

Awareness And Factors Influenced Selecting Forensic Medicine As Career Among Male Medical Students in AlBaha University, Saudi Arabia

HAMZAH ALZHRANI¹, SULTAN ALZHRANI², YAZEED
ALZHRANI², HASSAN ALZHRANI²

¹Intern student , medicine college , Albaha university , Saudi Arabia

²Intern students , medicine college , Albaha university , Saudi Arabia

Abstract

Introduction: Forensic medicine is a branch of medicine dealing with the application of medical knowledge to establish facts in civil or criminal legal cases. It is typically involved in cases concerning blood relationship, injury, or death resulting from violence. For some people, the decision on which specialty to choose is not an easy one. Aim of present study is to assess awareness factors influenced selecting forensic medicine as career among male medical students in AlBaha University, Saudi Arabia
Methods: A cross-sectional study. The questionnaire was self-design questionnaire. The sampling was random sampling technique for all undergraduate male students
Result: A total of 95 medical students in all years of study in Albaha University were included. Concerning the awareness about forensic medicine 52.8% of student they don't know and the influential factors in developing interest in forensic medicine were personal interest and personal reasons about 84.2% of subjects. The medical students were prefer forensic medicine as specialty by 34%.
Conclusion: The medical education has important role to decline the percent of lack of knowledge about forensic medicine and begin action to establishing mentor programs for all specialties to direct students to pike up specialty that suitable for them.

Keywords: Forensic medicine, influenced factors, selecting specialty, Medical student and Saudi Arabia

1. INTRODUCTION

Forensic medicine or Medical jurisprudence is a branch of medicine that dealing with the application of medical knowledge to establish facts in civil or criminal legal cases. It is typically involved in cases concerning blood related , mental illness, injury, or death resulting from violence. Today ,the services of forensic medicine expanded to cover a wide medical range¹.The importance of forensic medicine as medical specialty and the over need of forensic doctors nowadays leading us to look after factors influenced selecting it as career . Areas of medicine that are commonly involved in forensic medicine are anatomy, pathology, and psychiatry². Forensic doctors work with cases related to the medical malpractice, possible causes of death, the rape crime and fabrication crime, disputed paternity, inheritance, change of newborns in maternal hospital and injuries of children that may relate to neglect or abuse and sometimes witness in tribunals^{1,2}. The undergraduate student must get enough

orientation about the forensic medicine from their college, also the media should contribute in this part of education by spreading the awareness among communities .

Studies have found that the students divided into three groups on according to their of knowledge about forensic medicine : the greater number of students had average level of knowledge 40% ,the second group show insufficient level of knowledge 36.3% and finally group pass with sufficient level of knowledge 23.7% , this study suggested to support the student in practice aspects and build them up on the side of learning weakness ⁴.The choice of specialty is one of the important decision in the life . For some people, the decision on which specialty to choose is not an easy one.

There are many factors influencing to choose one specialty from other .These including personality characteristic, abilities, interests, ambitions, aptitudes, limitations and task-management skills⁵. In this paper we assessed which factors influenced them to select forensic medicine as a career such as personal interest, personal reasons (eg: family , friends),geographical ,location influence from a mentor, lifestyle and financial rewards and future job opportunities in that field , helping the student to choice specialties by leading them and advise them via directors programs⁶.

This study support previous study⁵to work hard to help student during choosing specialty in verity of ways through creating opportunities to find job ,financial rewards and important thing is personal inserted , the beauty of this study appears the desire for forensic medicine of the students unfortunately the result was least popular specialties ⁷.Thus, more studies are needed to provide evidence-based data to higher education and health authorities to building and design strategies to improve the educational process in the study areas.The aims of the present study to assess awareness and affect factors to choice forensic medicine among medical students in Albaha University in Albaha area, Saudi Arabia.

2. METHODS

2.1. Ethical statement

Informed consent was taken from the participants.In the consent we insured that all information of the participants will be used only for the research purposes and the privacy of the participants will not be violated by any of the researchers. The importance and aims of the study were explained and permission to participate in the study was obtained from all respondents.

2.2. Study design

A cross-sectional study was conducted during the period from the start of February 2016 to June 2016 among medical students of Al-Baha University, Al-Baha, Saudi Arabia. The questionnaire was self-design questionnaire to gather information about awareness and affect factors to choice forensic medicine zamong medical students and conduct by well-trained persons. The questionnaire was pretested in a few subjects similar to the study participants (not selected in the study sample) before the study for validity. The questionnaire includes information such as questions about awareness , the affect factors related to forensic medicine and affect of the media in this part .

2.3. Sample size

The sample size was estimated using Raosoft sample size calculator⁸ with 7% accepted margin of error, 90% confidence level, 50% response distribution and 266 as a population size. The sample size was calculated to be 92 and we complete it to 95 to increase the study precision.

2.4. Study area

Al-Baha is a city in the south west of Saudi Arabia. It is the capital of Al-Baha Region nestled between the resorts of Mecca and Abha, Al-Baha is one of the Kingdom's prime tourist attractions. It enjoys a pleasant climate and is surrounded by more than forty forests, including Raghdan, al Zaraeb and Baidan. Al-Baha is the headquarters of the Governor, local councils and branches of governmental departments. Receiving the state's special attention, the city of Al-Baha abounds in educational, tourist and health institutions, It is considered the capital of the Ghamidi and Zahrani tribes in Saudi Arabia, And most of its inhabitants are from the native tribes⁸. Al-Baha University is a university in Al-Baha city, the capital of Al-Baha province, Saudi Arabia. It is a public university that was founded in 2006. The main campus is at Alaqiq about 25 km away from Al-Baha city. The other campuses are in Almikhwah, Almandaq, and Baljurashi. The university emphasizes public services in all of its disciplines⁹.

2.5. Study population

The study was carried out in the male section of medical college of Albaha University. The study sample was taken from all years (1st, 2nd, 3rd, 4th, 5th and 6th years). The questionnaire filled by participant and they put it after finished on box in lobby of medical college of Albaha University. The overall targeted number of the students was 266 male students. The sampling technique depended on randomness to select our samples, so we used Random Number Generator¹⁰ to select random medical students in Al-Baha University. Inclusion : any medical student male from level 1-12 in ALBAHA university . Exclusion : non-medical student.

2.6. Statistical analysis

Data were entered and analyzed using SPSS 19v (Statistical Package for Social Science, version 19). Proportions and frequency tables were used to summarize categorical variables. Continuous variables were categorized. Descriptive and inferential statistics were performed.

3. RESULTS

In the present study, a total of 95 medical students in all years of study in Albaha University were included. The age group 19-25 years with mean age of 21.36 (Table.1). All of student 100% had agree that forensic medicine is a part from medicine (Table.2).

Table No (1):Shows age among male students of Medicine College of Al-Baha University during the period from February 2016 to June 2016 (n = 95)

	N	Minimum	Maximum	Mean
Age	95	19	25	21.36

Table No (2) :Shows awareness by related questions among male students of Medicine College of Al-Baha University during the period from February 2016 to June 2016 (n = 95)

forensic medicine is a part from medicine	Frequency	Percent
YES	95	100.0

We measured the awareness of medical students about forensic medicine through their understanding of the concept of the forensic medicine, 34% of students believe it deal with the medical malpractice, about 48.4% of participants think it assess the possible causes of death, and 40% of them agree forensic medicine practitioners can assess the rape crime and fabrication crime. Only 29.5% of respondents know it deal with the disputed paternity, inheritance, change of newborns in maternal hospital the result, 34.8% of respondents state it assess injuries of children that may relate to neglect or abuse. about half of students think they give a certification of death (Table.3). Almost 34% of The medical students prefer forensic medicine as specialty (Table.4).

Table No (3) :Shows awareness by related questions among male students of Medicine College of Al-Baha University during the period from February 2016 to June 2016 (n = 95)

Assessment the medical malpractice	Frequency	Percent
I don't know	52	54.7
Disagree	10	10.5
Agree	33	34.7
Total	95	100
Assessment of possible causes of death	Frequency	Percent
I don't know	43	45.3
Disagree	6	6.3
Agree	46	48.4
Total	95	100.0
Assessment the rape crime and fabrication crime	Frequency	Percent
I don't know	52	54.7
Disagree	5	5.3

Agree	38	40.0
Total	95	100.0
Assessment disputed paternity, inheritance, change of newborns in maternal hospital	Frequency	Percent
I don't know	57	60.0
Disagree	10	10.5
Agree	28	29.5
Total	95	100.0
He/she gives a certification of death	Frequency	Percent
I don't know	44	46.3
Disagree	5	5.3
Agree	46	48.4
Total	95	100.0

The most influential factors in developing interest in forensic medicine were personal interest and personal reasons (eg: family , friends) about 84.2% of subjects . The number of responders who were encouraged by financial rewards, times of working and job opportunities 80% of students . About 82.1% of students were favored the nature of work(eg: deals with crime, dead body, medical malpractice)(table.5) .

Table No (4) :Shows dose the student like forensic medicine as specialty among male students of Medicine College of Al-Baha University during the period from February 2016 to June 2016 (n = 95)

Did you like forensic medicine as specialty	Frequency	Percent
YES	33	34.7
NO	62	65.3
Total	95	100.0

The TV and radio 62.1% they students believe that have no affect to know about forensic medicine, in other hand lectures, doctors, friends, social media, conferences and workshops that affect to know about forensic medicine 68.8%(Table.6) .

Table No (5) :Shows the factors that affect to choose the forensic medicine as specialty among male students of Medicine College of Al-Baha University during the period from February 2016 to June 2016 (n = 95)

Nature of work(eg:deals with crime , dead body, medical malpractice)	Frequency	Percent
Not effective	17	17.9
Effective	78	82.1
Total	95	100.0
Personal interest and personal reasons (eg: family , friends)	Frequency	Percent
Not effective	15	15.8
Effective	80	84.2
Total	95	100.0
financial rewards, times of working and job opportunities	Frequency	Percent
Not effective	19	20.0
Effective	76	80.0
Total	95	100.0

4. DISCUSSION

The present study examined the awareness and affect factors to choice forensic medicine among all years medical students studying in Medical College of Albaha University, Saudi Arabia. In this study all of students (100%) knows that the forensic medicine is a part of medicine. but majority of student (52.8%) they don't know a lot about forensic medicine . (7.7%) have only confused information about forensic medicine .(39%) have aware about forensic medicine .

This study has insufficient level of knowledge (36.3%) and sufficient level of knowledge (23.7%) compared to the average level of knowledge (40%)⁴ which guide us to know that the majority of student don't know a lot about forensic medicine , also there is a weak knowledge and limited awareness of the importance³. The factors that affects choosing specialty in this study was , high income (27.8%) , opportunities in the private sector (22.2 %), stimulated interest(22.2 %),acceptable working hours (22.2%)⁶.

In our study we have found that , the nature of work (eg: deals with crime, dead body, medical malpractice) is chosen as an effective factor by (82.1%) , personal interest and personal reasons (eg: family , friends) also chosen by (84.2%) as an effective factor ,the financial rewards, times of working and job opportunities is represented by (80 %) as an effective factor, but other studies was found that working hours and opportunities chosen by (22.2%) and high income by (27.8%)⁶.

The medical student in ALBAHA university seeing forensic medicine as specialty was (34.7

%) which is good , in comparison with the study that shows the forensic medicine least popular specialties 4.6%⁷ , (62.1%) of student think that the TV & radio have no effect to know about forensic medicine , but the lectures, doctors, friends, social media, conferences and workshops have more effect to know about forensic medicine , which represented by (68.8%) of student .

5. CONCLUSION

Although measures have been taken to reduce the feasible limitations of this study as much as possible, the main obstacle was lack of literatures and still some limitations in the following aspects; Selection bias has known effect on the validity of the study results. Failure to obtain information from a designated individual for any reason (absence or refusal to reply) was expected in this study especially incomplete response when academic grade requested .

The study showed the undergraduate students knowledge about forensic medicine is weak , also there is poor attitudes toward and limited awareness of the importance of it. So encourage of medical institutes to solve this issue is a big concern and they have to influence this knowledge by using the available channels to get student interest for forensic medicine . On the other hand must begin action to establishing mentor programs for all specialties to direct students to pick up specialty that suitable for them before clash with desiring that doesn't wanted . Finally , work very hard from medical education on the media the affecting to know about forensic medicine to deliver information to students in all side and do more studies to find proper media that affecting.

Funding : Non

Conflict of interest

All authors have declared that they have no conflict of interest.

Acknowledgments

Authors would like to thank the administrations of the faculty of medicine of Al-Baha University for facilitating this study. Also we would like to thank the students of this college for their participation in the study.

REFERENCES

- [1] David Wells : CLINICAL FORENSIC MEDICINE IN AUSTRALIA available at http://www.aic.gov.au/media_library/conferences/medicine/wells.pdf((accessed March 20, 2016)).
- [2] FORENSIC MEDICINE available at <http://www.forensic-medicine.info/forensic-medicine.html> ((accessed March 20, 2016)).
- [3] Mohammed S. Madadin, MBBS, MD : Assessment of knowledge about, attitudes toward, and awareness of a forensic medicine course among medical students at the University of Dammam2013
- [4] MadalenaCunhaa, RuiLibóriob, Mauro Coelhob: Knowledge Questionnaire over Forensics Nursing Practices 2016
- [5] Royal College of Physicians : How to choose your medical specialty 2015
- [6] Rawan Al-Fouzan, Sarah Al-Ajlan, Yousef Marwan, and Mervat Al-Saleh:Factors affecting future specialty choice among medical students in Kuwait2012

- [7] Abdulghani HM, Al-Shaikh G, Alhujayri AK, Alohaideb NS, Alsaeed HA, Alshohayeb IS, Alyahya MM, Alhaqwi AI, Shaik SA: What determines the selection of undergraduate medical students to the specialty of their future careers 2013
- [8] Al-Baha available at https://en.wikipedia.org/wiki/Al_Bahah ((accessed March 28, 2016)).
- [9] Al-Baha University available at https://en.wikipedia.org/wiki/Al_Baha_University((accessed March 28, 2016)).
- [10] Random Number Generator available at <http://stattrek.com/statistics/random-number-generator.aspx>((accessed March 28, 2016)).

ANNEXES

Table No (6) :Shows the media that affecting to choice forensic medicine as specialty among male students of Medicine College of Al-Baha University during the period from February 2016 June 2016 (n = 95)

Lectures	Frequency	Percent
YES	68	71.6
NO	27	28.4
Total	95	100.0
Your friends	Frequency	Percent
YES	54	56.8
NO	41	43.2
Total	95	100.0
Doctors of your college	Frequency	Percent
YES	74	77.9
NO	21	22.1
Total	95	100.0
Social media channels	Frequency	Percent
YES	68	71.6
NO	27	28.4
Total	95	100.0
Conferences and Workshops	Frequency	Percent
YES	63	66.3
NO	31	32.6
Total	95	100.0
TV and radio	Frequency	Percent
YES	36	37.9
NO	59	62.1
Total	95	100.0