

**ALEXANDRE LEME GODOY-SANTOS** 

AFFILIATED PROFESSOR AT DEPARTMENT OF ORTHOPEDIC SURGERY, UNIVERSITY OF SÃO PAULO. SÃO PAULO. BRAZIL.

## Role of reading a scientific article in modern education of ankle and foot surgery: a strategy for adherence

Prioritizing the training of ankle and foot residents and fellows is strategic for the future of our specialty.

The scenery of medical education is changing rapidly, and adapting to new educational methods is critical for the modern ankle and foot surgeon to ensure an effective, productive, and inspiring learning environment for new specialists.

Modern strategies to achieve these goals involve developing educators' and students' skills.

Educators benefit from the commitment to up-to-date content and innovation in the lectures and discussions; it is important to define learning expectations clearly and monitor progress in gaining clinical knowledge and surgical skills. Therefore, it is necessary to divide this process into stages; throughout the learning process, the student should receive objective assessment and feedback to establish a close relationship with the educator.

In this context, the power of scientific evidence and reading scientific journals are important for learning.

No one is born a good reader of medical literature; this skill improves with practice and can be taught and learned. However, some educators can help new specialists and residents gain regularity and productivity from critical reading.

Initial screening can be done by identifying a few reliable and accessible sources, such as one general interest orthopedic journal and two subspecialty journals, as they provide enough content to consume before the next issue is released.

The initial evaluation of articles begins with a close reading of the article titles. Then, for those papers that seem worthwhile, the next step is to devote attention to the objective, method, and conclusion sections and ask, "Assuming this information is validated, would it matter to my practice?"

In the third step, to decide to read the entire article in depth, the articles' key question or its main objective should be answered, which will define whether the chosen methodology is valid in answering it.

In methodology, two central factors must be considered: validity and bias.

Validity has two aspects: internal validity, which determines methodological accuracy and represents impartial measures between exposure/intervention and functional/clinical outcome, whose threats are the different biases; and external validity, which allows the generalization of findings to the general population and is related to the study participants are representative of the target population.

Critical components of modern teaching for ankle and foot surgery residents and fellows include goal setting, educator-student collaboration, science-based knowledge gain, team, feedback, and use of technology.