Patients' Satisfaction Concerning Hospital Care Post-acute Myocardial Infarction at Maysan Governorate Hospitals

رضا المرضى المتعلق بالرعاية الصحية بعد الإصابة باحتشاء عضلة القلب في مستشفيات محافظة ميسان

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الخلاصة

هدف الدراسة : تهدف الدراسة الى معرفة رضا المرضى المتعلق بالرعاية الصحية بعد الإصابة باحتشاء العضلة القلبية الحاد في مستشفيات محافظة ميسان .
المنهجية: تم اعتماد التصميم الكمي(دراسة وصفيه مترابطة) في هذه الدراسة التي انجزت لغرض التعرف على رضا المرضى المتعلق بالرعاية الصحية بعد الإصابة باحتشاء العضلة القلبية للفترة بين٣٠ كانون الأول ٢٠١٤ ولغاية ٢٨ آيار ٢٠١٥، ولتحقيق أهداف الدراسة اختيرت عينة غرضية غير احتمالية مكونة من (١٠٠) مريض مصاب باحتشاء عضلة القلب. وجمعت البيانات الخاصة بالدراسة من خلال استخدام استمارة الاختبار المتعلقة برضا المرضى للعناية الصحية بعد الإصابة باحتشاء عضلة القلب تم بناؤها وتصميمها من قبل الباحث لأغراض الدراسة الحالية ، حيث جمعت البيانات باسوب المقابلة الشخصية مع المرضى الذين تم ادخالهم الى وحدة العناية القلبية في مستشفى الصدر التعليمي ومركز ميسان للامراض القلبية في محافظة ميسان بعد اخذ موافقة المريض وباستخدام النسخة العربية من الاستمارة واستغرقت المقابلة مع كل مريض تقريبا من ٢٥-٣٠ دقيقة. تم تحقيق ثبات أدوات القياس من خلال استخدام الفا كرون باخ والذي كانت (٠,٨٥).أما مصداقية أدوات القياس فقد تحققت من خلال عرضها على مجموعة من الخبراء لغرض مراجعتها وتقويم درجة مصداقيتها. قام الباحث باستخدام الإحصاء الوصفي (التوزيع التكراري والنسبة المئوية) والوسط الحسابي والانحراف المعياري.
النتائج: أعلى رضا للمرضى كان في ألفقره الرابعة بوسط حسابي (٥.٥٩) وانحراف معياري(٠٤٩٤) تليها الفقرات الأخرى بأقل وسط حسابي
الاستنتاج: أشارت الدراسة إلى أن هنالك رضا عالي لدى المرضى عند القليل من الفقرات ذات العلاقة بالرضا وقليلة الرضا في معظم الفقرات الأخرى.
التوصيات : زيادة عدد الملاك الصحي المتخصص في تقديم ما هو الأفضل في العناية بالنسبة لمرضى احتشاء عضلة القلب لغرض زيادة رضا المرضى عن الرعاية الصحية المقدمة لهم .

Abstract:

Objective: To identify the satisfaction of patients concerning hospital care post-acute myocardial infarction.

Methodology: Quantitative design (connective a descriptive study) was carried out to identify the patients' satisfaction concerning hospitals care post-acute myocardial infarction at Maysan governorate hospitals. Starting from December 30th 2014 up to May 28th 2015. To achieve the objectives of the study, a non-probability sample (a purposive sample) consisted of (100) patients were acute myocardial infarction. Data were collected through the use of questionnaire which is related to acute myocardial infarction patients' The questionnaire was interview with acute myocardial infarction patients who were attended coronary care unit at Al-Sadder Teaching Hospital, and Maysan Center of Cardiac Disease after obtaining agreement from the patients throughout using Arabic version of questionnaire. The researcher conducted private meeting with each patient who spends about 25-30 minute to respond to the interview which were developed for the purpose of the study. Instrument validity was determined by a panel of experts. Reliability of the instrument was determined through the use of Cronbach Alfa which was (0.85) which are strong acceptable for acute myocardial infarction patients'. Analysis of data was performed through the application of descriptive statistics (frequency, percentage), mean of score and Standard Deviation.

RESULT: .high patients' satisfaction was in item (4) with mean score (5.59) and stander deviation (0.494) and anther items with less mean score

CONCLUSION: The results indicated that there is a high satisfaction for patients when little of the items of satisfaction and little satisfaction in most of the other items

RECOMENDATION: increased the medical staff to provide the important health care for patient that led to increased patient satisfaction concerning hospital care.

Keywords: Patients' satisfaction, hospital care, Myocardial infarction.

INTRODUCTION:

Myocardial Infarction (MI) focuses on the myocardium (the heart muscle) and the changes that occur in it due to the sudden deprivation of circulating blood, hence limited oxygen supply. The main change is necrosis (death) of myocardial tissue. The incidence of Acute Myocardial Infarction (AMI) is high, and it is the leading cause of death in the elderly [(1)]. AMI has a mortality of 30% with half of deaths occurring before hospital arrival. Recent data from Quebec has shown that providing STEMI care in hospitalized patients that is both appropriate and timely (according to guideline-based practice) reduces 30-day mortality rates by half. The reduction in mortality is true whether the chosen method of reperfusion is fibrinolysis or primary percutaneous coronary intervention (PCI) [(2)]. The incidence of AMI is high and it is the leading cause of death in the elderly also. According to World Health Organization (WHO) in the world 14 million people die annually [(3)].

. In the year 2003, it was estimated that heart attacks are the leading cause of death among both men and women all over the world [(4)]. In the year 2007, WHO estimated that globally (29 %) of deaths were due to CVD and among them, (25-28 %) of deaths were due to MI [(5)]. Patient satisfaction is one of the establishes yardsticks to measure success of the services being provided in the health facilitate. But it is difficult to measure the satisfaction and gauze responsiveness of the health system as not only the clinical but also the non-clinical outcomes of care do influence the patient satisfaction[(6)]. Patient satisfaction depends upon many factors such as; clinical services provided, availability of medicine, behavior of doctors and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support and respect for patient preferences[(7)].

METHODOLOGY:

Design of the Study: Quantitative design (connective a descriptive study) was carried out to identify the patients' satisfaction concerning hospitals care and its effect on general self-efficacy post-acute myocardial infarction at Maysan governorate hospitals. Starting from 30th Dec. 2014 up to the 28th May 2015.

The Setting of the Study: The study was conducted at Al- Sadder Teaching Hospital and Maysan Center of Cardiac Disease in Al-Amarah City. These hospitals provide caring for patients with acute myocardial infarction.

The Sample of the Study: The sample of the study non-probability (a purposive sample) consisted of (100) patients with acute myocardial infarction after admitted to hospital and were selected according to the following criteria:-

1. Patients which admitted to hospital and medically diagnosed as acute myocardial infarction.
2. Both sexes of acute myocardial infarction patients.
3. Patients different level of education.

Instrument Construction: After extensive review of relevant literature and studies the researcher constructed the questionnaire and was used as mean of data collection. The questionnaire consisted of (61) items which include four parts.

Part I: Patients' demographic characteristics

The first part of instrument concerning with determination the demographic characteristics of patients which include seven items (age, gender, marital status, level of education, occupational status, change occupation after disease, and monthly income).

Part II: Medical Information Concerning Sample of Study

The second part of instrument concerning with medical information for sample of study which include four items (Risk factor that causes disease, Time of treatment the heart attack in hospital, Have you been making the necessary first aid at the moment of a heart attack?, and Methods of treatment).

Part III: Items Related to Patients' Satisfaction Concerning Hospital Care Post- Acute Myocardial Infarction

This part focused on medical and nurse staff care which provided for patients with acute myocardial infarction which consisted of (38) items. These items were measured, scored to express about satisfaction of patient by rated on 6 levels type Likert scale: (6) for very satisfactory, (5) for satisfactory, (4) for satisfactory to some extent, (3) for unsatisfactory, (2) for not very satisfactory, and (1) for I don't know.

Part IV: General patient satisfaction about health care

This part include comprehensive patient satisfaction to the medical and nursing care which provided for patients during stay in hospital which expressed by line ranging with satisfaction from one (low satisfaction) to five (high satisfaction).

Validity of the Instrument: The validity of the instrument was established through a panel of (12) experts.

Reliability of the Instrument: The aims of reliability was to ensure that the items of the questionnaire were clear, suitable, and understandable. The reliability of the present study instrument was determined through Cronbach's alpha. Pilot study was carried out from February . 24th of 2015 up to March 24th of 2015 on (10) patients with acute myocardial infarction at Al-Sadder Teaching Hospital , and Center of Maysan for Cardiac Disease. The result of reliability coefficients by Cronbach's alpha was (0.85) . This result of the reliability for the pilot study indicated that the items of the questionnaire were clear, relevant, and understandable, and this indicated that the questionnaires are strong acceptable

Data collection: After permission were obtained from all institutions, the data was collected from 25th March of 2015 up to 10th May of 2015. Data was collected through the use of designed questionnaire format by interview techniques.

The questionnaire was interview with acute myocardial infarction patients who were attended coronary care unit at Al-Sadder Teaching Hospital, and Maysan Center of Cardiac Diseases after obtaining agreement from the patients throughout using Arabic version of questionnaire for all subjects who were included in study sample during discharge from hospital for all items of questionnaire and after one month for items of general self-efficacy.

The investigator conducted private meeting with each patient who spends about 25-30 minute to respond to the interview.

Data analysis: Analysis of data was performed through the application of descriptive statistics (frequency, percentage), mean of score and Standard Deviation.

RESULT:

Table 1. Distribution of demographic data for study sample

NO	Variables	F	%
Age(years)	30-39 years	7	7
	40-49years	24	24
	50-59 years	31	31
	60 and above	38	38
	Total	100	100
Gender	Male	64	64
	Female	36	36
	Total	**100**	**100**
Marital status	Married	**100**	**100**
Do you have any children?	Yes	94	49
	No	6	6
	Total	**100**	**100**
Level of education	Illiterate	40	40
	Read and write	6	6
	Primary	21	21
	Intermediate	14	14
	High school	8	8
	College	6	6
	Others	5	5
	Total	**100**	**100**
Occupation status	public servant	20	20
	Retired	27	27
	Housewife	29	29
	Business free	23	23
	Others	1	1
	Total	**100**	**100**
Is the reason for being retired exposure to current health status?	Yes	9	33.3
	No	18	66.7
	Total	**27**	**100**
Is your lob changed after the disease	Yes	21	21
	No	79	79
	Total	**100**	**100**
Monthly income	Enough	11	11
	Not enough	37	37
	Enough to some extent	52	52
	Total	**100**	**100**

Table (1) shows that the highest percentage (38%) of the patients' age group (60 years and above) old. Most of them (64 %) were male. All of them (100%) were married. Most of them (94%) have children. The level of education represents that most of them (40%) were illiterate. (29 %) of them were Housewife. (18%) from Retirees

say the current health status (AMI) isn't reason for being retired. Majority of them (79%) don't change their jobs after the disease. The monthly income for most of patients (52%) was enough to some extent.

Table 2. Risk factor of myocardial infarction

No.	Variables	F.	%	Cumulative%
1.	Smoking	15	15	15
2.	Alcoholic beverages	3	3	18
3.	Unhealthy eating habits	4	4	22
4.	Poor socio-economic situation	5	5	27
5.	Chronic disease	70	70	97
6.	Hereditary factor	2	2	99
7.	Side effects of oral contraceptives	1	1	100
	Total	**100**	**100**	

Table (2) indicates that the majority risk factor (70%) of the disease for sample of study was chronic disease.

Table 3. Treatment time of a heart attack in hospital

No.	Variables	F.	%	Cumulative%
1.	Before the end of the (first 4 hours) of a heart attack	64	64	64
2.	After the end of the (first 4 hours) of a heart attack	36	36	100
	Total	**100**	**100**	

F: frequency

Table(3) indicates that the majority sample of study (64%) were treated before the end of the (first 4 hours) of a heart attack.

Table 4. Make the necessary first aid at the moment of a heart attack

No.	Variables	F.	%	Cumulative%
1.	Yes	96	96	96
2.	No	4	4	100
	Total	**100**	**100**	

F : frequency

Table (4) shows that the majority sample of study (96%) have been making the necessary first aid at the moment of a heart attack.

Table 5. Methods of disease treatment

No.	Variables	F.	%	Cumulative%
1.	Treatment with medication in the intensive care unit	65	65	65
2.	Catheter treatment	35	35	100
	Total	**100**	**100**	

Table(5) shows that the majority sample of study (65%) have method of disease treatment by medication in the intensive care unit.

Table 6. The mean of scores and standard deviation of Patients, satisfaction about health care provided in the hospital after the injury with acute myocardial infarction(for the first 10 item)

No.	Items	Very satisfactory		Satisfactory		Satisfactory to some extent		Unsatisfactory		Not very satisfactory		I do not know		MS	SD	rank
		F	%	F	%	F	%	F	%	F	%	F	%			
1.	Full comfort that was provided during the inpatient hospital	39.0	39.0	51.0	51.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	5.29	.640	10
2.	Planning to do cardiac electrical(ECG)	51.0	51.0	49.0	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.51	.502	5
3.	Taking vital signs in an intensive care unit	43.0	43.0	29.0	29.0	12.0	12.0	0.0	0.0	0.0	0.0	16.0	16.0	4.67	1.741	27
4.	When connected to a control access to the intensive care unit	59.0	59.0	41.0	41.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.59	.494	4
5.	Provide oxygen through residence in the hospital, especially the early hours of a heart attack	51.0	51.0	43.0	43.0	1.0	1.0	0.0	0.0	0.0	0.0	5.0	5.0	5.3	1.115	9
6.	Note oxygen saturation of the blood through the control monitor by nurses	0.0	0.0	4.0	4.0	6.0	6.0	0.0	0.0	0.0	0.0	90.0	90.0	1.34	1.037	38
7.	Pain Management	3.0	3.0	51.0	51.0	45.0	45.0	1.0	1.0	0.0	0.0	0.0	0.0	4.56	.574	28
8.	Bring electric shocks and emergency medicine and device of respirator beside you	0.0	0.0	4.0	4.0	18.0	18.0	2.0	2.0	0.0	0.0	76.0	76.0	1.74	1.346	37
9.	Note incidence of irregular heartbeat and inform the doctor about it	0.0	0.0	19.0	19.0	7.0	7.0	0.0	0.0	0.0	0.0	74.0	74.0	1.97	1.660	36
10.	Reduce anxiety and psychological support by nurses	17.0	17.0	72.0	72.0	11.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	5.06	.528	15

MS: mean score . SD: stander deviation

Table(6) indicates that the item (4) came in ranked first with mean of score (5.59) and standard deviation (0.494), item (2) came in ranked second with mean of score (5.51) and standard deviation (0.502) , while item (1) came in third place with mean of score (5.29) and standard deviation (0.640)

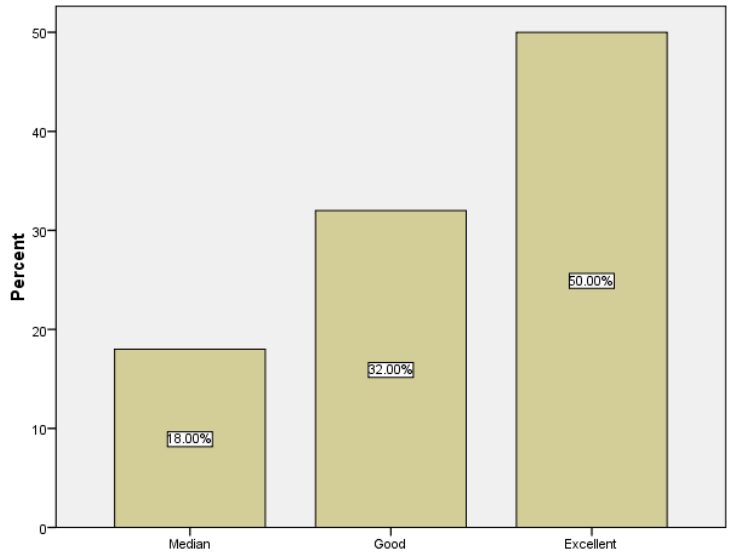

Figure 1. level of patient satisfied about medical care provided by the physician during the period of residence in the hospital

Figure(1) reveals that the majority level of patients, satisfied about medical care provided by the physician during the period of residence in the hospital was excellent for (50%) of study sample.

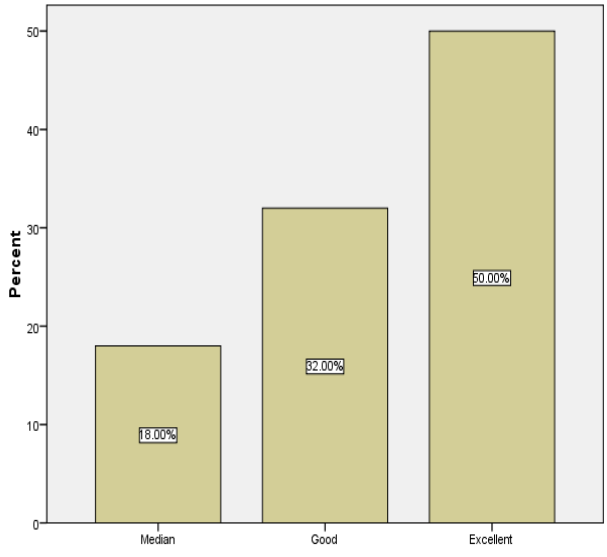

Figure 2 .level of patients' satisfied about nursing care provided by the nurses during the period of residence in the hospital

Figure(2) reveals that the majority level of patients, satisfied about nurses care provided by the nurse during the period of residence in the hospital was excellent for (52%) of study sample.

DISCUSSION:

Through the data analysis distribution of demographic variables table (1) reports that most of myocardial infarction patients are (60 year and more) years old and this account for (38%) of the study sample. This result is similar to the results obtained from studies done by [8]. These results indicate that the majority of myocardial infarction patients' ages are late adulthood. The researcher emphasizes that the people in this age group are less active and reproductive so they need most care and support to preventive from heart disease, Regarding gender of myocardial infarction patients majority of sample are male (64%).These results agree with study done by[9]. suggest that the female myocardium is more resistant to ischemia/reperfusion injury than the male myocardium. Concerning the marital status all members of sample study are married (100%). (94%) of them have children. These results agree with study done by [10] that indicates most of myocardial infarction patients are married and have children. Based on the findings the researcher suggests that the married persons are highly exposed to problems of heart such as AMI .With regard to the level of education of myocardial infarction patients, it is demonstrated that most of the patients are illiterates (40 %). This result is consistent with the study which indicate that the majority of myocardial infarction patients are low level of education (45%)[11]. In relation to occupation status the majority (29%) of myocardial infarction patients in the study are housewives. (18%) from Retirees say the current health status (AMI) isn't reason for being retired. This result is in agreement with study that the majority of myocardial infarction patients in this study have a wide spectrum of occupational factors, stress, noise and fine particulate dust (76%) [12]. (79%) of myocardial infarction patients in the study don't change their jobs after the disease. This result is in agreement with study that the majority of myocardial infarction patients don't change their jobs after the disease (97%) [13]. The monthly income for most of myocardial infarction patients 52 (52%) is enough to some extent

The majority risk factor of acute myocardial infarction for sample of study table (2) was chronic disease that was accounted for (70 %). This result is disagree with study done by another study which indicate that the lifestyle occupation first rank for risk factor of acute myocardial infarction include smoking appears to be the cause of about (36%) and obesity the cause of (20%) of coronary artery disease. [14] Lack of exercise has been linked to (7–12%) of cases. Less common causes include stress-related causes such as job stress, which accounts for about 3% of cases, and chronic high stress levels. The second rank chronic disease.

Table (3)Sample of study were treatment before the end of the (first 4 hours) of a heart attack that were accounted for (64 %) .This result is consistent with the study done by another study which indicates that the majority of patients with AMI treatment during the period between the first (2-4) hours of a heart attack.[15] Myocardial infarction patients have been making the necessary first aid at the moment of a heart attack that were accounted for (96 %) table (4).This means that myocardial infarction patients have prior knowledge about necessary first aid at the moment of a heart attack for expected AMI because most of sample of study have chronic diseases. Table (5) The majority of myocardial infarction patients have method of disease treatment by medication in the intensive care unit that was accounted for

(65 %). This result is in agreement with the study done by another study Which indicates that most of myocardial infarction patients treatment by medication in the intensive care unit (80%)[16].

Table (6) shows that the item (Respect for the rules and regulations (such as no smoking, calm, dates of visit) by others) came in ranked first with mean of score (5.84) and standard deviation (0.395), item (The instructions that are provided to you on how to get away from the stress and nervousness when you discharge the hospital) came in ranked second with mean of score (5.8) and standard deviation (0.426) , while item (The instructions that are provided to you on the daily activities and the extent of the amount of effort you can, and their level of physical comfort when you discharge the hospital) came in third place with mean of score (5.71) and standard deviation (0.478). This result is disagree with the study done by Al Faraj and others, 2009. This study indicates that patients estimate the satisfaction about skills and abilities of professional physicians with highest average (M=3.91, SD=1.07), While the lowest average was their appreciation for the quality of the information provided them by the physician (M=3.42, SD=1.12). Patients estimate the satisfaction about taking vital signs in an intensive care unit by nurses with highest average (M=3.90 , SD=0.93) , while the lowest average was the availability of nurses for their time in order to hear patient (M=3.31 , SD= 1.12) [17]..

Figure (1) reveals that the majority level of patients' satisfied about medical care provided by the physician during the period of residence in the hospital was excellent for (50%) of study sample. Also, figure (2) reveals that the majority level of patients' satisfied about nursing care provided by the nurses during the period of residence in the hospital was excellent for (52%) of study sample. This result is disagree with another study This study indicates the levels of patients' satisfied about medical care provided by the physician and levels of patients' satisfied about nursing care provided by the nurses during the period of residence in the hospital was good (83%)[18].

CONCLUSION

The results indicated that there is a high satisfaction for patients when little of the items of satisfaction and little satisfaction in most of the other items.

RECOMMENDATION:

1-Increased the number of nurses staff graduate from college to provide the importance health care for patients with (AMI).

2- Acute myocardial infraction requires immediate medical attention. Treatment attempts to save as much viable heart muscle as possible and to prevent further complications**.**

REFERENCE:

1. Browne Lisa.: Cardiology part 9, Acute Myocardial infarction. (2010). P 41–42.

2. Lambert, L., Brown K., Segal E., Brophy J., Rodes-Cabau J., Bogaty P.**:** Association between timeliness of reperfusion therapy and clinical outcomes in ST-elevation myocardial infarction JAMA. 2010 Jun 2; 303(21):2148-55.

3. World Health Organization: Cardiovascular Disease Atlas: World Data Table .World Health Organization Global Info base. Database online. Accessed Jul16. .2010 P: 1403-9.

4. Rajesh, P.: "Cardio Vascular diseases in India" *journal of health promotion of education in south East Asia* .2006, P 1-9.

5. WHO, Geneva, Available from http://www.who.int/healthinfo/survey/en/index.html,2005
6. Agrawal, D.: Health Sector Reforms: *Relevance in India Indian Journal of Community Medicine;* 2006.p 31:220-2.
7. C Jenkinson, ,A Coulter, S Brouster, N Richard, D Chandola.: Patient's experiences and satisfaction with healthcare: Results of a questionnaire study of specific aspects of care. *Qual Saf Health Care*; 2002.P 11:335-9.
8. Nathan, M. : Trends in Clinical, Demographic, and Biochemical Characteristics of Patients With Acute Myocardial Infarction From 2003 to 2008: A Report From the American Heart Association Get With The Guidelines Coronary Artery Disease Program**,** *J Am Heart Assoc*. 2012 Aug;.
9. Braunwald E .: Harrisons principles of internal medicine, 15 edition .Mc Graw Hill; 2001:2629.
10. Philip A, Inge K, Margit H, Bernhard K, Ines T , Andereas M, Annette P, et al.,: Marital Status Shows a Strong Protective Effect on Long-term Mortality Among First Acute Myocardial Infarction-Survivors With Diagnosed Hyperlipidemia, *BMC Public Health*. 2014; 14(98).
11. Rasmussen, JN, Gislason GH, Buch P, Abildstrom SZ, Køber L, Osler M, et al-.: Mortality after acute myocardial infarction according to income and education, *J Epidemiol Community Health.* 2006 Apr; 60(4):351-6.
12. Bortkiewicz ,A, Gadzicka E, Siedlecka J, Szyjkowska A, Viebig P, Wranicz JK.: Work-related risk factors of myocardial infarction. *Int J Occup Med Environ Health*. 2010; 23(3):255-65.
13. Kivimäki, M, Nyberg, S. T., Batty, G. D., Fransson, E. I, Ferrie, J. E., Jokela .: "Job strain as a risk factor for coronary heart disease: a collaborative meta-analysis of individual participant data". The *Lancet* 380(31 August 2012). (9852): 1491–7.
14. Kivimäki, M, Nyberg, S. T., Batty, G. D., Fransson, E. I, Ferrie, J. E., Jokela: "Job strain as a risk factor for coronary heart disease: a collaborative meta-analysis of individual participant data". The *Lancet* 380(31 August 2012). (9852): 1491–7
15. Gulli, Bengamin, Citolla ,Joseph A, Barnes, Leagueay: **Emergency** care and transportation of the sick and injured. (10th ed.).2010, Sudbury, Mazss.: Jones and Bartlett. p. 575.
16. Amsterdam EA.: ACC/AHA guideline for the management of patients with non–ST-elevation acute coronary syndromes: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines published online ahead of print September 23, 2014.
17. Al Faraj, A, Katarzyna C, Ghislaine L, Sophie G, Emmanuelle C ,Yannick C: In vivo imaging of carbon nanotube biodistribution using magnetic resonance imaging. 2009, 1023-1027. Publication data (web)February 6,2009 Copyright. 2009 American Chemical Society
18. Jawahar, L. Changping H , Abhijit D , Jiawei C , Yoshiko F , Nobutaka I , Yosuke K: **LOX-1** deletion alters signals of myocardial remodeling immediately after ischemia–reperfusion, *Cardiovascular Research* 76 (2007) 292–302.