

Letter; Are Students Who do not Complete their Medical School Education Abandoned? Is More Help Needed?

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Abstract: During our teaching we have been confronted with a number of stressed students over the years and yet there have been relatively few discussions, workshops or group meetings no, how to help them face life after medical school if they should fail to complete their studies. We were concerned about this, especially as there are relatively easy steps that can be taken to help, and the cost of medical school increasing leading to increased debt with nothing to show for it. Tuition this year will range from \$28,000 to \$50,000 at a public and private institution respectively, with total costs from \$50-\$70,000.

Using a simple search of a number of medical school and blog sites, we formulated a simple tool that would at least, we hope, give some guidance to students that leave medical school early. It is hoped that this link table will be developed, updated and expanded further in the future so that these bright, degree-holding people do not find themselves suddenly cast adrift.

Keywords: Medical students, assistance, education, stress, guidance for medical students, opportunities, psychological and educational, support.

STUDY PURPOSE

It is inevitable that teachers will have to deal with stressed students, yet there have been relatively few discussions, workshops or group sessions in education meetings and symposia as to how to help some of these individuals face life when they fail to complete medical school, or even as to whether it is part of our job as teaching faculty. There are simple steps that can be taken to offer help and the lack of these gave us concern and directed us to determining how to funnel individuals into a process in which the burdens of accrued loans and future employment might not be insurmountable. We felt that such an effort was timely, given that tuition in 2011 averaged \$29,000 at a public institution to \$47,000 at a private school and with total costs of \$50-\$70,000 (<http://www.amaassn.org/amednews/2012/08/27/prsb0827.htm>).

Using a simple search of medical school sites and blogs, we compiled a simple list that would give some guidance to those students that leave medical school early, with the hope that this link table will be developed, updated and further expanded so that these intelligent, degree-holding people, do not find themselves in a situation that they are unable to cope with [1, 2].

Is it Our Place to Help Students who Leave Medical School?

“Right now you feel like a big, fat failure”, (Birdie Conrad, *You’ve Got Mail*, 1998, Warner Bros.). That might be

the thought running through a student’s head upon realizing that their time and studies at a chosen school are over and that they are unlikely to fulfill their dream of becoming a physician. What do they do next? Is there a help network that they can turn to which is both readily available and useful?

Many people involved in teaching are frequently upset when they see a student struggle, knowing that the end result is likely that of ‘dropping out’, and that depression might be a major problem, making the need for the initiation of intervention and considerations of solutions something that must occur quickly. While mechanisms and resources are always in place to help students advance and remain within that school, this is not enough for students that are ‘forced’ to leave and who face a lack of assistance [3].

What happens next? What do these students do? How do they know what choices are available and who is there to help them? Stress levels increase, depression often follows and dire outcomes can result [4]. To allay some of their fears, we suggest that help resources using a simple list of links are made available to students, hopefully providing them with a focus on their future and offering a positive distraction. They would benefit greatly if guidance was available in taking that important first step. We also suggest that a structured assistance program be required in every medical school, as well as being offered by professional, national and international organizations. The need for help is just as important as for those that do complete their studies.

Paul and colleagues [5] surveyed a large number of medical schools to determine if they had help resources available for solving academic problems. Somewhat surprisingly, only 79% of the schools provided comprehensive support services

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and these almost always focused on helping to keep students in that school, not providing help for students who had to leave. As the authors stated, “Medical schools need to take a proactive approach in helping students develop the necessary skills that can prevent academic difficulties”. However, if these difficulties are not overcome, there must be continued help.

Numbers of medical students who leave and their reason(s)

To gain a better understanding as to why students left medical school, a relatively concise internet search of medical and dental school home pages was performed using a number of search engines, in order to find discussion sites, blogs, medical journals and education journals that included student-help resources. Search parameters were subsequently expanded to include students who had failed to gain entry into a US medical school, and understand where they next went for information and assistance. A willing group of students at this medical school also gave their opinions as to the need for a help program, as well as the likely decisions they would make in a situation of both non-acceptance to medical school or subsequent failure to complete their studies successfully.

With assistance from our Student Affairs office, attrition rates and reasons for leaving UTMSH were tabulated for 1995-2010 <https://med.uth.edu/admissions/current-students/>. Medical school leaving rates were generally reported on many internet sites as 6-8% in the first year and 2-4% in further years, the attrition rate decreasing the more years completed. It is not unheard of for third and even fourth year students to decide that medicine is not for them however (<http://citystreams.com/2008/07/17dropping-out-of-medical-school-uncensored>). The annual attrition rate for this medical school, with associated reasons for leaving, is shown in Table 1.

Table 1. Reasons and Rates of Attrition Over a 15 Year Period at UTMSH

Reasons for Leaving	(%)
Poor academic performance	(30%)
Failure to complete all requirements	(10%)
Career change	(44%)
Health concerns	(6%)
Family needs	(9%)
Other	(1%)

What Do Students Actually Do When They Leave? What are The Repercussions?

An expanded search with an increased number of responses gave us a good idea as to where students who left medical school, as well as those who failed to gain entry into a United States medical school, next went for information and assistance. A generic question, “*What do students do if they drop out of medical school?*”, was entered into four search engines (Google, Yahoo, Bing and PubMed) and 10,000,600 ‘hits’ were returned which, after suitable paring, yielded 68 links specific to medical school students. Opin-

ions from these sites were collated into four ‘general’ groups regarding choices as to what students actually did or thought they would do. Links were listed and grouped based on the answers, yielding a resource that might be a reasonable starting point for enabling students to pursue potential employment and further study possibilities (Table 2). The groups are:

Group 1

Continuation of their studies at an offshore/other college;

Group 2

Exploring the possibilities of transferring into another program such as from medicine to law or dentistry for example;

Group 3

Pursuing other studies related to medicine or science such as graduate school (Masters/PhD), or entering a study program such as physician’s assistant;

Group 4

Obtaining employment, but with the intention of returning to medical school if and when possible.

Column 1 of Table 2 lists properties that students stated they would want in their future choices, Column 2 of Table 2 lists potential jobs that encompassed these preferences, while column 3 lists suggestions and resources to assist in considering alternative vocations and study programs.

The most common response from students was that they would strongly consider the chance to re-enter medical school, with the next preference being to gain a doctorate in a science discipline, preferably in a field that included patient interaction, such as public health. Table 3 includes more useful resources as well as potential pitfalls.

Resources Currently Available and Frequently Used

There is ample evidence that associates major health concerns with unsuccessful students and it is very apparent that much of the help they get is gleaned from sites and blogs such as College Confidential (<http://talk.collegeconfidential.com>) and Live Journal (<http://community.livejournal.com>). Much of the content on these sites adds support to our belief that there is a lack of resources to help early medical school leavers, and we have included warnings against bad advice such as entry into an “off-shore” medical college, in which graduation often does not result in employment as a physician in the United States (http://www.admissionsconsultants.com/medical/caribbean_med_schools.asp), whereas attending Ross University might be a viable route to pursue because of clinical training in the United States being offered by this school (<http://www.rossu.edu/medical-school/>).

OUR CONCLUSIONS

The Carlsen and Bloise paper [3] states what has been a focus for many institutions of higher education, that many students are not prepared for college and possible failure which, for some, will unfortunately be the outcome. Early entry programs, targeted testing, and such undertakings help immensely, but there is still the inevitable problem regarding students who do not succeed [4].

Table 2. Help and Assessment Table of Potential Vocations and the Pluses and Negatives of Those Fields, Including Search Links

Responses to Job WANTS AND DON'T WANTS	POSSIBLE VOCATIONS	RESOURCES
<i>Patient contact</i>	Nursing, dentistry, Physicians assistant, dental hygiene, social worker, epidemiology/public health, clinical research	http://www.allnursingschools.com/ http://www.dentalsite.com/dentists/densch.html http://www.gradschools.com/ListingFunctions/SearchResults.aspx?SubjectId=315&Country=USA&State=&ProgramType= http://www.adha.org/careerinfo/dir_education.htm http://www.dentalsite.com/hygienists/ http://www.ceph.org/ http://www.universities.com/Distance_Learning/Degrees_PhD_Programs_Epidemiology.html https://www.aamc.org/
<i>People contact</i>	Law school, nursing school, dental school, public health	http://en.wikipedia.org/wiki/List_of_law_schools_in_the_United_State http://en.wikipedia.org/wiki/List_of_nursing_schools_in_the_United_State http://dentistry.about.com/od/dentalschoolsbystate/Dental_Schools_in_the_United_State.htm http://www.asph.org/document.cfm?page=200
<i>Further learning opportunities</i>	Nursing school, graduate school, teaching	http://en.wikipedia.org/wiki/List_of_nursing_schools_in_the_United_State http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-health-schools http://www.getdegrees.com/p/teaching-degrees
<i>Financial soundness</i>	Law school, nursing school, dental school	http://en.wikipedia.org/wiki/List_of_law_schools_in_the_United_State http://en.wikipedia.org/wiki/List_of_nursing_schools_in_the_United_State http://dentistry.about.com/od/dentalschoolsbystate/Dental_Schools_in_the_United_State.htm
<i>Chance for advancement</i>	Law school, dental school, graduate school, (nursing school), Teaching	http://en.wikipedia.org/wiki/List_of_law_schools_in_the_United_State http://en.wikipedia.org/wiki/List_of_nursing_schools_in_the_United_State http://dentistry.about.com/od/dentalschoolsbystate/Dental_Schools_in_the_United_State.htm http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-health-schools http://www.getdegrees.com/p/teaching-degrees
<i>High standing in society/prestige</i>	Law School, dental school	http://en.wikipedia.org/wiki/List_of_law_schools_in_the_United_State http://dentistry.about.com/od/dentalschoolsbystate/Dental_Schools_in_the_United_State.htm
<i>Job security</i>	Law School, Dental school, Nursing School	http://en.wikipedia.org/wiki/List_of_law_schools_in_the_United_State http://dentistry.about.com/od/dentalschoolsbystate/Dental_Schools_in_the_United_State.htm http://en.wikipedia.org/wiki/List_of_nursing_schools_in_the_United_State
<i>Respected higher degree</i>	Law, Dentistry, Nursing, Teaching	http://en.wikipedia.org/wiki/List_of_law_schools_in_the_United_State http://en.wikipedia.org/wiki/List_of_nursing_schools_in_the_United_State http://www.getdegrees.com/p/teaching-degrees
<i>Help people</i>	Law, Dentistry, Nursing, Public Health, Osteopathic Medicine (Massage therapist, Rehabilitation)	http://namtonline.com/ http://www.nationalrehab.org/cwt/external/wcpages/divisions/arts.aspx
NEGATIVES		
Poor salary	Early law, dental hygiene, public health, teaching	
Bad working conditions	Multiple situations, especially teaching, low-income areas, etc are big factors; maybe lack of advancement chances	
Long hours, poor salary	Nursing, Sometimes early law, public health/protection services, teaching	
No advancement	Teaching (Location factor), public health, social work.	

Table 2. Contd.....

Responses to Job WANTS AND DON'T WANTS	POSSIBLE VOCATIONS	RESOURCES
Continuous supervision	Nursing, Teaching	

Table 3. Listing of Possible Routes to a Terminal Medical Degree, Plus Suggested Other Sites that Might be Suitable for Consideration

RESOURCE/INSTITUTION	COMMENTS
ROSS UNIVERSITY http://www.rossu.edu/medical school	Fifth year-Miami, FL and Saginaw, MI as well as Dominica and Grand Bahama
UNIVERSITY OF GUADALAJARA http://www.uag.edu/medicine/med4.htm http://www.uag.edu/medicine/curriculum/fifth_year.php	Close to US; Fifth year options available in NY; good match rate in USA; <u>MUST</u> perform year of social work in Mexico if intending to practice in USA; 2 entering classes per year; North American Students Association; Mexican-Spanish only in third and fourth years
UNAM –Mexico City http://www.microsofttranslator.com/bv.aspx?ref=SERP&br=ro&mkt=en-US&dl=en&lp=ES_EN&a=http%3a%2f%2fwww.unam.mx%2f	Same as above, but with all foreign schools, check with requirements and ability to practice where you want to practice. Check on Titulo and Internado, etc. Monterrey is another school often chosen by foreign students. UNAM does have NIH research support however.
FIFTH YEAR PROGRAMS - http://www.uag.edu/medicine/curriculum/fifth_year.php	BE CAREFUL!!! SOME PROGRAMS ARE MORE TROUBLE THAN THEY ARE WORTH AND IT MIGHT NOT BE THE BEST THING TO DO. BE SURE THAT THE LICENSURE REQUIREMENTS TO PRACTICE IN THE USA ARE IN PLACE. SOME 5 TH YEAR PATHWAYS WERE HALTED.
PA SCHOOL http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-health-schools/physician-assistant-rankings	Just because you got into medical school and didn't make it doesn't mean you can get into PA School. Check the requirements as school have individual needs. PA school is sometimes referred to as 'medical school without the depth', so be prepared this isn't easy
SAINT JAMES SCHOOL OF MEDICINE http://www.sjasm.org/	Some accreditation links with USA and UK. The charter GUARANTEES clinical rotations at US hospitals and USMLE-based instruction
http://www.valuemd.com/stjames/	Lots of 'other' medical school links here. But remember, if you failed, it will be more difficult to get into medical school or dental school. Some people try Eastern European schools, but distance, cost, depression, etc are often major hurdles to face.
LAW SCHOOL http://stu.findlaw.com/schools/fulllist.html	Difficult with a failure at graduate level, but call the school you are interested in. Don't be disappointed if you FAIL to get accepted and you'd have to do an LSAT. But acceptance is unlikely
DENTAL SCHOOL http://www.dentalsite.com/dentists/densch.html	Difficult with a failure at graduate level, but call the school you are interested in. Don't be disappointed if you FAIL to get accepted and you might have to do a DAT exam, though your MCAT might be OK. But acceptance is unlikely
SCHOOL OF PHARMACY http://www.globalrph.com/pharmacyschools.htm	Possibilities based on undergraduate work and grades. Pre-pharmacy portion of program, if needed, might be waived with appropriate science background
PHARMACEUTICAL SCIENCE http://www.gradschools.com/ListingFunctions/SearchResults.aspx?SubjectId=308&Country=USA&State=&ProgramType=	Some colleges do offer a distinct Pharmaceutical program, distinct from pharmacy. Again, chance here due to undergraduate and graduate studies.
TOXICOLOGY http://www.universities.com/edu/Doctors_degrees_in_Toxicology.html	Unlikely to be too much patient interaction if that is what you desire, but certainly people contact especially through work with contamination, DEA, etc. Might be something not considered
PUBLIC HEALTH http://www.asph.org/	Good site and you never know. Choices from here into socialized medicine, epidemiology, smoking cessation, etc. Some successes here in the past with students leaving medical school. Worth a look.

Table 3. Contd.....

RESOURCE/INSTITUTION	COMMENTS
GRAD SCHOOL http://www.gradschools.com/	Start with this site and then select area(s) of interest. Some schools are loath to take you if you have been forced to leave medical or dental school. However, there are a few that will look at what you have passed and take you in. However, grad school in biomedical sciences isn't well paid and when you get your degree, masters or PhD, finding a lab to work in at decent money is again difficult. Think what to do with your degree after you leave graduate school, as there are choices.
DOCTOR OF OSTEOPATHIC MEDICINE http://www.txosteo.org/ AND DUAL DEGREES DO/PHD http://www.physicianscientists.org/careers/training/do-phd	Not a bad option IF, and I say IF, you can get accepted. DO schools are appreciated much more in the media and in the public eye and many DO graduates now practice in 'conventional' medicine settings. DO school is difficult to get into and if it wasn't your first choice and if you are doing the application simply because you failed medical/dental school, then your chances aren't that great
GOOD, HELPFUL SITES	http://www.studentdoctor.net/2009/07/caribbean-medical-schools-a-good-option/

For the unsuccessful few, medical schools are usually in medical centers and close to other health and medicine facilities, which offer many possible alternatives in the medical field. It would therefore only take a minimum of effort for colleges to assemble a list of links, including potential employers and areas of employment, so that 'leaving' students sense the possibilities and lose the anguish.

Our searches found that the major sources for information and assistance for students who prematurely leave medical school is via the internet and blogs, with only a few medical schools having the necessary resources to assist students in career changes and overcoming accrued financial burdens. This should be of major concern to schools, faculty, students, parents and education authorities and it is something that must be considered as costs increase, even though it has been a topic of discussion by departments of education, government entities and accrediting bodies.

It is not the intention of this paper to compile a complete listing of links, opportunities or alternative degree programs, but to demonstrate with the included table that this might be a good starting point and that a fuller listing will be subsequently generated and readily available.

In the preparation of this manuscript, many blogs and viewpoint pages were accessed and, as would be expected, there was an enormous amount of ire, angst, confusion, despair and depression shown by many of the writers. There were very few positives coming from the communications and views as to their time at medical school. For example, a piece that appeared on the previously noted Live Journal (<http://community.livejournal.com>) included the statement from a first year in medical school, "I almost literally jumped out of a third floor window". The writer also made the observation that after leaving medical school, "It's been tough trying to free myself from the medically-oriented mindset I've had my entire life". Ahmed and colleagues noted a "considerable amount of depression and anxiety among doctors and students", and concluded that much more needs to be done with this often overlooked problem [6]. When students begin to feel anxious and anxiety develops into depression, their enjoyment of medical school life, and their overall quality of life, are greatly impacted [7] and so

it is advisable that medical schools ensure that emotional support is available at all times.

An interesting post was seen on the Experience Project page ([8]; <http://www.experienceproject.com/stories/Dropped-Out-Of-Medical-School/96236>) addressing the concerns of a student who was on leave of absence, but who was welcome to return to that medical school. This person stated that "just the thought of returning to medical school makes me almost suicidal". What could possibly drive an intelligent person this far, and why wasn't there help or intervention available before this stage was reached? This experience includes feelings that are eerily reminiscent of the sense of loss described by Elisabeth Kubler-Ross [9]. The need for help in higher education has become more recognized [10, 11] and this is a major positive, but the need for continuing help is sorely lacking.

This paper suggests that support for students must be available for those who are in the unenviable position of having to leave medical school, a distressing time that comes after paying significant amounts of money and accruing a substantial debt, as well as spending many sleepless hours studying for exams that lead them to unhealthy regimens and increased stress. Schools accept students, willingly take the fees, then let the less fortunate leave with no direction, no advice, and often in a daze as to what they should do next or where they should go.

As teachers and educators we have an obligation, a duty that should continue even when a student has problems that result in them leaving medical school early. A paper by Jadoon and colleagues concluded, "...medical students constitute a vulnerable group that has a high prevalence of psychiatric morbidity comprising of anxiety and depression" [12]. This vulnerability does not magically disappear unfortunately when given a change in circumstances.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflicts of interest.

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