## Cardiology as A Career Choice for Medical Students in Saudi Arabia: A Cross-Sectional Study

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## **ABSTRACT**

The planning of the healthcare workforce depends on the knowledge of the students' preferences for specialties and the factors that affect such preferences. This research aims to identify the various factors influencing cardiology interest among medical students in Saudi Arabia, shedding light on potential barriers and motivators. This is an online cross-sectional survey study that was conducted in Saudi Arabia in January 2025. Social media platforms such as WhatsApp, X, and Instagram were utilized to recruit the study participants. The questionnaire tool for this research was developed based on extensive literature review. The study included a total of 454 participants. A significant majority (n= 348, 76.7%) had prior exposure to cardiology, primarily preclinical years of medical school (n= 182, 52.3%). Clinical exposure to cardiology varied, with 107 students (30.7%) experiencing 2-7 days, while 83 (23.9%) had no clinical exposure. Medical students' preferences towards cardiology were influenced by high research opportunities (n= 399, 86.7%), having a relative as a cardiologist (n= 392, 85.2%), and job market opportunities (n= 374, 81.3%). The analysis of factors influencing interest in cardiology as a specialty showed greater exposure to cardiology during medical school through lectures and examination was strongly associated with increased interest, with an OR of 27.82 (95% CI: 3.55-217.91, p =0.002) for those exposed to more than eight sessions. Clinical exposure, though less impactful, showed a trend towards significance for students with 8-14 days of experience (OR =0.39, 95% CI: 0.15-1.00, p=0.05). This finding highlights the need for greater development of structural cardiac teaching and relevant clinical exposure in medical schools. Clarifying misunderstandings and enhancing mentorship programs could motivate more students to pursue cardiology. With the rising number of cardiovascular disease cases in Saudi Arabia, a rising interest in this profession is essential to cater to the increasing demand for cardiologists and to fortify the healthcare system.

Keywords: Cardiology; Career; Medical student; Profession; Saudi Arabia

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