

Role of Structured Career Counselling in Speciality Selection among Post Graduate Trainees

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ABSTRACT

Aim: To highlight the relevance, importance and necessity of structured career counselling for medical graduates and post graduate trainees with regards to specialisation decision preferences.

Study design Mixed method

Place and duration of study: Study conducted at sandmen provincial hospital from 1st September to 30th December 2021.

Methodology: This was two phase sequential mixed method study. The first phase involved qualitative exploration through a semi-structured interview with post graduate trainees from various specialties who walked into the radiology department of Sandman Provincial Hospital Quetta with identification of theme and subtheme to develop a questionnaire. Questionnaire was designed to collect various opinions on the theme and sub-theme. Questionnaire included 11 items with two open ended questions and all other closed ended questions. Questionnaire was distributed to target population and demand survey was conducted by collecting questionnaire after a week. It was anonymous to ensure confidentiality and autonomy to participants.

Results: The response rate was 71% while omitting the incomplete questionnaire. It was divided into two groups, 1) changed of speciality CS 8(16%), M-3(37%), F-5 (62%) and 2) without changed of speciality 43(84%), M-21(49%), F-22(51%). Results were also compiled by combining both the groups as total participants to check the variation in opinion.

The availability of structured career counselling for specialty selection will lessen the burden of decision making, total participants agreed were 44(86%), not in favour were 6(12%) and one answered with don't know (2%), { NCS (36(84%); CS (8(100%))}.

Conclusion: Based on results Medical Students are in demand of structured career counselling program to ease the decision of speciality preference and in favour of incorporating it in medical education to avoid stress and other difficulties faced by them.

Keywords: Structured career counselling, change of speciality (CS), Post graduate trainee,

INTRODUCTION

In the seventies, the term career guidance and counselling emerged concurrently. The non-professional people understood the term as it is only about helping people to decide on their occupation and educational paths. In the original context, the concept is about an organized activity that helps the individual to realize their competencies and trains them to plan the appropriate steps to develop essential skills that will lead to personal, educational, economic, and social advancement for the individual, family, society and nation¹.

Medical career decision – making is a process that begins before entry to medical school and continues up to point of retirement. There was unstated assumption that a medical degree is a complete vocational training so career choice has already been made, so further career support is unnecessary. In all medical training system, it is clear that this assumption is unjustified and career related decision are made throughout the career².

UK introduced Modernizing medical career (MMC) which help junior doctors to make career decision about specialty choices. In the USA since 1999 the Association of American Medical Colleges (AAMC) Careers in Medicine web-based resource offer online help for students in career planning as well as for training faculty in how best to use the resources with their students. Number of medical schools offer psychometric testing to assist in medical speciality choice decision in USA. Other researchers have constructed medicine specific- indicator such as the Medical Specialty Preference Inventory (MSPI) in USA and SCI 45/59 which is specialty choice inventory development in the UK. These are under revision since its birth to achieve comprehension³.

In Pakistan when medical students graduate, they try to pursue the advice of peers, senior medical students and teachers as structured career counselling is not available. In Pakistan there is informal minimal career guidance and no structured resource is available for selection of speciality. Our graduate and postgraduate medical education institution provides no systematic, structured

and well-organized programme or no specific corner for career counselling and guidance is available for selection of specialty. In the era of information technology, no web-based organized content is available at one place for help of medical graduates⁴.

As a medical graduate, it is understood that decision will be taken to leap from stem doctor to specialist who will be restricted to one specialized area of medicine and adults differ in learning abilities, interest, personalities and aptitudes which lead to a difference in achievements and level of mastery of specific medical competencies. Career planning requires self-understanding, exploring the variety of medical career possibilities for a job, the chance of postgraduate training, lifestyle and finally choosing a speciality to meet the personal demands, objective and also community requirements⁵.

Non-availability of systematic structured career counselling and guidance leads to confusion, waste of time and resources. Failure of proper selection can cause waste of talent, decrease interest, sense of failure, discontent and poor performance. This turn out to be foundation of improper utilization of human ability, change of specialities, drop out and even leaving health career.

The objective of study is to provide evidence that medical graduates are in need of structured career counselling which will envisions them about their true self and career environs with the help to make appropriate decision otherwise they encounter waste of time, money and stress with change of specialty and even abandoning the medical profession. This will also help in filling of those specialities which are neglected by the medical graduated but required by the society.

METHODOLOGY

This two phase study sequential mixed method is to emphasis on the role of structured career counselling among post graduate trainees in speciality selection. It was conducted from September 1st to December 30th 2021 at the sandman provincial hospital Quetta which is affiliated with Bolan medical college. Approval was given by Ethical Committee of Sundeman Provincial Hospital and Principal of Bolan medial college. The first phase involved qualitative exploration through a semi-structured interview with post graduate trainees from various specialties who walked into the radiology department of Sandman Provincial Hospital Quetta. It

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basically includes decision of speciality selection with and without provision of structured career counselling. Themes and subthemes from this phase was used to develop a questionnaire.

A questionnaire was designed to collect various opinions on the theme and sub-theme. Questionnaire included 11 items with two open ended questions and all other closed ended questions with categorised response of yes, no and don't know. Item includes qualification, gender, decision for speciality selection, change of speciality if yes than reason included, availability of structured career counselling, problems avoided by availability of career counselling program (stress, waste of time, waste of money and their opinion), preference of career counselling program either through institute or website and participation of government.

Questionnaire was distributed among target population and demand survey was conducted. Questionnaire was collected after a week. It was anonymous to ensure confidentiality and autonomy to participants. Data was recorded on excel sheet and analysed using SPSS 16.

RESULTS

Approximately 70 questionnaires were distributed among postgraduate trainees who were willing to participate in study. Fifty two participants responded but one Questionnaire was discarded due to incongruous response. Rate was 71%, with one discarded questionnaire 1.4%. Male were 24(47%), Female were 27(53%). Results were divided among resident with changed speciality 8(16%), M-3(37%), F-5 (62%) and didn't change speciality 43(84%), M-21(49%), F-22(51%). Results were also compiled by combining both the groups to check the variation in opinion.

Total participants	Changed speciality	Didn't change speciality
52 (71%)	8(16%)	43(84%)
Male 24(47%)	3(37%)	21 (49%)
Female 27(53%)	5(63%)	22(52%)

It was observed that availability of structured career counselling for speciality selection will lessen the burden of decision making, Total participants agreed were 44 (86%), who didn't favour were 6(12%) and one answered with don't know (2%).

If structured career counselling programme was available for your help than decision would be easier.

Participants who didn't change speciality		
Yes	No	don't know
36 (84%)	6 (14)	19(2)
Participants who changed speciality		
Yes	No	I don't know
8(100%)		

Total participants 50(98%) answered 'yes' for introduction of structured career counselling programme during medial education. Only 01 (2%) answered with don't know.

Do you think during the medical education program career counselling should be introduced?

Participants who didn't change speciality		
Yes	No	don't know
42(98%)		1(2%)
Participants who changed speciality		
yes	No	don't know
8(100%)		

Do you suggest that government should participate in it?

Participants who didn't change speciality		
Yes	No	I don't know
33(77%)	7 (16%)	3(7%)
Participants who changed speciality		
yes	No	I don't know
4(50%)	3 (37.5%)	1(12.5%)

Total Participants favoured web based structure were 48(94%) while 02(5%) answered no and 01(2%) answered don't know

Government participation was agreed by total participants 37(72%) Participants, 10(20%) answered with no and 4(8%) answered with don't know.

Do you suggest web based structure should be available 24 hours?

Participants who didn't change speciality		
Yes	No	I don't know
40(93%)	2(5%)	1(2%)
Participants who changed speciality		
yes	No	I don't know
8(100%)		

For Institution based arrangement for career counselling of speciality selection, including total Participants favoured with response of yes were 49(96%), 01(2%) answered with don't know and 01(2%) didn't give answer.

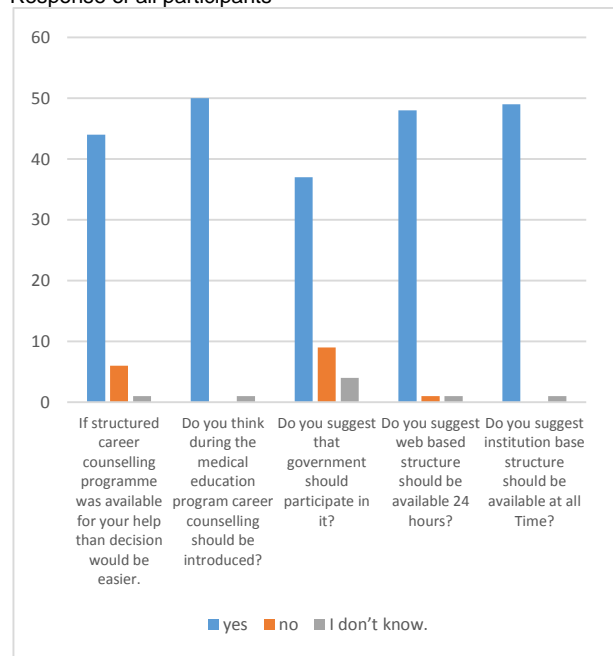
Do you suggest institution base structure should be available at all Time?

Participants who didn't change speciality		
Yes	No	I don't know
41(95%)		1(2%)
Participants who changed speciality		
Yes	No	I don't know
8(100%)		

Response of all Participants;

Questions	Yes	No	I don't know
If structured career counselling programme was available for your help than decision would be easier.	44 (86%)	6 (12%)	1 (2%)
Do you think during the medical education, programmed career counselling should be introduced	50 (98%)		1(2%)
Do you suggest that government should participate in it?	37(72%)	10(20%)	4(8%)
Do you suggest web based structure should be available 24 hours	49 (96%)	1(2%)	1(2%)
Do you suggest institution base structure should be available at all Time	50 (98%)		1(2%)

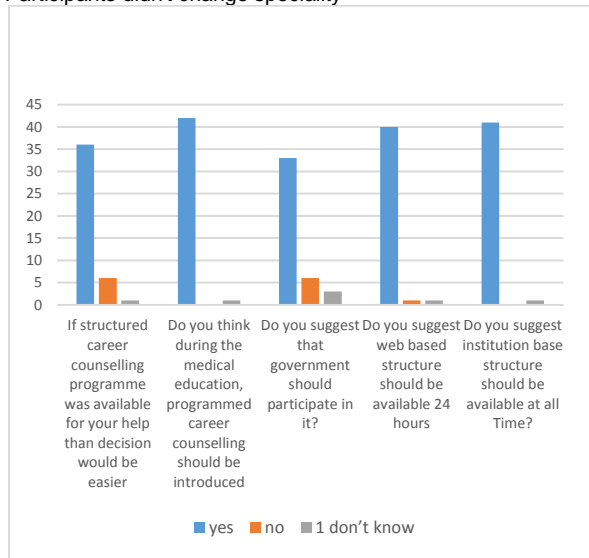
Response of all participants



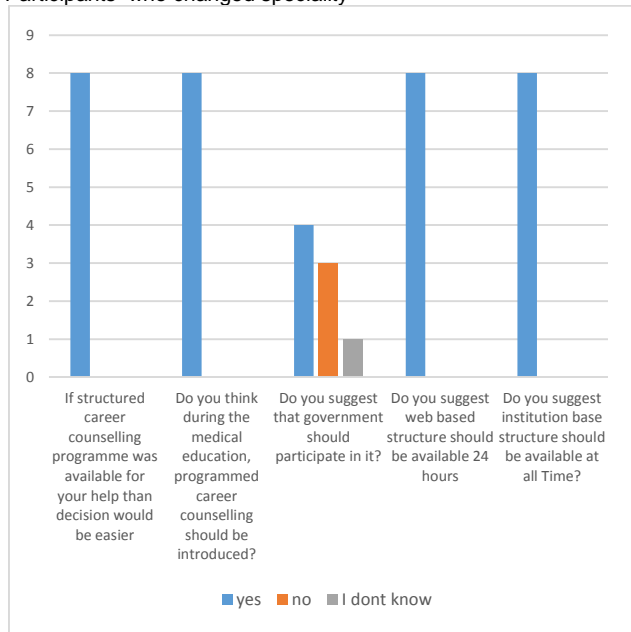
Participants were asked about issues they encountered as a result of the lack of comprehensive and trustworthy organized career

guidance programme. The most common issue was stress, which was followed by waste of time. Some participants responded with two or three answers and combining stress which was the priority with waste of time and waste of money.

Participants didn't change speciality



Participants who changed speciality



If structured career counselling programme was available for your help than which problems can be avoided	Participants who changed Speciality	Participants who didn't change speciality	Total resident	%age
Stress	3	19	22	43.13
Waste of time		14	14	27.45
Stress + Waste of money	3	4	7	13.7
Stress + Waste of money + waste of time	2	5	7	13.7
Waste of money		1	1	1.96

Problems avoided with the availability of structures career counseling

All participants	n	%age
Stress	22	43%
Waste of time	14	27%
Stress+waste of money	7	14%
Stress+waste of money+waste of time	7	14%
Waste of money	1	2%

Different reasons were given by Participants for selection of speciality, commonest was interest 26(51%), then 6(11%) residents answered with family pressure, no answer was given by 5(10%) residents, and 4(8%) said randomly and life style/social life, 2(4%) high scope and others mentioned as no idea, high scope, for humanity, peer advise, role model.

Factors for speciality selection
How did u decide about speciality?

Factor	n	%age
Interest	26	51%
Family pressure	6	11%
No answer given	5	10%
Randomly	4	8%
For relax duties/ For social life	4	8%
High scope	2	4%
No idea	1	2%
To serve humanity	1	2%
Peer advise/senior advise	1	2%
Role model	1	2%

Reasons for change of speciality;

Exhaustion ,mental stress, emotional instability ,tired, hectic routine with duty hours , unpredicted life style, no social life ,over burden
Good future and good return
Social environment, my home town need it
Change of interest
For learning opportunities
Randomly

DISCUSSION

A career is a continuous process that spans person's entire life and never ends. Parsons' simple method is still used as the foundation for career guidance today. It is 1) obtain a "clear grasp" of their own characteristics (e.g., interests, abilities), (2) develop knowledge about the needs and conditions (3) evaluate how to reconcile these two sources of information using "correct reasoning".

Choosing a specialty or the next stage in one's medical career after graduating from medical school is a difficult issue. Medical world is continuously innovating with introduction of artificial intelligence and robotic surgery. Being a doctor used to be the pinnacle of a career, but in order to compete, doctors must now pursue more in order to triumph. It is critical to make appropriate decisions not only at the completion of basic medical education, but also throughout one's career to be successful^{7,8}. El nagger ma et al proved in study that career guidance programme significantly improved students' career development and readiness levels by assisting them in making career decisions and it is recommended that career counselling should be integrated in formal curriculum⁹.

Medical graduates are in desperate need of Inventory, as well as career guidance and counselling programmes, in determining their future. Understanding individualities of person is essential for deciding on a career path during six years of education, as well as designing a life that takes personal characteristics into consideration¹⁰.

Attention-grabbing information about the career guidance experience of recent medical school graduates in Ireland emerged as a result of study which showed that career guidance programmes should be integrated into medical schools where they are currently lacking, both in Ireland and internationally. Career counselling is scarce in medical school and recent graduates believe it should be improved¹¹. A review of the literature revealed that there is a need for inventories to be created and modified for use in specialty selection. Such findings may act as a catalyst for career counselling services in medical graduates¹².

According to my study, most of participants (84%) who didn't switch specialties and all participants (100%) who switched specialties preferred structured career counselling to help them in decision making for speciality selection. Participant (98%) strongly agreed with introduction of structured career counselling programme during medical education by creating a demand to authorities through this study.

Hurl et al design a six-year career coaching model and suggested it should be spiral with curriculum that begins with the student's admission and continues until graduation which recommend phases, goals, competencies, and programme categories. He implemented systematic career coaching programme for medical students in Korea at Konyang University College of Medicine from 2016-2017 and concluded with pre and post sessions that before programme, medical student readiness level was not high for career choices but after the programme, they were better prepared and their behaviour to explore and approach to career decision also changed¹³.

Decision about speciality or future career path is crucial academic judgement for medical students. Considering my results, a career counselling program for medical students is required for promoting their self-examination of their preferences with understanding of their abilities and providing information about department and career direction¹⁴.

Several U.S. medical schools have recently begun to support the process of speciality decision through curriculum strategies. Colorado State University has organised career activity programmes. The first year to discover interests, aptitudes, and abilities, second year is to learn and make important professional decisions. Third year is for planning and field experience, fourth year is selection stage to decide and implement professional path. Continuously it is improved through research to determine any loop holes. It is necessary to develop a focused and continuous career counselling and guidance programme which start from First year where student sets career goals and develop a sense of career identity, 2nd year start collecting career information, 3rd year develop competency through practical experience and fourth year should be provided the stage where they can decide on career that suits their interest, aptitudes, abilities^{15,16}.

In Bolan medical college a programme by Baluchistan institute of psychiatry and behavioural sciences (BIPBS) is introduced from 2018 where first year students of MBBS and BDS of Bolan Medical College and 2nd year student of Quetta Institute of Medical sciences are delivered lectures and psychologist is available at the institute for the guidance where they can discuss their problems but no structured formal programme integrated with curriculum is introduced at the institution where students can develop self-realization with career exploration. British Medical Association (BMA) states that it is critical to address the issue of career advice provision in order to improve doctors' professional lives¹⁷.

Some countries have proposed reorganising and restructuring the career counselling system by incorporating it into accreditation requirements and national guidelines. The FMEC PG Implementation Project in Canada believes that national guidelines are required to ensure that Canadian medical schools consistently meet accreditation standards by providing dependable and high-quality career counselling to all medical students¹⁸.

There is no significant literature available showing the relation of structured career counselling with preference of speciality in Pakistan among medical graduates working at different levels. My study can help in establishing the fact that organized career counselling must be incorporated at the institutional level in Pakistan for medical graduates at a different level of the profession for decision making in speciality selection. Government must develop a proper policy for career counselling and institutes which are offering postgraduate courses should also participate by providing yearly draft to undergraduate institute about the specialties¹⁹.

My study showed that Participants strongly supported Structured career counselling at the institutional level (96%) or

through a web-based structure (94%). Government engagement was obliged by majority of participants (72%) but 20% were against that was higher percentage in comparison to other question response in my survey, which could be due to peculiar social and political environment of province. Web-based initiatives, such as Vanderbilt's CiM Web site, offer a variety of advantages including easy access to information, rapid distribution of resources and organisational information. It is simplest way to update content and quick communication between faculty and students^{20,21}.

According to Year et al., career counselling for medical students is always important because a good career decision leads to a satisfied person who can perform better and as a result, improve the quality of health care²².

Medical students face a lot of stress when it comes to career planning and deciding on a speciality. Time between medical school graduation and medical specialty selection is arduous and difficult process. stress is common throughout residency training and its various situational, professional, and personal origins among students which is not appropriate for their skills and personalities .^{23,24} Students and their respective societies benefit much from career guidance in medical education. Specific career choice leads to job contentment and improving their performance, resulting in higher healthcare standards^{25,26,27}.

University of Michigan Medical School (UMMS) introduced a new career development program (CDP) in 1999 and incorporates the 4-phase career development model defined by the Association of American Medical Colleges (AAMC) Careers in Medicine (CiM). Data showed by 2003, UMMS students had significantly higher satisfaction in all measured areas of career planning services when compared with all other U.S. medical students^{28,29}.

Medical students acknowledge that many factors influence career choice. Better understanding of the factors that influence students' career choices contributes to the development of a more accurate and comprehensive model for guiding medical students in their career decisions. This can improve future career satisfaction and personal well-being, as well as the distribution of graduates across specialties which are neglected but required by society. To keep passion for profession, solution is to provide career counselling and ensure that each student fully understands whole aspects of all medical specialties in order to make more informed and productive decisions^{30,31}.

According to my research, majority of participants chose their speciality based on their interests, while others did so owing to family pressure. Some participants did not respond, while others said randomly. These participants have red flags as they have no specific goal or enthusiasm for the chosen specialty and are in red zone of commotion to switch. Controlled life style and to pursue social life, high scope, serve humanity, peer advice, and role model were mentioned too by participants. M. Aslam et al worked among students and house officers of Karachi for speciality choices and concluded that many students and graduates favour the same medical speciality which leads to saturation³². There are many specialties which are ignored by the graduates either deliberately or unknowingly^{33,34,35}. Many doctors who need direction to reach the top promptly can easily be directed by career counselling and guidance. Different surveys demonstrate about female doctors in Pakistan who leave their career and choose family life can be assisted with career guidance^{36,37,38}.

Participants who changed their speciality enumerates different reason like uncontrolled life style, difficult duty hours, lack of learning opportunities, mental stress. some mentioned about future benefits, good return. Few point out about the need of society. It is believed that medical graduates must be given balanced unbiased information so they can make better selection³⁹.

Medical life style, encouragement, positive clinical exposure, negative clinical exposure, economics or politics, competency or skills, and ease of residency enrolment have all been identified as factors that influence students' career choices throughout their preclinical years^{40,41}.

The professional coaching programs and policy makers must attain knowledge about these factors to modify the existing framework that can accommodate the favoured, saturated and deserted specialties. Students who are influenced to pursue a specialisation in which they have no true passion may endanger the foundation of high-quality physicians and academicians. Policy makers must conduct a critical analysis and provide solutions to strengthen the fields that medical graduates overlook⁴². Results of my study showed that medical students are in need of a structured career counselling program and this demand survey can be used as evidence to stakeholders for development of career education programs merged in curriculum for medical graduates⁴³.

CONCLUSION

Medical graduates desire for structured career counselling program which will improve their readiness regarding speciality selection. All challenges can be identified and solved during program. Effective career counselling results in lowering the stress and improvement in determination⁴⁴.

Structured career guidance program should be introduced during the medical education of under graduates, along with appropriate quantitative and qualitative remedial measures to fill the gaps left by graduates⁴⁵.

Limitation of study is Generalizability as it is conducted only in one hospital so further research is needed for validity from other institute graduates and residents.

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