



ROLE OF CLINICAL CLERKSHIP FOR UNDERGRADUATES (MBBS) IN CHOOSING FUTURE SPECIALITY

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ABSTRACT

Introduction: Clinical clerkship (Electives) is a period of course during which the medical undergraduates are exposed to different speciality (Wards). The main task of these electives is to orient the graduates' interest towards clinical practices, and enable them to apply their medical knowledge practically. It also aids them in determining their choices regarding each speciality.

Objectives: To determine, the importance of attending clinical clerkship (at undergraduate level) in molding their choice for a specific speciality in future.

Method: The cross-sectional study, performed by 3rd year students of Jinnah Medical College Peshawar, from 15 May, 2025 till 1 September, 2025. A 23 item-based questionnaire was generated, with 1st three questions, related to demographics and rest 20 question based on topic. The study includes 3rd year, 4th year, final year students. Total 402 responses were collected; the total positive score was calculated. SPSS 27 was used for statistical analysis.

Results: Out of 410 responses obtained, 402 were completely filled with 8 incomplete responses, and were discarded. The responses comprise 49% (197) male and 51% (205) female students. Yearly class wise % responses mention below. The total of positive response was predicted from 20 question and later confirm by analysis through SPSS. 84.3% (339) response were in favor of clerkship, considered it as benchmark, which aid them in choosing speciality in future. Total positive score was 76.6% (308) clearly dominating the negative response of 23.4% (94). The reason and analysis mention in article.

Conclusion: A dominant positive score was calculated and hence proved the vital role played by clerkship; the extra hours of clinical rounds seemed to be of great importance for MBBS students in orienting themselves towards a specific speciality.

Key words: Clinical Clerkship, speciality, undergraduate.

INTRODUCTION:

Clinical clerkship (Electives) is the course content during medical career in which student requires training in given course option according to their interest. (1) Undergraduates are assisted in adjusting from classroom instruction to practical clinical experience through clinical clerkship. Through rotations across different medical specialties, they give students the opportunity to experience a range of clinical situations and patient types. By evaluating clinical competency, medical students are guaranteed to possess the information and abilities necessary to deliver safe and efficient

healthcare.(2)Worldwide, most of a medical student's first clinical experience occurs during medical school, specifically during the fourth and fifth years in 6-year degree and from third year in four-year degree. The clinical training phase is typically included in the third year of the medical school curriculum in North America, where the degree lasts four years. (3) Ethiopian medical schools follow a conventional curriculum, which includes basic science courses in the first two years and clinical training in the third year that is entirely independent.(4) In Pakistan a 5 years MBBS program is offer by medical colleges in which clinical clerkship exposure increases in last 3 years of the degree while first 2 years are for Basic Health Sciences. During clinical clerkship the students put up long hours of patient interaction, care and study which are psychologically and physically very demanding.(5)The clinical clerkship has been around for nearly a century in the United States. (6) "I taught medical students in the wards" is an epitaph that captures William Osler's unwavering commitment to training future physicians. A sharp observer, analyst, and synthesizer, he was also a prudent and skeptical bedside clinician. Osler gave students a part in the clinical service by instituting a clerkship system. In his view, illness was the primary teacher for the student, and instruction ought to take place at the patient's bedside instead of in a classroom. (7) The model that William Osler introduced at Johns Hopkins in 1896 is largely responsible for the modern clerkship. Although the clerkship is currently facing challenges, Osler's model has proven remarkably resilient.(6)For selecting a specialty in medicine strong incentive is required.(8) The insight of student about a specialty affects their future career selection. Preference and specialty selection changes with exposure to different specialty, educational experience quality, patient interaction, mentor and the hospital environment. By these all a medical students can select between two specialties according to their capabilities.(9)The role of clinical clerkship in choosing field of interest is of great significance for policy making around different country. The under-graduates' students have several career choices and it becomes challenging for students to select a specific career when they are uncertain.(10) The factors that affect the decision process includes individual interest, social pressure, ambition, financial reasons and quality of life.(11) Medical career is distinctive as it's observed to be generous as it provides opportunity to serve humanity more, compare to other careers.(10) All under graduates' medical students face a question that is "which specialty should I choose as a career?" At initial years most of the students have some idea about future specialty but their preferences changes with time.(12) After graduation around 15 % of students remains uncertain about career direction and they experience stress when choosing a career. This is notable because clinical clerkship helps students to obtain work experience and clinical skills, but should also offer them with the chance to explore career alternatives, choice and changing initial career options.(13)There have been different studies in which career opportunity for medical students and specific specialty clerkship importance have been stated both in Pakistan and other international countries. But data about the factors that affect the career selection, role of clinical clerkship in under-graduates' students of Pakistan, assessing medical student's knowledge and preferences about different specialty that they pursue in MBBS is very limited.(8)The present study is designed to explore the role of clinical clerkship in choosing filed of interest in students of colleges affiliated to Khyber Medical University (KMU) and the factors that influence their preferences.(8)

RATIONALE

Through rotations across various medical specialties, clinical clerkship give students the opportunity to obtain real-world clinical experience. Clinical clerkship play a crucial role in specialty selection for policymakers because students frequently lack clarity regarding their future career paths. In addition to providing students with the chance to investigate career options, clinical clerkship assist students in gaining clinical skills and work experience. There is little information on how clerkship affects specialty choice in Pakistan, particularly in colleges connected to KMU. This study attempts to fill that gap.

MATERIALS AND METHORD:

Study Design: Cross sectional study.

Setting: The study was Performed by a group of 3rd year MBBS students at Jinnah medical college Peshawar, affiliated with Khyber medical university,

Duration of study: Started on 15 May, 2025 till 1 September, 2025.

Approval of Study: The study was approved by the research committee of Jinnah Medical College Peshawar.

Sample size: A total number of 402 undergraduates were involved in the study, from all over KPK, medical colleges affiliated with Khyber Medical University.

Inclusion Criteria: Students of 3rd year to the final year were selected for study. Response from each year were kept open, random responses from each year were recorded.

Exclusion Criteria: 1st and 2nd year students.

Data Procedure

A 23-item questionnaire was generated, an idea taken from other research articles, after a literature search from PubMed and google scholar (reference). 1st 3 were demographic related questions (Age, gender, study yr), the remaining 20 questions format was yes/ no type.

The questions were related to their experience in clinical clerkship/ rotations, how it affects and helped them in choosing their future specialty and oriented their plans.

Questionnaire was generated through form A app, which was later shared through link with all Khyber medical university affiliated medical colleges.

RESULTS

The present study is designed to explore the role of clinical clerkship in choosing filed of interest in students of colleges affiliated to Khyber Medical University (KMU) and the factors that influence their preferences.9) students were satisfied with rotation which provides them exposure to different speciality, the negative responses were 23.1% (93). The factor that influences the students in choosing a particular speciality was the 1, Environment, 2, Excel in research, 3, interaction with patients, 4, Their confidence in certain wards as compared to rest of wards, 5, Case complexity in certain wards and the % r following:

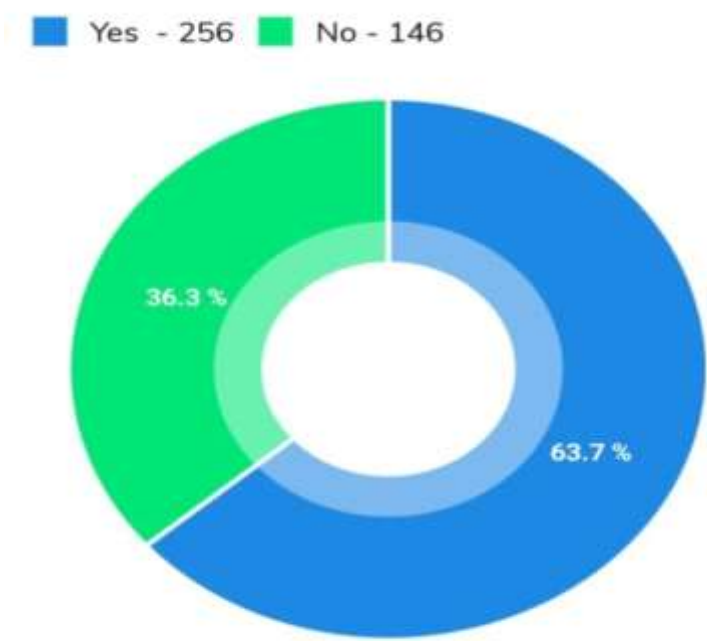
1. 76.6% (308) give a positive response and 23.4% (94) responses were negative.
 2. 63.7% (256) give a positive approach toward the question and 36.3% (146) gave a negative response.
 3. Patients' interaction helped in choosing a speciality and the positive% are 78.9% (317) compared to negative response of 21.1% (85).
 4. 74.9% (301) give a positive response toward their confidence, aiding in the speciality choice, negative responses were 25.1% (101).
 5. Case complexity paying off a positive role in speciality choice, positive approach was about 72.9% (293) compared to negative response of about 27.1% (109).
- About 75.1% (302) were satisfied with their supervisor helping them in each ward while 24.1% (100) were dissatisfied.

Rotation did helped the students finding out their weak point in certain wards which help them to improve and work on their weak points and also aid in their choices of choosing the best of field and the approach was followed as 80.1% (322) , negative 19.9%(80).

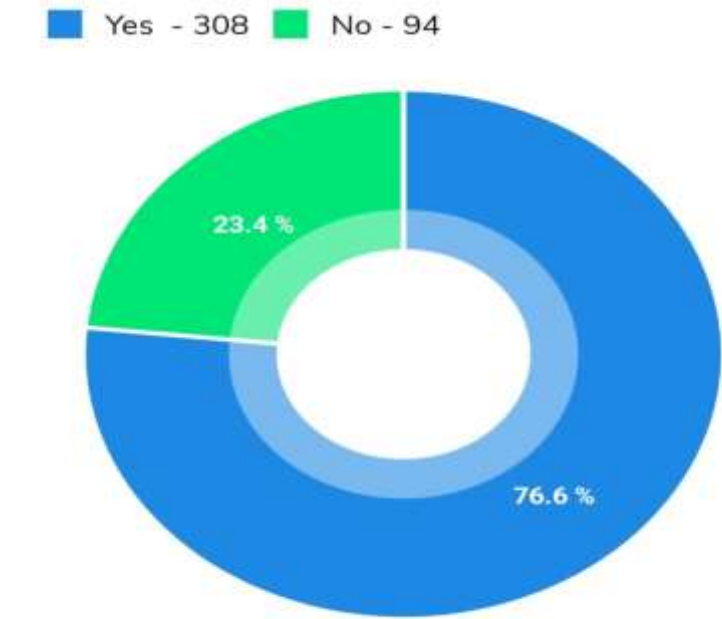
From these, we conclude that a net positive approach was received by the study in regard to clinical clerkship and its role in aid the mindset of undergraduates toward a specific speciality 65.4% (263) with negative response of 34.6%(139).

The students concluded that rotation did help them in choosing speciality and they won't have chosen the best of speciality for themselves without attention rotations [54.7% (220)]

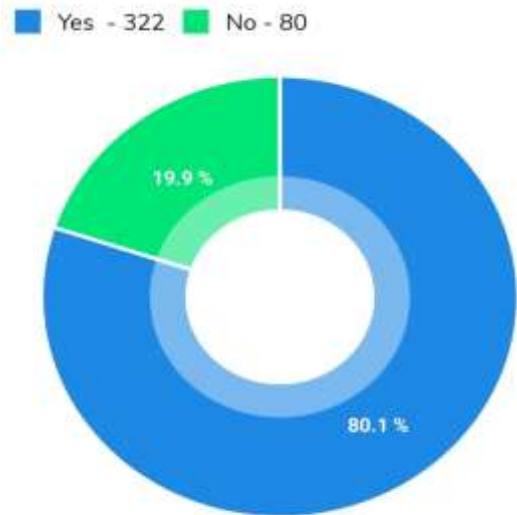
At the end, a proper conclusion was made that Clinical clerkship plays a significant role in molding the mind set of undergraduates toward a speciality that he/ she owns.



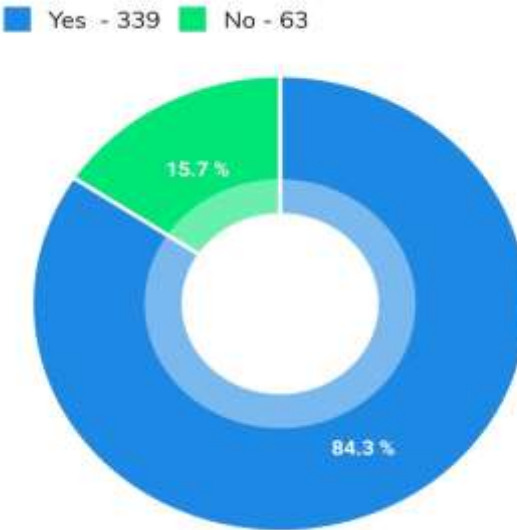
Potential for research in pertinent speciality



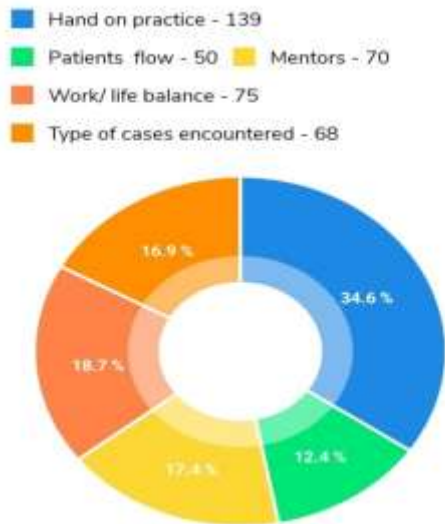
Environmental Factors affecting speciality selectio



Self-Determination



Recommending electives for future graduates



DISCUSSION

Rotations play a pivotal role in shaping medical students' career decisions. They help students clarify what kind of doctors they aspire to become, reducing uncertainty and stress during specialty selection. However, career choices remain influenced by multiple factors, including Clinical parental expectations, financial stability, job opportunities, clinical skill development, personal interest in medicine or surgery, merit-based government policies, and the availability of government jobs. Our study of 402 MBBS students produced the following findings:

1. Career expectations and autonomy – 70.4% of students reported that their clinical rotations aligned with their career expectations. A qualitative study of sixth-year students in a distributed integrated clinical rotation (IDEAL) similarly described the experience as “enabling,” noting that it built confidence, promoted autonomy, and shifted students' mindset from “knowing answers” to “knowing what to do.” The immersive, hands-on format aligned closely with learners' expectations and personal learning needs.(14)

2. Skill development – 79.4% of students stated that rotations significantly enhanced their clinical skills. Comparable findings were observed internationally:

Nigeria (2021): 81% of final-year medical students reported improved diagnostic and procedural abilities.

United States (2019): A multicenter study found 76% of students felt rotations greatly improved their confidence in patient management.(15)

3. Guidance and mentorship – 63.9% of students were satisfied with the guidance they received during clinical rotations. Literature indicates that the effectiveness of longitudinal integrated clerkship depends on continuity in patient care, supervision, mentorship, peer support, and institutional backing. The preparation of both students and clinical supervisors strongly influences satisfaction levels Saudi Arabia (2019): 61% of clinical-year students reported adequate guidance from consultants and residents.(16)

4. Specialty decision factors – 34.5% of students identified patient flow as a major determinant in specialty selection. This reflects broader findings such as those from Ireland (R.W. Glynn et al.), where career choice was linked to employment prospects, intellectual challenge, and career opportunities. In that study, 13.2% planned to pursue surgery, with males significantly more likely to choose it ($p = 0.006$). (17)

5. Confidence in specialty choice – 73.6% of students expressed confidence in selecting their future specialty after clinical rotations. Research broadly categorizes career choice factors into:

Educational factors – mentorship, early research, quality learning resources

Non-educational factors – networking opportunities, gender gap, residency requirements

Our findings parallel these results, highlighting that mentorship and exposure during rotations strongly enhance confidence and alignment with specialty interests.

CONCLUSION

Structured and supportive clinical rotations substantially improve students' confidence (73.6%) and skill acquisition (79.4%), directly aiding career clarity. When compared with international data, these results reinforce that mentorship, guidance, and clinical exposure are universal drivers of specialty choice. Gender disparities, systemic barriers, and external pressures such as financial concerns, bureaucracy, and mandatory service obligations—documented in other countries warrant closer evaluation in our setting.

A well-organized rotation program, complemented by mentorship and career counseling, can reduce confusion, sustain motivation, and help medical students choose specialties that align both with their personal aspirations and the needs of the healthcare system.

CONCLUSION

According to this research all students from medical colleges across KPK support the implementation of clinical clerkship.

Clinical clerkship helps them developing skills, enhance critical thinking, support their learning, spark their interest, and assist them in choosing their preferred specialty.

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