

Meeting Summary for HP 299B

Feb 12, 2025 09:56 AM Singapore ID: 991 3067 4094

Quick recap

Nemuel and the team discussed the continuation of a presentation and the remaining questions related to step one, with a focus on whiteboarding and evaluation in clinical teaching. They explored the effectiveness of operating room teaching for medical students, the use of specific bond techniques in fixed orthodontic treatment, and the feasibility of conducting research without a control group. Nemuel also discussed various medical missions and techniques used in the Philippines, healthcare professional pathways, research design methods, and the importance of ethics approval for research involving animals.

Next steps

- All participants to complete the 9 questions for their research topics before the next meeting on February 26th.
- All participants to consider whether they want to include an intervention in their study design.
- Ellaine to research factors affecting bracket retention in orthodontic treatments.
- Derek to further develop his research question on operating room experiences for medical students.
- All participants to review the study design options provided in the interactive materials.
- All participants to prepare to discuss their chosen study designs at the next meeting.

Summary

Clinical Teaching: Whiteboarding and Evaluation

Nemuel announces that the meeting will continue with a presentation followed by addressing the remaining six or seven questions related to step one. He mentions using a summarization tool for distributing meeting summaries to customers. The group briefly discusses audio quality issues. Nemuel then introduces the topic of whiteboarding, mentioning three types, and encourages the presenter to begin. The presenter, initially considering a topic on community, decides to switch to evaluation, focusing on clinical teaching, specifically operational teaching.

Evaluating Surgical Rotation's Value for Students

The discussion focuses on evaluating the effectiveness of operating room teaching for medical students. Nemuel suggests conducting a descriptive study to understand what students are actually learning during surgical rotations and whether these experiences are still productive. There is concern that students may not be gaining valuable skills, instead often performing menial tasks. The group considers examining if the time spent in surgical rotations aligns with the competencies needed for general practice, especially in the context of primary care. They propose using a mixed-method approach to observe and describe students' experiences, with the aim of potentially influencing curriculum and policy changes.

Comparative Study of Orthodontic Bond Techniques

Ellaine conducted a comparative study on conventional edge and bond versus self-etch primer technique in fixed orthodontic treatment used in UP Manila MSD orthodontic patients. The study aimed to help clinicians in choosing between these two techniques in orthodontics. The specific research question was whether the use of a specific bond technique affects effectiveness in retaining brackets in a fixed orthodontic treatment. The study aimed to identify factors that influence retention and measure the effectiveness of the two techniques. However, Nemuel suggested that the study should also identify other factors that may impact the retention of brackets, such as patient eating habits, oral hygiene habits, and the impact of natural factors like saliva and oral flora.

Research Without Control Group Feasibility

Nemuel discusses the feasibility and ethics of conducting research without a control group, suggesting that literature can serve as a control in some cases. He explains that for Ellaine's study on orthodontic bracket retention, they will not use a placebo or experimental design with random selection. Instead, they will focus on measuring the bonding strength of brackets over time. Nemuel and Ellaine also discuss potential variables that could affect the results, such as tooth alignment and missing teeth. They conclude by reviewing the difference between counted and measured outcomes in research, with Ellaine's study primarily using measured outcomes for retention time.

Variables in Surgical Rotation Research

Nemuel explains the difference between independent and dependent variables in research, using surgical rotations and their effect on behavior as an example. He discusses

how the operating room experience can influence ethics and mentions past instances of student abuse during procedures. Nemuel then delves into statistical methods, explaining the use of t-tests for measured variables and chi-square tests for frequencies. He emphasizes the importance of formulating a hypothesis and choosing appropriate significance levels, noting that smaller significance levels require larger sample sizes. Nemuel also discusses the potential for misleading conclusions when interpreting statistical results, particularly in gender-based studies.

Philippines Medical Missions and Professional Pathways

Nemuel discussed various medical missions and techniques used in the Philippines, particularly in small cities, which are less common in the capital. He mentioned the Smile Foundation and their plastic surgery missions, highlighting the importance of dental care. Nemuel also shared information about healthcare professional pathways; for example, in India, after completing dentistry, one can directly pursue oral and maxillofacial surgery without an MD. He noted significant differences in healthcare professional training and pathways across countries, including the Philippines, India, Australia, New Zealand, and Indonesia. Nemuel mentioned the challenges faced by nurses and doctors in the Philippines, such as low wages and a lack of interest in residency positions, leading to a shortage of healthcare professionals in some fields.

Research Design Methods and Ethics

Nemuel discussed research design methods, emphasizing the importance of intervention to achieve research goals. He highlighted the need for ethics approval and clearance from animal ethics committees for research involving animals. Nemuel also mentioned the possibility of requesting exemption from review if the research does not involve people but maintains confidentiality. He encouraged the team to explore and play around with different research designs, providing examples and resources. The next meeting was scheduled for February 26, where they would discuss the next steps.