

LETTER TO THE EDITOR

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# The challenge of attracting residents in Cardiothoracic and vascular Surgery (CTVS): unveiling enduring potential

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## Abstract

The declining interest in pursuing MCh Cardiothoracic and Vascular Surgery (CTVS) programs presents a significant concern within the medical community. This letter addresses the multifaceted factors contributing to this decline and proposes strategies to rekindle interest in this prestigious and rewarding super specialty. The perceived demerits of a career in CTVS, such as the extended training period and the need for well-equipped facilities, deter potential candidates. Furthermore, competition with interventional cardiology and demanding work hours pose additional challenges. To revitalize interest in CTVS, this letter advocates highlighting its immediate impact, technological advancements, and emerging subfields. CTVS offers the unique opportunity to witness immediate life-changing results for patients, an aspect often underemphasized. Additionally, showcasing advancements in skills and technology, including minimally invasive procedures and innovations in transplantation, can capture the enthusiasm of aspiring surgeons. Moreover, the letter emphasizes the vast opportunities in emerging subfields, such as heart failure surgery and transcatheter aortic valve implantation (TAVI).

While the current situation may seem discouraging, CTVS remains a prestigious field with immense potential. By addressing the identified challenges and presenting the enduring rewards and opportunities within this domain of healthcare, it is possible to inspire the next generation of passionate and dedicated CTV surgeons, ensuring a bright future for the field. This letter encourages collaboration among medical professionals to address the challenges and actively promote CTVS as an exciting and fulfilling career choice. It highlights the importance of nurturing a new generation of surgeons who can contribute significantly to the ever-evolving field of cardiothoracic surgery.

Dear Esteemed Editor,

I am writing to express my deep concern regarding the difficulties encountered in filling the vacancies for MCh CTVS programs, which have recently experienced a significant shortage of applicants. This situation requires a thorough examination of the factors contributing to the apparent decline in the popularity of cardiothoracic surgery among aspiring residents. While the causes are

multifaceted, it is crucial to consider various aspects that may influence the current state of affairs.

## Perceived demerits and lack of popularity

### Extensive training and rigorous pathway

The path to becoming a proficient CTV surgeon involves extensive training and a substantial time commitment. After completing MBBS and MS General Surgery, aspiring surgeons must undergo rigorous MCh CTVS training, further lengthening their education. The prolonged training period, intense competition, and mandatory gaps between degrees may discourage some individuals from pursuing a career in CTVS.

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### Infrastructure challenges

Even after completing the rigorous training process, CTV surgeons require well-equipped facilities and a competent team to perform cardiac surgeries effectively. However, the cost and maintenance of surgical setups, along with the need for specialized junior doctors and trained cardiac anesthesiologists, pose significant challenges. The financial feasibility of owning and maintaining an independent setup is often unattainable, making CTV surgeons heavily reliant on existing hospitals or institutions.

### Competition with interventional cardiologists

Interventional cardiologists often play a significant role in providing initial advice and therapeutic options to patients, influencing their treatment decisions. In some cases, patients may prefer interventional cardiology procedures even when surgical intervention is more appropriate. Encouraging adherence to evidence-based guidelines and promoting a collaborative Heart Team approach can ensure comprehensive patient care and address misconceptions about surgical interventions.

### Work hours and work environment

CTV trainees face demanding work hours, which can be even more challenging than those of their international counterparts. The absence of standardized working hour regulations in India leads to long workdays, potentially discouraging medical students from considering a career in CTVS. Establishing guidelines to regulate working hours may attract more aspiring surgeons to this field.

### Revitalizing CTVS

#### *A field of immense potential emphasizing immediate impact and rewards*

CTV surgery offers the opportunity to witness immediate results, such as the restoration of cardiac function or the resolution of critical conditions. The profound satisfaction derived from witnessing a patient's recovery after a complex surgery, and the tangible impact on their lives remain unmatched. By highlighting these aspects, we can reignite interest in and appreciation for CTVS.

### Showcasing advancements in skill and technology

CTVS continues to be a specialty that relies on advanced skills and cutting-edge technology. Significant advancements, such as beating heart surgery, minimally invasive procedures, video-assisted surgery, endovascular techniques, innovations in transplantation, and mechanical support, have greatly improved

patient outcomes. By emphasizing these advancements, we can capture the attention and enthusiasm of aspiring surgeons.

### Presenting emerging subfields and vast opportunities

New subfields within CTVS, including heart failure surgery, transcatheter aortic valve implantation (TAVI), artificial hearts, ventricular assist devices, and heart transplantation, offer exciting prospects for early career advancement. The anticipated rise in cardiovascular disease incidence further underscores the need for a fresh wave of talented CTV surgeons, presenting abundant opportunities for professional growth and leadership.

While the current scenario may appear discouraging, CTVS remains a prestigious and rewarding super specialty. By addressing the identified challenges and highlighting the enduring potential of this field, we can attract passionate individuals who possess the necessary dedication and commitment to excel in this remarkable domain of healthcare.

Thank you for considering these valuable points, which I believe will contribute to the ongoing discussion surrounding the challenges faced in attracting competent junior residents in cardiothoracic surgery. Let us collaborate to inspire the next generation of CTV surgeons and shape a bright future for this remarkable field.

### Abbreviations

MCh CTVS	Master of Chirurgiae—Cardiothoracic and vascular Surgery
MS General Surgery	Master of Surgery
CTV	Cardiothoracic and vascular

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