

Commentary

Evaluation of “cadaveric oath ceremony” as a part of AETCOM teaching in Anatomy Teaching-Learning program for Phase 1 MBBS Students — A proposed methodology (protocol)

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Abstract

Background : After the implication of the AETCOM module by NMC (erstwhile MCI), the AETCOM classes are regularly arranged for the Phase 1 MBBS Anatomy students. Module no 1.5, “cadaver is the first teacher” is usually get taught by two successive sessions- lecture followed by ‘cadaveric oath ceremony’ where after an oath taking led by the Head of the Department, students offers floral tribute to the cadaver and promises for respectful handling in their dissection demonstration classes. In attempt to evaluate their learning, literature says that authors did upto level 2 Kirkpatrick’s analysis. But their actual behavior in handling cadaver during their dissection class (work-placed based) has never been assessed. In this protocol, out of the acceptable modes of Work-placed based assessments, Direct Observation of Non-clinical Skill (DONCS) is planned to be conducted, if needed in modified versions, considering all feasibilities. So, this protocol is aimed to assess the students’ behavior during their actual Anatomy classes.

Key words : cadaveric oath ceremony, AETCOM Session, Reflection Writing, DONCS.

AETCOM module was implemented since 2019 MBBS entrant batch as a part of Competency-based Medical Education (CBME). Alongwith the teaching learning methods, the assessment plans are also mentioned in each module. During the Phase 1 MBBS, when a student first time starts the dissection classes in Anatomy, a **cadaveric oath ceremony** is used to be hosted in all medical college of the state of West Bengal to show the tribute to the cadaver and the human remains, as a part of the training of AETCOM module “Cadaver is your first teacher”. This practice is going on for the last four years. During the ceremony all the students get oriented about the importance of cadaver in the teaching of Anatomy and the medical science, following which the ‘cadaveric oath’ get read out by the Head of the department and students offer their tribute¹.

As till date no evaluation has been done on the said programme in the state so far the literature is reviewed, for which this endeavor is been taken to

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Editor's Comment :

■ This is a project proposal (protocol), which is framed in the year 2023, approved by IEC on February, 2024; to evaluate the AETCOM teaching learning in Anatomy for the 1st year MBBS students. Here first time, as available in literature, ‘does’ level of Millar’s pyramid is been proposed to be addressed (for Anatomy students).

evaluate the impact of such programme among the students of Anatomy, in this institute, based of Kirkpatrick’s model.

The Kirkpatrick’s model² is basically five-levelled approach, which is recommended to evaluate any educational programme. The levels of the model is summarized as —

Levels	What to evaluate	How to evaluate
1	Whether participants have liked the programme?	Feedback regarding the programme
2	What the participants can learn from the programme?	Pre-post test/ Reflection writing/ Question-Answer session after the programme
3	How far their behaviour get changed?	Work placed based assessment (WPBA)
4	What is the long term effect in society?	Portfolio of the participants/ various social indicators
5	What is the return of investment?	Formula for cost-effectiveness assessment

As in this case, we intend to assess students’ behavior for how they are handling cadaver in Anatomy, so it becomes to address the ‘DOES’ level of Millar’s Pyramid. So, the assessment tools becomes – Work Placed Based assessment.

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(a) Mini-CEX cannot be done in this case, as it not clinical cases.

(b) Multisource feedback (MSF *alias* 360 degree evaluation) also cannot be done as to get feedback from the patient's relatives as well as the patient himself. Here in maximum we can arrange the MSF stations with feedback from the teacher, peer as well as the dissection hall attendant. So, this plan also aborted.

(c) Direct observation of Procedural Skill (DOPS) also cannot be undertaken as there would not be any procedure of skill domain.

(d) The Kalamazoo scaling, cannot be taken as it not encounter any live patient.

So, considering all feasibilities, the Direct Observation of Non Clinical Skill (DONCS) with certain modifications may be planned of, which needs only the trainee-trainer interaction³.

Research Gap analysis :

In 2017, a study from Pondicherry⁴ with 150 Anatomy students of Phase 1 MBBS, have explored students' reflection of the 'cadaveric disrobing ceremony'; where the ethical concerns and moral aptitudes of the students got exposed in form of narratives.

Study by Singal A, *et al*⁵ in 2020 have explored students perception for the utility of the cadaver in Anatomy learning in the 'thanks-giving ceremony' to the cadaver even amidst the lockdown times. They have expressed their gratitude to their silent-mentor in form of poem, gift cards. Study published in similar times with 220 students in JNMC Wardha⁶ has explored the students' gratitude and empathy to the cadaver when they were provided with the predesigned questionnaire after the cadaveric oath ceremony.

Later, a study from Chennai⁷ with 250 UG students has established students' concerns about the empathy and gratitude to the cadaver when they were taken into the session of 'donor is the first teacher'. Almost in similar time a in a different study from Hyderabad the result of a case-control pattern was explored. There 100 students were exposed to the cadaveric oath and 100 were not. All the students were made exposed to a questionnaire regarding the importance of the cadaver in learning of Anatomy. Students, who have taken the oath expressed better sense of bioethics, humanities to the altruism of the donor⁸.

A recently published article (2023) from Andhra

Pradesh⁹ have expressed the students' perception of importance of the cadaveric oath ceremony when they were interviewed with predesigned questionnaire after the event.

So, till the literature have searched for, everywhere the 'immediate feedback' (ie, the Reaction- level 1 of Kirkpatrick evaluation ladder) or maximum to the "attitude to the result of learning" ie, the Learning- Level 2 of Kirkpatrick evaluation ladder have been assessed. None of the work could enlighten the higher level, ie, actual work-place based survey of the skill (Level 3- Behaviour), which would be tried in our present work.

Till the literature searched for no WBPA assessments were been explored for the Phase 1 Anatomy students on the issue of handling cadaver during their Anatomy teaching-learning programme. DONCS, which was found to be used for assessing non-clinical skills as chairing a meeting with a range of senior stakeholders, managing differing or opposing viewpoints effectively, managing conflict with a colleague or person receiving care etc. There was the trainee-trainer feedback session after the over of the event. But in nowhere in literature it was found to assess the behavior of the learner while handling cadaver during Anatomy class¹⁰.

Research Question :

Whether the "Cadaveric Oath Ceremony" conducted as the part of AETCOM training in Anatomy, makes the impact in attitude and behavior of the students while handling cadaver/ human remains like viscera, bones etc. during their Anatomy practical classes?

AIMS AND OBJECTIVES

Aim :

This study aims to explore effectiveness of "cadaveric oath ceremony" for Phase 1 MBBS Anatomy students in attitude and behavior to handle cadaver/ human remains during their classes.

Objective :

- (1) To explore the reaction of students for the cadaveric oath ceremony.
- (2) To analyse the learning of the students in handling the cadaver or human remains.
- (3) To measure the behavior of the students while handling cadaver or human remains in their practical/ demonstration classes.

MATERIALS AND METHODS

Place of study : The study will be carried out in a government medical college of Kolkata.

Study design : Exploratory- Action research.

Study period : It will be carried on next 12 months.

Period required for data collection : 08 months

Study setting : The study will be carried on in the Department of Anatomy of a government medical college of Kolkata.

Sampling frame : Students of Phase 1 MBBS.

Sample size : all students will be approached. So expected sample size would be 200.

Inclusion criteria : The students, who will provide the informed consents, will be incorporated in the project.

Exclusion criteria : Students not consented to participate and/or not attended either of the sessions (cadaveric oath ceremony/ assessment programmes) will be excluded.

Study tool (Table 1) :

IEC clearance : Approval has been obtained (IPGME&R/IEC/2024/0031 dt. 08/02/2024)

Making & validating the tool : Necessary approval has already been obtained from the Institutional Ethics Committee as well as from the administration.

At first the two tools will be made and validated.

(a) For the feedback-questionnaire, which would be placed just after the “cadaveric oath ceremony” will be formed and validated by the MEU/CC members of the institute and the subject experts from outside the institute.

(b) Secondly a one day one hour session will be arranged for the faculties of the department of Anatomy to prepare the blueprint of the DONCS (Directly observed non clinical skill) stations. That will also be validated by the MEU faculties and CC

faculties respectively.

Proposed method of data collection — Now, the work will start from the upcoming ‘cadaveric oath ceremony’ programme. When in the academic calendar the respective event will be scheduled as the part of AETCOM teaching programme in Anatomy for UG Phase 1 MBBS students; just after the cadaveric oath gets over, the immediate feedback of the students will be obtained by using the ‘feedback questionnaire’. On requisite analysis this will reflect the Level 1 of the Kirkpatrick’s tier (Fig 1).

After one week, one session will be carried on for ‘how to write reflection’ and students will be asked to submit their reflections of the AETCOM class and cadaveric oath ceremony. Qualitative analysis will be carried on for those reflective writings and Kirkpatrick’s level 2 is expected to be assessed.

During the departmental assessment events, separate station will be framed for the assessment of how they are handling cadaver by using DONCS schedule made within the department. Students will be provided requisite feedback for their necessary rectifications. By this the ‘workplace based assessment’ level will be attempted to assess.

Statistics : The data collected will be checked for completeness and consistency. The quantitative parts of the data will be analysed Microsoft Office Excel 2010;

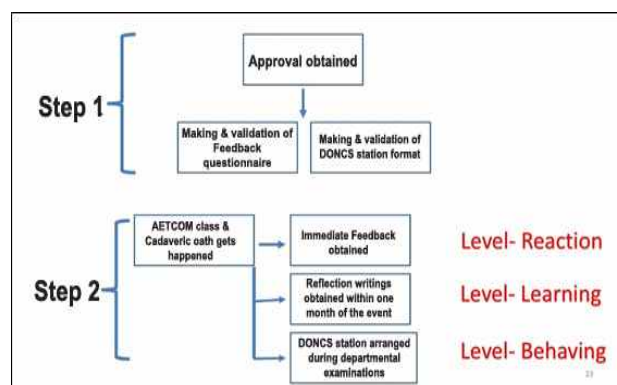


Fig 1 — Representing the plan of work

Table 1 — Showing Study Tool

Kirkpatrick Levels	What to evaluate	How to evaluate	Study tools proposed to be used
1	Whether participants have liked the programme?	Feedback regarding the programme	Feedback questionnaire after the cadaveric oath ceremony
2	What the participants can learn from the programme?	Pre-post test/ Reflection writing/ Question-Answer session after the programme	(1) Reflection essays gathered from the students (2) Theory questions on AETCOM in examinations
3	How far their behaviour get changed?	Work placed based assessment (WPBA)	Directly observed Non clinical skill (DONCS)

Table 2 — Showing Statistics of Data Collection

	Data	Proposed source	Proposed tool statistics	Proposed use of
1	How the students' liked the cadaveric oath ceremony?	Departmental record	Feedback form filled up just after the session	Quantitative analysis (descriptive statistics)
2	What the students' learnt from the cadaveric oath ceremony	Departmental record	Narrations in the reflective writings	Qualitative analysis (thematic)
3	How the students behaved actually while handling the cadaver	Scores in upcoming formative assessments	DONCS	Qualitative analysis (descriptive)

and the qualitative part of the data will be analysed thematically. Descriptive statistics including frequencies and will be used to summarise the findings (Table 2).

DISCUSSION

As this is a project-protocol only, so at present this section can not be built up. will be done on the basis of observation and analysis data.

CONCLUSION

It will be drawn on the basis of Observation and Results.

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