

Comparative Study of Competencies of a Fresh Medical Graduate in Pakistan in General and for Forensic Medicine in Specific

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ABSTRACT

Background: Next compare these competencies with the competencies which graduates Pakistan Medical and Dental Council is registering. Secondly, the competencies of forensic medicine are compared with the competencies drafted by Pakistan Medical and Dental Council, once it is done 06 experts of the field of forensic medicine are interviewed in the light of the derived competencies to establish a draft for future competencies in general and for forensic medicine in specific.

Aim: To study and compare the competencies of fresh medical graduate from countries who have got a well-established medical system.

Methodology: It is a mixed quantitative and qualitative study.

Results: General competencies which are required by a fresh medical graduate from medical councils of different countries were agreed upon, however, Pakistan Medical and Dental Council have so far not tabulated any competency which is required by their medical graduate.

Competencies for forensic medicine were derived for comparison with competencies drafted by PMDC and further evaluated by 06 experts of the field. After multiple brain storming sessions, it was agreed that the competencies chalked by Pakistan Medical and Dental Council does not fulfill the current requirement of the community.

Conclusion: It was concluded that the general competencies available from different countries were agreed, however, experts of forensic medicine did not agree with the competencies mentioned by Pakistan Medical and Dental Council, hence, new competencies were established.

Keywords: Competencies, medical graduate, forensic expert.

INTRODUCTION

Competencies are the measurable or observable knowledge, skills, abilities and behavior. In general competencies which an artisan such as doctors, nurses, butcher, baker, must have in order to do their jobs and then designing a programme to ensure that they possess these competencies is required by all concerned authorities controlling different professions^{1,2}.

Doctors are expected to enhance their competencies to match the increased complexity of health care environment^{3,4}. Extensive work to achieve the minimum competencies for doctors have been observed in the recent past. Some countries have advocated competencies in such a comprehensive leaving foot prints for others to follow.

Different countries have worked extensively to develop competencies for their doctors, this work was done in different time spans. A bird eye view shows that in spite of their independent work, competencies derived were almost the same or close to each other. This raised suspicion, how was it possible that competencies derived in different time frame with people of different mindset developed competencies for medical doctors which were

close to each other. One thing which was common among all the countries was that doctors and medical associations have been influenced by Hippocrates, who did not chalk down the competencies but gave a comprehensive view about the ethics related to medical field among which the competencies were embedded^{5,6}. This was one of the main reasons why competencies of different countries were so close to each other.

This study is a mixed quantitative and qualitative study⁷. Data regarding the basic competencies is collected from the medical associations of different countries which is compared with the competencies drafted by PMDC⁸, from this data the competencies related to forensic medicine are derived for further comparison with the competencies narrated by Pakistan medical and dental council.

This study will help us to relate the position of our medical graduates in general competencies and competencies related to the subject of Forensic Medicine with the rest of the world. It will further guide us whether we fall short of the competencies, we are at par with the rest of the world or we are in a position to guide others to follow.

Interviews from subject specialists of forensic medicine were recorded who had a vast experience in this field. Their ideas were inculcated with the view to improve the level of competencies of forensic medicine⁹.

MATERIAL AND METHOD

This is a mixed quantitative and qualitative study¹⁰. Quantitative data was collected from the medical councils of countries who have already served a lot of time to establish competencies for their medical doctors¹¹. General competencies which are required from a medical graduate were derived and tabulated, these competencies were compared with the competencies drafted by PMDC

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for Pakistani medical graduates. From these general competencies, competencies related to forensic medicine were derived and compared with the competencies drafted by PMDC.

06 experts of forensic medicine who have worked for more than 10 years in the field on forensic medicine were included in the study.

In-depth interviews with open ended questions were asked from these experts about the competencies they expect from medical graduate regarding forensic medicine¹².

Experts with more than 10 years' experience, postgraduate qualification were included in the study. Those experts with more than 10 years' experience but no postgraduate qualification were not included in the study.

For this purpose, in-depth interviews were conducted. These interviews were recorded and important issues were highlighted. Satisfaction on required competencies of fresh medical graduate were also asked and evaluated.

RESULTS

The result is based on the competencies which have been laid down by the medical councils of the respective countries. These are the general competencies which are expected from a fresh medical graduate, so that he can

work independently and provide healthcare services to the community which has shown trust on him¹³.

During his routine medical work if he comes across some medicolegal case, what should be the minimum level of competency which is required from him at this level¹⁴. These competencies tabulated below (Table 1) are extracted from figures 1-4, which have been derived from the medical council of five countries.

The competencies which are common among these countries will be highlighted, under these highlighted competencies the matter shall be explored further to see the competencies related to forensic medicine in special, so that results can be compared with the competencies drafted by PMDC. This will help us for better understanding where we stand and guide us for further improvement if required.

Once this frame work has been developed 06 consultants from the subject of forensic medicine in Pakistan are interviewed to have an insight about the competencies drafted by PMDC and in the light of the competencies chalked by other countries new competencies shall be discussed which shall serve as a guideline for PMDC to develop comprehensive layout of the competencies related to forensic medicine.

Fig. 1:

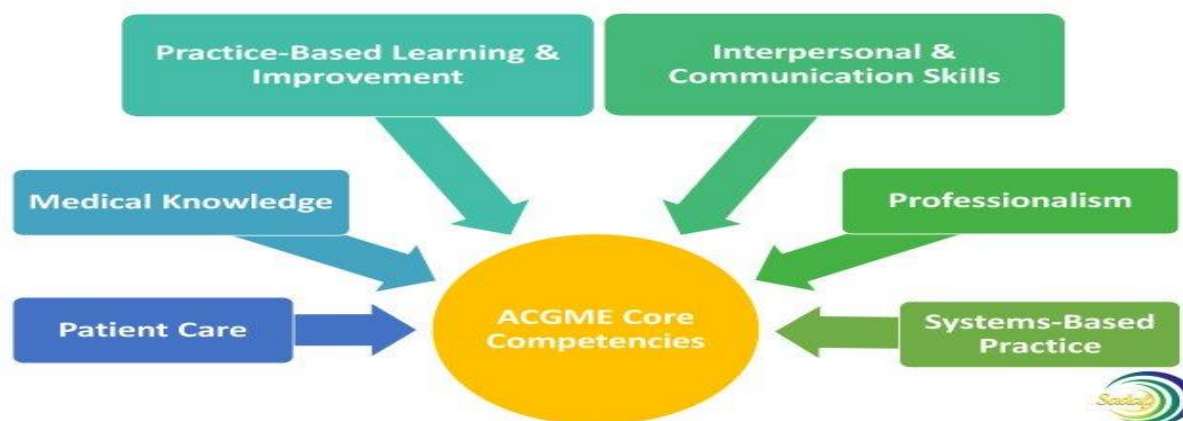


Fig. 2:

What are CanMeds competencies?

CanMEDS Competencies

- Medical Expert
- Communicator
- Collaborator
- Health Advocate
- Manager
- Scholar
- Professional



Fig. 3

- ### The Scottish Doctor
- **CAN DO**
 - Clinical Skills
 - Practical procedures
 - Patient Investigation
 - Patient Management
 - Health Promotion
 - Communication
 - Medical Informatics
 - **APPROACH and PRACTICE**
 - Basic, social and clinical sciences
 - Attitudes, ethics and legal
 - Decision making , reasoning, judgment
 - **PROFESSIONAL**
 - Role within health service
 - Personal development

Fig. 4

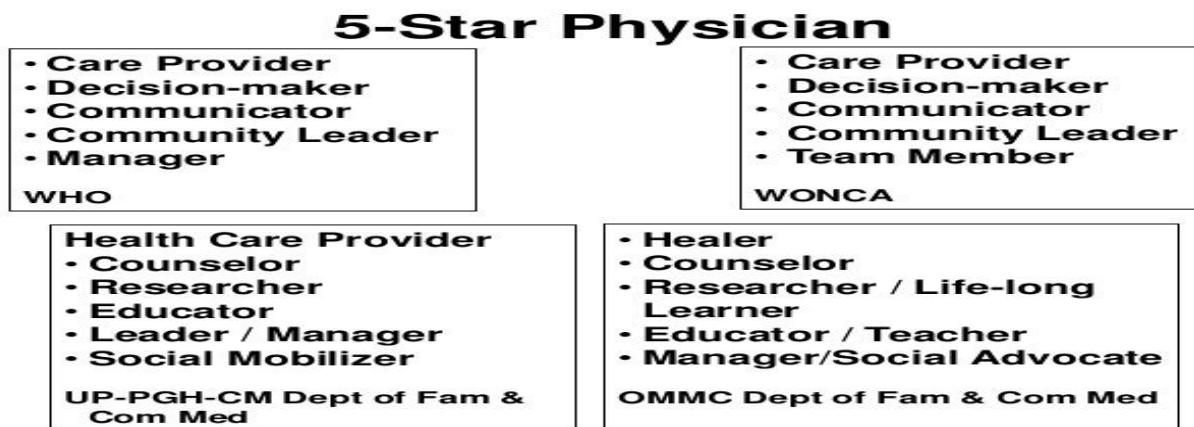


Table-1

Accrediting Bodies	General competencies							
ACGME	Patient care	Medical knowledge	Practice based learning and improvement	Interpersonal and communication skills	---	System based practice	---	Professionalism
Can MED	Medical expert role	---	Collaborator role	Communicator role	Manager role	Health advocate role	Scholar role	Professional role
Scottish Doctor	What the doctor is able to do	Medical informatics	Patient management	Communication	Clinical skills	Patient investigation	Practical procedures	Health promotion and disease prevention
	How the doctor approaches their practice	Decision making skills, and clinical reasoning and judgment	Basic, social and clinical sciences and underlying principles	---	Attitudes, ethical understanding and legal responsibilities	---	---	---
	---	Personal development	Role of doctor within the health services	---	---	---	---	The doctor as a professional
5 Star Doctor	Care provider	Decision maker	---	Communicator	Community leader	Manager	---	---
PMDC	Care provider	Decision maker	---	Communicator	Community leader	Manager	Researcher	Lifelong learner

A fresh graduate generally shall be care provider with basic knowledge of medicine⁽¹⁵⁾, he shall be competent enough to manage things and shall have good command on communication skills to make his objectives clear⁽¹⁶⁻¹⁸⁾, his decisions has to wise enough to justify his professional attitude¹⁹. These competencies are common among all the countries under study.

The forensic experts were discussed about the competencies of the subject in specific in the light of the general competencies. Many of the competencies were

overlapping and some new competencies were introduced by the experts in the light of their experience over the years. A forensic expert should have minimum competencies which are mentioned below which have been derived from the general competencies from table-1.

1. He should have basic knowledge of the subject²⁰.
2. He should be a good enough to manage things and situation²¹.
3. He should have strong communication skills²².
4. His decisions should satisfy the majority.

5. He should be a true professional²³.

These competencies are common with the competencies which all medical doctors are supposed have.

In addition to these he should have additional competencies related to forensic subject in specific which have been stressed by the experts of the field.

1. He should be competent enough to differentiate between medical and medicolegal case²⁴.
2. He should think reflectly about death and the process of dying²⁵.
3. Think critically about medicolegal investigation of death²⁶.
4. Understand the role of toxicology and histology in death investigation²⁷.
5. Gain an understanding of sudden natural death²⁸.
6. Encounter non-natural deaths of all types²⁹.
7. Learn about autopsy, when and how to do it, to uncover the cause of death and issues related to death certification³⁰.
8. Prepare comprehensive medicolegal reports³¹.
9. Awareness of medical ethics and law related to medical man³².
10. He should be aware of his role in the court³³.
11. Proper preservation of the specimen, and dispatch of concerned specimens to the respective departments⁴⁴.

DISCUSSION

To graduate as a medical doctor is not an easy and overnight task to achieve. It requires a long and rough road to travel. Once it is done a medical graduate acquires the minimum qualification to practice the art of medicine. This is the time when the community has to decide whether they can rely on the competencies of the person with whom they are going to share the secrets they are reluctant to share with someone else regarding their health. They are going to take the medicines prescribed to them by a doctor with minimum experience as they know the doctor is a fresh graduate with base line knowledge but no experience.

The purpose of current study is to compare the competencies of fresh medical graduate in general and forensic medicine in specific. Once this comparison is done it is further evaluated keeping the competencies drafted by PMDC, for better assessment about the level of competencies of Pakistan medical graduate in general and forensic medicine in specific.

The general and specific competencies which are common among the graduates of countries under discussion are knowledge about the subject, decision maker, manager, communicator and professional^{13,35}.

The experts of the field with a vast experience agreed with the above mentioned competencies and further suggested competencies related to the subject of forensic medicine. In wider aspect these specific competencies are somehow covered under the general competencies.

The experts of forensic medicine agreed that the general competencies in any case have to be present in a forensic expert, however, some additional competencies are expected which are specific for the subject only.

A fresh medical graduate should be competent enough to differentiate medicolegal cases from general cases, natural from un-natural deaths, sudden death from deaths related to some other cause including toxicological causes(36).

In case of un-natural deaths when and how to perform autopsy and how to prepare medicolegal reports. He should be well versed with routine court proceeding, follow the ethical principles learnt over time and should be professional throughout his routine work.

The competencies mentioned by different countries under their curricula fulfill the requirements of their graduates, however, when such competencies were compared with the competencies chalked by PMDC, it was a surprise that no specific competencies have been mentioned or tabulated in the curriculum mentioned by PMDC. The competencies mentioned in table-1 have been derived after a thorough study of the PMDC curriculum. However, the competencies related to forensic medicine drafted by PMDC are mentioned in table-2.

Table-2: Competencies of fresh medical graduate by PMDC

A	This course is the first step in the curriculum designed to introduce both classical and contemporary topics in Forensic Medicine & Toxicology to the students.
B	After taking this course students will be expected to have a basic understanding of the subject of Forensic Medicine & Toxicology and its role towards public, state and judiciary.
C	They should be able to work independently in primary and secondary health care level organizations and to provide excellent medicolegal work/certification and manage problems to be treated in courts of law.

The tragic part of these competencies is that the experts of this field do not agree with these competencies and suggest changes at a large scale so that a minimum standard can be established for all the graduates before they are allowed to practice the art of medicine independently(37).

The suggestion by the experts is based on the vast experience they have gained after working in all the sub-specialties of the field. They all possess the required knowledge, practical experience, multiple visits to the courts.

PMDC need to formulate new competencies in general and for forensic medicine in specific because this is a state subject, which have to deal with government directly or with agencies related to provide justice indirectly.

Whether a fresh medical graduate or an expert with vast experience, when dealing with any medicolegal case, there is no margin of error. It is assumed by the court that when PMDC registers a person as a doctor he is competent enough to handle all the general cases as well as forensic cases independently without any margin of error, if not so he shall not be awarded with medical degree.

To conclude so far PMDC have not framed any general competencies for fresh medical graduates, the competencies for forensic medicine which have been suggested by the council is not agreed by the experts of the field. To arrive at a better conclusion, it is suggested to form a body of experts who should brain storm to develop competencies which is based on the requirement of the community to fulfill the gap which still needs to be plugged.

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