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Flexner has fallen: Transitions in medical education system across time, a gradual return to pre-Flexnerian state (de-Flexnerization)

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Abstract

The modern medical education system has gradually evolved starting from 1910 incorporating the suggestions by Abraham Flexner, his public disclosure of the poor conditions at many medical schools provided a means to galvanize all the constituencies needed for reform to occur. He could say what other reformers could not, due to their links to the medical education community. But now we are again going back to a pre-Flexnerian state due to multiple reasons such as gradually diminishing importance of basic science subjects for the students, the decline in the number and quality of investigator initiated research among clinical researchers, lesser emphasis to bedside training by means of detailed clinical examination and making appropriate observation of signs to reach to a diagnosis rather than over reliance on the laboratory tests and radiological modalities for the diagnosis, poor exposure to basic clinical skills starting from college throughout residency and the trend of disrespect and absenteeism from both theoretical and clinical/practical classes. The attitude of students is just to complete their required attendance so that they are not barred from appearing in examinations. This de-Flexnerization trend and regression to pre-Flexnerian era standards, ideologies, structures, processes, and attitudes, are bound to beget pre-Flexnerian outcomes, for you get what you designed for.

Key Words: Flexner era; Medical education system; Outcome based curriculum; Basic sciences; Early clinical exposure

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Core Tip: Learning is the process by which experience is transformed into new knowledge. Flexner's suggestions should be reinstituted in the medical education system. There are many dilutions almost to the pre-Flexnerian level, mostly on the part of students who are focused on just getting their degree and becoming doctors and on the part of faculty who spend less time with the students because more time is given to patient care. Although the majority of them are professed to be implemented.

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INTRODUCTION

The medical education system is currently one of the most dynamic systems and in a continuous state of flux. Adopting the changes is justifiable by the requirement to increase educational standards and instruct the upcoming generation of physicians based on patient outcomes rather than course content (outcome-based curricular reform movements). The most revolutionary change to the system occurred in 1910 as a result of the Flexner research[1] which reorganised the North American and Canadian medical education system. The report included a brief summary of the deficiencies in medical education at that time, which were as follows: insufficient pre-medical education, which prevented students from understanding scientific principles; an excessive amount of didactic work done by the teachers; a dearth of student clinical work; a dearth of tests of practical work; and an insufficient amount of time spent working and studying[2]. More than a century has passed since the Flexner report from 1910 criticised the overall standard of medical education. The Johns Hopkins approach of academically based post-graduate physician education[3] was praised in the report as the gold standard. Since then, this strategy has nearly totally gained traction in the United States and Canada, with some variations across MD and DO institutions. Medicine has completely blended into higher education, with everything that involves for the calibre of medical education (a University-based curriculum). All students mix academic instruction with hands-on training at medical facilities. In spite of the fact that the amount of responsibility given to students has greatly decreased over the past 30 to 40 years, they continue to engage with patients and participate in their treatment[4]. Flexner was a staunch advocate of establishing stringent requirements for training future physicians. He advocated that doctors should treat patients with a critical mentality and continually hunt for evidence to support the legitimacy of their advice, deviating from the then-current perspective of physicians who showed ignorance and arrogance. He anticipated that the duties of physicians would change from being "specific and therapeutic" to becoming "social and preventative"[5]. But more importantly, he was a strong supporter of the importance of having a strong foundation in basic sciences and research in medical education, the requirement that clinical faculty members should be scientists rather than merely practitioners, the requirement that they be full-time "triple threat" academicians rather than full-time clinicians dabbling as part-time adjunct teachers with no training in scientific investigation, and the requirement that medical education be based on university curriculum[3] instead of a proprietary vocational school. In short, he forged and emphasized the academization of a profession, the Scientification of a practice, the multidimensional aspects of the medical faculty identity (full-time clinician, full-time educator, and full-time investigator), and that undergraduate medical education requires a professorial-level of education and training.

American medical education underwent a transformation in the middle of the 19th century. It was led by early medical researchers who had studied in France and Germany, where they had witnessed the development of experimental medicine and more importantly, had learned the principles and practises of science[6]. The University of Pennsylvania School of Medicine, Harvard Medical School, and University of Michigan Medical School all expanded their programmes of study in the 1870s, added new scientific subjects to the curriculum, started requiring laboratory work from all of their students, and started encouraging medical research. The Johns Hopkins University School of Medicine soon climbed to the top of the rankings after opening its doors for the first time in 1893. The programme at Johns Hopkins was designed to be completed in four years with nine-month terms. Admission was restricted to those having a college degree (and certain scientific courses), and the laboratory and clinical clerkships served as the primary teaching methods. The Johns Hopkins model was a hybrid of the French and German model, with the preclinical phase emphasizing the German model of university-based and laboratory-trained in basic sciences and scientific methods of inquiry, and the clinical phase emphasizing the French model of hospital-based and bedside-trained in clinical practice[6]. Numerous "medical" specialties, including scientific allopathic medicine and pseudo-scientific medical specialties such as osteopathic, homoeopathic, rheumatic, integrative, physiotherapy, and ayurvedic medicine, were taught in these medical colleges as well. Additionally, rich and motivated medical students who were studying in hospitals and universities across Europe, notably in England, Scotland, France, and Germany added clinical and laboratory training to their studies. Doctors in America around the turn of the 20th century had a wide range of medical knowledge, therapeutic beliefs, and skills for treating the sick due to the variability of their training experiences[7].

Not only in the United States but also in other nations across the world including China, Europe, Japan, Saudi Arabia, India, etc., the medical education system has gradually evolved. In the 1940s, it was noted that medical education needed to advance and change due to the industrial revolution, the growth of information technology, and the changing global environment. Due to the separation of pre-clinical and clinical training as well as the growing tendency of specialisation

in education, programmes emphasising comprehensive patient care were developed in the 1940s. First, Cleveland, Ohio's Western Reserve University School of Medicine altered its curriculum in 1940 to give students early exposure to clinical discipline and interdepartmental training. Following reforms in the 1970s and 1980s placed a substantial emphasis on cultivating the proper attitudes and values in besides medical expertise[8].

Many aspects of our health care system have changes such as more emphasis is not being given to standard operating procedures, protocols, battery of tests that are must for the patients to undergo whenever they come for consultation. These issues were not there few decades ago. People did not seek doctors care for minor health ailments for which at present they consult the super specialist which actually are appropriate to be dealt by nurse practitioners or physician assistants (PAs). The use of Advance practitioners including the nurse practitioners and PAs is expanding on a global scale. Due to physician shortages, new innovations in healthcare, and rising population demands, they are becoming more prevalent. Healthcare systems are now using these providers both outpatient as well as to care for the inpatient environment, as well. The workload on the MDs will be reduced by turning to nurse practitioners or PAs for minor disorders. The PA is employed in a supportive capacity. According to a lot of literature, a PA's care was of a similar calibre to that of a doctor[9]. The blind and indiscriminate use of PAs, on the other hand, may result in the under delivery of some services, such as complete physical examinations or mammograms[10] and is helping to bring back the "marginal practitioners" of the pre-Flexner era.

THE RELEVANCE OF BASIC SCIENCES IN MEDICAL EDUCATION

Since Flexner, there has been virtually unanimous agreement that basic science should be studied by medical students for at least two years and that a strong background in the subject is a must for competent clinical practise[11]. Three different arguments can be made in favour of the idea that basic science is the most crucial component of medical education: some specialties, like anaesthesiology, critical care medicine and nephrology have strong roots in basic science and frequently use concepts from physiology in their daily work[12]. While all other specialties need basic science, especially in circumstances when things do not fit together, the clinician have to go back to basic principles to reason it out[12]. The relevance and importance of basic science has changed from pre-Flexnerian to Flexnerian and post Flexnerian era which is presented in Table 1. During the pre-Flexnerian times it was considered irrelevant, there were no labs, no cadaveric dissections, no scientific training or engagement. The classes were purely theoretical and didactic teaching was followed. During the Flexnerian times[13], basic science subjects were made mandatory and fundamentals were covered, laboratory based scientific training was also given. It became a powerful separate discipline and had strong scientific identity formation and engagement. But after de-Flexnerization, again, it lost its relevance[14]. There is no mandatory or real laboratory training or exposure, no cadaveric dissections, just multimedia theoretical instruction, lack of scientific identity and engagement among students, these were the reasons that made students lose their interest in these subjects.

To help students grasp clinical topics better and connect the pathology or clinical aspects of the illness with the physiological, anatomical, or biochemical abnormalities, basic science courses are given in the first years of medical school. The basis of this approach of curriculum is effective knowledge retention and application when beginning with the actual clinical practice. The most prevalent misconception among students about medical education is that it merely involves the study of sickness, its clinical manifestations, and any necessary medical or surgical treatments. They care the least about the anatomical structures involved, the fundamentals of surgical incisions or suturing, the physiological or biochemical abnormalities that led to disease, the pharmacology of the medications being recommended for the illness. The only concern now is to make a diagnosis, prescribe a drug or perform a surgery, but medical practitioners should understand the mechanisms of diseases, rather than simply recognize and treat them. This is demonstrated by the proportion of students who choose to pursue post-graduate degrees in fundamental sciences as opposed to those who continually drop out rather. Additionally, compared to other areas, basic science courses have a substantially smaller faculty. Basic science will utterly lose its significance if this tendency continues, even though it is the most crucial. Without a solid foundation in basic science, learners will not be able to comprehend diseases and their symptoms. Learning with understanding is preferable to "memorising" learning, because comprehension can only happen with some knowledge of mechanisms[12]. Using the assumption that "people develop new knowledge and understanding based on what they already know and think," Students' diagnostic choices might be based on what "makes sense" rather than on the memorization of isolated signs if they have a knowledge of the causative factors that determine why clinical features are linked to a certain disease[15]. For instance, if a patient presents with an acute abdomen, only a surgeon who is familiar with the anatomy of the abdomen will be able to recognise the aberrant organ and, after locating the abnormal organ, perform the appropriate surgery. De-Flexnerization of basic sciences is de-Scientification of medical education, it is a return to medieval times when cadaveric dissection prohibition led to stagnation of medical education.

Thirdly, Basic Science is essential to recognize the disease by understanding the mechanism of its occurrence so as to provide treatment directed towards the pathology or rectifying the physiological or biochemical alteration leading to treating the disease by its root cause.

THE DECLINE IN THE NUMBER OF CLINICAL RESEARCHERS

The literature suggests that the relative importance of patient care, education, and research in medical campuses is disproportionate[16]. A study of senior research administrators and chairs of five distinct types of departments from 122 medical schools, performed in 1998-1999, to determine their opinions of the condition of clinical research at academic

Table 1 Comparison between pre-Flexnerian, Flexnerian and post-Flexnerian era

	Original pre-Flexnerian status (proprietary model) corporate model	The Flexnerian revolution (academic model)	Re-emerging pre-Flexnerian status (re-proprietaryization model) re-corporatization model The post-Flexnerian regression
Medical school ownership	Private practitioners and hospitals	University-based and academicians	Hospital-based, practitioners-owned
University hospital (academic medical centre) ownership and affiliations	Privately owned and funded	University-owned, publicly and charity funded	University-affiliated, not owned, or more precisely, the hospital owns the school, which is only nominally affiliated with the university, but operated like a proprietary private practice, an appendage accessory facility to a tertiary center
Accreditation and standard setting agency	Absent, determined by the practitioners needs	Rigorous, robust, determined by university and regulated by academicians	Paperwork stamping exercise, and determined by practitioners and hospital's needs and philosophies
	Private practice ideals and standards	University-based ideals and standards	Private practice ideals and standards
Faculty status	Full-time private practitioners who part-time in teaching, no interest in research, and no academic interests or identity	Full-time academicians, with clear academic identity and values, high sense of scholarship, and education and research	Full-time practitioners who part-time in teaching, and clinical academicians are fulltime in name only Hospital job clinicians given academic titles without contributing to education or investigation (research)
Basic sciences status	Irrelevant, no labs, no cadaveric dissections, pure theoretical didactic teaching, no scientific training or engagement	Mandatory, fundamental, laboratory scientific training, powerful separate disciplines, strong scientific identity formation and engagement	Integrated to the point of irrelevancy, no laboratory training or exposure, no cadaveric dissections, just multimedia theoretical instruction, lack of scientific identity and engagement, which made most students look down on basic science
Clinical sciences	No clinical exposure, if any it was ambulatory, no in-patient exposure or involvement in caring activities or educational rounds, no observation of the totality of in-patient journey	Extensive clinical exposure, mainly in-patient, patients assigned to students, involved in caring activities and daily educational rounds, observation of the totality of in-patient journey	Poor clinical exposure, especially hospital based, replaced by community based, mostly ambulatory in nature or imaginary patients and scenarios or simulated clinical environment in skill labs
The profession (clinical practitioners) perceptions of the clinician academician	Negative: waste of talent and time, the clinical mission is the only mission	Positive: the best of the triple worlds (educators, researchers, and clinicians)	Negative: waste of time, irrelevant, postgraduate training is more important than undergraduate education
Basic scientists and non-medical academicians perceptions of clinical faculty	Negative: Not true academicians, nor scientists, just professional practitioners masquerading as academicians and scientists, imposters	Positive: Academic clinicians are investigators, scientists, and educators	Negative: Clinical faculty are academicians in title only, they are not trained in science, or educational theory and practice, they are practitioners who teach by emulation at best, and by telepathy at worst
Research status	Absent, no room for inquiry and discovery	Central, fundamental component of the school mission, faculty and students have to be scientists, not just practitioners	Revenue-generation is the primary motivator, students don't need to be scientists, they just have to be competent and safe practitioners generating revenue
Student status	Customers, self-learners, no much of instruction	Students were active learners, teacher-centred curriculum, enriched the student-faculty interaction	Customers, student-centred curriculum and learning approach, meant less teaching and more self-learning, which led to low quality interaction between students and faculty, made the faculty redundant and led to disrespect of the faculty Teaching is frowned upon and shamed (the T-word), and learning is emphasized instead Faculty are not allowed to "hijacking" the educational process by daring to teach, and denying students the opportunity for self-learning, and that student empowerment requires faculty to resist the medieval urge to teach and to practice educational restraint and let students learn as an empowerment strategy
Dominant and major sources of revenues	Private clinical practice, student's tuitions	Research grants, public funding of under and post graduate education, public and private not for profit charities funding of public clinical services	Expanding private clinical practice, escalating student's tuitions and students enrolments to the detriment of quality
Aim after graduation	Vocational training and private practice or community hospitals	Academic university based postgraduate education and	Vocational training and private practice or community hospitals

medical institutions, provides insight into the effects of different changes in medical curricula. 93% of respondents thought there was a moderate-to-large problem with the demand on clinical faculty to visit patients. Additionally, 75% of respondents mentioned a shortage of clinical researchers, and 70% mentioned that clinical research received very little funding[16]. MD-directed research is plagued by complex problems. The time set aside for academic pursuits, such as clinical research, has decreased as more and more new young faculty are appointed. Previously, young faculty had protected time to hone their clinical research skills. Since many young faculty members are hired and spend a significant portion of their time providing clinical care, their main focus appears to be meeting the financial needs of the for-profit medical institution, and as a result, they are unlikely to ever have successful academic careers. The conduct of clinical research and its regulatory requirements have also become more challenging. High-quality clinical research requires the same focused training as basic scientific research does. However, most medical schools, residencies, and fellowships do not effectively teach clinical research methodology[16]. However, a sizable portion of clinical research has historically not been externally supported because of the requirement to make money from clinical services. Biopharmaceutical and medical device sponsors have recently contributed around half of the funding for MD research. This discrepancy is likely partially due to the fact that few MDs have the clinical research skills necessary to conduct investigator-initiated research, but it's also possible because there aren't many other funding options. Industry support for medical research has a place, but there are many important clinical issues that it will not be able to resolve[16]. The crisis in clinical research may also be attributable to changes in the health care environment[17]. The insurers are not ready to bear the higher cost of patient care as a result of research neither the academic health institutions are ready to subsidize the rate[17]. Young faculties may be more involved in patient care to cover more for their salaries, for example in many institutions that doesn't pay non practice allowance, the faculties are involved in private practice at their clinics rather than spending more time in academic health institutions. and last but not the least the health plan limit the availability of patient for clinical research [17]. These ultimately lead to insufficient number of trained clinical researchers. The research status has evolved when compared between pre-Flexnerian, Flexnerian and post-Flexnerian eras shown in Table 1. Research as a mandatory requirement for clinical faculty was completely absent during pre-Flexnerian era whereas, during the Flexnerian era, research became the central and fundamental component of medical school, and it was mandated for faculty and students to be scientists and not just practitioners. In the post-Flexnerian era, again, Revenue-generating clinical practice has eclipsed the research mission. It started being emphasized that students don't need to be scientists, they just must be competent and safe practitioners to be able to generate revenue. De-Flexnerization of Clinical Investigation is de-academization of clinical practice into an apprenticeship model.

LESSER EMPHASIS ON BEDSIDE TEACHING

Since it fosters professional identity, conducts, and the ability to demonstrates history taking and physical examination skills, bedside teaching has historically been regarded as the best clinical training method. There are a number of causes for the decline in bedside training and the ensuing decline in clinical competence. There is an excessive focus on testing, students spend an inordinate amount of time on computers, and there is little time for bedside teaching in the ward during rounds. This is partially a result of residents, students, and attending physicians occasionally being pulled in numerous directions at once. Clinicians and residents also hold the opinion that an echocardiogram can yield the necessary results, which would enable a straightforward diagnosis, saving time that would otherwise be wasted using a stethoscope at the bedside and examining patients. The early clinicians relied less on laboratory tests and were more focused on clinical examination. In contrast to what is happening presently, they would spend hours thoroughly examining the patient. These are just a few of the numerous possible reasons for the phenomena of declining bedside clinical skills[18]. An accurate diagnosis is built on a thorough history that also helps to build a rapport with the patient, a focused clinical examination, and a battery of laboratory tests. A detailed medical history would be worth around 60%, a thorough clinical examination would be worth about 30%, and a laboratory test, which is given the most weight, would be worth about 10%. The ratio has nearly turned around, with clinical examinations and history-taking now only receiving 10% of the weight and laboratory testing receiving 90%. The decrease in clinical skills could also be brought on by students attending less clinical training sessions. Physicians' communication and examination skills with patients have been harmed by the advancement of technology and its growing use as a substitute for face-to-face contact with patients. The changing character of teaching hospitals, particularly the abbreviated admittance of patients, which increases the workload of doctors while lowering the possible suitability of patients for bedside rounds, is a commonly heard cause for the fall in bedside teaching[19]. Time restraints, patients who are not in bed, and noise on the ward are a few examples of practical teaching obstacles, as well as students' lack of clinical expertise and aptitude[19]. Younger physicians, afraid of it being demeaning and burdening to patients when in reality it is not so in every case as majority of patients appear to appreciate bedside teaching because of the extra time and insight given to their medical situation[19]. Presentations in conference rooms frequently take the place of bedside rounds. The move from patient-centred medicine to a greater reliance on technology and laboratory tests during the diagnostic process is one of the most frequently put forth explanations for this change[19]. Here, in conference rooms, the teaching is entirely at the discretion of the professors, who can conduct the discussion in his own area of specialisation without (unexpected) patient intrusion. Additionally, it is easier to observe the outcomes of sophisticated diagnostic procedures, and more students can be taught simultaneously, but little progress is made in the development of clinical skills[19]. De-Flexnerization of clinical sciences and practice is de-

intellectualization of clinical decision making and care, and technicalization of patient-clinician relationship (converting practitioners into technicians).

EXPOSURE TO BASIC CLINICAL SKILLS

Since the 1960s, there has been a decline in the teaching of clinical skills, with inadequacies starting in medical school and continuing through residency and into practice[20]. Because too many doctors lack adequate knowledge in using clinical skills properly and in the examination of clinical data, discrepancies between laboratory findings and clinical data frequently go unnoticed[20]. Clinical reasoning, as well as the capacity to form the gestalt impression, have both suffered from the degradation of extensive history-taking and physical examinations. Appropriate history-taking and physical examination are crucial to making the right diagnosis, but they are useless without the capacity to evaluate the data. Close-ended queries that don't elicit precise information necessary for clinical decision-making usually limit the history-taking process. For instance, the existence of dyspnea is now treated as a yes-or-no question on printed checklist, rather than a way to assess its severity, context, alleviating and aggravating factors, and chronology[20]. Internal medicine rounds with the attending doctor were regarded as the platform for displaying history taking, physical examinations, and clinical decision making prior to the 1970s. Attending physicians improved a physician-in-practice, trainee's exhibited clinical skills, and fixed mistakes or misinterpretations. In 1978, only 16% of bedside exams were conducted while students were in class, and many doctors believe the number has now fallen even lower. Nowadays, attending physicians hardly ever show how to conduct a history and physical examination and use the results to make clinical decisions to medical students and residents[20]. In undergraduate, postgraduate, and continuing medical education, medical simulation continues to gain importance in clinical and procedural training. An efficient reaction to the growing emphasis on patient safety, the need for new training models and standardised educational opportunities, and the need to practise and perfect skills in a controlled setting is the increased use of simulation in the education of healthcare professionals [21]. The ability to learn from mistakes and handle errors under real-world circumstances is a unique aspect of simulation-based medical education. Such a strategy is thought to greatly lower the number of errors made in actual practise and give healthcare personnel the right mentality to deal with mistakes in the most effective manner[22]. Medical schools have not made much progress in terms of improving the way clinical skills are taught, despite the fact that many regret the shift in the focus of medical education. Medical school and teaching hospital operations have been shifted back toward education since the 1980s thanks to advancements in the field. The teaching of clinical skills has been enhanced by the addition of new modalities such as standardised patients, simulators, and computer technologies. A thing which nonetheless, unites these modern teaching strategies: they call for reduced teacher participation[20]. Many of the cutting-edge teaching tools provide excellent, unthreatening environments for students to hone their abilities, but they cannot take the place of faculty-supervised patient interactions. Like what is occurring now, where there are fictitious patients and scenarios or simulated clinical environments in skill labs, fragmented encounters, no involvement in caring activities, and rounds that are mostly service or working rounds, there was no clinical exposure or involvement in caring activities during the pre-Flexnerian era. If there was any clinical exposure, it was ambulatory. During the Flexnerian era, the situation was very different. There was extensive clinical exposure, primarily in-patient, where patients were allocated to students and included in caring activities as well as daily educational rounds as depicted in Table 1. De-Flexnerization of clinical reasoning and cognitive skills is scholasticization of analytical reasoning and mysticization of intuitive reasoning. The current era of excessive "computer time" for charting is equally as dangerous than pre-Flexner era student plagued by dearth of clinical duties or meaningless work. Incidentally, the recent epidemics of COVID-19 and the spread of virtual "learning" only exacerbated this phenomenon.

ELIMINATING THE TREND OF ABSENTEEISM FROM THE CLASSES

With the excuse that they are preparing for the post-graduation qualification examination, it is becoming more and more common for students to miss didactic and clinical sessions in the modern age. Theory lectures for courses that will be assessed in later years are routinely skipped by students, as shown, for instance, in the second year of medical school when only pathology, pharmacology, microbiology, *etc.* must be studied for the year's final exam. If students attend courses, certain vital issues become clearer, and some facts stay in their memories for a lifetime since all the important themes are addressed by the faculty in a unique way to help the learners comprehend them best. Additionally, things seen in practical or clinical classes or heard in lectures always linger in the mind better than things that are just read in books. In order to make sure that students understand the importance of attending class, no excuses should be made for their lack of participation in theoretical or practical/clinical sessions. Taking lessons might help you remember what you've already studied. In medical education, tardiness in class hinders both the teaching and learning process and the final academic grade[23]. The interaction between students and teachers during a lecture or clinical session has been found to produce precise instructions that make learning engaging and accommodating[23]. A variety of computer-based software has been incorporated as a result of the information technology revolution to make lectures more engaging and interactive, contributing to the effectiveness of traditional instruction[4]. Low class attendance continues to be a significant obstacle in teaching, even with the use of well-designed computer-based instructions[23]. It has been noted that there was a decline in academic results as the quantity of missed lessons increased[22]. Due to their inability to understand the lessons being taught in class, pupils who are accustomed to skipping class perform badly on assessments. Students can interact with their teachers in a proper setting in the classroom, where they can also observe their attitudes

and behaviours. Due to this contact being hampered, the professionalism and ethical principles required for the medical profession may not grow as they should[23]. Since the fall of the Flexnerian model, students' attitudes have significantly changed as a result of changes in the curriculum's design, which emphasise self-learning over teaching. This has resulted in low-quality interactions between students and faculty, reduced the role and identity of educators in the faculty, and created a climate of disrespect for the faculty because of the loss of transformational mentorship. Just as it was in the pre-Flexnerian era, students today in the post-Flexnerian era are merely clients, and faculty are merely service providers. Although students were engaged in learning during the Flexnerian era, teacher-centred curricula and instructional methods required faculty to spend a lot of time teaching them. This enhanced the student-faculty interaction and made faculty input necessary for students' growth, development, and identity formation. Transformational mentoring also increased respect for the faculty. De-Flexnerization of academic rigor in undergraduate medical education to increase student satisfaction is the clientization of mentorship and proletarianization of the faculty.

“THE SHORTEST ROUTE TO DYSTOPIA IS A UTOPIA”

There will be a decline in the respect for faculty in various medical schools just like in the mouse utopia experiment by John B Calhoun, youths did not respect their parents in as they did in the wild, and that this generational difference is not cultural or environmental, it is actually an educational difference, or rather, the lack of social education. Simply put, you do not respect your parents just because they are your parents, you do so, because of social education, because you needed them to teach you how to survive, it is this social education that makes you respect your teachers, it is not because of the title, it is because they taught you how to survive and thrive the medical school, how to shed ignorance and timidity and become a competent and safe professional, so when teachers are no longer needed, and students feel that medical school is about self-learning only, not teaching, and when we teach faculty to despise the T-word and shame them if they do dare to teach and accuse them of hijacking the educational process, and denying students the opportunity for self-learning, and that student empowerment requires faculty to resist the medieval scholastic urge to teach and to practice educational restraint and let students learn as an empowerment strategy, then we should not be surprised when students see the role of teachers as a redundancy, and disrespect for faculty becomes understandable and unfortunately, even, tolerable.

INTRODUCTION OF THE CONCEPT OF VIRTUAL LEARNING DURING COVID-19 PANDEMIC

The severe acute respiratory syndrome coronavirus, or COVID-19, was an emerging disease that ranged in severity from the common cold to more serious conditions. It initially became publicised in China at the later part of 2019. As a result of the disease's subsequent global spread, the World Health Organization labelled it as a pandemic[24]. The disease continued to spread despite tremendous efforts to stop it, and all attempts to limit it were unsuccessful. Physical distance had shown to have a substantial impact on reducing the transmission of COVID-19, whose propagation was significantly escalating as a result of social mixing[25]. In order to contain COVID-19, most nations have implemented quarantines[26] and are putting into practise all activities that can be done online, including educational processes in institutions not excluding that of medical education[27]. Now at present, educational resources include both traditional and online (or e-learning) tools, such as textbooks, lectures, and tutorials. Blended learning has been the name for this combination of techniques, which is increasingly widely used[28].

The current era of “test-taking” (most United States school no longer perform verbal exam at the end of course) is creating an education focused on institution pretending to be assessing knowledge rather than skill which is equally important for a medical student for their practice as a doctor. The assessment is done by making the students only to pass single or multiple choice test and student, learning on how to pass a test. For evaluation, the delivery of accurate feedback, and the improvement of medical education, core competencies like medical knowledge must be adequately measured[29,30]. Multiple-choice questions that test memory of medical knowledge or facts have typically been employed as summative assessment tools to evaluate medical knowledge. This emphasises the necessity of evaluating medical students more carefully by looking at results that show higher order processes, like the use of knowledge[31]. Professional oversight organisations like the Liaison Committee on Medical Education, American Association of Medical Colleges, and National Board of Medical Examiners are urging medical schools to implement curriculum changes, including formative assessments that will encourage medical students to use and develop critical thinking skills from the time of matriculation through their life - long medical profession[32-34].

CONCLUSION

“The method is remembered when facts have been forgotten, and method can be used in a new situation where there are no, or too few facts. The student learns how to learn and can go on acquiring knowledge for the rest of his life”[24]. “Learning is the process whereby knowledge is created through the transformation of experience.” learning is an integrated process with each stage being mutually supportive of and feeding into the next[8]. The medical education system should return to Flexner’s recommendations. Although most of them are professed to be implemented but there are lot of dilutions almost to the pre Flexnerian level, mostly on the part of students who are focussed on just getting their

degree somehow and become doctors and also on the part of faculty who spend less time with the students because of more time given in patient care. There is a need to maintain the standards of medical education so that the quality of doctors are maintained and community is benefitted at large. Over reliance on laboratory tests should not be encouraged by faculty, rather bedside examination and development of clinical skills must be emphasized so that treatment may be carried out even in resource limited settings and our goal of health for all is achieved. Flexnerists are not necessarily Flexnerians, the former cite Flexner's value, while the latter practice them, for Flexnerians, Flexner was just a fallible man who was a champion of change and reform, and his true legacy is continual reform, and to honour him is not to follow in his steps, nor to return to his reforms, rather, to look forward and leave him behind, starting a new Flexnerian revolution of their own, however, for Flexnerists, Flexner was an idealistic idol, who should be adored, but his reforms are not practical, and that's why they did not endure, and a return to a pre-Flexnerian status is just nature taking its course, and any intervention is a mere exercise in futility[35].

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