Participant Information Sheet

I, Dr. Mahmud SpAn, MSc, KMN, FIPM from FKKMK-UGM-RSUP DR Sardjito Yogyakarta, will conduct study entitled "Comparison of learning methods: Mobile application-augmented reality with traditional learning for pain management skills lumbar facet joint intervention with fluoroscopic guidance".

This research aims to improve residents' medical skills and knowledge better by using mobile application with AR as learning methods compared with traditional learning for management of interventional pain in the lumbar facet joint with fluoroscopy guidance.

The team invites you to take part in this study. This study requires around 82 participants, with participation period of around 5 weeks.

A. Volunteering to participate in study

You are free to choose to participate in this study without any coercion. If you have decided to participate, you are also free to withdraw/change your mind at any time without being subject to any fines or sanctions.

B. Procedures

If you are willing to participate in this study, you are asked to sign this consent form in two copies, one for you to keep, and one for the investigator. The procedures are:

1. This study was carried out after obtaining approval from the Research Ethics Commission of the Faculty of Medicine, Public Health and Nursing, Gadjah Mada University and the Education and Training Department of Dr Sardjito Hospital Yogyakarta.
2. You will be interviewed by a research assistant that ask your: Name, age, brand and type of smartphone, internet connection.
3. Your student identity will be collected by recruitment officers and carried out randomization and inclusion criteria.
4. Participants who meet the inclusion criteria sign a research agreement and are given initials, subject number and research number by the recruitment officer.
5. All groups of participants recorded brand types and smartphone types, coordinated by recruitment officers and data entry officers.
6. All groups of participants collected data on internet connections used by WiFi, cellular and providers to recruitment officers and data entry officers.
7. All groups of participants download Geekbench 5 and Speedtest applications and record score results.
8. All groups of participants carry out a pre-test first. Data entry officers and recruitment officers work together to divide groups. The first group was intervention and the second group was control.
9. On the first and second weeks, the intervention group downloaded the M-EduPain application which was coordinated by recruitment officers and data entry officers and studied the courses in the application.

10. On the first and second weeks, the control group attended lectures in class using the traditional method by the instructor using the same modules as in the M-EduPain application (without AR).
11. All groups of participants are monitored by recruitment officers and data entry officers based on subject groups.
12. On the third week, participants in the intervention and control groups took post-tests and received observations of intervention procedures at Dr Sardjito Hospital in the Surgery and Anesthesia Group Installation in the Anest (Application of Non-Surgical Interventions) / 4.00 on the 4th floor with an instructor.
13. In the fourth and fifth weeks, participants in the intervention and control groups carried out a skills examination (OSCE) at Dr Sardjito Hospital in the Surgery and Anesthesia Group Installation in the Anest/4.00 room on the 4th floor which was assessed by examiners.

C. Obligations of study participants

If you are willing to participate in this study, you are obliged to follow the study instructions and procedures as stated above. If something is unclear, you can ask the team for further questions.

D. Risks, side effects and treatment.

This study aims to determine the level of knowledge and clinical skills regarding learning to develop a mobile application for lumbar facet intervention pain management with fluoroscopy guidance for anesthesiology residents. The use of fluoroscopy may have an impact on study participants, but can be avoided by using an apron (radiation protection device or sledding apron) and installing radiation detection. This study and the team do not expect any risks and side effects during data collection period. If there is interference with the participants' lecture or education schedule, a time will be found that does not coincide with that schedule.

E. Benefits

The benefits gained after participating in this study are that you gain knowledge and skills regarding the development of a mobile application for lumbar facet intervention pain management with fluoroscopy guidance. Skills were only used during this research and we did not provide competency certification.

F. Confidentiality

All information regarding identity and information about knowledge and skills is kept confidential and is only known to researchers, research staff and auditors. The study results will be published without the identity of the participants.

G. Compensation

Those who take part in this study will receive internet quota compensation of IDR100,000 (one hundred thousand rupiah) during the study.

H. Financing

All costs related to this study will be borne by the researcher. Respondents are not charged.

I. Additional Information

You will be given the opportunity to ask questions and consider participating as a participant in this study. If at any time an undesirable incident occurs or you need further information, you can contact me at: Dr. Mahmud SpAn, MSc, KMN, FIPM with HP number 0812 269 7997. If you want to ask about this study, you can ask Medical and Health Research Ethics Committee, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada/RSUP dr. Sardjito Yogyakarta (Tel. 0274-588688 ext 17225 or +62811-2666-869; via e-mail mhrec_fmugm@ugm.ac.id)