CADAVER CEREMONIES AS A FOUNDATION STEP FOR BIOETHICS: A PHENOMENOLOGICAL STUDY

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ABSTRACT

Introduction: A cadaver is the first “body” upon which students lay their hands. The student-cadaver relationship stabilised on humanities can serve as a simulation for future doctor-patient relationship. This calls for the “humanities” in medicine to be incorporated into the anatomy curriculum

Methodology: It included 150 students of the first year of medical college. An interpretative phenomenological analysis of students’ reflections upon first exposure to cadaver and during the gratitude ceremony was done.

Results: The responses were classified under four themes (cognitive, moral, behavioural and affective) according to the Triune brain model. Responses during gratitude ceremony are generated as such.

Conclusion: Our initiative provides adequate scope for reflective writing, fulfils most criteria for a hidden curriculum and acts as foundation step for bioethics. Rather than reducing into a narrower set of generalizable constructs as in qualitative studies, students’ holistic experiences when presented as such would convey the intended plurality.

KEY WORDS: Cadaver Disrobing, Phenomenological Study, Hidden Curriculum, Bioethics.

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INTRODUCTION

A cadaver is the first “body” upon which students lay their hands. The ambiguous nature of the body, its possession of both personal and material qualities [1], is often difficult for us to resolve before the commencement of regular dissection course [2]. The affective domain of the students is not a static entity. It varies depending upon the response to situations which is largely mediated by individual experiences. The emotional learning can also be acquired.

This calls for the “humanities” in medicine to be incorporated into the anatomy curriculum [3]. It is said that, dissection can serve to help foment a communicative, ethical, and humanistic approach to patient care [4]. The student-cadaver relationship stabilised on humanities can serve as a simulation for future doctor-patient relationship. The need to express and control emotions and not to suppress them seems to be a more positive approach in the training of medical students [5].

The weightage given for humanities based medical education has increased in recent years. Humanities education in the first year of undergraduate curriculum has broadened its palette to include narrative ethics where forms of fine arts and observational evaluations. Discussing the perception of students and making them introspect is the most efficacious method of infusing human ethics in the early years of medical education. In the West, the common way of bestowing additional personal qualities on the cadaver has been to regard it as the students' "first patient" [6,7]. Medical schools in Thailand defy this view of "first patient" and treat cadaver much more like a social person and less like an object [8]. They confer the status of "*ajarn yai*" meaning 'great teacher' to the cadavers by two ceremonies, which seem to be a powerful means to define the atmosphere and an ethical framework for dissection courses: the dedication ceremony some days before the first course session and the cremation ceremony at the end of the course [8].

The Thailand approach to dissection would help them to create a more personal relationship with their body donors compared to professionalism and empathy. Rather intimidating role of "doctor" to the donor patient, the Thai approach places the medical student in the already familiar role of "student." [2]. Irrespective of the perspectives, these commemorations and the associated reflective activities have positive effect in students. Studies [9,10] have shown that dissection of cadavers is a potential stressor to the students who have freshly entered the medical school and might induce anxiety and distress in them. To add, surveys of students on whole-body donation, carried out before and after their dissections, have shown that after completing the course students are less interested to donate their own bodies for dissection [11,12]. The dissection hall can be considered as a beginning of physician training in how to isolate and restrict their emotional responses to disturbing situations and how to deal with it when engendered by such exposures [13].

Rizzolo LJ [3] had stated that, "The dissection experience serves naturally as a springboard for discussions of psychosocial issues that in turn help to broaden student's perspective on patient

care". This might be because of the resemblance of donors with acquainted persons or other such factors [14]. This experience is invaluable in preclinical years because the students pay their utmost attention to psychosocial issues [3]. As Segal DA [7] has described, "'Laymen,' according to medical students, react 'emotionally' to the human body, finding bodily fluids 'disgusting,' sexuality 'exciting,' and mortality 'frightening.' By contrast, 'the physician' must react 'professionally,' always fulfilling his or her duties regardless of any 'personal feelings' or 'emotions.' When a student is getting exposed to stressors such as dissection, he / she experiences early concern followed by detachment as a coping strategy by adopting an impersonal, scientific attitude, and this is finally followed by the re-emergence of concern during the clinical years [15].

Undertaking an oath prior to cadaveric dissection is one of the ways by which the basic elements of bioethics can be introduced to first-year medical students [16]. The main intention of the oath is to make the students feel that the cadaver is not an object and it was our fellow human being few months ago. Medical schools across the world practice memorial services in remembrance of those who had donated their bodies for anatomical dissection [17]. Balancing between "detachment" and "concern" for cadavers, these ceremonies also aim at learner's reflections on mortality, respect, altruism, and personal growth depicted through various humanities modalities [18].

The aim of the present study is to study the affective domain of the students during their first encounter with cadavers and to promulgate the above said humanities modalities by conducting didactic sessions and memorial services.

METHODOLOGY

Three initiatives were designed to promulgate humanistic attitude in first year medical students.

First Initiative: The "cadaver disrobing" ceremony as mentioned by Dinesh Kumar V et al., [14], was conducted for the students of 2015-16 and 2016-17 batches by the faculties of Department of Anatomy and Medical Education Unit (MEU) in the dissection hall of

Pondicherry Institute of Medical Sciences. The session aimed at documenting the affective domain of the students ("emotional impact") when they see the cadaver for the first time.

The students were divided into 6 groups of 25 each. They were made to sit around the dissection table on which cadavers, fully covered by white cloth were placed. An emotionally appealing introductory presentation (audio and visual) was delivered to the students, where a brief narration was made from the cadaver's point of view. The draped cotton sheet was then removed gradually in stages and questions were put forth and the students were asked to document their feelings. Head of cadaver was exposed followed by limbs, thorax, abdomen and finally genitals. The sheet given to the students had main headings corresponding to the parts of the body exposed and the observations of students were recorded. The foot part of the sheet had a paragraph earmarked to document their naïve emotion in its entirety.

Second initiative: The second semester of the students had sessions on "humanities in medicine". One of the sessions was christened as "CURIOSITY FOR HUMAN BODY" which had three parts.

1. Global history of dissection – narrating the changes which happened from the ancient Greek period to the present day paucity of cadavers. It emphasized on the preciousness of cadavers and how difficult it was to procure it in previous centuries.

2. Indian history of dissection – from the days of Sushruta to the present and how we procure cadavers in our institute.

3. The third component was a role play where two groups of volunteers were involved. It stressed the importance of paying utmost attention in dissection classes and how it will pay off in the future when they become surgeons.

Third initiative: The ceremony named "GRATITUDE CEREMONY FOR THE FIRST PATIENT" was conducted at the end of dissection classes. It started with a pre-ceremony address, followed by a video presentation lasting for 10 minutes. It summarized the journey of the cadaver with the students, how it got progressively dismantled, how it got torn into pieces. The value

of their sacrifice was narrated as rolling verses from the cadaver point of view. Students were asked to pen down their feelings at this moment to make an emotional snapshot. Following this the pieces of dissected cadaver was "robed back" and offered gratitude with flowers. The cadavers were then returned to the tank in the dissection hall.

Table 1: Verses displayed during "Gratitude Ceremony"

<i>Do you remember me?</i>
<i>When you entered....</i>
<i>I too entered to teach you...</i>
<i>Yes... I am your" first patient"</i>
<i>I got disrobed...</i>
<i>I dedicated myself</i>
<i>To quench your quest for knowledge...</i>
<i>Your tender hands peeled me...</i>
<i>Sharp scalpels cut me into pieces...</i>
<i>Hard hammers broke my mandible...</i>
<i>My heart, lungs and brain were taken out from me...</i>
<i>Have they taught you well my dear??</i>
<i>At the beginning I was complete...</i>
<i>At the end, I have lost my physical integrity...</i>
<i>But have become engraved in you</i>
<i>In a form which cannot be erased...</i>
<i>I have accomplished my mission and successfully</i>
<i>Returning to my nest....</i>
<i>I gave everything for you...</i>
<i>What can I expect from you??</i>
<i>Can you promise me that your journey</i>
<i>Will continue with</i>
<i>Courtesy...Compassion and ...Empathy...</i>
<i>It's time to sign off.....good bye...</i>

Type of study: These initiatives are aimed at investigating how the initial exposure to cadaver helps in socializing students into a medical way of understanding, experiencing, and coping with the body. It is required to clarify the unfolding, qualitative process of students' experience in contrast to documenting the behavioural responses quantitatively.

The primary research tenet which we had in our mind was "what would be the uninfluenced, purely psycho-social response of a student when he / she gets exposed to a cadaver for the first time in his / her life?" As the study was conducted in the first year of medical education, the students seldom have inputs pertaining to clinical conditions which makes their reflections purely psycho-social. We collected the naïve

Table 2: Summarized Responses of the all 4 themes.

CLASSIFICATION OF RESPONSES	COMMENTS
AFFECTIVE	<ol style="list-style-type: none"> 1. "Emotionally disturbing" 2. "felt sorry for him to die so early and thinking about family" 3. "Feeling pity" 4. "I respect him because he is going to kick start all things in my career" 5. "entirely different experience"(n=2) 6. "feeling more professional like than a naïve girl" 7. "a truly humbling experience" 8. "thankful / respectful for being my first patient"(n=9) 9. "the session enlightened my view about anatomy as a whole" 10. "It was a good observational experience" 11. "the experience is awesome and unforgettable"(n=4) 12. "he has taught us humanity" 13. "human life gains its beauty by sacrificing" 14. "I should see him with concern" 15. "Now I feel really motivated in this profession" 16. "I felt awed by the still yet fascinating specimen" 17. "after seeing the video, I felt quite comfortable"(n=2) 18. "Makes me excited of the prospects of what I could be learning for the next 5.5 years" 19. "feeling sympathetic for the cadaver" 20. "feeling bit guilty on seeing her body" 21. "the state of the body seems pathetic and sense of sympathy overflows looking at her state" 22. "This was one of the moments I have been looking forward right from 6th standard." 23. "a mysterious and thrilling experience"
COGNITIVE	<ol style="list-style-type: none"> 1. "Stitches in the right thigh- suggestive of injury / operation?" (n=5) 2. "Calluses and cuts in leg – what might be the reason?"(n=2) 3. "the skin outside is diseased somewhat" 4. "he has bowed legs / rickets"(n=2) 5. "sunken abdomen"(n=2) 6. "traces of corrosion on skin" 7. "head has got some white patches" 8. "signs of injury in lower leg" 9. "his face is revealing poverty" 10. "she has a blister on his nose" 11. "has abrasion below knee" 12. "has a sad expression in face" (n=2) 13. "Pelvic region has a big scar – might be due to an operation?"(n=2) 14. "What might be the reason for his death?" 15. "I tried to guess what this man would have been when he was alive?"
BEHAVIOURAL	<ol style="list-style-type: none"> 1. "feeling excited" (n=4) 2. "feeling afraid to see an old male cadaver for the first time"(n=3) 3. "Feeling scary"(n=4) 4. "mixed feeling (excited and scary)" 5. "feeling nervous"(n=3) 6. "feeling shocked"(n=3) 7. "feeling dizzy" (n=2) 8. "When I saw the cadaver for the first time I cried. Teachers made me feel comfortable and confident" 9. "feeling bit tensed" 10. "not feeling good /disgusted" (n=3) 11. "hard to adjust the odour / nauseating"(n=5) 12. "initially anxious; felt comfortable on progressive revealing; could control my emotions" 13. "feeling sad" (n=2) 14. "felt pity at first, then pride and at last feeling humble and reverence" 15. "feeling weird and pathetic"(n=4) 16. "cadaver looks horrible and is frightening"(n=2) 17. "felt initially uncomfortable but sequentially scariness went off" (n=3) 18. "feeling curious to learn more about it"(n=2) 19. "Feeling depressed / sad; Seems I can't even go alone for the next two days" 20. "feeling panicky" 21. "felt afraid at first and after deep observation felt normal"(n=4)
MORAL	<ol style="list-style-type: none"> 1. "your sacrifice came to my mind when I first saw you" 2. "felt gratified to the person for donating his body for dissection"(n=3) 3. "empathy and compassion for the cadaver"(n=2) 4. "he teaches to be thankful for my life and treasure another's life as well" 5. "I understand that we are going to be dead like this. So we must use the opportunity to do good" 6. "thank him for his noble deed and letting us study through him" 7. "feeling proud to be in this prestigious profession" 8. "Dust thou art, dust thou returned was the emotional state"

Table 3: Reflections of the students about the journey with the cadaver documented during the “Tribute to my first patient” ceremony.

1.	<i>“a feel of satisfaction that we made good use out of it”</i>
2.	<i>“feeling thankful to the cadaver”</i>
3.	<i>“The body taught me everything. Although he is not a living man, I have become close with him as with each other. I am going to miss him as he is no longer a part of our lives. Thanks for his sacrifices”</i>
4.	<i>“For me, right now, you are not ‘the cadaver’. You are ‘my cadaver’ and I will always remember the things you have shown me”</i>
5.	<i>“The body gave itself for me to learn and daily taught me something new. It reminds me to be a good doctor and show courtesy to all”</i>
6.	<i>“When I am joining the college I had fear for cadavers but now I don’t have it. On seeing the dissection of my cadaver I wanted to become a surgeon. My cadaver taught me to know my own feelings”</i>
7.	<i>“My cadaver played an unforgettable role in my life by devoting itself”</i>
8.	<i>“After death everyone wishes for dignified last respects. But the cadaver has sacrificed it to help us. By becoming good doctors, I am sure that we can pay the last respect to the cadaver”</i>
9.	<i>“it taught me things which are beyond books”</i>
10.	<i>“at first I was not comfortable to touch the cadavers but now I realize that cadavers are our passive teachers”</i>
11.	<i>“I learnt not only about anatomy but also about compassion”</i>
12.	<i>“The cadaver gave me the first chance to see how a dead person looks like. Since our cadaver was the only female, I had a special concern about her past life and reason for death. When we broke her skull to remove the brain, I was moved out of emotion”.</i>
13.	<i>“I thank from my heart for his dedication”</i>
14.	<i>“Our cadaver is a female. Female life always start with dedication and ends with dedication”</i>
15.	<i>“By observing daily I have developed an affection with the cadaver. I learnt to deal with bodies in a compassionate way”</i>
16.	<i>“By learning from the cadaver we gave a person another purpose to exist even after death”</i>
17.	<i>“he may be illiterate but he served as a teacher after death”</i>
18.	<i>“During the initial days of dissection, I felt pity for the person lying dead as he has also gone through the same life I am going through”</i>
19.	<i>“we had destroyed his whole appearance, yet he remain smiling”</i>
20.	<i>“the cadaver has fulfilled its mission and we will carry forward the things learnt from it”</i>
21.	<i>“Our cadaver is our honourable teacher. It has taught us empathy, balancing of emotions and detached concern”</i>
22.	<i>“Dissection as a whole taught me the art of patience and building team work”</i>
23.	<i>“Dissection hall is indeed a place where dead teaches the living”</i>
24.	<i>“Many mysteries of life got revealed when we started to dissect him. We named our cadaver and treated like our friend”</i>
25.	<i>“After watching the video which tells us what all we have engraved from our cadavers I have developed a huge respect to this unknown person”</i>
26.	<i>“The cadaver which was wholesome is now torn into pieces just for the sake of us in the journey of gaining knowledge”</i>
27.	<i>“It helped me to overcome and suppress my feelings. One year ago, I would have run away from touching someone dead or ill but this experience changed me a lot”</i>
28.	<i>“I wish to donate my body after death in order to give wisdom to the upcoming medical students”</i>
29.	<i>“At last, we will have him in our memories”</i>
30.	<i>“The truth is he is the only teacher who teaches without scolding us for doing mistakes”</i>
31.	<i>“I wish to donate my body after death so that I can be useful to others like me getting knowledge from cadavers”</i>
32.	<i>“At this moment the dissection hall is filled with an air of sentiment and emotions from our hearts”</i>
33.	<i>“It has given out all of it for the sake of us to learn. What am I going to do back in return, for I had used through it”</i>
34.	<i>“Thank you for this program which helped me to look at a person in a scientific manner. This has changed my way of approach”</i>
35.	<i>“If being a doctor is noble then I would say my first patient is more nobler”</i>
36.	<i>“We utilized our cadaver not only to gain anatomical knowledge but also compassion and respectfulness”</i>
37.	<i>“I feel very much privileged now”</i>
38.	<i>“I was surprised to revisit our journey with the cadaver throughout the year”</i>
39.	<i>“This is the highest sacrifice which can be made by a person”</i>
40.	<i>“The cadaver shows how our life is multi-dimensional. Through dissection we would also understand how united can we be for a purpose”</i>
41.	<i>“I had learnt that human body doesn’t have the same structure in everyone. When the lungs were taken out, we found cavitation in it”</i>
42.	<i>“our cadaver gave us an opportunity to articulate with what we mean by life and death and doing so ponder about our own mortality”</i>
43.	<i>“he lived for others; but dies for us”</i>

responses from 150 students of 2015-16 batch during the gratitude ceremony and 150 students of 2016-17 batch during disrobing ceremony. Phenomenology is a type of qualitative research which relies on the principle that "experience is a conscious process". It depends on documenting the immediate responses of the participants from their point of view and which is not mediated by any presuppositions or scientific knowledge [19]. The data were analysed using an interpretative phenomenological analysis consisting of six steps: data collection, empathic immersion, meaning units, constituent themes, situated structure, and common structure [20,21].

Analysis: As our study is phenomenological, the analysis was iterative, fluidic and multi-directional. Each reflection was read and the emotional part of it was shelled out. Next, we read the entries and clustered them according to emerging common themes. Four common themes were identified according to the "Triune brain model". The exhaustive collection of reflections were now streamlined according to common themes. A general structural description of the phenomenon was coined out which took into consideration how the common themes fit together and got implicated one another as a whole. Most of the reflections emerging as concise phrases from the data were reduced into themes and subthemes which were generated as a table..

Themes: MacLean [22] had suggested that the human brain is not a single entity, rather it is a composite structure made of three brains. The oldest or "original" one forming the core is known as the reptilian or "R" complex, controls the behavioural responses of humans to a stressor. The second brain or limbic system wraps it and controls the affective / emotional responses to the stressor. The entirely human brain is known as the neo-cortex which forms the shell and controls the cognitive and moral responses of humans to stressor. This theory which has its implications in psychological studies was used in our analysis to form four themes namely cognitive, affective, moral and behavioural.

We followed the process of "bracketing" by which the procedure was not explained prior hand, thus maintaining the integrity of the quali-

tative research. Similarly during the gratitude ceremony, following the video telecasting, students were instructed to pen down their feelings. Most of the reflections stressed the importance of knowledge gained via dissection and the "sacrifice" of the cadaver to serve a purpose. We can't compartmentalize those into different distinct subdivisions as we did for the cadaver disrobing ceremony. The reflections are narrowed down into phrases which marks the completion of second phase of phenomenological research analysis.

RESULTS

Responses from 150 students of 2016-17 batch were collected. By adopting phenomenological analysis the reflections were narrowed down into concise phrases. These phrases were grouped and based on conceptual similarities four themes emerged out namely 1) affective 2) cognitive 3) behavioural and 4) moral. The responses are summarized in **Table 2**.

During the gratitude ceremony, the students of 2015-16 batch were asked to pen down their experience with their table cadaver throughout the year. We laid emphasis on inculcating the humanities in students. Those who were positively affected said the ceremony humanized the cadavers, made them more appreciative towards the donors, and validated their emotions. Most feelings were iterative and emotionally charged. The responses are generated as concise phrases and all converged into few themes. Significant quotes are generated as a table (**Table 3**). The responses of these students during the cadaver disrobing ceremony was published [14] in a previous article.

DISCUSSION

The initial encounter with the cadavers often makes the student emotionally vulnerable. It has been emphasized that apart from learning anatomy and developing dissection skills, the overt learning outcome for medical students is often to cope with the "emotional confrontation" on the initial days of dissection [23]. On the course of dissection, most students latently adopt a "perspective switch" between the concept of a learning tool (rational aspect) and a human being (sensitive aspect) [24].

If a student fails to adopt in such a way then he / she may develop symptoms like exhaustion, “burn out,” cynicism, impaired empathy in patient–physician relationships, or being unable to deal with the stress of working with live patients (25, 26). The first student-cadaver encounter in dissection hall is the “nodal point” - from absolute convergence to comparative divergence [27]. The present study is the extended process of our initiative named “cadaver disrobing”. In both the studies we intended to document the affective feelings in its naïve form. So we opted for a phenomenological methodology, a form of qualitative research. As they are effective in bringing to the fore the perception of an individual from their own point of views, it seldom fits any structural or normative assumptions of the researcher. According to *Bolton*, [28] emphasis of medical humanities should be on critical conceptualization and analysis, reflexivity and reflective capacity. Sticking on to the core principle of phenomenology assumptions / presuppositions of the researcher are ‘bracketed’ in order to gain understanding of the experience. Any phenomenological investigation begins from a standpoint free of hypothesis and preconceptions and find its own shape when the perceptions are analysed in an ‘intertwining’ manner. Our primary aim was to document the pluralistic visualizations of the same subjective experience as it invokes new ways of thinking and interpretation.

In a similar phenomenological study [24], the utterances of the students were categorized into four themes namely [1] initial emotional impact, [2] human referents, [3] coping strategies, and [4] ways of perceiving cadavers. The initial emotional impact induced behavioural responses in a category of students. In our study, we adopted a “Triune brain” model, based upon which the behavioural responses purportedly stemming from the diencephalon. During the course of dissection, these students have developed coping strategies to ameliorate these behavioural responses.

The second theme of responses was ‘human referents’ where students consider the cadaver like a “living person” having a previous life story, family, human-like appearance, and special

organs like the brain and eyes [29]. In our study, we further classified the responses as cognitive, affective and moral. The students who gave cognitive responses were able to effectively ‘detach’ themselves emotionally from the cadaver and observe it to seek the cause of death and signs of diseases they know off. Students who gave moral reflections were filled with gratitude whereas students giving affective reflections were emotionally moved.

The differences in the perceptions can be explained by Lief and Fox model [30] of “detached concern”. When a student confronts the cadaver for the first time, he / she is emotionally vulnerable towards it (concern phase). Following this, when he / she starts to dissect the cadaver the concern shrinks and detachment develops. This detachment allows him to operate in a similar way how physicians treat their patients empathetically at the same time not getting emotionally submerged. Later, when he / she enters the clinical years, it is said to re-emerge as a compassionate concern. This is the ideology behind western medical schools advocating the students to consider cadaver as their “first patient”. In our initiative also we conferred the same status to the cadaver.

Fig. 1: Spectrum of benefits for the first year medical students by our initiative.

In contrast, eastern countries like Thailand, honour the cadavers with the special status of “teacher” and conduct two different ceremonies 1) the dedication ceremony some days before the course session and 2) the cremation ceremony at the end of the course [31].

We conducted a gratitude ceremony at the end of our dissection schedule ensuring that the last rites are being paid to the first patient. We had a priori induction that some themes might

emerge on the due course of analysing the reflections. But, most reflections emerged as different shades of compassion and gratitude, valuing the “sacrifice” of the donor.

Medical education is deemed to impart some implicit learning processes apart from the formal learning modules. These implicit processes can be grouped as “hidden curriculum”. Some of the learning processes of the hidden curriculum [32] which can serve as a foundation step for bioethics are loss of idealism, adoption of a “ritualised” professional identity, emotional neutralisation [33] change of ethical integrity [34]. As a result of our initiatives, we intend that we have achieved loss of idealism as a part of coping strategy and emotional neutralisation as a part of disrobing and robing ceremonies. Also many students can adapt the role of a doctor when they consider the cadaver as their “first patient”. As per *Coser RL* [35], a medical student possibly have an “ambinormative expectations” by which he / she not only have to behave like a student while learning anatomy but also have to behave like a physician-to-be to treat the cadaver as a human with concern. This can be equated with adoption of a “ritualised” professional identity, another feature of hidden curriculum. The reflections uttered during gratitude ceremony is a clear example of change in ethical integrity. Thus, it can be summed up that our initiative fulfils most criteria of an ideal hidden curriculum.

Limitations: Though we strictly adapted to the basics of phenomenology while analysing the results we can't generate suitable themes during the closing ceremony. We focussed on the student's varied perception to the experience as a whole and we believed the narratives which was given were genuine. This has limited our study in achieving a single objective result. Nevertheless, we had imparted our fullest efforts to snapshot the “holistic emotional portrait” of the students and transfer the multiple subjective realities of an experience. The analysis is more horizontal rather going in-depth as our study sample is bigger.

CONCLUSION

This study, being phenomenological in its approach, reveals that students' perception

towards first exposure to cadaver is varied. Their responses can be categorized into four domains according to the ontogeny of brain. Our initiative provides adequate scope for reflective writing, fulfils most criteria for a hidden curriculum and acts as foundation step for bioethics. Rather than reducing into a narrower set of generalizable constructs as in qualitative studies, students' holistic experiences when presented as such gain its plurality.

Conflicts of Interests: None

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