accounting and Finance*, 375: 18-28
- Sahim, B., Yilmaz, F. and Lee, K. (2007). Factors affecting impatient satisfaction, Structural equation modeling. *Journal of Medical System*, 31(1): 9-1.