



***Nurses Knowledge Toward Management Of  
Hypovolemic Shock In Al Basrah Teaching  
Hospitals***

***An Article Submitted***

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***To The Council Of***

***College Of Nursing - University Of Basrah***

***In***

***Partial Fulfillment Of The Requirements For The Degree***

***Of Baccalaureate In Nursing Science***

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا  
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العلي العظيم

سورة البقرة (32)

## الإهداء

إليك يا حبيبة القلب..... يا من وضع الله سبحانه وتعالى الجنة تحت أقدامك

إليك يا أمي

إليك أيضاً يا خالد الذكر... لم أرك يوماً تتهاون في توفير لي سبل السعادة

والخير... إلى أبي الموقر

إليكم جميع أصدقائي ومعارفي الكرام... الذين أكن لهم كل حب وتقدير واحترام

إلى جميع أساتذتي الكرام.... الذين لم يبخلوا علي يوماً ما

إليكم جميعاً بحثي العلمي

## *Acknowledgments*

**first and foremost, I would like to thank Allah to grant our wisdom the opportunity and force to complete this search successfully. I would like to express my deep thanks to Dr. Abdul ameer al-Mousawi. Dean of the Faculty of Nursing Basra University.**

**Special thanks to Assist. maher abdul ameer We would like to express our sincere thanks for the staff of the College of Nursing, Our great thanks to the teachers who participate and helped us in study**

## **Supervisor certificate**

I certify that this project of research

" Nurses' knowledge toward management of hypovolemic shock in  
al Basrah teaching hospitals "

prepared under my supervision at the College of Nursing, University of  
Basra as partial fulfillment of the requirements for the degree of Bachelor in  
Nursing.

# **Abstract**

## **Background**

Hypovolemic shock refers to a medical or surgical condition in which rapid fluid loss results in multiple organ failure due to inadequate circulating volume and subsequent inadequate perfusion. Hypovolemic shock is the most commonly occurring form of shock.

## **Objective of the study:**

1. To assess knowledge of nurses about hypovolemic shock.
2. To assess nurses' knowledge about management regarding patients with hypovolemic shock

## **Methodology:**

The design of the study is descriptive cross sectional study design was carried out to assess nurses' knowledge toward management of hypovolemic shock in Al Basra teaching hospitals. The study had started from 10th November 2021 to 20th April 2022

Demographic data this part includes 5 questions related to characteristics of the nurses as: age, gender, educational level and work related data as work place name in hospital, years of experience)

Nurses knowledge about hypovolemic shock this part consisted 10 questions in the form multiple choice questions, including Nurses' knowledge regarding, five points talk about general definition and knowledge about hypovolemic shock, one points talk about signs and symptoms, next two points talk about Pathophysiology and causes, also next point talk about complication

Nurses' knowledge about management to hypovolemic shock This part consisted 11 questions including (nursing care, treatment, fluid resuscitation, nursing intervention for hypovolemic shock)

## **Results:**

the results the socio-demographic variables of the nurses in this study. Most of the participants in this study were female (69%) and also male equals (31%), age group was (20-30) years (68%). Regarding years of experience, most nurses have less than 5 years of experience (56%) The highest percentage is seen in the Nursing Institute (39%) regarding educational levels. Most of them work in Obstetrics, surgery, burns (41%)

More than half of nurses have a good knowledge about hypovolemic shock regarding pathophysiology, sign and symptoms, causes of hypovolemic shock, case type and age group at risk at mean score (0.68 – 1). nurse have a medium knowledge about hypovolemic shock regarding definition, risk factor and classification of hypovolemic shock at mean score (0.34 – 0.67), indicate that

More than half of nurses (72%) have agree about nursing management of hypovolemic shock, (27%) of them don't know about nursing management, and (3%) of them disagree. The most of the nurse answer agree regarding nursing care, nursing intervention and intravenous solutions that most used with hypovolemic shock at mean score (2.34 – 3). Nurses how answer don't know regarding treatment at mean score (1.67 – 2.33) overall assessment about nursing management of hypovolemic shock was agree at the mean score and standard level deviation (2.52+0.310)

## **Conclusions:**

the socio-demographic variables of the nurses in this study. Most of the participants in this study were female (69%) and also male equals (31%), age group was (20-30) years (68%). Regarding years of experience, most nurses have less than 5 years of experience (56%). The highest percentage is seen in the Nursing Institute (39%) regarding educational levels. Most of them work in Obstetrics, surgery, burns (41%)

More than half of nurses (58%) have good knowledge about hypovolemic shock, (39%) of them have medium knowledge, and (3%) of them have a weak knowledge

most of the nurses (72%) have good nursing management of hypovolemic shock, (27%) of them medium about nursing management, and (3%) of them have poor nursing management of hypovolemic shock

### **Recommendations:**

Special Education Programs for Medical professionals, specifically nurses working in hospitals should be required to raise awareness of the most important management of hypovolemic shock. Continuing education and rigorous clinical trials are needed to address the importance of identification and management of hypovolemic shock

Increase health awareness among nurses through the implementation of courses and lectures for nurses in coordination with the health in order to the management of hypovolemic shock

provide regular training sessions and assessments for nurses to improve their knowledge and practice regarding hypovolemic shock



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# Chapter One

# **Introduction**

# Chapter One

## Introduction

### 1.1. Introduction

The exact cause of hypovolemic shock is not known because it is a response rather than the disease it is a common complication among hospitalized patients in the emergency department and after surgery or invasive procedure (Sasaki, and Hori 2014 )

Every year around 5.8 million people die worldwide due to events-related trauma leading to death and disability about 40 percent of trauma-related death are due to hemorrhage (Jacob & Kumar,2014).

Hypovolemic shock is the most common type of shock which results from the loss of circulating blood volume this may result from depletion of body fluid. (Siddal, Khatri & Radhakrishnan,2017). So, blood carries oxygen, and oxygen is required to keep the body tissue and cells alive if an insignificant amount of blood is lost internally or externally the cells will not receive the amount of oxygen they need to furthermore the waste product of oxygen metabolism (carbon dioxide) that return to the heart and lung via the blood for elimination from the body will build up in the cells and organs leading to cell or organ death (Escobar et al., 2017).

The conditions are leading to hypovolemic shock include burns, trauma, hemorrhage, and surgery burns leading to loss of plasma but hemorrhage and trauma lead to blood loss internally or externally ( Shin et al ., 2015).

Hypovolemic shock progresses to four-stage when the condition that causes shock remains uncorrected and poor cellular oxygenation continues. Moreover, identify sign and symptoms (Fröhlich et al., 2016). each stage help in treatment first stage are heart rate 90 beat minute, normal blood pressure, urine output of more than 30 ml per hr., second stage heart rate 110, normal blood pressure, urine output of 20-30 ml per hr., or third

## **Chapter One :Introduction**

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stage heart rate more than 120 bpm, hypotension, tachypnea and urine output 5 to 15 ml per hour or four-stage heart rate more than 140 beat minute, very decrease blood pressure, a respiratory rate more than 35 breath per minute, negligible urine output, patient confused and lethargic. Also, depending on the cause of hypovolemic shock may be of the following type hemorrhagic shock, dehydration shock, and traumatic shock (Morrison, Galgon & Jansen, 2016).

Principle of managing patient with hypovolemic shock focus on stopping the loss of fluid and restoring the circulating volume the health care teamwork to gathers and collaborates to provide the appropriate care quickly for hypovolemic shocked patients effective collaboration and clear communication are essential in providing the patient with a positive outcome. (Rahman, Ahmad, Kareem & Mohammed, 2016).

The nurse plays an important role in giving first aid to hypovolemic shocked patients by ensuring patent airway, inserting intravenous catheter administering oxygen as the doctor ordered, when bleeding is presently applying direct pressure to the site increase level of intravenous fluid as doctor order assess the level of consciousness and vital signs and interpret laboratory values which help in identify the hypovolemic condition. (Workman et al., 2015) Furthermore, incorrect fluid volume loss by administering intravenous fluid and blood product as doctor order and closely monitor patient urine output and maintain effective tissue perfusion by given oxygen as doctor order to maintain normal pulse oximetry, place the patient in trend Lenberg position give medication as doctor order (Baumle, Duncan & White, 2013). In addition, nursing management for the patient during fluid replacement through monitoring of the patient for the serious side effect of

fluid replacement cardiovascular overload and pulmonary edema (Brunner & Suddarth, 2012) nursing role in management hypovolemic shocked help in

preventing serious complications as acute respiratory distress syndrome, acute tubular necrosis disseminated intravascular coagulation or multiple organ dysfunction syndromes. (Williams & Wilkins, 2014).

### **1.2. Importance of the study**

Globally traumatic injuries account for 9% of mortality and 12% of the global burden of disease for disability (Mahran, Farouk, Qayed, & Berraud, 2016) In Egypt trauma is a hidden epidemic problem and the top ten leading causes of death worldwide by 2030 in Egypt injuries burden is significant to assist was the fifth leading cause of death. (Mahran, Farouk, Qayed & Berraud, 2013)

Nurses' workings in the intensive care unit play an important role in the management of a post-traumatic hypovolemic shocked patient which helps in decreasing mortality rate and preventing complications. they may have lacked in knowledge and improper practice regarding post traumatic hypovolemic shocked patients. Therefore, the study may explore the nurses' malpractice and lack of knowledge about post-traumatic hypovolemic shocked patient ( Standl & Annecke ,2018)

### **1.3. Question of research:**

What is nurses' knowledge toward management of hypovolemic shock in al basrah teaching hospitals

### **1.4. Objective of the study:**

1. To assess knowledge of nursing about hypovolemic shock.
2. To assess nurses' knowledge about management regarding patients with hypovolemic shock

### **1.5. Definition of the Terms:**

#### **1.5.1 Nurse**

The nurse is a person who has completed a program of basic, generalized nursing education and is authorized by the appropriate regulatory authority to practice nursing in his/her country. Basic nursing education is a formally recognized programmer of study providing a broad and sound foundation in the behavioral, life, and nursing sciences for the general practice of nursing (Roberts, Kay,2001)

#### **1.5.2. Knowledge**

Knowledge is information and skills which the human beings gain by continuous searching process to improve their life and find the truth of self-development (Hislop, et al., 2018).

#### **1.5.3. Management**

Nursing management is defined as process of planning, organizing, activating and controlling the managerial function of nursing in order to determine and accomplish the objectives of nursing care. (Nagelkerk, 2005)

#### **1.5.4. Hypovolemic shock**

Hypovolemic shock is an emergency condition in which severe blood and fluid loss make the heart unable to pump enough blood to the body due to decreased preload. It occurs from inadequate fluid volume in the intravascular space. (Adams HA, Cascorbi I, 2010)



## Chapter Two

# **Review of Literature**

### **Chapter Two**

#### **Review of Literature**

#### **2.1. Background**

Hypovolemic shock refers to a medical or surgical condition in which rapid fluid loss results in multiple organ failure due to inadequate circulating volume and subsequent inadequate perfusion (Shagana, J. A., 2018)

#### **2.2. Definition Of Hypovolemic Shock**

Hypovolemic shock is an emergency condition in which severe blood and fluid loss make the heart unable to pump enough blood to the body due to decreased preload. It occurs from inadequate fluid volume in the intravascular space. The lack of adequate circulating volume leads to decreased tissue perfusion and initiation of the general shock response. Hypovolemic shock is the most commonly occurring form of shock. (Davis, Harold.2015)

#### **2.3. Pathophysiology of hypovolemic shock**

A sudden loss of intravascular volume decreases venous return to the heart and results in reduced CO. Compensatory mechanisms are initiated to increase the circulating volume through the activation of the sympathetic nervous system and neurohormonal responses. If the condition persists, existing blood volume is shunted to the vital organs (heart, lungs, and brain), causing hypoperfusion to such organs as the liver, stomach, and kidneys. If volume is not replaced, compensatory mechanisms eventually become ineffective. The failure of the compensatory mechanisms to restore adequate circulating volume causes cellular hypoperfusion and inability to meet cellular oxygen requirements for metabolism. The cells must use anaerobic metabolism in an effort to meet their ATP requirements; this results in lactic acidosis. (Burkhoff, and JOHN V, 1993)

### **2.4. Causes Of Hypovolemic Shock**

Hemorrhagic (Loss of whole blood)

- Trauma or surgery
- Gastrointestinal bleeding
- ruptured ectopic pregnancy
- postoperative bleeding
- significant vaginal bleeding

Loss of plasma

- Thermal injuries
- Large lesions

Loss of other body fluids

- Severe vomiting or diarrhea
- Massive diuresis
- Loss of intravascular integrity
- Ruptured spleen
- Long bone or pelvic fractures
- Arterial dissection or rupture
- profound dehydration (Ajmani & Pritam Singh, 2020)

### **2.5. Signs And Symptoms of Hypovolemic Shock**

- Weak pulse, tachycardia, tachypnoea
- Cold, clammy extremities, poor capillary refill
- Hypotension with narrow pulse pressure in the decompensated stage
- Specific symptoms corresponding to the cause (e.g., bleeding, hematemesis, diarrhea) (Hill& Barry, 2020)

### **2.6. Classification Of Hypovolemic Shock**

The clinical manifestations of hypovolemic shock depend on the severity of fluid loss and the patient's ability to compensate for it. It's a clinical classification to describe the levels of severity of hypovolemic shock. And it's important to know the stage of hypovolemic shock in order to provide the appropriate treatment quickly due to the complications hypovolemic shock presents. A simpler approach of classifying hypovolemic shock as mild, moderate, or severe is also commonly used. (Gutierrez & Guillermo,2020)

#### **2.6.1. Class I**

Also called mild shock, indicates a fluid volume loss up to 15% or an actual volume loss up to approximately 750 mL. Compensatory mechanisms maintain cardiac output and the patient appears free of symptoms other than possibly slight anxiety. As volume loss worsens, the patient may develop cool extremities and increased capillary refill time in response to peripheral vasoconstriction. (Yamauchi & Hiroshi,1964)

#### **2.6.2. Class II**

hypovolemia is consistent with moderate shock. Class II hypovolemia occurs with a fluid volume loss of approximately 15% to 30% or an actual volume loss of 750 to 1500 mL. Falling cardiac output activates more intense compensatory responses. Anxiety increases. The heart rate may increase to more than 100 beats/min The pulse pressure narrows as the diastolic blood pressure increases because of vasoconstriction. The respiratory rate increases as blood loss worsens, as evidenced by a low partial Urine output starts to decline to 20 to 30 mL/h as renal perfusion decreases the urine sodium level decreases, whereas urinary osmolality and specific gravity increase as the kidneys start to conserve sodium and water. The patient's skin becomes pale and cool with delayed capillary refill because of peripheral vasoconstriction. Jugular veins appear flat as a result of decreased venous return.

### Clinical Features During This Class

- Tachycardia (↑heart rate > 20% of patient's baseline)
- Hypotension (↓systolic blood pressure > 10% of patient's baseline)
- ↓Urine output
- Pulses weaker
- Skin and extremities cool to touch
- Hemodynamics: within normal limits cardiac output, ↑systemic vascular resistance
- Mild acidosis (↑base deficit, ↑lactic acid, ↓gastric pH)

#### 2.6.3. Class III

hypovolemic shock occurs with a fluid volume loss of 30% to 40% or an actual volume loss of 1500 to 2000 mL. This level of severity may produce the progressive stage of shock as compensatory mechanisms become overwhelmed and. Blood pressure decreases, but often after tissue hypoperfusion is already significant. The heart rate may increase to more than 120 beats/min, and dysrhythmias may develop as myocardial ischemia ensues. During this phase, Decreased renal perfusion results in the development of oliguria. Blood urea nitrogen and serum creatinine levels start to rise as the kidneys begin to fail. The patient's skin becomes ashen, cold, and clammy, with marked delayed capillary refill. The patient may appear confused as cerebral perfusion decreases. (Carlson & Beverly, 2019)

### Clinical Features During This Class

- Tachycardia (↑heart rate > 20%–30% of patient's baseline)
- Hypotension (↓systolic blood pressure > 10%–20% of patient's baseline)
- Tachypnea (↑respirations > 10% of patient's baseline)
- Oxygen saturation may not be altered dependent on the percentage of exogenous oxygen the patient is receiving

## **Chapter Two: Review of Literature**

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- ↓Urine output (<30 mL/h)
- Altered level of consciousness: restlessness, agitation, confusion, or obtunded
- Poor peripheral pulses
- Progressive acidosis (↑base deficit, ↑lactic acid,)
- Hemodynamics: ↓cardiac output, ↑systemic vascular resistance

### **2.6.4. Class IV**

hypovolemic shock is severe shock and usually refractory in nature. It occurs with a fluid volume loss of greater than 40% or an actual volume loss of greater than 2000 mL. As the compensatory mechanisms of the body become insufficient, tachycardia and hemodynamic instability worsen, and hypotension ensues. Severe lactic acidosis is present. Peripheral pulses and capillary refill become absent because of marked peripheral vasoconstriction. The skin may appear cyanotic, mottled, and extremely diaphoretic. Organ failure occurs. Urine output ceases. The patient may be confused and agitated, eventually becoming unresponsive. Various clinical manifestations associated with failure of the different body systems develop.

### **Clinical Features During This Class**

- Tachycardia (↑heart rate > 20%–30% of patient's baseline)
- Hypotension (↓systolic blood pressure > 10%–20% of patient's baseline)
- Tachypnea (↑respirations > 10%–20% of patient's baseline)
- Oliguria → anuria
- Mental stupor
- Marked peripheral vasoconstriction: cold extremities, poor peripheral pulses, pallor
- Severe acidosis (↑base deficit, ↑lactic acid, ↓gastric pH). (Carlson & Beverly,2019)

### **2.7. Possible Complications:**

Complications may include:

- Kidney damage (may require temporary or permanent use of a kidney dialysis machine)
- Brain damage
- Gangrene of arms or legs, sometimes leading to amputation
- Heart attack
- Other organ damage
- Death (Goldman L, Schafer AI,2020)

### **2.8. Medical Management**

- The major goals of therapy for a patient in hypovolemic shock are to correct the cause of the hypovolemia, restore tissue perfusion, and prevent complications.
- This approach includes identifying and stopping the source of fluid loss, administering fluid to replace circulating volume, and administering vasopressor therapy to maintain tissue perfusion until volume is restored.
- Fluid administration can be accomplished with use of a crystalloid solution, a colloid solution, blood products, or a combination of fluids.
- The type of solution used depends on the type of fluid lost, the degree of hypovolemia, the severity of hypoperfusion, and the cause of hypovolemia. (Gutierrez & Guillermo,2004)
- Aggressive fluid resuscitation in trauma and surgical patients is a subject of great debate.
- Limited or hypotensive (systolic blood pressure 60 to 80 mm Hg or MAP 40 to 60 mm Hg) volume resuscitation in patients with uncontrolled hemorrhage is postulated to lessen bleeding and improve survival and has been demonstrated in a meta-analysis.
- The type and amount of solutions used for fluid resuscitation and the rate of administration influence immune function; inflammatory mediator release; coagulation; and the incidence of cardiac, pulmonary, renal, and GI complications. Consensus on the optimal resuscitative strategy for hypovolemic shock is lacking and is likely situation specific, especially in the case of traumatic hemorrhage.

### **2.9. Nursing Process**

#### **2.9.1 Nursing Assessment Includes:**

Clinical findings are directly related to the severity and acuity of volume loss. Some patients, especially older patients or those who have chronic diseases, have more subtle compensatory responses. assessments of physical and laboratory findings may uncover trends that guide treatment and prevent vascular collapse.

#### **HISTORY.**

A thorough history of the patient's presenting problem may reveal risk factors for hypovolemic shock. Patients experiencing significant blood loss because of gastric hemorrhage or liver or splenic rupture from trauma require a rapid replacement of circulating volume to prevent the consequences of hypovolemia.

**PHYSICAL FINDINGS.** Patients with hypovolemic shock have the following signs and symptoms caused by poor organ perfusion:

- Altered mentation, ranging from lethargy to unresponsiveness
- Rapid and deep respirations, which gradually become labored and shallower as the patient's condition deteriorates
- Cool and clammy skin, with weak and thready pulses
- Tachycardia from activation of the sympathetic nervous system
- Hypotension
- Decreased urine output; urine is dark and concentrated because the kidneys are conserving fluid. (Van den Elsen MJ & Leenen LP,2010)



### **2.9.2. Nursing diagnosis:**

1. Deficient Fluid Volume related to active blood loss
2. Deficient Fluid Volume related to interstitial fluid shift.
3. Decreased Cardiac Output related to alterations in preload.
4. Imbalanced Nutrition: Less Than Body Requirements related to increased

### **2.9.3. Nursing care plan and goals:**

1. Prevention of hypovolemic shock is one of the primary responsibilities of the nurse.
2. Preventive measures include the identification of patients at risk and frequent assessment of the patient's fluid balance.
3. Accurate monitoring of intake and output and daily weights are essential components of preventive nursing care.
4. Early identification and treatment result in decreased mortality.
5. The nursing management plan for a patient in hypovolemic shock may include numerous nursing diagnoses, depending on the progression of the process.
6. A patient in hypovolemic shock requires continuous evaluation of intravascular volume, tissue perfusion, and response to therapy.
7. Measures to minimize fluid loss include limiting blood sampling, observing lines for accidental disconnection, and applying direct pressure to bleeding sites.
8. Measures to facilitate the administration of volume replacement include insertion of large-bore peripheral intravenous catheters and rapid administration of prescribed fluids.

### **2.9.4. Nursing Intervention:**

- administer oxygen.
- ensure adequate organ and extremity perfusion.
- administer fluids (crystalloids, colloids, blood & other blood products).
- administer vasoactive medications.
- administer positive inotropic medications.
- initiate nutritional support therapy.
- institute evidence-based practice protocols to prevent complications.
- assess response to therapy.
- assess patient at least every 15 minutes until shock is controlled and condition improves.
- monitor pulse (rate, regularity, quality), bp, pulse pressure, cvp, respiratory rate, skin color, O2 saturation, cognition and urine output
- prevent & be alert for complications.
- minimize fluid loss: limit blood sampling, observe lines for accidental disconnection & apply direct pressure to bleeding sites.
- for hypotension, position patient with legs, trunk flat with head and shoulders above chest.
- provide additional post-operative care for patient's vascular graft surgical repair.
- provide comfort and emotional support. (Carlson & Beverly,2019)

# **Chapter Three**

# **Methodology**

### **Chapter Three**

#### **Methodology**

#### **3.1. Design of the Study:**

A Descriptive Cross Sectional study design was carried out to nurses' knowledge toward management about hypovolemic shock in Al Basra teaching hospitals. The study had started from 10th November 2021 to 20th April 2022.

#### **3.2. Approval Arrangements:**

After the project of the study is approved by the College of Nursing, set out of official letters have started. Before the data collection, permissions were obtained to conduct the study. Another approval was obtained from the Basra Health Department. Then, permission was obtained from the hospitals.

#### **3.3. The Study Setting:**

The study carried out in Al Basra teaching hospitals (Al-Sadr Teaching Hospital, Al-basrah Teaching Hospital, Al-mauane Teaching Hospital) to assess nurses' knowledge toward management of hypovolemic shock. The number of nurses who participated in the study was (120) participant by selection sample.

#### **3.4. The Study Sample:**

A convenient sample of available nurses (120) male and female participated the questionnaire distributors on Al Basra teaching hospitals (Al-Sadr Teaching Hospital (50) , Al-basrah Teaching Hospital (41) , Al-mauane Teaching Hospital(29)

### **3.5. The Study Instrument:**

The tool of the study is the questionnaire which has been constructed and design for the purpose of the study after extensive reviews of available literature and related studies also distributed for experimentals (faculty members) The study instrument consists of three parts.

The first part includes participants' demographic characteristics of the study sample

the second part include nurses' knowledge about hypovolemic shock

The third part include nursing management about hypovolemic shock

#### **Part I: Demographic Characteristics of the Study Sample**

This part includes 5 questions related to characteristics of the nurses as) age, gender, educational level and work related data as work place name in hospital, years of experience)

#### **Part II: Nurses knowledge about hypovolemic shock**

This part consisted 10 questions in the form multiple choice questions, including Nurses' knowledge regarding, five points talk about general definition and knowledge about hypovolemic shock, one points talk about signs and symptoms, next two points talk about Pathophysiology and causes, also next point talk about complication

#### **Part III: Nurses' knowledge about management for hypovolemic shock**

This part consisted 11 questions including) nursing care, treatment, intravenous solutions, nursing intervention for hypovolemic shock)

### 3.6. Validity of the Instrument

The instrument validity was done by a panel of experts and content validity was obtained. Furthermore, the questionnaire items were changed according to the notes and recommendations of experts (appendix B).

Content validity of the instrument was determined by a panel of experts who have had more than 5 years of experience in their field in relation to exploring the lucidity, relevance, and adequacy of the questionnaire in order to accomplish the goals of the present study (Appendix A). The correction of the question items was done and changed according to the notes and recommendations of the experts.

A preliminary copy of the questionnaire is designed and distributed to the (9) experts. They are (9) faculty members from the College of Nursing/ University of Basrah. Results show that the majority of experts have agreed that the questionnaire is appropriately designed and developed to measure the phenomena underlying the study.

The experts' suggestions and recommendations were taken into consideration and the final copy of the constructed instrument has become acceptable as a tool for conducting the study and achieving the purpose.

### 3.7. Reliability of the Instrument.

Reliability is concerned with the consistency and dependability of a research instrument to measure a variable. Determination of reliability of the questionnaire is based on the Cronbach's Alpha reliability (Table 3-2). It was determined through use of the following formula (Yount, 2006).

$$\alpha = \frac{K}{K - 1} \left( 1 - \frac{\sum_{i=1}^K \sigma_{Y_i}^2}{\sigma_X^2} \right)$$

$K$  = components (K-items or test lets):

$\sigma_X^2$  = The variance of the observed total test scores

$\sigma_{Y_i}^2$  = The variance of component  $i$  for the current sample of persons

## **Chapter Three: Methodology**

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The degree of reliability is usually determined by the use of correlation procedures. Reliability coefficient normally range from (-1.00) through (.00) to (+1.00), reliability coefficient above (0.70) are considered satisfactory (Yount, 2006).

**Table ( 3-2) Reliability Coefficient of the Study Instruments**

<b>Study scale</b>	<b>Number of items</b>	<b>Cronbach's alpha</b>	<b>Report</b>
<b>Knowledge items</b>	<b>26</b>	<b>0.94</b>	<b>Excellent</b>

### **3.8. Rating and Scoring of the Study Instrument:**

The questionnaire form style was the question of a multiple choice for the nurse's knowledge, it has been scored and rated on two levels dichotomous scale (1) points for the correct answer and (0) points for the incorrect answer which was assessed by cutoff point (0.33) due to scores (1,2 and 3) respectively. Scores of responses are categorized according to the following level of patients' knowledge: (0-0.33) = weak level of knowledge, (0.34 – 0.67) = medium level of knowledge, and (0.68- 1)) = good level of knowledge.

### **3.9. Data Collecting:**

The data is collected through the utilization of a developed questionnaire (Arabic version), the researcher had held the whole responsibility of interviewing the study sample after explanation and clarification the objectives of the study, after taking the initial consent of each nurse to participate in the study. An approximately (6\_10) minutes spent with each nurse to complete the filling of the questionnaire format.

### **3.10. Statistical Data Analysis:**

The data of the present study were analyzed through the use of Statistical Package of Social Sciences (SPSS) version 26 and excel 2010

**3.10.1. Descriptive Data Analysis:**

**Statistical tables (Frequencies and percentages).**

**(percentages  $\% = f/n * 100$ )**

**Arithmetic mean.**

$$\text{mean} = \bar{x} = \frac{\sum x_i}{n}$$

**a- Standard deviation (SD).**

$$s = \sqrt{\frac{(x_i - \bar{x})^2}{n-1}}$$

**b-Standard deviation =**

... **Orris, 2007)**

**C- Chi-square (X2)**

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$



# Chapter Four

# **Results of the Study**

**Results of the Study**

**(4 – 1) Demographic data of study sample**

**Table 4.1.1: descriptive statistics of Demographic Variables**

<b>Demographic Variables</b>	<b>Variables Classes</b>	<b>F</b>	<b>Percent</b>
<b>Gender</b>	<b>Male</b>	<b>37</b>	<b>31%</b>
	<b>Female</b>	<b>83</b>	<b>69%</b>
	<b>Total</b>	<b>120</b>	<b>100%</b>
<b>Age</b>	<b>20 – 30</b>	<b>81</b>	<b>68%</b>
	<b>30 – 40</b>	<b>23</b>	<b>19%</b>
	<b>More than 40</b>	<b>16</b>	<b>13%</b>
	<b>Total</b>	<b>120</b>	<b>100%</b>
<b>Years of experience</b>	<b>Less than 5</b>	<b>67</b>	<b>56%</b>
	<b>5 – 10</b>	<b>40</b>	<b>33%</b>
	<b>More than 10</b>	<b>13</b>	<b>11%</b>
	<b>Total</b>	<b>120</b>	<b>100%</b>
<b>Education level</b>	<b>High school</b>	<b>27</b>	<b>23%</b>
	<b>Nursing Institute</b>	<b>47</b>	<b>39%</b>
	<b>College of nursing</b>	<b>46</b>	<b>38%</b>
	<b>Total</b>	<b>120</b>	<b>100%</b>
<b>Workplace</b>	<b>Emergency, ICU, CCU</b>	<b>35</b>	<b>29%</b>
	<b>Esoteric, fractures, kidney</b>	<b>36</b>	<b>30%</b>
	<b>Obstetrics, surgery, burns</b>	<b>49</b>	<b>41%</b>
	<b>Total</b>	<b>120</b>	<b>100%</b>

F = frequency

According to this table shows, the socio-demographic variables of the nurses in this study. Most of the participants in this study were female (69%) and also male equals (31%), age group was (20-30) years (68%). Regarding years of experience, most nurses have less than 5 years of experience (56%). The highest percentage is seen in the Nursing Institute (39%) regarding educational levels. Most of them work in Obstetrics, surgery, burns (41%)

### (4 – 2) Knowledge about hypovolemic shock

Table 4.2.1: descriptive statistics and mean score for knowledge questions							
	Domain of knowledge	N	Min	Max	Mean Score	Std. Deviation	Ass.
1	hypovolemic shock is .....	120	0	1	0.57	0.498	Medium
2	hypovolemic shock is the inability to meet .....	120	0	1	0.79	0.408	Good
3	What are the symptoms of hypovolemic shock?	120	0	1	0.82	0.389	Good
4	What are the causes of hypovolemic shock?	120	0	1	0.80	0.402	Good
5	There are some life-threatening conditions that...	120	0	1	0.66	0.476	Medium
6	Complications of Hypovolemic Shock....	120	0	1	0.72	0.448	Good
7	hypovolemic shock occurs when.....	120	0	1	0.55	0.500	Medium
8	Most cases of hypovolemic shock are.....	120	0	1	0.68	0.470	Good
9	Being a health care, you know that in order.....	120	0	1	0.43	0.498	Medium
10	What is the age group at risk?	120	0	1	0.75	0.435	Good

\*Weak = (0 – 0.33), medium = (0.34 – 0.67), good = (0.68 – 1) Mean Score

this table shows domain of knowledge about hypovolemic shock. The results of this table indicate that most of the nurse have a good knowledge about hypovolemic shock regarding pathophysiology, sign and symptoms, causes of hypovolemic shock, case type and age group at risk at mean score (0.68 – 1). nurse have a medium knowledge about hypovolemic shock regarding definition, risk factor and classification of hypovolemic shock at mean score (0.34 – 0.67)

## Chapter Four: Results of the Study

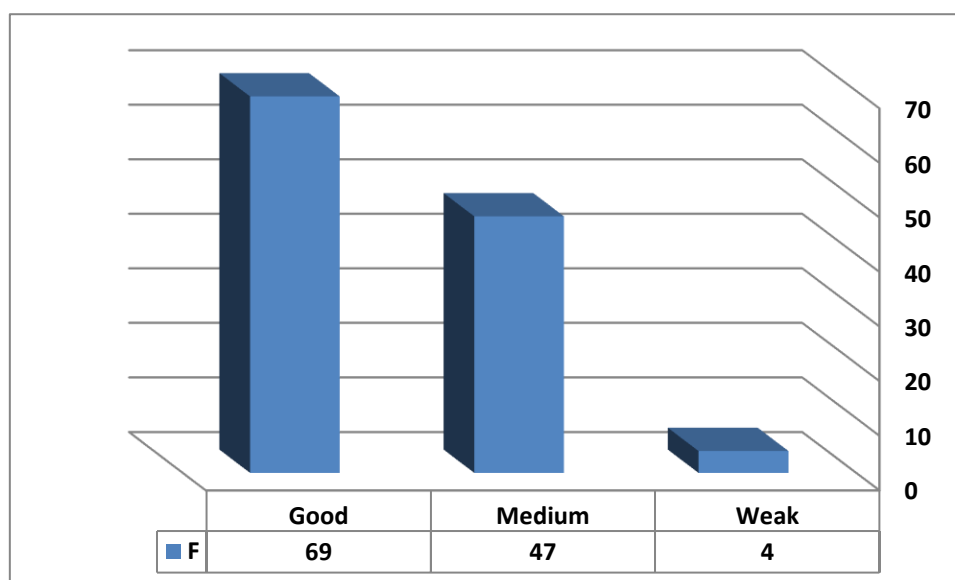
Statistics	N	Min	Max	Mean Score	Standard. Deviation	Ass.
Domain of knowledge	120	0.20	1.00	0.67	0.168	Medium

\*Weak = (0 – 0.33), medium = (0.34 – 0.67), good = (0.68 – 1) Mean Score

The results of this table indicate that overall assessment about knowledge of hypovolemic shock was medium at the mean score and standard level deviation (0.67+0.168)

Mean Score	F	%	Assessment
0 – 0.33	4	3 %	Weak
0.34 – 0.67	47	39 %	Medium
0.68 - 1	69	58 %	Good
Total	120	100 %	

The results of this table indicate that most of the nurses (58%) have good knowledge about hypovolemic shock, (39%) of them have medium knowledge, and (3%) of them have a weak knowledge.



### (4 – 3) Knowledge about management for hypovolemic shock

<b>Table 4.3.1: descriptive statistics and mean score for management questions</b>							
	<b>Domain of management</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean Score</b>	<b>Std. Deviation</b>	<b>Ass.</b>
1	Keep the person warm to avoid hypothermia .....	120	1	3	2.47	0.840	Agree
2	The best position for a hypovolemic shock patient.....	120	1	3	2.58	0.729	Agree
3	Not to place a foliar catheter for a patient with vascular shock.....	120	1	3	2.33	0.853	don't know
4	Monitor the vital signs of hypovolemic patients every 15 minutes.....	120	1	3	2.77	0.586	Agree
5	Giving diuretics to a patient with hypovolemic shock.	120	1	3	2.31	0.887	don't know
6	Of the important solutions given to the patient are (ringer lactated .and norm saline)	120	1	3	2.75	0.638	Agree
7	Make the patient lie down with his feet raised and.....	120	1	3	2.62	0.699	Agree
8	It is important to obtain blood samples quickly, for complete blood percentage.....	120	1	3	2.74	0.642	Agree
9	Working to stop active bleeding by applying local pressure to the site of injury.....	120	1	3	2.62	0.758	Agree
10	Giving medications such as dopamine that increase the heart's pumping.....	120	1	3	2.29	0.854	don't know
11	It is not necessary to give oxygen to a patient in hypovolemic shock	120	1	3	2.34	0.884	Agree

\*Disagree = (1-1.66), don't know = (1.67 – 2.33), agree = (2.34 – 3)

According to this table shows, the nurse's knowledge about management of hypovolemic shock. The most of the nurse answer agree regarding nursing care, nursing intervention and intravenous solutions that most used with hypovolemic shock at mean score (2.34 – 3). Nurses how answer don't know regarding treatment at mean score (1.67 – 2.33)

## Chapter Four: Results of the Study

Statistics	N	Min	Max	Mean Score	Std. Deviation	Ass.
Domain of management	120	1.55	3.00	2.52	0.310	Agree

\*Disagree = (1-1.66), don't know = (1.67 – 2.33), agree = (2.34 – 3)

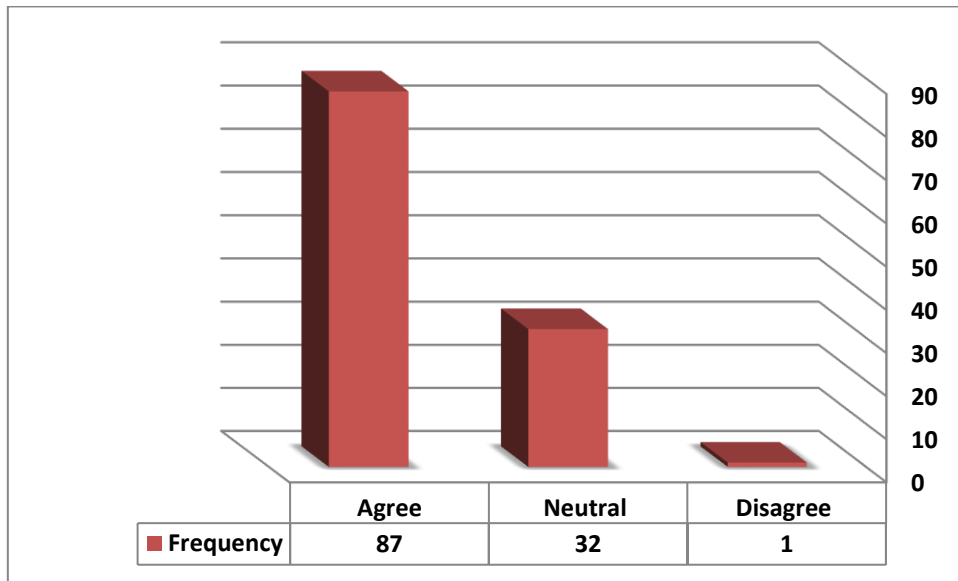
The results of this table indicate that overall assessment about nursing knowledge about management of hypovolemic shock was agree at the mean score and standard level deviation (2.52+0.310)

<b>Evaluation of accepting nursing staff</b>			
Evaluation	Mean score	Frequency	Percent
Disagree	1 – 1.66	1	1 %
don't know	1.67 – 2.33	32	27 %
Agree	2.34 – 3	87	72 %
<b>Total</b>		<b>120</b>	<b>100 %</b>

The results of this table indicate that most of the nurses (72%) have agree about nursing management of hypovolemic shock, (27%) of them don't know about nursing management, and (3%) of them disagree

## Chapter Four: Results of the Study

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## Chapter Five

# **Discussion of the Results**



## **Chapter Five**

### **Discussion of the Results**

#### **5.1. Part I: Discussion of the Socio-Demographic Characteristics for the Study Sample:**

the socio-demographic variables of the nurses in this study. Most of the participants in this study were female (69%) and also male equals (31%), age group was (20-30) years (68%). Regarding years of experience, most nurses have less than 5 years of experience (56%). The highest percentage is seen in the Nursing Institute (39%) regarding educational levels. Most of them work in Obstetrics, surgery, burns (41%)

These results agree with findings Abo al-ata, Amal Bakr(2020). "Nurses' Knowledge and Practice Regarding Patients with Posttraumatic Hypovolemic Shock." Port Said Scientific Journal of Nursing

Jama, Abdinasir Abdullahi, and Eric Lawer Torgbenu(2019). "Assessment on Management of Hypovolemic Shock in Galkayo Public Hospital, Somalia."

#### **5.2. Part II: Discussion of the nurses' knowledge about hypovolemic shock.**

These results agree with findings that most of the nurses (58%) have good knowledge about hypovolemic shock, (39%) of them have medium knowledge, and (3%) of them have a weak knowledge.

These results agree with findings Bethel, Duska .(2015). "Dual Component Educational Program to Improve Medical-Surgical Nurses' Knowledge and Self-Efficacy of Shock and Severe Sepsis."

## **Chapter Five: Discussion of the Results**

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Most of the nurse have a good knowledge about hypovolemic shock regarding pathophysiology, sing and symptoms, causes of hypovolemic shock, case type and age group at risk at mean score (0.68 – 1). nurse have a medium knowledge about hypovolemic shock regarding definition, risk factor and classification of hypovolemic shock at mean score (0.34 – 0.67)

These results agree with findings Jeon, Jaehee, and Sihyun Park. 2021 "An Exploratory Study to Develop a Virtual Reality Based Simulation Training Program for Hypovolemic Shock Nursing Care"

That overall assessment about knowledge of hypovolemic shock was medium at the mean score and standard level deviation (0.67+0.168)

These results agree with Ocaña., Molpeceres, Porro, Gómez, & Morales, (2004). Experimental assessment of the influence of irradiation parameters on surface deformation and residual stresses in laser shock processed metallic alloys

### **5.3. PartIII: Discussion of the nurse's knowledge about management of hypovolemic shock**

More than half of the nurses (72%) have agree about nursing management of hypovolemic shock, (27%) of them don't know about nursing management, and (3%) of them disagree

These results agree with Morrell, (2005). Towards a typology of nursing turnover: the role of shocks in nurses' decisions to leave.

More than half of the nurse answer agree regarding nursing care, nursing intervention and intravenous solutions that most used with hypovolemic shock at mean score (2.34 – 3). Nurses how answer don't know regarding treatment at mean score (1.67 – 2.33)

These results agree with Jeon, & Park, (2021). An Exploratory Study to Develop a Virtual Reality Based Simulation Training Program for Hypovolemic Shock Nursing Care: A Qualitative Study Using Focus Group Interview.

## **Chapter Five: Discussion of the Results**

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That overall assessment about nurse's knowledge about management of hypovolemic shock was agree at the mean score and standard level deviation (2.52+0.310)

These results agree with Hofmeyr., & Mohlala, (2001). Hypovolaemic shock. Best practice & research Clinical obstetrics & gynecology

## Chapter Six

# **Conclusions and Recommendations**

**Chapter Six**  
**Conclusions and Recommendations**

**Conclusions:**

1. The socio-demographic variables of the nurses in this study. Most of the participants in this study were female (69%) and also male equals (31%), age group was (20-30) years (68%). Regarding years of experience, most nurses have less than 5 years of experience (56%). The highest percentage is seen in the Nursing Institute (39%) regarding educational levels. Most of them work in Obstetrics, surgery, burns (41%)
2. More than half of nurses (58%) have good knowledge about hypovolemic shock, (39%) of them have medium knowledge, and (3%) of them have a weak knowledge
3. More than half of nurses (72%) have good nursing management of hypovolemic shock, (27%) of them medium about nursing management, and (3%) of them have poor nursing management of hypovolemic shock

### **Recommendations:**

- Special Education Programs for Medical professionals, specifically nurses working in hospitals should be required to raise awareness of the most important management of hypovolemic shock.
- Continuing education and rigorous clinical trials are needed to address the importance of identification and management of hypovolemic shock
- Increase health awareness among nurses through the implementation of courses and lectures for nurses in coordination with the health in order to the management of hypovolemic shock
- provide regular training sessions and assessments for nurses to improve their knowledge and practice regarding hypovolemic shock

# References

## References

### A

- Abo al-ata, Amal Bakr. "Nurses' Knowledge And Practice Regarding Patients With Posttraumatic Hypovolemic Shock." *Port Said Scientific Journal of Nursing* (2020): 155-174.
- Ajmani, Pritam Singh. "Massive Blood Transfusion." *Immunoematology and Blood banking*. Springer, Singapore, 2020.
- Alfaro-LeFevre, R. (2012). *Applying nursing process: the foundation for clinical reasoning*. Lippincott Williams & Wilkins.
- Al-Ganmi, A. H. A.(2014). *Assessment of Nurses' Knowledge Concerning Cardiogenic shock for Patients' in Cardiac Care Unit at Baghdad Hospitals*.
- Angus DC. Approach to the patient with shock. In: Goldman L, Schafer AI, eds. *Goldman-Cecil Medicine*. 26th ed. Philadelphia, PA: Elsevier; 2020
- Arathy, S. R. (2011). A study to assess the knowledge and practices among cardiac nurses about patient's safety after cardiac catheterization code No6210available
- Baumle w., Duncan G., White L. (2013). *medical surgical nursing an integrated approach,3rd ed., united state of America, cengage learning, P. p, 80-88*.
- Burkhoff, D. A. N. I. E. L., and JOHN V. Tyberg. "Why does pulmonary venous pressure rise after onset of LV dysfunction: a theoretical analysis." *American Journal of Physiology-Heart and Circulatory Physiology*(1993)
- Burner & suddarth S.,(2012). *text book of conidian medical surgical nursing , 2nd.,Canada Lippincott, Pp. 350-360*.
- Carlson, Beverly, and Lorraine Fitzsimmons. "Shock, sepsis, and multiple organ dysfunction syndrome." *Priorities in Critical Care Nursing-E-Book* 474 (2019).
- Davis, Harold. " Management of Patients in Shock." *Small Animal Emergency and Critical Care for Veterinary Technicians-E-Book* (2015)



### B

- Escobar M. F., Füchtner, C. E., Carvajal, J. A., Nieto, A. J., Messa, A., Escobar, S. S., & Miller, S. (2017). Experience in the use of non-pneumatic anti-shock garment (NASG) in the management of postpartum hemorrhage with hypovolemic shock in the Foundation Valle Del Lili, Cali, *Colombia. Reproductive health*, 14(1), 58
- Gutierrez, Guillermo, H David Reines, and Marian E. Wulf-Gutierrez. "Clinical review: hemorrhagic shock." *Critical care* 8.5 (2004)
- Gutierrez, Guillermo, H David Reines, and Marian E. Wulf-Gutierrez. "Clinical review: hemorrhagic shock." *Critical care* 8.5 (2004).
- Hill, Barry, and Aby Mitchell. "Hypovolaemic shock." *British Journal of Nursing* 29.10 (2020).
- Hofmeyr, G. J., & Mohlala, B. K. (2001). Hypovolaemic shock. *Best practice & research Clinical obstetrics & gynaecology*,
- Jeon, J., & Park, S. (2021, April). An Exploratory Study to Develop a Virtual Reality Based Simulation Training Program for Hypovolemic Shock Nursing Care: A Qualitative Study Using Focus Group Interview. In *Healthcare. Multidisciplinary Digital Publishing Institute*.
- Jeon, Jaehee, and Sihyun Park. "An Exploratory Study to Develop a Virtual Reality Based Simulation Training Program for Hypovolemic Shock Nursing Care: A Qualitative Study Using Focus Group Interview." *Healthcare. Multidisciplinary Digital Publishing Institute*, 2021.
- Metheny, Norma. Fluid and electrolyte balance. Jones & Bartlett Publishers, 2012.
- Morrell, K. (2005). Towards a typology of nursing turnover: the role of shocks in nurses' decisions to leave. *Journal of Advanced Nursing*, 49(3), 315-322.

## References

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### C

- Nagelkerk, J. (2005). Leadership and nursing care management. Elsevier Health Sciences.
- Ocaña, J. L., Molpeceres, C., Porro, J. A., Gómez, G., & Morales, M. (2004). Experimental assessment of the influence of irradiation parameters on surface deformation and residual stresses in laser shock processed metallic alloys. *Applied Surface Science*.
- Roberts, Kay, Janie Mason, and Pam Wood. "A comparison of a traditional and an accelerated basic nursing education program." *Contemporary Nurse* 11.2-3 (2001): 283-287.
- Sasaki, J., and S. Hori. "Validation of inflationary non-invasive blood pressure monitoring in emergency room patients." *Critical Care* 18.1 (2014): 1-182.
- Shagana, J. A., et al. "Hypovolemic shock-A review." *Drug Invention Today* 10.7 (2018)
- Standl T, Annecke T, Cascorbi I, Heller AR, Sabashnikov A, Teske W. The Nomenclature, Definition and Distinction of Types of Shock. *Dtsch Arztebl Int*. 2018
- Van den Elsen MJ, Leenen LP, Kesecioglu J: Hemodynamic support of the trauma patient. *Curr Opin Anesth*, 2010
- Yamauchi, Hiroshi, and J. A. M. E. S. HOPPER JR. "Hypovolemic shock and hypotension as a complication in the nephrotic syndrome: Report of ten cases." *Annals of internal medicine* 60.2\_Part\_1 (1964): 242-254.

# Appendices

**APPENDIX-A: ADMINISTRATIVE ARRANGEMENTS.**

**APPENDIX-B: PANEL OF EXPERTS.**

**APPENDIX-C: QUESTIONNAIRE IN ENGLISH  
LANGUAGE.**

العدد : ٢١٢  
التاريخ : ٢٠٢٢/٣/٢٨



جمهورية العراق  
وزارة الصحة  
دائرة صحة البصرة  
مكتب المدير العام  
مركز التدريب والتنمية البشرية  
شعبة ادارة المعرفة/البحوث

الى/م. الصدر التعليمي  
م. البصرة التعليمي  
م. الموانئ التعليمي

م/ تسهيل مهمة

درست لجنة البحوث في دائرة صحة البصرة مشروع البحث ذي الرقم ( ٥٨٢ ) المعنون (معرفة المرضين اتجاه العلاج الصدمة الوعائية في مستشفيات البصرة التعليمي) والمقدم من الباحثة (زئلب منعم قاسم ) والباحثة ( دنيا خالد عبد القادر) والباحثة ( معصومة لايد برغش ) - كلية التمريض - جامعة البصرة

بتاريخ ٢٠٢٢/٣/٢٨ وقررت:

"الموافقة على تنفيذ مشروع البحث بصيغته المقدمة ولأمانع من تنفيذه في مؤسسات الدائرة."

لتفضلكم بالاطلاع وتسهيل مهمة الباحث لا جراء بحثه مع التقدير....

المرفقت:  
قرار لجنة البحوث الرقم ٢٠٢٢/٣١٢

دائرة صحة البصرة  
مكتب المدير العام  
د. رجاء احمد محمود  
مديرة مركز التدريب والتنمية البشرية  
٢٠٢٢/٣/٢٨

لمسقة منه الى:  
مركز التدريب والتنمية البشرية بمع الاوليات



وزارة الصحة  
دائرة صحة البصرة  
مركز التدريب والتنمية البشرية  
لجنة البحوث



رقم القرار ٢٠٢٢/٢١٧  
تاريخ القرار ٢٠٢٢/٣/٢٨

قرار لجنة البحوث

درست لجنة البحوث في دائرة صحة البصرة مشروع البحث ذي الرقم (٥٨٢) الملنون (معرفة المرضين اتجاه العلاج الصدمة الوعائية في مستشفيات البصرة التعليمي) والمقدم من الباحثة (زينب منعم قاسم) والباحثة (دنيا خالد عبد القادر) والباحثة (معصومة لاهد برغش) - كلية التمريض - جامعة البصرة بتاريخ ٢٠٢٢/٣/٢٨ وقررت:

"الموافقة على تنفيذ مشروع البحث بصيغته المقدمة ولأمانع من تنفيذه في مؤسسات الدائرة."

دائرة صحة البصرة  
د. علي كاظم قاسم  
مقرر لجنة البحوث / دائرة صحة البصرة  
٢٠٢٢ / ٣ / ١٨

المرفقات:

لا يوجد

الملاحظات:

- تم تحويل رئيس لجنة البحوث او مقرر اللجنة للقرارات على هذا القرار استنادا الى النظام الداخلي للجنة البحوث .
- الموافقة تدعي ان مشروع البحث قد استوفى المعايير الأخلاقية والعلمية لإجراء بحث والمعتمدة في وزارة الصحة. اما التنفيذ فيمتمد على التزام الباحث بتعليمات المؤسسة الصحية التي سينفذ فيها البحث. وعلى الباحث التواصل مع مسئول البحوث في المؤسسة الصحية التي يجرى بها البحث وإطلاعها على مجريات البحث بشكل دوري ولحين انتهاء البحث.

## Appendix- B

ت	الاسم	اللقب العلمي	الشهادة	الاختصاص	مكان العمل
1	محفوظ فالح	أستاذ مساعد	دكتوراه	فسلجه	كلية التمريض
2	سجاد سالم	أستاذ	بورء	طب أسرة	كلية التمريض
3	وصفي ظاهر	أستاذ	دكتوراه	فسلجه	كلية التمريض
4	عادل علي	مدرس	دكتوراه	تمريض اطفال	كلية التمريض
5	هشام حسين عبد الرؤوف	مدرس	بورء	بورء عراقي في الاشعة التشخيصية	كلية التمريض
6	فراس عبد القادر	مدرس	دكتوراه	طب الأسرة	كلية التمريض
7	أفكار فاضل	مدرس	ماجستير	تمريض نفسية وعقلية	كلية التمريض
8	خديجة محمد جاسم	مدرس مساعد	ماجستير	تمريض بالغين	كلية التمريض
9	علي مالك	مدرس مساعد	ماجستير	تمريض بالغين	كلية التمريض

**Demographic Information**

Age  year

gender

female

male

**Years of service**

Less than 5 years old

10-5 years

more than 10 years

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**education level**

Nursing high school

Nursing institute

College of nursing

Master's

---

**Work inside the hospital**

### Nursing Knowledge

**hypovolemic shock is: ...**

- A. Severe shortage of blood**
  - B. Severe lack of fluid that makes the heart unable to pump enough blood to the body**
  - C. Both**
- 

**2. hypovolemic shock is the inability to meet the needs of cells for oxygen and nutrients due to:**

- A. Loss of circulatory volume**
  - B. Cardiac arrhythmia**
  - C. Anaphylaxis**
- 

**3. What are the symptoms of hypovolemic shock?**

- A. Rapid heartbeat and fainting**
  - B. Increase the amount of urination**
  - C. hypertension**
- 

**4. What are the causes of hypovolemic shock?**

- A. Asthma**
  - B. Gastroenteritis**
  - C. Internal or external bleeding**
- 

**5. There are some life-threatening conditions that lead to low blood volume, including:**

- A. Major burns, serious injuries and accidents**
- B. For example, internal bleeding that may occur due to bleeding in the digestive system**
- C. a-b**



## **Appendix- B**

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### **6. Complications of Hypovolemic Shock**

- A. Acute Kidney Failure. Brain Damage**
  - B. swollen thyroid gland. Kidney inflammation**
  - C. Myocarditis**
- 

### **7. hypovolemic shock occurs when the fluid volume is too low in:**

- A. interstitial**
  - B. Intravascular**
  - C. a-b**
- 

### **8. Most cases of hypovolemic shock are .....**

- A. emergency**
  - B. Non-emergency**
  - C. a-b**
- 

### **9. Being a health care provide, you know that in order for hypovolemic shock to occur, the patient must lose ..... of the volume of his blood**

- A. less than 10% (500ml)**
  - B. more than 40% (2000 mL)**
  - C. more than 15% (750 ml)**
- 

### **10. What is the age group at risk?**

- A. kids**
- B. Young and old**
- C. it is not restricted to a specific age group**

## Appendix- C

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### Nursing management

		agree	not agree	don't know
1	Keep the person warm to avoid hypothermia, and do not give oral fluids			
2	The best position for a hypovolemic shock patient is that the head is level with the body and the legs are raised			
3	Not to place a foliar catheter for a patient with vascular shock			
4	Monitor the vital signs of hypovolemic patients every 15 minutes to 1 hour for an unstable patient, and every 4 hours for a stable patient.			
5	Giving diuretics to a patient with hypovolemic shock			
6	Of the important solutions given to the patient are (ringer lactated and norm saline).			
7	Make the patient lie down with his feet raised and refrain from moving the person if there is a head, neck or back injury			
8	It is important to obtain blood samples quickly, for complete blood percentage, blood group and match blood count in anticipation of transfusions			
9	Working to stop active bleeding by applying local pressure to the site of injury, or performing surgery to stop internal bleeding			
10	Giving medications such as dopamine that increase the heart's pumping force to improve blood circulation			
11	It is not necessary to give oxygen to a patient in hypovolemic shock			

## الخلاصة

### المقدمة

تشير الصدمة الوعائية إلى حالة طبية أو جراحية يؤدي فيها فقدان السوائل السريع إلى فشل أعضاء متعددة بسبب عدم كفاية حجم الدورة الدموية وعدم كفاية التروية اللاحقة. صدمة نقص حجم الدم هي أكثر أشكال الصدمة شيوعاً

الهدف من الدراسة

1. لتقييم معرفة الممرضين حول صدمة نقص حجم الدم

2. لتقييم العناية التمريضية فيما يتعلق بالمرضى الذين يعانون من الصدمة الوعائية

### المنهجية

تصميم الدراسة هو تصميم دراسة مقطعية وصفية تم إجراؤها لمعرفة الممرضين وإدارتهم تجاه الصدمة الوعائية في مستشفيات البصرة التعليمية. بدأت الدراسة من 10 نوفمبر 2021 إلى 20 أبريل 2022

البيانات الديموغرافية يتضمن هذا الجزء 5 أسئلة تتعلق بخصائص الممرضين مثل (العمر والجنس) والمستوى التعليمي والبيانات المتعلقة بالعمل كاسم مكان العمل في المستشفى وسنوات الخبرة

معرفة الممرضين حول صدمة نقص حجم الدم يتكون هذا الجزء من 10 أسئلة في شكل أسئلة الاختيار من متعدد، بما في ذلك معرفة الممرضين فيما يتعلق ، خمس نقاط تتحدث عن التعريف العام والمعرفة حول صدمة نقص حجم الدم ، نقطة واحدة تتحدث عن الاعراض والعلامات ، النقطتان التاليتان تتحدثان عن الفيزيولوجيا المرضية والأسباب ، أيضا النقطة التالية تتحدث عن المضاعفات إدارة التمريضية حول صدمة نقص حجم الدم يتكون هذا الجزء من 11 سؤالاً بما في ذلك (الرعاية التمريضية، العلاج ، إنعاش السوائل ، التدخل التمريضي لصدمة نقص حجم الدم)

### النتائج

نتائج المتغيرات الاجتماعية والديموغرافية للممرضين في هذه الدراسة. كان معظم المشاركين في هذه الدراسة من الإناث (69%) وكذلك الذكور يساوي (31%) ، وكانت الفئة العمرية (20-30) سنة (68%). فيما يتعلق بسنوات الخبرة ، فإن معظم الممرضات لديهن أقل من 5 سنوات من (56%) الخبرة

أعلى نسبة في معهد التمريض (39%) فيما يتعلق بالمستويات التعليمية. معظمهم يعملون في قسم النسائية والتوليد والجراحة والحروق (41%)

معظم الممرضين لديهم معرفة جيدة حول الصدمة الوعائية فيما يتعلق بالفيزيولوجيا المرضية والاعراض والعلامات وأسباب الصدمة الوعائية

معظم الممرضين لديهم معرفة جيدة حول الصدمة الوعائية فيما يتعلق بالفيزيولوجيا المرضية ، والاعراض والعلامات، وأسباب صدمة نقص حجم الدم ، ونوع الحالة والفئة العمرية المعرضة للإصابة في متوسط الدرجة (0.68-1). ممرضين لديهم معرفة متوسطة حول صدمة نقص حجم الدم فيما يتعلق بالتعريف ، عامل الخطر وتصنيفات الصدمة الوعائية في متوسط النتيجة (0.67-0.34) ،

كان التقييم العام حول معرفة الصدمة الوعائية متوسطا عند متوسط الدرجة وانحراف المستوى القياسي (0.168+0.67)

أن معظم الممرضين (58٪) لديهم معرفة جيدة بصدمة الوعائية ، (39٪) منهم لديهم معرفة متوسطة ، و (3٪) منهم لديهم معرفة ضعيفة

معظم الممرضات (72٪) يوافقن على إدارة التمريضية لصدمة نقص حجم الدم ، (27٪) منهم لا يعرفون عن الإدارة التمريضية ، و (3٪) منهم لا يوافقون. يتفق معظم الممرضين فيما يتعلق بالرعاية التمريضية والتدخل التمريضي والمحاليل الوريدية الأكثر استخداما مع صدمة نقص حجم الدم عند متوسط النتيجة (3-2.34). ممرضين اجابوا لا أعرف فيما يتعلق العلاج في متوسط درجة (2-67)

### الاستنتاجات

المتغيرات الاجتماعية والديموغرافية للممرضين في هذه الدراسة. كان معظم المشاركين في هذه الدراسة من الإناث (69٪) وكذلك الذكور يساوي (31٪) ، وكانت الفئة العمرية (20-30) سنة (68٪). فيما يتعلق بسنوات الخبرة ، فإن معظم الممرضين لديهم أقل من 5 سنوات من الخبرة (56٪). أعلى نسبة في معهد التمريض (39٪) فيما يتعلق بالمستويات التعليمية. معظمهم يعملون في (41٪) قسم النسائية و التوليد وقسم الجراحة والحروق

معظم الممرضين (58٪) لديهم معرفة جيدة عن الصدمة الوعائية ، (39٪) منهم لديهم معرفة متوسطة ، و (3٪) منهم لديهم معرفة ضعيفة

معظم الممرضين (72٪) لديهم إدارة تريض جيدة لصدمة نقص حجم الدم، (27٪) منهم متوسطة حول إدارة التمريض ، و (3٪) منهم لديهم إدارة تريض سيئة لصدمة الوعائية

## التوصيات

يجب أن تكون هناك برامج التعليم الخاص للمهنيين الطبيين، وخاصة الممرضين العاملين في المستشفيات لزيادة الوعي بأهميه الإدارة التمريضية للصدمة الوعائية

زيادة الوعي الصحي بين الممرضين من خلال تنفيذ دورات ومحاضرات للممرضين بالتنسيق مع الصحة من أجل إدارة الصدمة الوعائية

هناك حاجة إلى التعليم المستمر والتجارب السريرية الصارمة لمعالجة أهمية تحديد وإدارة صدمة نقص حجم الدم

تقديم دورات تدريبية منتظمة وتقييمات للممرضين لتحسين معارفهم وممارساتهم فيما يتعلق بالصدمة الوعائية



جامعة البصرة

كلية التمريض

معارف الممرضين تجاه الاجراءات التمريضية للصدمة الوعائية في  
مستشفيات البصرة التعليمية

مشروع البحث

قدم الى مجلس كلية التمريض في جامعة البصرة في تحقيق جزء من متطلبات  
الحصول على درجة البكالوريوس في علوم التمريض

من قبل الطالبات

دنيا خالد عبد القادر

زينب منعم قاسم

معصومة لايد برغش

2022\_2021

باشراف: م.م ماهر عبد الأمير عطية