

From India to Aruba: Insight into Teaching and Cultural Approaches in India and the Dutch Caribbeans Medical Education System

ARNAW KISHORE


Keywords: Comparative analysis, Comparison, Learning environment

Dear Editor,

As an academican, I recently transitioned from Assistant Professor of Microbiology and Molecular laboratory incharge in India to Assistant Professor of Microbiology and Immunology and Secretary Research at a medical school in the Dutch Caribbean. This provides a unique perspective on medical education in two distinctly different regions. I currently work at Xavier University School of Medicine (XUSOM), in Oranjestad, the capital of Aruba one of the ABC islands (Aruba, Bonaire and Curaçao) in the lesser Antilles [1].

Cultural Context and Institutional Background

From an Indian perspective, Aruba is often less known, yet it serves as a melting pot of diverse cultures reflected in the diverse backgrounds of the students enrolled in medical education at our institution. The diverse students are from different races and nationalities viz., Indian, Asian, North and South American, Afro-Caribbean, French, Filipino, Dutch and African heritage to name a few. The rich diversity creates a vibrant learning environment, fostering cross-cultural interaction.

Established in 2008, XUSOM is a prominent leading institution in the Dutch Caribbeans and is the only medical school in Aruba among the five medical schools in the region. It has been accredited by the Accreditation Commission on Colleges of Medicine (ACCM) and listed in the World Directory of Medical Schools underscoring its global recognition [2]. Additionally, XUSOM holds the prestigious New York State Education Department (NYSED) recognition, a distinction achieved by only a few selected Caribbean medical schools.

Comparative Analysis of the Medical Education System

1. Educational Framework

At XUSOM, students complete their basic science education on the island before moving to the United States (US) for their clinical rotation, a common path among offshore Caribbean medical schools. The US system places a strong emphasis on passing three major licensing examinations United States Medical Licensing Examination (USMLE) [3], before they can practice. In contrast, the Indian medical education system follows Competency-Based Medical Education (CBME) under National Medical Commission (NMC) guidelines [4], focusing on an integrated approach emphasising Early Clinical Exposure (ECE) and community-based learning.

2. Teaching Methods and Assessment

A. Caribbean perspective- Faculty employ diverse teaching methodologies like Clinical Case Presentation (CCP), Team-Based Learning exercise (TBL), Objective Structured Clinical Examination (OSCE). Lectures are structured with two 45-minute sessions with breaks. The combination of digital toll with traditional chalk and talk teaching enhances understanding. Students are exposed to Standardised Patients (SPs) and ECE, from year one fostering patient-centred clinical skills despite limited population size and

teaching hospitals. Assessment mainly relies on Multiple Choice Questions (MCQ) through examination software, with flexible scheduling and regular mentoring for struggling students.

B. Indian perspective- The CBME curriculum in India, standardised by NMC as per VISION 2015 [4] has led to an even approach across all medical schools, which emphasises integration across disciplines through horizontal and vertical teaching methods, including ECE and community-based learning as key components leading to overall clinical development of students. Lecture follows a traditional one-hour format, with two-hour laboratory session emphasising skills. Indian system still values traditional assessment methods, combining essay questions, practical examination and viva voce and involvement of external examiner for non biased evaluation. Students engage in extensive laboratory work from first year along with real patient interaction during Outpatient Department (OPD) postings and bed side teaching.

3. Curriculum Design and Research

A. Caribbean perspective- Caribbean schools operate independently, allowing curriculum flexibility and innovation. At XUSOM, curriculum is specifically aligned with USMLE requirement to maximise students' success with strong emphasis on high yield topic and clinical relevance. Unlike many Caribbean schools where research is not given emphasis, XUSOM supports extramural and intramural funded projects.

B. Indian perspective- Indian medical schools follow standardised curriculum under the NMC, ensuring consistency across institutions. Research has gained a prominence over the past two decades, with many institutions publishing their own journals.

4. Challenges and Key Difference

Both systems face unique challenges while maintaining distinct approaches to train future doctors for a better healthcare. Caribbean school face challenge in geography and limited clinical exposure due to smaller population and fewer hospital facilities. SPs and local clinic partnership help address this. India, the seventh largest country in the world, is home to numerous medical colleges. After the formation of NMC, many institutions have made a significant technological advancement, becoming increasing resourceful. However, some college in the interior region still lag behind in technological process.

Caribbean perspective:

1. Limited patient population for clinical exposures;
2. Fewer opportunities for hands on laboratory exposure;
3. Dependency on US for clinical rotation.

Indian perspective:

1. Technological advancements are rapidly improving, but some interior colleges still lag behind;
2. National standardisation leads to a rigid curriculum structure;

- 3. Less emphasis on licensing exam preparation;
- 4. Limited exposure to SP interactions.

Both Caribbean and Indian medical education systems have distinct strengths. Indian schools excel in practical experience and standardised education, while XUSOM leads in innovative digital learning, flexible student-centered approaches, strong research initiatives and high USMLE pass rates. Offshore schools like XUSOM show that quality education is achievable with blend of advanced technology, flexible learning and strong clinical training.

CONCLUSION(S)

Indian and Caribbean medical education system reflect distinct strength shaped by their unique context. Indian school excel in standardised education, rich clinical exposure and hand on learning due to access to large patient population. Caribbean school demonstrates adaptability, leveraging, innovative teaching

methodologies, USMLE focused curricula to overcome geographic and population limitations. XUSOM in particular stands out for its strong research initiative and global reorganisation, despite reliance on the US for clinical rotation. Together, these systems highlight how medical education can adapt to regional strength and limitations employing distinct yet complementary approach.

REFERENCES

[1] Hoetink H Aruba. History, Map, flag, population, climate, & Facts [Internet]. Encyclopedia Britannica. 2024. Available from: <https://www.britannica.com/place/Aruba>.

[2] Xavier University. Xavier University Aruba- Best Caribbean Medical School [Internet]. Xavier University. 2024. Available from: <https://xusom.com>.

[3] United States Medical Licensing Examination. [Internet]. [cited 2024 Oct 19]. Available at: <https://www.usmle.org/about-usmle>.

[4] Medical Council of India. VISION-2015 Document. New Delhi 2011. [Internet]. [cited 2024 Oct 19]. Available at: https://www.nmc.org.in/wp-content/uploads/2018/01/MCI_booklet.pdf.

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Microbiology and Immunology, Xavier University School of Medicine, Oranjestad, Aruba.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Arnaw Kishore,
Assistant Professor, Department of Microbiology and Immunology, Xavier University School of Medicine, Oranjestad, Aruba.
E-mail: kishore.arnaw@gmail.com

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Oct 21, 2024
- Manual Googling: Mar 03, 2025
- iThenticate Software: Mar 05, 2025 (3%)

ETYMOLOGY: Author Origin

EMENDATIONS: 5

AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was Ethics Committee Approval obtained for this study? Yes/No
- Was informed consent obtained from the subjects involved in the study? NA
- For any images presented appropriate consent has been obtained from the subjects. NA

Date of Submission: Oct 20, 2024

Date of Peer Review: Dec 04, 2024

Date of Acceptance: Mar 07, 2025

Date of Publishing: Apr 01, 2025