

Quality of Health Care Services Provided for Patients with Burn in AL-Sadder Medical City at Burn Unit in AL-Najaf AL-Ashraf City

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Abstract- Objective: this study aimed to assess quality of health care services provided for patients with burn at Al-Sadder Medical City/ Burn Unit. **Methodology:** A descriptive design (Quantitative) is carried out in Al-Sadder Medical City/ Burn Unit / at Al-Najaf AL-Ashraf City. The study started from November, 2nd, 2015 to September, 4th, 2016, in order to assess quality of health care services provided for patients with burn. A non-probability (purposive) of (30) Patient with burn who are admitted to Al-Sadder Medical City/ Burn Unit for treatment are included in the study sample. Data collected through using a well-designed questionnaire consist of two parts: part I consists of demographic data and part II consists of (25) items which distributed according to five domains of health care services quality. Data was analyzed by using descriptive statistic. **Results:** The results show that the burn common occurs among persons in urban residential area than in those in rural, the burn most happen in females than in male, and the burn present in married farther single one also the study reveal that most of patients are satisfied with the quality of health care services provided at burn unit especially within reliability, responsiveness, and empathy domain of health care services quality, while at the tangible and assurance the patients are partially satisfied. **Conclusion:** The study concludes that the overall assessment of HCSQ indicates that half of the patients are satisfied with the HCSQ that provided at burn unit. **Recommendation:** The nurses must measure and/or assess the quality of health care services in the burn unit continuously in order to apply the quality improvement and/or quality assurance in this unit, and Health education programs and training sessions should be implemented for nurses to increase or/and improve their abilities in managing burned patient.

Index Terms- QUALITY, HEALTH CARE SERVICES, BURN.

I. INTRODUCTION

Burns are considered as a major community health problem globally. Majority of burns happen in the third world countries⁽¹⁾. Most of burns in children are scalds because of lack of awareness, higher activity levels, and natural curiosity, this can cause morbidity and mortality⁽²⁾. Flame burns commonly happen among males (77%) versus females (23%)⁽³⁾. Electrical injury occurs most commonly in males between 30-39.9 years of age, if it happens from high voltage source, then it can be devastating and it is non- devastating if it is happen due to a low voltage source. Most electrical injuries are work-related

accidents and occur at an industrial setting. Electrical injuries which occur as accidents in the work place⁽⁴⁾. Globally, around 11 million burns require medical care. Its treatment requires a multidisciplinary approach and its major cause of sickness and death, impermanence in all age groups⁽⁵⁾. The primary health care setting provides many opportunities to promote safety measures in order to prevent burns and scalds which they are seen routinely⁽⁶⁾. Quality is becoming more prominent section of people lives. Individuals are hoping to get a better quality of care. One of human rights is to acquire high quality of health care services (HCSQ). This can lead to satisfaction for patient, staff, suppliers, and better action for the organization. When the quality of healthcare services increase, then expenses reduced, production enhancement, and best service can be offered to patients and supply longstanding functional interactions for the staff and supplier. Healthcare service quality is hard to measure because of its subjective nature and intangible properties⁽⁷⁾. All the health staff which includes medical, nursing, allied, and expertise are able to provide protection in the management of burn patient. The quality of services supports fire protection and avoidance of burn activities in the community that lead to providing best management in first aid and early resuscitation for burned patient with severe injury. Infection control is a main concern matter in healthcare services with infection surveillance techniques in position⁽⁸⁾. Nurses spend more time with their patients each day than from any other health care provider and have most interactions with patients and their families because they provide hour to hour care and promotes frequently to the family the instruction given by the physician as well as the care plan and the way of the care⁽⁹⁾. Nurses take an important part to control infection in patients with burn by nursing interventions, research investigation, and education of patient. However, numerous familiar nursing interventions to control infection depend on the belief or expert point of view but without scientific inspection⁽¹⁰⁾.

II. METHODOLOGY

Descriptive design (Quantitative) was adopted in the current study to assess quality of health care services provided for patients with burn. The research was carried out at Al-Najaf City/ Health Directorate of Al-Najaf Al-Ashraf / AL-Sadder Medical City / Burn Unit. The study was started from November, 2nd, 2015 to September, 4th, 2016. A non-probability (purposive) sampling technique was used consisting of (30) patient with burn who

were admitted to Al-Sadder Medical City/ Burn Unit for treatment. An assessment tool was adopted and developed by the researcher to assess quality of health care services provided for patients with burn. The last indicator of the study instrument consists of (2) parts:

Part I: Socio-demographic Characteristics: consists of (7) items, including gender, age, and marital status, level of education, occupational status, residency, and socio-economic status. In the socio-economic status, the researcher uses the Socio-Economic status Scale (SES) to clarify the level of participant's socio-economic status in term of Sufficient, sufficient to some extent, and insufficient. **Part II: Quality of Health Care Services Measurement Scales (Dimensions of Health Care Services):** was comprised of (25) items, to measure healthcare service quality in burn unit. The SERVQUAL scale which consists of five dimensions model including tangible, reliability, responsiveness, empathy and assurance. The five dimensions of SERVQUAL as proposed by Parasuraman *et al.* (1988)⁽¹¹⁾. A five-point Likert-type scale is used in this study, anchored by strong agree, agree, not Sure, disagree and strong disagree scored 5, 4, 3, 2 and 1 respectively on a Likert scale of 1-5. **Tangible:** This domain was measured through (7) items which represented appearance of physical facilities, equipment, personnel and communication. **Reliability:** means ability to perform the service accurately and dependability. It is measured through (5) items. The criteria for evaluating this dimension, accuracy of certified records in hospital administration,

appointments accuracy in medical procedures. Provide the service on exact time with reliably, accurately, consistently and without errors which can be relied upon, and develop solutions of the patient problems that leading to giving it a sense of confidence and providers of medical services. **Responsiveness:** Is that means willingness to help customers and provide services. It is measured through (4) items. **Empathy:** Is mean caring and individualized attention provided to customers. Its measured through (5) item. **Assurance:** Is mean employees' knowledge, courtesy and ability to convey trust and confidence. Its measured through (4) item. The data collection was carried out from March 22th, to 27th April, 2016. The data collection was done by applying of the established questionnaire and by means of structured interview with the subjects as they separately interviewed in special room, and each subject was interviewed in the same way by using the similar questionnaire for the subjects of the study sample at the Burn Unit. The participants are requested to answer the questionnaire within (20-25) minutes. Data was analyzed through the use of SPSS (Statistical Package for Social Science) version (19) application statistical analysis system and Excel application. Data analyzed through the application of a descriptive statistics approaches. **A descriptive data analysis** includes (Frequencies, Percentages, and Mean of scores), Cutoff point (0.66), Statistical figure (pie Charts) and Pearson's Correlation Coefficients (Reliability).

III. RESULTS

Table (1): Distribution of Patient with Burn by Their Socio-Demographic Characteristics.

| Variable | Items | Frequency | Percent |
|---|---------------------------|-----------|--------------|
| Gender | Male | 11 | 36.7 |
| | Female | 19 | 63.3 |
| | Total | 30 | 100.0 |
| Age years <i>Mean = 29.26</i> <i>SD= 1.21</i> | ≤ 25 | 15 | 50.0 |
| | 26 - 35 | 8 | 26.7 |
| | 36 - 45 | 5 | 16.7 |
| | 46 - 55 | 1 | 3.3 |
| | 56+ | 1 | 3.3 |
| | Total | 30 | 100.0 |
| Marital Status | Single | 9 | 30.0 |
| | Marriage | 17 | 56.7 |
| | Widow | 2 | 6.7 |
| | Divorced | 1 | 3.3 |
| | Separated | 1 | 3.3 |
| | Total | 30 | 100.0 |
| Level of Education | Illiterate | 6 | 20.0 |
| | Able to read and to write | 1 | 3.3 |
| | Primary school graduate | 3 | 10.0 |
| | Middle school | 5 | 16.7 |
| | Preliminary school | 7 | 23.3 |
| | Institute | 4 | 13.3 |
| | College | 4 | 13.4 |

| | | | |
|------------------------------|----------------------------------|-----------|--------------|
| | Total | 30 | 100.0 |
| Occupation | Employee | 5 | 16.7 |
| | Free business | 4 | 13.3 |
| | Retired | 1 | 3.3 |
| | Housewife | 13 | 43.3 |
| | Unemployed | 2 | 6.7 |
| | Student | 5 | 16.7 |
| | Total | 30 | 100.0 |
| Residence | Rural | 14 | 46.7 |
| | Urban | 16 | 53.3 |
| | Total | 30 | 100.0 |
| Socio-Economic Status | Sufficient | 6 | 20.0 |
| | Sufficient to some extent | 13 | 43.3 |
| | Insufficient | 11 | 36.7 |
| | Total | 30 | 100.0 |

This table reveals the most of the study research are female (63.3%), within the first age group (≤ 25) years old (50.0%), married (56.7%), illiterates (28.7%), housewives (43.3%), urban resident (53.3%), and socio-economic status Sufficient to some extent (43.3%).

Table (2):Assessment of Dimensions of Quality of Health Care Services / Tangibility.

| No. | Items | Reject Strongly (%) | Reject (%) | Neutral (%) | Agree (%) | Strong Agree (%) | Mean | Assessment |
|-----|---|---------------------|------------|-------------|-----------|------------------|------|--------------|
| 1 | Burn unit location is convenient and easy access to the provision of health service for all patients | 6.7 | 3.3 | 10.0 | 43.3 | 36.7 | 4.00 | Satisfied |
| 2 | Burn unit rooms (waiting rooms and clinical testing and diagnosis rooms) are an integrated and well furnished. | 23.3 | 26.7 | 16.7 | 23.3 | 10 | 2.70 | Dissatisfied |
| 3 | In burn unit all amenities are provided such as (continuous electricity, water, sanitation, ventilation and unpleasant odors) | 20 | 23.3 | 30 | 10 | 16.7 | 2.80 | Dissatisfied |
| 4 | Burn unit have up- to-date Instruments, equipment and medical supplies | 40 | 16.7 | 23.3 | 10 | 10 | 2.33 | Dissatisfied |
| 5 | Foods are appropriate for patient | 53.3 | 6.7 | 20.0 | 13.3 | 6.7 | 2.13 | Dissatisfied |
| 6 | Burn unit provides all required medication in the pharmacy. | 86.7 | 6.7 | 0 | 6.7 | 0 | 1.27 | Dissatisfied |
| 7 | Employees in the burn unit excellent and they have a neat appearance. | 10.0 | 0 | 6.7 | 43.3 | 40.0 | 4.03 | Satisfied |

Satisfied: mean of score ≥ 3

Dissatisfied: mean of score < 3

This table reveals that the subjects' response regarding tangible domains of health care services quality, the results indicate that the patients are dissatisfied with the services of unit due to these services are insufficient to meet patients requirements in the minimum

level, except the items (Burn unit location is convenient and easy access to the provision of health service for all patients) and (Employees in the burn unit excellent and they have a neat appearance) the patients responses shows they are satisfied.

Table (3): Overall Assessment of Dimensions of Quality of Health Care Services / Tangibility.

| Assessment | Items | Frequency | Percent |
|-------------------|---------------------|-----------|---------|
| Tangibles Domains | Satisfied | 3 | 10.0 |
| | Partially satisfied | 18 | 60.0 |
| | Dissatisfied | 9 | 30.0 |
| | Total | 30 | 100.0 |

Satisfied M.S > 2.33; Partially Satisfied M.S = 1.67 - 2.33; Dissatisfied M.S = 1 - 1.66

This table shows that only 10% of the study subjects are satisfied from these services, while (60%) of the study subject are partially satisfied, and (30%) are dissatisfied in the tangibility domain of health care services.

Table (4): Assessment of Dimensions of Quality of Health Care Services / Reliability Satisfied: mean of score ≥ 3

| No. | Items | Reject Strongly (%) | Reject (%) | Neutral (%) | Agree (%) | Strong Agree (%) | Mean | Assessment |
|-----|--|---------------------|------------|-------------|-----------|------------------|------|------------|
| 1 | The burn unit is interested in recording information about patients and their health status in the records accurately. | 3.3 | 0 | 36.7 | 33.3 | 26.7 | 3.80 | Satisfied |
| 2 | When a patient has problem, the employees will appear a sincere interest in solving them. | 6.7 | 26.7 | 16.7 | 26.7 | 23.3 | 3.33 | Satisfied |
| 3 | The unit provides promised services at appointed time. | 3.3 | 3.3 | 10.0 | 46.7 | 36.7 | 4.10 | Satisfied |
| 4 | The employees attempt to deliver services in right way at the first time. | 13.3 | 0 | 16.7 | 40.0 | 30.0 | 3.73 | Satisfied |
| 5 | The employees provide services with a high degree of accuracy and reliability. | 6.7 | 13.3 | 26.7 | 10.0 | 43.3 | 3.70 | Satisfied |

This table demonstrates, the subject's responses regarding reliability domain of the quality of health care services, the study results indicate that the services of unit are sufficient to meet patient's requirements at all items in the table.

Table (5) Overall Assessment of Dimensions of Quality of Health Care Services / Reliability

| Assessment | Items | Frequency | Percent |
|---------------------|---------------------|-----------|---------|
| Reliability Domains | Satisfied | 21 | 70.0 |
| | Partially satisfied | 6 | 20.0 |
| | Dissatisfied | 3 | 10.0 |
| | Total | 30 | 100.0 |

Satisfied M.S > 2.33; Partially Satisfied M.S = 1.67 - 2.33; Dissatisfied M.S = 1 - 1.66

This table shows that (70%) of subjects are satisfied, and 20% are partially satisfied, while only 10% are dissatisfied in reliability domain of health care services.

| No | Items | Reject Strongly (%) | Reject (%) | Neutral (%) | Agree (%) | Strong Agree (%) | Mean | Assessment |
|----|---|---------------------|------------|-------------|-----------|------------------|------|------------|
| 1 | The employees of burn unit telling patients exactly when services will be provide. | 23.3 | 20.0 | 13.3 | 16.7 | 26.7 | 3.03 | Satisfied |
| 2 | The employees are too busy to respond patient requests immediately | 20.0 | 20.0 | 16.7 | 10 | 33.3 | 3.17 | Satisfied |
| 3 | The employees of burn unit Simplify work procedures as much as possible to ensure the speed and ease in providing health service. | 3.3 | 3.3 | 40 | 33.3 | 20 | 3.63 | Satisfied |
| 4 | The unit organizes continuous shifts to ensure the provision of health services at all the time of day. | 0 | 3.3 | 13.3 | 43.3 | 40.0 | 4.20 | Satisfied |

Table (6): Assessment of Dimensions of Quality of Health Care Services/ Responsiveness

Satisfied: M.S ≥ 3

This table demonstrates, the subject's responses regarding responsiveness domain of health care services quality, the study results indicate that the services of unit are sufficient to meet patient's requirements at all items in the table.

Table (7): Overall Assessment of Dimensions of Quality of Health Care Services / Responsiveness

| Assessment | Items | Frequency | Percent |
|-----------------------|---------------------|-----------|---------|
| ResponsivenessDomains | Satisfied | 16 | 53.3 |
| | Partially satisfied | 11 | 36.7 |
| | Dissatisfied | 3 | 10.0 |
| | Total | 30 | 100.0 |

Satisfied M.S > 2.33; Partially Satisfied M.S = 1.67 - 2.33; Dissatisfied M.S = 1 - 1.66

This table shows that (53.3 %) of the study subject are satisfied, and (36.7%) of them are partially satisfied, while only (10%) are dissatisfied with the responsiveness of health care services.

Table (8): Assessment of Dimensions of Quality of Health Care Services / Empathy

| No | Items | Reject Strongly (%) | Reject (%) | Neutral (%) | Agree (%) | Strong Agree (%) | Mean | Assessment |
|----|---|---------------------|------------|-------------|-----------|------------------|------|------------|
| 1 | Employees put patient's best interests at introduction of their work | 20 | 16.7 | 6.7 | 26.7 | 30 | 3.30 | Satisfied |
| 2 | Employees in this unit interest understand the requirements of the patient and give him individual attention. | 13.3 | 16.7 | 20 | 26.7 | 23.3 | 3.30 | Satisfied |

| | | | | | | | | |
|---|---|------|-----|------|------|------|------|-----------|
| 3 | Employees have the knowledge to answer patients' questions in understandable way. | 16.7 | 6.7 | 30 | 23.3 | 23.3 | 3.30 | Satisfied |
| 4 | Employees in the unit gives enough time to caring their patients | 0 | 3.3 | 10 | 36.7 | 50 | 4.33 | Satisfied |
| 5 | Employees considerateness and respect the habits and customs for patient | 0 | 0 | 13.3 | 20 | 66.7 | 4.53 | Satisfied |

Satisfied: Mean of Score ≥ 3

This table demonstrates, the subject's responses regarding empathy domain of health care services quality, the study results indicate that the services of unit are sufficient to meet patient's requirements at all items in the table.

Table (9): Overall Assessment of Dimensions of Quality of Health Care Services / Empathy

| Assessment | Items | Frequency | Percent |
|-----------------|---------------------|-----------|---------|
| Empathy Domains | Satisfied | 19 | 63.3 |
| | Partially satisfied | 9 | 30.0 |
| | Dissatisfied | 2 | 6.7 |
| | Total | 30 | 100.0 |

Satisfied M.S > 2.33;

Partially Satisfied M.S = 1.67 - 2.33;

Dissatisfied M.S = 1 - 1.66

This table shows that (63.3 %) of the study subject response are satisfied, and (30%) are partially satisfied, while only (6.7%) are dissatisfied with the empathy of health care services.

Table (10): Assessment of Dimensions of Quality of Health Care Services / Assurance

| No | Items | Reject Strongly (%) | Reject (%) | Neutral (%) | Agree (%) | Strong Agree (%) | Mean | Assessment |
|----|---|---------------------|------------|-------------|-----------|------------------|------|------------|
| 1 | Patients feel secure during receive health care | 33.3 | 10 | 3.3 | 23.3 | 30 | 3.07 | Satisfied |
| 2 | The patient trusts with the experience, skills, and qualifications of medical and nursing staff in burn unit. | 16.7 | 10 | 23.3 | 20 | 30 | 3.37 | Satisfied |
| 3 | Employees were courteous, and treated patient with dignity and respect | 3.3 | 6.7 | 3.3 | 30 | 56.7 | 4.30 | Satisfied |
| 4 | Employees in this unit willing to help patients permanently | 16.7 | 20 | 16.7 | 20 | 26.7 | 3.20 | Satisfied |

Satisfied: mean of score ≥ 3

This table demonstrates, the subject's responses regarding assurance domain of health care services quality, the study results indicate that the services of unit are sufficient to meet patient's requirements at all items in the table.

Table (11): Overall Assessment of Dimensions of Quality of Health Care Services / Assurance

| Assessment | Items | Frequency | Percent |
|-------------------|---------------------|-----------|---------|
| Assurance Domains | Satisfied | 13 | 43.3 |
| | Partially satisfied | 13 | 43.3 |
| | Dissatisfied | 4 | 13.4 |
| | Total | 30 | 100.0 |

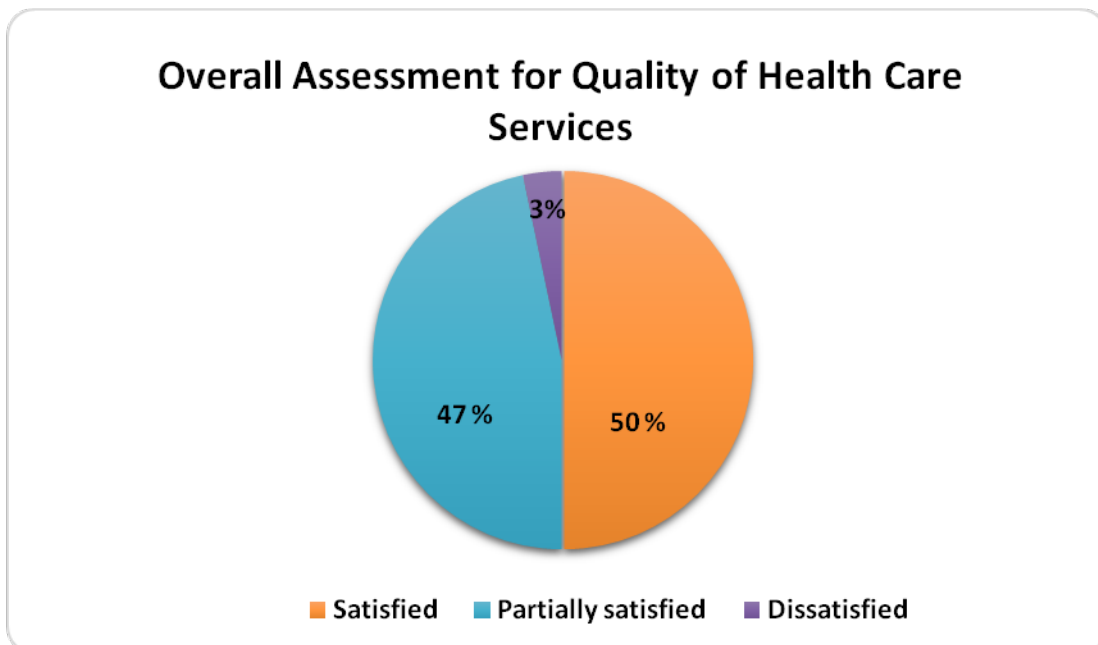
Satisfied M.S > 2.33; Partially Satisfied M.S = 1.67 - 2.33; Dissatisfied M.S = 1 - 1.66

This table shows that (43.3 %) of the study subject are satisfied and the same result for partially satisfied, while (13.3%) of the sample are dissatisfied with the assurance of health care services.

Table (12): Overall Assessment of Quality of Health Care Service

This table illustrates the overall assessment for the quality of health care services, the study results indicate that half (50%) of the study subjects are satisfied with the health care services which provided in the unit.

| Main domain | Items | Frequency | Percent |
|---|---------------------|-----------|---------|
| Overall Assessment of quality of health care services | Satisfied | 15 | 50.0 |
| | Partially satisfied | 14 | 46.7 |
| | Dissatisfied | 1 | 3.3 |
| | Total | 30 | 100.0 |



This Figure Shows the Assessment of the Patients' Responses Regarding Quality of Health Care Services

IV. DISCUSSION OF THE RESULT

Part-I: Discussion of Distribution of Burned Patients by Their Socio-Demographic Characteristics

According to (Table 1) in the results, the study shows that the majority of the research sample are females. This result agrees with Azizan& Mohamed, (2013) and Essiam, (2013), in their studies which involved quality of healthcare delivery, and

they found that the majority of study subject's sex are females⁽¹²⁾
⁽¹³⁾

In addition, Rayner & Prentice, (2011) give further support to the study results, they conducted a study to explore the demographic characteristics of the burned patients, they stated in their study the majority of patients are female also this result matched with result of the study done by Othman, (2010) who emphasized in his study the majority of burn injury happens in women. The researcher believes the reason for majority of the burned patients in Iraq are women who deal with most of activities inside the houses which can be sources for burn, such as cooking and cleaning, so they may be increasing risk for burns from contacting fire or scaled with hot water in the kitchen, or from contacting electrical socket which leads sometimes to electrical fault during performing some activities⁽¹⁴⁾⁽¹⁵⁾.

Regarding age, the study indicates that most of patients are within age group (≥ 25) years old. Beheshti, *et al.*, (2011) pointed in their study that the majority of the study subjects are within (16-25) age group also Goodarzi, *et al.*, (2014) emphasized in their study which is conducted to establish a standard of care and it's related with the patients' outcomes that the majority of the study subjects are within (20-30) years old, and Othman, (2010) mentions in his study that burns injury are mainly occur in adolescents. Early adolescent is a productive and discovering period and the individuals at this age have curiosity to explore their surroundings through pulling, touching and grabbing objects, or dealing with more than one activity at the same time with less experience that may lead him to forget about the electrical switch or socket on, or may forget fraying pan on the fire of the cooker or oven⁽¹⁶⁾⁽¹⁷⁾⁽¹⁵⁾.

In regards to marital status, most of the study samples are married. Concerning the level of educations the highest percent is preliminary school graduated. These results are in agreement with Al-Rubaiee, and Alkaa'ida (2011), they pointed in their study that the majority of study subjects are married and a preliminary school graduated. This result disagrees with Ramadan, *et al.*, (2013), they found in their study that most common burn injury occur in patients who are not married. In our research, very few of spouse planned to burn their wives purposefully after fight between them⁽¹⁸⁾⁽¹⁾.

About the study sample occupation, the present study shows that the majority of the research sample are housewives, which emphasizes on the opinion that indoor activities can lead to burn as most of the burned subjects are housewives. These results matched with study done by Mahmood, (2015), who emphasized in their study that the majority of the study subjects are homemakers⁽¹⁹⁾.

In addition, the study results indicate that the majority of the research sample are living in urban area. Ramadan, *et al.*, (2013) and Goodarzi, *et al.*, (2014), they revealed in their study that the majority of the study subjects are homemakers and urban residents. The researcher believes that this may be due to the life in city which is more complicated with the hug use of electrical instruments while in rural residency people have a simple life with less use of these electrical instrument⁽¹⁾⁽¹⁷⁾.

In regards to monthly income, the socio-economic status of the sample is sufficient to some extent. Karassavidou, *et al.*, (2008) they claimed that the socio-economic status of the respondents is low, so they seek on health services at the public

hospitals. Also Mahmood, (2015) mentioned in his study the majority of the study subjects are from lower socio-economic status⁽²⁰⁾⁽¹⁹⁾.

Part-2: Discussion of the Quality of Health Care Services:

Regarding tangible domain of quality of health care services table (2), that based on the subjects' responses, the results indicate that in the following items (Burn unit location are convenient and easy access to the provision of health service for all patients) and (employees in the burn unit excellent and they have a neat appearance) the responses of the study subjects are acceptable, while in the remaining responses for the services quality in burn unit are insufficient to the patients' requirements. This means that they are unacceptable for most of the subjects. The researcher suggest this result comes because the hospitals are provide an appropriate material and equipment that is enough for patients need. While not provided materials are not affect on patients satisfaction because this materials don't directly related to the patients need

In addition, the subjects' responses regarding reliability domain of the QHCS table (4), the study show that services of the unit are sufficient to the patient's requirements at all items. Also regarding responsiveness domain of the quality of health care services table (6), the study indicates that services are sufficient to meet the patients' requirements at all items. Furthermore, the subjects' responses regarding empathy and assurance domains of the quality of health care services table (8) and (10) respectively, the subjects responses are sufficient to their requirements at all items. This result matches with the result of the study done by Diab, (2016) who showed in his study that health care services that provided in public hospitals within acceptable and satisfying level, and this result reflects on many dimensions of the health care services (tangible, reliability, responsiveness, empathy and assurance)⁽²¹⁾. The researcher believe the reasoned is most of nurses how work in burn unit from institutes graduate with good knowledge and experience to caring, answer patient questions in understanding way and solving patient problem

In addition, Jenkinson, *et al.*, (2002) they stated in their study that there is a high degree of satisfaction with health care services provided at hospitals⁽²²⁾.

Part-3: Discussion of the Overall Assessment of the Quality of Health Care Services:

The study shows that patients are satisfied with the quality of health care services provided at the burn unit especially within reliability table (5), responsiveness table (7), and empathy table (9) dimensions of the health care services quality, while at the tangible table (3), and assurance table (11),, the study results indicates that the patients are partially satisfied. The researcher opinion that patients were partially satisfied because most of services in burn unit not provided to them which include (location, building, furniture, food, medication, instrument, patient trust, safety, dignity and respect. Furthermore, in table (12), the study results indicate that half of the patients are satisfied with the quality of health care services that provided at the burn unit which are in consistency with result of the study done by Al-Sharief, *et al.*, (2008) mentioned in their study that the majority of the patients are satisfied with health care services,

while only few number of patients are partially satisfied⁽²³⁾. Aman and Abbas, (2016) found in their study that the mean value of assurance domain indicating that trust in public hospitals are high. Baernholdt, *et al.*, (2014) are in agrees with the present study results, pointed in their study that the factors influencing QOC are not varying in the majority^{(24) (25)}.

Peprah and Atarah (2014) are in agreement with the present study results, they claimed in their study that overall satisfaction of patients regarding the QHCS of the hospital is good⁽²⁶⁾.

Punnakitikashemet *et al.* (2012) are in agreement with the present study results, they pointed in their study that overall service quality score is positive with health care services⁽²⁷⁾.

Yousapronpaiboon and Johnson (2013) emphasized in their study that the responsiveness domain mostly effects on patient's satisfaction, followed by empathy, tangibles, assurance and finally reliability⁽²⁸⁾.

Lim and Tang (2000) disagrees with the present study results, they mentioned in their study that the six dimensions of QHCS, (tangibles, reliability, assurance, responsiveness, empathy, assurance) need to improvements in all six dimensions⁽²⁹⁾.

Mahmoud and Asaad (2014) shows in their study that the quality of health services provided in health centers according to the dimensions of quality of health services (tangibility, reliability, power of responsiveness, empathy, trust and safety) are unsatisfied⁽³⁰⁾.

V. CONCLUSIONS

1-The study confirms that the burn common occurs among persons in urban residential area than in those in rural, the burn most occurs in females than in male, and the burn present in married farther single one

2-Most patients are dissatisfied with the services provided in burn unit regarding tangible domain of healthcare services related to (food, medication, cleanliness, physical facilities,.....etc.) .

3-There are satisfied from most of patients about the health care services level regarding the following domains of healthcare services: (reliability, empathy and responsiveness).

4-Most patients are "satisfy" to "partially satisfied" about health care services in regards to assurance domain.

5-As general the study indicates that half of patients are satisfied toward all quality of health care services domains

VI. RECOMMENDATIONS

- 1- The nurse must measure the quality of health care services in the burn unit continuously, so that we can apply the quality improvement and/or quality assurance in this unit.
- 2- The domains and items related to the quality of health care services must be educate to health worker (physician, nurse ... etc.) to learn them how can apply it in the burn units.
- 3- The basic requirements (medications equipment, electricity, water,.. etc.) in the burn unit must be

supplied in a typical method to facilitate the medical and nursing staff work and to provide the patients' needs.

- 4- Apply special courses to nursing staff about infection control and provide infection control nurse in burn unit to keep this unit free from microorganism and prevent contamination that lead to worsen patient's condition
- 5- Dietitian specialist should be provided to assess food process in the kitchen and to evaluate the services provided to the patients.
- 6- Supply the pharmacy of burn unit with the required medication for the treatment of the patient like different types of antibiotic, IV fluids, ointments etc.
- 7- Health education programs and training sessions should be implemented for nurses to increase and improve their abilities in managing burned patient.

REFERENCES

- [1] Ramadan, A.; Adel, A.; Emeal, A.; Ezzat, A.; Saber, A.; Soliman, M.; Saad, M.; Mousa, A.; Ahmed, M.; Ghoneim, M.; AL-Araby, M. and Yehia, M.: Pattern of Burn Injuries Admitted to Emergency Department in Suez Canal University Hospital. *Journal of Macro Trends in Health and Medicine*, 2013, Vol. 1(1), P.: 16.
- [2] **World Health Organization (WHO)**: Burn prevention: success stories and lessons learned, 2011, PP.: 13, 29.
- [3] American Burn Association, National Burn Repository Report: dataset V. 5, 2009.
- [4] American Burn Association, National Burn Repository Report: dataset V. 8, 2012.
- [5] f the burn patients hospital. *Journal of Clinical and Analytical Medicine*, 2012, 3(3), pp.: 268-267.
- [6] **World Health Organization (WHO)**: Geneva and UNICEF, Management of Burns in Children, Surgical Care at District Hospital, 2003, P.:3.
- [7] c for quality of care, *Journal Materia socio-medica*, 2012, 24(4), P.:251-2.
- [8] **AL-Sudani, A. and Ali, E.**: Determination of Quality Nursing Care for Children with Burns Injury in Baghdad City Hospital, 2012, PP.: 1,2,9, 16
- [9] **Doan, H.**: From Husserl to van Manen. A review of different phenomenological approaches, *international Journal of Nursing Studies*, 2011, 44(1), P.: 131.
- [10] **Dukhan, A.**: evaluate the nurses' practices concerning isolation techniques for adult leukemic patients in Baghdad Teaching Hospitals, 2008, P.: 6.
- [11] **Parasuraman, A.; Zeithaml, V.; and Berry, L.**: SERVQUAL: A multi-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 1988, 64, spring, P.: 24.
- [12] **Azizan, N. and Mohamed, B.**: The effects of perceived service quality on patient satisfaction at a public Pahang, *Asian Journal Of Social Sciences & Humanities*, 2013, 2(3), P.:313.
- [13] **Essiam, J.**: Service Quality and Patients Satisfaction with Healthcare Delivery: Empirical Evidence from Patients of the Out Patient Department Ghana, *European journal of business and management*, 2013, 5(28), P.:55.
- [14] **Rayner, R. and Prentice, J.**: Paediatric burns: a brief global review. *The Australian Wound Management Association*, 2011, 10(1), PP.: 20, 40, 42
- [15] **Othman, N.**: Epidemiology of burn injuries in Sulaymaniyah province of Iraq, 2010, P.:214.
- [16] **Beheshti, Z.; Nia, H.; Soleimani, M.; Bahrami, N.; Rahbar, N.; Fattahi,** m center in Iran. *Caspian Journal of Internal Medicine*, 2011, 2(2), PP.:240-1.
- [17] **Goodarzi, M.; Reisi-Dehkordi, N.; Daryabeigi, R. and Zargham-Boroujeni, A.**: An

- epidemiologic study *Journal of Nursing and midwifery research*, 2014, 19(4), P.: 387.
- [18] **AL-Rubaiee, L. and Alkaa'ida, F.:** The Mediating Effect of Patient Satisfaction in the Trust Relationship, *International Journal of Marketing Studies*, 2011, 3(1), P.:102
- [19] **Mahmood, J.:** Prevalence of Burns in Females in Mosul City. *Kufa Journal for Nursing Sciences*, 2015. 4(3) P.:4.
- [20] **Karassavidou, E.; Glaveli, N. and Papadopoulos, C.:** Health Care Quality in Greek NHS Hospitals: No one knows better than patients, 2008, P.: 5.
- [21] **Diab, S.:** measure the dimensions of the quality of medical services provided in the Jordanian government hospitals of the patients and staff perspective. *Islamic University Journal of Economics and Management Studies*, 2016. 20 (1), P.:70.
- [22] **Jenkinson, C.; Coulter, A.; Bruster, S.; Richards, N. and Chandola, T.:** Aspects of care. Quality and safety in health care, 2002, 11(4), PP.: 335, 338.
- [23] **Al-Jarrah, M. and Al-Jarrah, M.:** Hospital Services At Nablus District, West Bank, Palestine, 2008, P.:75.
- [24] **Aman, B. and Abbas, F.:** Patient's perceptions about the service quality of health services in Rawalpindi, Pakistan. *Journal of the Pakistan Medical Association*, 2016, 66(1), PP.:72-74.
- [25] **Baernholdt, M.; Keim-Malpass, J.; Hinton, I.; Yan, G. and Bratt, M.:** A study of patient satisfaction in rural hospitals. *Online Journal of Rural Nursing and Health Care*, 2014, 14(2), P.:4.
- [26] **Peprah, A. and Atarah, B.:** Assessing Patient's Satisfaction using SERVQUAL Model: A Case of Sunyani Regional Hospital, Ghana, *International Journal of Business and Social Research*, 2014, 4(2), PP.:133, 139.
- [27] **Punnakitikashem, P.; Buavaraporn, N.; Maluesri, P. and Leelartapin, P.:** Patient Satisfaction and Service Quality: A Case Study of POMS 23rd Annual Conference, 2012, Chicago, Illinois, USA. P.P.: 3-4
- [28] **Yousapronipai boon, K. & Johnson, W.:** Out-patient Service Quality Perceptions in Private Thai Hospitals. *International Journal of Business and Social Science*, 2013, 4 (2), P.: 62.
- [29] **Lim P. and Tang N.:** A study of patients' expectations and satisfaction in Singapore hospitals, *International Journal of Health Care Quality Assurance*, 2000, 13(7), P.: 293.
- [30] **Mahmoud, H. and Asaad, B.:** Measuring the Level of the Quality of the Medical Services Provided at the Health Centers in Lattakia Province from the Beneficiaries' Point of View A Field Study of Supervision Center of al-Shamia, *Tishreen University Journal for Research and Scientific Studies - Economic and Legal Sciences Series*, 2014, 36 (5), P.: 196.

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