

The impact of applying quality in the examination of biology at the clinical forensic medicine clinic in Mecca

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ABSTRACT

This current study aims to know the effect of applying quality standards in the medical refrigerator in examining biology, and the effect of employees applying quality standards at work in examining biology, the methods used in examining biology in a clinical forensic medicine clinic, what are the components of a clinical forensic medicine clinic. The questionnaire was prepared via Google Drive and distributed to all employees of the Forensic Medical Services Center in Mecca (administrators, technicians, and doctors). It was distributed to them via the social networking program (WhatsApp), and responses were obtained via email. It concluded that All procedures taken and implemented in the clinical forensic medicine clinic reflect the extent of precision and diligence in the work and the rate of application of quality is very high.

Keywords: the impact, of applying quality, in forensic biology examination, in Mecca.

1. INTRODUCTION

Forensics is a broad term used to describe a group of medical specialties that deal with the examination and diagnosis of individuals who have been injured or died due to external or unnatural causes such as poisoning, assault, suicide, or other forms of violence, and applying the findings to the law (i.e. court cases). Forensic medicine is a multidisciplinary branch that includes the practice of forensic pathology, forensic psychology, forensic odontology, forensic radiology, and forensic toxicology⁽¹⁾⁽²⁾. There are two main branches of forensics; Clinical forensics; Forensic pathology, with the patient's condition being the differentiating factor. In clinical forensics, trauma to living patients is investigated⁽³⁾. The nature of the work of the forensic doctor differs from that of the civil doctor, who often appears before contemporaries as an advocate for patients. The functions of a forensic doctor include investigating crimes, and searching for clear fingerprints on their views on the crime, such as the presence of toxic substances or a laboratory to wipe gunpowder on their hands. The forensic doctor works in coordination with official bodies specialized in criminal investigations, such as the forensic laboratory, toxicology laboratories, and the criminal court, before which the doctor, In Britain, forensic doctors are called "police surgeons," because they receive special training to evaluate the condition of victims who are still alive and provide urgent medical care to them, including victims of sexual rape and people detained in police stations⁽⁴⁾.

2. MATERIAL AND METHODS

The study began in (the city of Mecca in the Kingdom of Saudi Arabia), and the study ended with writing the data collection in July 2024. The researcher used descriptive analysis, an approach that uses quantitative or qualitative description of the social phenomenon (The impact of applying quality in forensic biology examination in Mecca) The independent variable (the percentage of organisms that are examined in the clinical clinic annually) and the independent variable (the percentage of organisms that are examined in the clinical forensic clinic on a monthly basis). This type of study is characterized by analysis, reason, objectivity, and reality. It is also concerned with individuals and societies, as it studies the variables and their impact on the health of the individual, society, and the consumer, and the spread of diseases and their relationship. For demographic variables such as age, gender, nationality, and marital status. Status and occupation⁽⁵⁾, and use the excel 2010 Office suite pie chart to sort the results⁽⁶⁾. The questionnaire is a wonderful and useful tool for collecting a huge amount of data, the questionnaire was only answered electronically, it consists of twelve questions, all of which are closed-ended.

3. RESULTS AND DISCUSSION

The approval rate for the questionnaire was 100%, and the gender of the participants was 82.6% male, and 17.4% female. Their gender was 100% Saudi male and female, and their professions were male and female technicians (radiology, nursing, resident physician, specialist physician, consultant physician) with a percentage of 87.5%, and the percentage of male and female administrators is 12.5%. As for the responses to the questionnaire questions It was as follows: The first question: Do you have a guide on how to deal with forensic examination of life? Yes 83.3%, No 0%, and I don't know 16.7%. The second question: Do you take samples from humans for forensic examination? 100%. The third question: Are disinfectants and sterilizers used before and after the forensic examination of living organisms is completed? Yes, 95.5%, no, 4.2%, and I don't know, 0%. Question four: Are there all the medical supplies in the forensic biology clinic? Yes, 87.5%, No, 4.2%, and I don't know, 8.3%.

Question five: Are all the correct medical procedures taken when dealing with living people in the forensic clinic? Yes, 95.8%, no, 0%, and I don't know, 4.2%. Question Six: Is the forensic clinic sterilized before examining the living there? Yes, 79.2%, No, 8.3%, and I do not know, 12.5%. Question seven: Are the dates for examination of living persons determined in the forensic medicine clinic? Yes, 78.3%, no, 13%, and I don't know, 8.7%. Question eight: Are living people examined in the forensic clinic during the day? Yes, 100%. Question nine: Are procedures taken before forensic examination of living people? Yes 91.7%, No 0%, and I don't know 8.3%. Question 10: Are there female doctors and technicians to examine living people (females) in forensic medicine? Yes, 83.3%, No, 12.5%, and I don't know, 4.2%. Question eleven: Is there an infection control system in place in the forensic medicine clinic? Yes 100%. The last question: Is there a specialized technician with the forensic doctor to assist in examining the living in the forensic clinic? Yes, 95.8%, no, 0%, and I don't know, 4.2%.(table.no.1)(table.no.2).

Table 1: the percentage of percentage of technicians and administrators

technicians	administrators
87.5%	12.5%

Table 2:the impact of applying quality in the examination of biology at the clinical forensic medicine clinic in Mecca

The impact of applying quality in the examination of biology at the clinical forensic medicine clinic in Mecca	Yes	No	I don't know
Are disinfectants and sterilizers used before and after the forensic examination of living organisms is completed?	95,5%	4.2%	0%
Are all the correct medical procedures taken when dealing with living people in the forensic clinic?	95.8%	0%	4.2%
Are there female doctors and technicians to examine living people (females) in forensic medicine?	83.3%	12.5%	4.2%
Is there an infection control system in place in the forensic medicine clinic?	100%	0%	0%

4. CONCLUSION

Disinfectants and sterilizers are used before and after the forensic examination of living organisms is completed, at a rate of 95.5%.All correct medical procedures are taken when dealing with the living in the forensic clinic, at a rate of 95.8%.There are female doctors and biology examiners (females) in forensic medicine: 83.3%,There is also a 100% infection control system in the forensic medicine clinic.

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