LONGVIEW JOURNAL - SPRING 2016

To the readers of The Longview,

In Appreciation of Humanities in Health Care

Veronique Dorais Ram

Class of 2017

On November 11, 2016, Dr. Pamela Wible published a story in which she asked physicians what their Surgeon General warning would be regarding medical school. She received a multitude of replies on demoralization, loss of compassion, depression, psychological harassment, poor self-care, addiction, emotional detachment, psychosis, suicidal ideations and even death. One medical student in the article stated: "Medical school could kill your child. [It's] demands are severely underestimated. Ensure that your child has the ability to do this. Do not ideally assume they are smart and talented and send them off. They may die. Many have."[ii]

Every year, we lose numerous colleagues in medicine – students, residents, and physicians – to suicide. The replies listed above are even reflected in pop culture portrayals of doctors, for example Dr. Gregory House. Dr. House may exude remarkable intelligence, but he demoralizes others, suffers from addiction and emotional detachment, struggles with self-care and his personal relationships, and contemplates suicide on numerous occasions. Such representations of physicians aren't new to our generation, however. George Elliot in the nineteenth-century novel, *Middlemarch*, portrays Dr. Tertius Lydgate as a clever man whose ambitions distance him from his patients, making him unable to sympathize with others and subsequently leading to his failed marriage and general misery. Indeed, it seems that more often than not, representations of physicians in literary and cultural texts underscore the conflict between contempt and veneration, which is not simply a discord of interpretation, but also a reflection of the tension that underlies how we as physicians see ourselves.

The stress of success and the fear of failure continue to dominate the culture of medicine, and journals like *The Longview* provide a safe space for expression as we navigate the hazardous tides of medical practice. It is an environment where future medical professionals can learn to heal by releasing thoughts, anxieties, joys, and questions via artistic vehicles. In the age of scientific data and technological certainty, the opportunity to wonder with words or reflect with colour on canvas or see through the lens of a camera bears witness to the fragmented emotions of medical practitioners.

In fact, there are numerous articles and books on staying human in medicine (*Staying Human in Residency Training, Being Mortal, The House of God*), as though the belief is that many of us eventually let the sea drown us, as Michael Ondaatje writes in his long poem "Tin Roof," as we fly to it "released by giant catapults of pain loneliness deceit and vanity." Michael Ondaatje ends with an image that expresses the conflict between order and chaos in poetry, but the same applies to medicine. Those words echo the struggles students have voiced in this edition: the desire to be in control and the inability to manage all in the face of human emotion.

I hope that over the years, *The Longview* will continue to grow as a representative body of the grace and courage of my colleagues in training and practice. There is a great deal at stake in the avoidance of emotion and the denial of dread. Collections like the one offered here create a sense of community and shared sentiment; in witnessing the pains of others, we acknowledge and validate feelings and therefore, allow for the potential to heal.

[i] https://www.idealmedicalcare.org/blog/surgeon-generals-warning-medical-s...

Faculty Editorial

John B. Kortbeek, MD FRCSC, FACS Professor, Departments of Surgery and Critical Care Cumming School of Medicine, University of Calgary

"The Best Hospital"

That's not a real Hospital! Spoken by a colleague, this is an interesting and bold statement to say the least. You may have heard something similar. Certainly this is a proclamation worthy of pause and reflection.

What is a real hospital in 2016? Perhaps the definition has changed? Over the span of a single generation the landscape appears transformed. A number of years ago (several decades actually), a few colleagues and I were visiting a city to interview for internship positions. A real city hospital at that time was covered by interns 24/7 and almost exclusively by interns and perhaps some residents at night and on weekends. We informally assessed the status of hospitals in the city by asking our various taxi drivers where they would go for their care (an early form of social media). Downtown Hospital is the best said one. I wouldn't take my dog to Metro said another. My doc works at All Saints and he is the greatest, guipped a third, but don't let them take you to Royal, they'll kill you there.

The Hospitals in this City and many others were virtually indistinguishable. They were all general hospitals with common departments of medicine, obstetrics and gynecology, surgery, psychiatry, pediatrics, family medicine and pathology. The departments of medicine and surgery ran intensive and coronary care units, still a relatively new phenomenon. Many, if not most, admissions were by general practitioners. In the 1980s hospitals were beginning to erect bold Trauma Centre signs to keep up with the Joneses, but behind the signs was very little substance or change. Cardiac surgery was evolving in select referral centres, but other surgical disciplines that we think of as tertiary subspecialties today were provided at every hospital, including neurosurgery. Children's hospitals were evolving as well but most general hospitals still had active pediatric facilities.

From a patient's perspective (and probably government's and insurance company's) this made things fairly easy. Simply choose a hospital close to home where your friend or relative had described a reasonable experience, or better yet a good outcome. Visiting the hospital that your trusted family doctor admitted to was even better.

Post MD training and the majority of RN training was exclusively apprentice based, often in a single hospital or two or three partner institutions, simplifying these programs and coverage as well. Work hour restrictions were limited or non-existent, and the schedule was simply covered with available manpower.

Few people survived to an advanced age with transplants, advanced malignancies or multiple immune-suppressants. The acuity was significantly less than a typical inpatient ward today. Extra-corporeal membrane oxygenation, endovascular and minimally invasive procedures were in their infancy or nonexistent. Prolonged hospital stays for convalescence following elective surgery were common; bed rest following inguinal hernia may have been prescribed for several days. Much has changed since the era of the general hospital, yet the perception of the public often has not.

"The Health System hasn't changed in decades and needs reform," remarked a prominent political leader in a recent conversation. A remarkable and perhaps surprising statement given the rapid and significant changes witnessed by those of us working in hospitals over the past three to four decades. Why is the public and political perception so different than the reality? What is a good hospital today? For that matter what is a hospital anyway?

I recently had the pleasure of visiting the sanctuary of Asclepius at Epidaurus in Peloponnese, Greece. It is an inspiring site steeped in history. Epidaurus has an intact Greek theatre, as well as the ruins of many buildings which were dedicated to healing. The centre was used for ceremonial healing as early as the second millennium BC. Asclepius, the son of Apollo in Greek mythology was the God of Medicine. His cult became popular by the 6th century BC. The sanctuary at Epidaurus became the most famous of the Asclepieia. The Greeks combined

ceremonial and religious healing with baths, remedies and the early science of observation and attention to symptoms and prognosis espoused by Hippocrates.

Hospital is derived from the Latin word, hospes, or guest. The Romans, particularly after the adoption of Christianity, built hospitals, often associated with cathedrals. Byzantium developed hospitals with residences for physicians and nurses in Constantinople. They also treated patients in separate buildings for different diseases, the forerunner of the modern ward and department. The Persians had developed hospitals by the 6th Century AD and the Abbasid Caliphate was operating a hospital in Baghdad by the 7th Century following which hospitals were built across the Islamic Empire from Persia to Spain.

In Medieval Europe, monasteries served the function of hospitals with care provided by monks and nuns. Following the protestant reformation and the age of enlightenment the modern hospital began to take shape. They became the centres of care, innovation and education. Thomas Guy, a wealthy businessman, funded the first great British hospital. Florence Nightingale established nursing as a profession. The first nursing school, The Nightingale School of nursing, opened its doors in 1860. Advances in germ theory, anaesthesia, surgery and epidemiology spurred further developments in the 19th century. Nonprofit and privately funded institutions evolved into large publicly funded hospitals and academic medical centres in the 20th century. The Flexner report, released in 1910, provided the political will to improve standardization and quality in medical Schools. The development of antibiotics and further advances in obstetrics, surgery and medicine in the 20th century accelerated the ability of hospitals to treat severe illness.

The pace of technological and biochemical progress accelerated during the late 20th and early 21st centuries. Significant advances led to the development of tertiary subspecialties and regionalization. Hospitals differentiated based on the presence of dedicated cardiac, neuro, trauma, oncology and pediatric services amongst others. Ambulatory specialized centers also appeared.

All of this has led to the development of rural, regional, urban, urban tertiary/quaternary hospitals and ambulatory specialist hospitals (also referred to as non hospital surgical facilities). Cities are building "super" hospitals. Services are regionalized. Health campuses are evolving. The lines and differentiation between these centres varies and is blurred. The pace of change appears to be accelerating. It is being driven by technology, politics, money and outcomes.

Ask a physician or nurse about their hospital and they will usually reflect on the program and service they work in. A great hospital is a place where people role up their sleeves and get the work done. A good hospital is one in which you know and trust your colleagues, where you know you can call them and depend on them for help. A desirable hospital is one that can manage its current work and is prepared for and has a vision for the future. Many cite great teamwork and high morale. "I take great pride in my team and our program" would be a common refrain.

In many cases physicians and nurses, including managers and directors will have dedicated incredible sweat equity into building and improving the programs to provide exceptional care for their patients. Academic or teaching programs will describe their ability to share/publish their results and lead in advancing the science and knowledge in their specialty. Attracting learners is highly valued.

Professional organizations are driving their quality initiatives by championing benchmarking and quality and process improvement programs.

Health authorities and organizations are also pursuing this. Occasionally competing and different measurement standards are creating conflict between front line staff and services, professional organizations, health authorities, insurers/payers and government.

Patients most often value cleanliness, communication, compassion, access to services and good outcomes, often in that order. Affordability has been addressed in most western countries that have developed mature publicly funded systems. Although death, critical illness and major complications will trigger complaints, the majority seem to derive from poor or inconsistent communication and a perceived lack of empathy.

Media has entered the fray in evaluating hospitals. Media interest in hospitals is often triggered by the "warm and fuzzy" a good news story reflecting a good outcome or a scientific technological advance. Media attention and front-page exposure (maximizing hits in 2016) are unfortunately even more likely when a distressing or frightful event has occurred, an unexpected death or a wrong side surgery.

Evaluating performance has caught the media's interest. The CBC recently developed a ranking system after consulting with a panel of experts. Reviewing their reports and methods reveals that they face the same challenges that governments and health authorities experience when attempting to rank or evaluate hospitals. Hospitals and health care services are complex and don't easily lend themselves to simple measures. The CBC scale included 5 outcomes reported by the Canadian Institute for Health Information (CIHI). CIHI reports are based on discharge abstract data, which has its own limitations. The CBC also based ratings on the Fifth Estate Hospital Survey, which asked about patient experience, safety and quality initiatives. Several countries have media hospital ratings available. These have generated considerable discussion and debate. Most would accept that increased transparency and accountability are positive developments.

How best to measure and compare? Professional organizations have entered the fray. The American College of Surgeons has developed the National Surgical Quality Improvement Program (NSQIP®) as well as its close cousin in trauma measurement and accountability (TQIP®). These programs used trained personnel, a common data dictionary and produce risk adjusted benchmarked reports on morbidity and mortality.

Leading universities and corporations have recently described characteristics of high performance health care organizations and hospitals. Consider whether the characteristics defined by General Electric (GE) Healthcare apply to your organization or institution?

These are:

- 1. A clear vision
- 2. Consistent leadership
- 3. Development of talent (both the future and existing workforce)
- 4. Accountability
- 5. Able to adapt and manage change
- 6. Communicate and share data
- 7. Measure and report outcomes on cost, quality and access
- 8. Align the agendas of physicians and institutions through clinical and service integration
- 9. Engage patients
- 10. Continuously innovate and redesign care

Governments are aware of the competing forces at work in evaluating health care. Ultimately their political survival rests upon public support for and reasonable confidence in existing health services. Their decisions may seem counterintuitive to the high performance characteristics described above but are easier to understand when viewed through the lens of the four to five year electoral cycle. I recently played a sim game based in historical times. Allocation of too few resources to health care resulted in disease and plague, devastated the economy and ultimately led to depopulation and popular revolt. Investment in health care reversed these conditions and supported a government's popularity up to a point. Higher levels of investment did little to increase political popularity or drive economic indicators.

Does this sound familiar?

Hospitals have a long and storied history dating back in time to the first written words. They have a prominent place in all cultures and societies and have always provoked strong opinions, beliefs and emotions. Hospitals will inevitably continue to evolve and change. The pace of change will continue to accelerate. In all shapes, sizes and purposes a good hospital will remain a place where we receive care that we trust. The best hospital will always be one in which we receive care provided by doctors, nurses and health care professionals that care about us.

Figure 1. Hygeiea, daughter of Asclepius at Epidaurus in Peloponnese, Greece

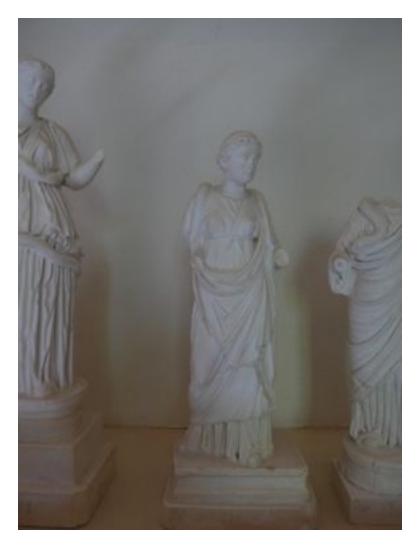


Figure 2. The author in the Theatre at the Sanctuary of Asclepius at Epidaurus



John B. Kortbeek, MD FRCSC, FACS Professor, Departments of Surgery and Critical Care Cumming School of Medicine, University of Calgary

STUDIO ART

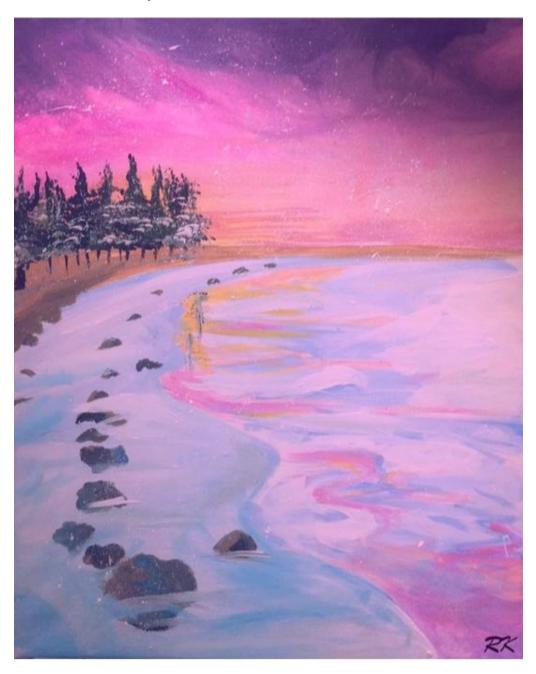
Depths - Grace Wang



"Depths" (Tempera on Canvas, 12"x 8"). This abstract painting describes the layers of a patient's narrative. Every interaction is influenced by many different factors, some visible, others layered underneath. This piece attempts to capture the complex shades which color a patient's story.

Grace Wang is a medical student at the University of Calgary Cumming School of Medicine.

Reflection - Raida Khwaja



At various stages of our training as providers of health care to our patients, we often become very emotionally invested. Sometimes it is hard to separate ourselves from all the loss, the sorrow and the death that we are surrounded by. One winter afternoon, I was sitting by a creek, reflecting on my interactions with terminally ill patients. The thoughts were heavy. I was looking around and felt the sharp breath of cold winter air touch my face. Everywhere I looked, I saw dead trees, stillness, frozen water, and just white snow. But after a while, as the sun began to set, I looked up at the sky and noticed the sky was painted in a spectacle of colours. I looked down at the creek and saw the reflection of the sunset. The snow had a tint of the colours reflecting on its body. It was beautiful. The colours of the sky paved its way through the cold, still winter afternoon. It woke me up. That moment was significant in my life. It

was in that moment that I realized that amidst all the sadness, loss and death that surround us, there is still joy, reward and life. I began to recall my times at the wards when I saw patients recovering from the deadliest of cancers, patients regaining their ability to walk after serious motor vehicle collisions, the first cry of a newborn baby in the OR. It was a momentous point of my journey as a medical student. It was a reminder for me, to not only dwell on the 'goodbyes', but also the 'welcomes' that we get to witness as health care providers. This painting is a representation of that special moment in my life.

Raida Khwaja is a medical student at the University of Calgary Cumming School of Medicine.

POETRY

"A Labour Lost"

Come, Madam, come, let's be done, Through with this labour, love's labour won. A living miracle, if you do allow Us to intervene and show you how. Licence our hands to rove inside, Where you do your anatomy hide. Let us unwrap you, vertical, transverse, Draped in skin, hidden becomes perverse. Full nakedness, bodies unbodied are made, Lettering living segments with our blade. Writing a mythical man, hand over hand, Flesh becomes clay, time becomes sand. Fingers stretching, moulding a door, Weighted palms undo the generator. Out of the blood a man is made free, Plucked from the shroud, he returned must be. A finger-birthed babe, a child unborn, A mother unburdened such, rendered forlorn. What makes a mother - skin, womb, thighs, hair Unravelled, limp, and unable to unbear? We tell her story in double-speak, Mouths covered, hands made busy with technique. By blood we each live, pulsing, grow old, But how oft forget our first entrance untold. Now, living dreams inspired by poets long dead, A child - not born - imagined, from man's head.

Ashleigh Frayne MD Program, Class of 2018 Cumming School of Medicine, University of Calgary

"Grace"

Awarded the Best Poem in the Cumming School of Medicine Student Writing Competition

I forget that beauty strikes in the least likely places.

Thursday morning at the gait lab, his wheelchair whirs in,

He stands placidly as we roll up his pant legs, a wader with nowhere to swim.

The long mat studded with sensors lies before him, a thin rail to the left,

Video cameras the sole paparazzi for his runway, as we capture each step.

The passage painstaking, each knee pistons upward and bends back,

His upper body floats - a fishing heron poised to attack.

A raptor, a waddling robot, a tent in the wind,

The air seems thick, muscle tone too thin to leverage limbs.

His body forms a block of pulleys without ropes - like us, bone cannot stand alone.

The human body should not perambulate with this little strength.

At least, that's what the doctors have told him.

But the human body is not his body; averages and acceptance are mere concepts,

Abstract as the sense of how one's own body would feel pared

To the bare essentials like this.

He was a dancer. His body an art, more than a vehicle,

Never careening through life the way some swerve and skid,

And now, a Greek horse - betrayal in the muscles that were once his gift.

He should not walk, yet stacks vertebra on vertebra, inhales,

Pulls in the pulsations and dances across the sensor-filled stage.

And what beauty do I selfishly extract from this?

The beauty of walking – a miracle? Of the human spirit, indomitable?

Poise was never a matter of muscles, or posture,

It is the dance that bears life forward when bones give way.

Kayla Feragen MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

*Winner of the Cumming School of Medicine Student Writing Competition in the Best Poem Division

"The Poor Historian "

How strange, how the role of timekeeper,

Clock-winder, church-bell ringer,

Of chronological voice passes from

Throat to throat in the room,

Obvious yet intangible as air.

And I with my pad and pen, exquisitely aware

Of the stethoscope coiled, encircling my neck,

How an instrument provides permission

To be so direct – "And when was that?"

From across the room she interjects,

"You forgot to mention the heart attack, Dad."

How delicate, when memory belongs

Not as static storage in the head of one

"Post-operative seventy-year old male",

But beyond neural networks to family networks,

Patterns of brains, an unseen synapse stretches

From daughter at the window, to wife,

To husband and father, recumbent in his hospital bed.

Of course, I remember the neuroanatomy, could point

With precision to the curled tail of the hippocampus,

Postulate the pathways of cortical connections,

Yet this is how memory is truly distributed:

Property of neither writer nor doer,

But of those who were present. They do not recall

The mechanism of that first fall, nor the exact date and time,

But recount how he teetered to his feet and golfed another nine.

The room reverberates with his life story,

An amateur conductor - I halt the orchestra to single out stray notes,

Panning for symptoms in his life's cache of gold.

A ritual in pictographs, fire and stone,

Travelers bartering in the currency of story,

Narrative as salve, prayer, mortar, quiet glory.

As I wander my way through his occupation, medications,

Place of birth, family illnesses, living situation,

Document every ache, each bone broken and repaired,

I am struck by the terminology...

How a history is "taken" rather than shared.

Kayla Feragen MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

PROSE

"An Exploration of *Vogue's* Narrative: Themes and the Body Mass Index of Cover Models as they Relate to Patient Reality"

As media has become an ever more pervasive source of information and entertainment for society, so has its influence on the thoughts and behaviors of individuals. An interesting result of this influence, particularly for health care providers, is the impact on health outcomes. Micali et al. (2013) have documented increases in eating disorders from 2000-2009. Eating disorders are multifactorial diseases, which are linked to other mental health conditions, genetics, and environmental factors (Collier & Treasure, 2004). The documented association of media with body image and its associated eating disorders (McCabe & Ricciardelli, 2001) suggests the power of media on health outcomes might have more influence than health care providers think. As a surrogate marker for this concept, I wondered whether changes in Body Mass Index (BMI) in media outlets were associated with similar changes in general society, and explored this idea more completely through the question: How do trends in BMI in *Vogue* from 1950-2015 vary, and how do they compare to historical trends in BMI? I also explored the messages *Vogue* chose to send about body image, and whether or not there were any associated health outcomes from the data I interpreted.

METHODS: To answer my question, I first investigated the trends in BMI in Vogue from 1950-2015. I chose to look only at Voque covers as a marker for the approximate BMI of the models hired during the various time periods I was investigating, for several reasons. First, I felt that the cover of a magazine is the most visible, and therefore arguably the most impactful on the average human. Second, the cover is particularly effective at influencing because of its visibility. While in line at the supermarket, a woman might notice the cover of a magazine, and without critically evaluating the message she is seeing as that of a fashion magazine, internalize that picture and change her own expectations of a normal body type. This could happen even though the images do not necessarily represent the typical or healthy BMI for a woman. Finally, I wanted to observe a larger number of models depicted through the years, and by focusing on covers, I was able to investigate all issues of Vogue from 1950-2015. For the decade of 1970-1979, I investigated beyond the cover of Vogue, as there were few covers depicting full body images of models. To approximate the BMI of the models, I used bodyvisualizer.com, a BMI estimator, which allowed to me assess hip, shoulder, bust, and waist size, as well as height and weight. I estimated the BMI of models from each decade meeting specific criteria; the models had to be facing the reader approximately head on, wearing clothing that made the models' body types visible, and have enough of their body present in the image to interpret their BMI. The approximation of the BMI of the models was a limitation of this study. It was not possible to input the images of the models into an application that could calculate BMI; therefore, the BMI's obtained were a result of my visual estimations, potentially decreasing the accuracy of the data. Future studies might aim to obtain the identities of Vogue cover models to determine their actual BMI's at the time the photographs were taken.

ANALYSIS: *Vogue's* covers through the years have touched on diverse aspects of women's lives, ranging from fashion to politics. *Vogue* has used these cover photos to develop a narrative around popular culture and the way in which women lead their lives. As a very successful, innovative, and elite magazine, *Vogue* reflects the undertone of success in all aspects of its communication. It would seem fitting, then, that its narrative surrounding the female culture serves to illustrate how successful women might behave, dress, and look. Stemming from this image of a successful woman, the three themes that seemed to stand out most prominently from *Vogue's* cover narrative, in terms of both what women ought to value and what the magazine hopes to represent, are status, attractiveness, and health. These themes relate to each other to portray interesting messages about health and wellness.

Vogue cover models are portrayed as having a certain status in society. The models are well dressed in expensive clothes and jewelry, surrounded by messages on travel and shopping. In the earlier decades, the cover messages discuss marriage and women with demanding social commitments, then move on to depicting supermodels who become famous and whose status is an intrinsic part of the supermodel agreement. In the later decades, the models are actual celebrities, already known to society as talented, wealthy, and popular. For example, in the October 15th, 1958 issue, a woman is depicted wearing expensive clothing, jewelry, and sunglasses, leaning up against a new car. This image alludes to the status this woman has in society.

The second theme, attractiveness, is demonstrated by classically beautiful models wearing trendy clothing, often an ideal body type for the time period, and with messages providing tips for women on how to become more beautiful. These messages often direct them on what to wear, what beauty products to use, and how to style their hair. For example, the January 1st, 1971 issue depicts a beautiful woman, with trendy hair, earrings, and clothing. Next to her image are messages like, "your hemlines: have the look of today in the length you like best", "your hair: 8 new ways to wear it without cutting it", and "your figure: shape up while you sleep".

The third theme, health, is also demonstrated through the cover models and the messages accompanying them. The models themselves tend to be what is stereotypically thought of as healthy- young, fit, and thin. There are some credible health facts about different medications and healthcare advice, but the majority of the health related

messages advertise the latest diet or exercise fads, with significant emphasis on weight loss. For example, the April 1st, 2015 issue depicts the image of Serena Williams, a professional tennis athlete, surrounded by messages like, "shape of the season: the long, lean line" and "six models share their training secrets".

The themes above interact in an interesting way to provide both overt and subliminal messaging to readers about attaining success. Essentially, *Vogue* suggests that to achieve success, through the themes of status, attractiveness, and health, women should dress like *Vogue* models, look like *Vogue* models, and hope for a similar lifestyle. This suggestion, combined with the messages on dieting and losing weight, conveys the powerful message that having the same weight and body type as the models portrayed in *Vogue* is not only associated with success, but also normal. This message serves to potentially undermine the self-esteem of some women, and consequently cause health implications ranging from negative body image to emotional disturbances and psychological disorders.

Evaluating the cover models' BMI's and comparing them to historical trends elicited an interesting observation. The BMI's of the models, although always on the lower end compared to population values, decreased from 1950 to 2000. Models from 2000-2015 overall maintained a similar average BMI throughout that time period, with a slight increase from 2010-2015. The BMI's of the models in *Vogue* ranged from 19.7-20.7 in the decade from 1950-1959, 18.9-19.5 from 1960-1969, 18.0-19.0 from 1970-1979, 18.2-18.8 from 1980-1989, 16.8-18.0 from 1990-1999, 16.4-19.0 from 2000-2009, and 17.0-21.0 from 2010-2015. Body types of the *Vogue* models also changed over time. During the 1950's, the models were curvy. During the 1960's and 70's, the models depicted were often thinner and more androgynous. The 1980's depicted thin, tall, and muscular women, while the 90's depicted women who were very thin, but busty. The 2000's and onward tend to depict women with body types almost unachievable without the extreme measures available to those who are part of the modeling and entertainment industries - personal trainers and nutritionists, plastic surgery, and picture editing. These models are thin and muscular with larger busts and hips.

Historical BMI trends in the average population have been increasing since 1960, along with rates of obesity. Ogden, et al., (2004) describe mean American adult female BMI's increasing from 1960-2002, along with trends in overweight and obesity for the same time period. In 1960, the mean BMI was recorded as 24.9, which slowly increased to 28.1 in the years between 1999 and 2002. According to Flegal et al. (2012), from 1999 to 2010, mean BMI in adult females was 28.7, with no statistically significant change in BMI during these 12 years. Rates of obesity also did not change from 1999-2010, although they did increase in specific sub-populations, namely non-hispanic black and Mexican American women. The prevalence of obesity remained around 35.8% in North American women from 1999-2010. In summary, these results indicate that BMI and obesity rates in the average woman increased between 1960-1999 and then plateaued between 1999-2010. This contrasts with the decreasing BMI of cover models portrayed in *Vogue* during these years.

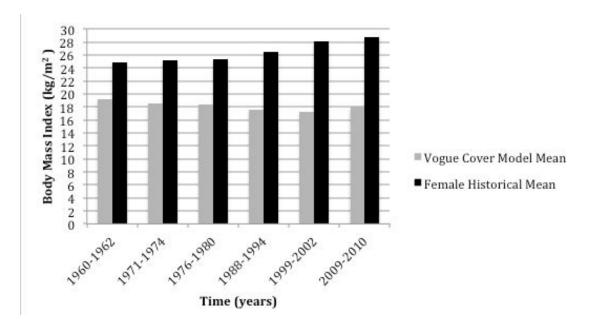


Figure 1. A comparison of the relationship between Time and Body Mass Index (BMI) for female *Vogue* cover models and historical data. The BMI's of female cover models in *Vogue* were determined using a BMI estimator

(bodyvisualizer.com) and the BMI's averaged over the time periods above. The Historical Mean BMI's of females in the general American population were obtained from Ogden et al. (2004) and Flegal et al. (2012).

Some might argue that this contrast in BMI's between average women with Vogue cover models suggests that Vogue's narrative is ineffective; that the increase in BMI's followed by maintenance of the trend in the general population suggests Vogue's strategy of depicting women of underweight BMI's and extreme body types has no impact on women's decision to alter their bodies. However, there is evidence suggesting that this presumption may be inaccurate. A study by McCabe & Ricciardelli (2001) indicated that adolescent females with higher BMI's were more likely to experience body dissatisfaction and engage in extreme dieting behaviors. Additionally, individuals with higher BMI's were more likely to feel pressure from sociocultural sources, such as media, to alter their weight. It is possible, therefore, that as BMI in the general population has increased, so has women's dissatisfaction with their bodies and, consequently, their participation in unhealthy weight loss behaviours. A meta-analysis by Groesz et al. (2001) demonstrated that females' body image was more negative after viewing images of very thin models. In both of these studies, adolescents were the most vulnerable to negative feelings about their body image and to participating in weight loss behaviors. There is also evidence suggesting that body dissatisfaction is correlated with stress, depression, and low self-esteem (Johnson & Wardle, 2005). This suggests that the Vogue magazine covers have an impact on multiple areas of mental health, including depression and eating disorders. A prospective study by Rohde et al. (2015) discussed six risk factors related to the development of eating disorders in women: perceived pressure to be thin, thin-ideal internalization, body dissatisfaction, dieting, temperamental negative affectivity, and body mass. Perceived pressure to be thin, thin-ideal internalization, and body dissatisfaction all increased over time. Dieting increased over time after first decreasing. Body mass initially increased and then decreased, although still remained above the starting values, and negative affectivity decreased over time in the subjects studied. Body dissatisfaction was the strongest predictor for adolescents developing a future eating disorder, and generally developed before the other factors. BMI was the only factor found not to correlate with an increased likelihood of developing an eating disorder. Vogue is a prime example of a media source that may contribute to pressure to be thin and thin-ideal internalization.

The contrast in BMI's of average women with *Vogue* cover models suggests that the narrative *Vogue* is trying to portray in its images is not representative of the majority of women's realities. By suggesting that the women *Vogue* depicts are the epitome of status, beauty, and health, the magazine is providing a dangerous message, which may impact the health of some women. Combining this depiction of women with a lower than healthy BMI with the messages in *Vogue* about dieting and weight loss, the magazine is providing an environment in which women may feel the need to diet excessively to attain the body types of the models used in *Vogue*, and by association, the success that these women represent. This may lead to development of disordered eating and the eventual development of clinical eating disorders, but more commonly, it may lead to emotional disturbances, as women with normal or high BMI's feel incapable of achieving a desirable body type or level of success.

Beyond *Vogue's* pattern of depicting cover models with BMI's lower than that of the average population and often under-weight, it also presents very homogenous body types; it is possible to describe specific body types depicted on *Vogue* covers from different decades. Interestingly, Groesz et al. (2001) demonstrate in their meta-analysis that female's reported body image, which normally becomes more negative after exposure to images of very thin models, did not decrease as much when exposed to images of both very thin models and normal or plus-sized models. This suggests that a more heterogeneous depiction of body types in popular media might help individuals to normalize their own body types and reduce the media pressure on women to achieve a specific appearance. This becomes an especially important concept in light of the current standards of beauty displayed by the fashion industry, which are almost unachievable by conventional methods.

The impact of media on women's health should be a concern for healthcare providers. This impact has the ability to affect patients' mental health, dieting patterns, and their interpretation of healthcare professional advice on healthy weight loss and eating patterns. In a study by Posavac et al (1997), three psycho-educational interventions which aimed to either explain the unrealistic nature of the appearance of women depicted in media, educate on the discrepancy between thinness and what is biologically possible, or both, reduced the negative impact of images depicting very thin models on the viewer's body image. Therefore, educational interventions on media presented to adolescents, who are the most vulnerable for developing body image disturbances and associated eating disorders, might benefit the health of young women. Additionally, inquiring about exposure to media sources in young women may help to identify risk factors for developing unhealthy weight loss patterns, emotional disturbances, or eating disorders.

CONCLUSION: Media remains a powerful influence in the North American culture. By promoting its own brand of success through status, attractiveness, and health, *Vogue* may indirectly impact the health of women. Images of cover models depicted in *Vogue*, which depict body types that differ largely from the general population, and are

counter to population trends over time, have the power to affect health behaviours and outcomes for individuals. Health care professionals should take this into consideration when counseling patients on nutrition and exercise.

Erin Auld MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

References:

Collier, D. A. & Treasure, J. L. (2004). The aetiology of eating disorders. *The British Journal of Psychiatry, 185(5), 353-365.*

Flegal, K. M., Carroll, M. D., Kit, B. K., & Ogden, C. L. (2012). Prevalence of obesity and trends in the distribution of body mass index among US adults, 1999-2010. *The Journal of American Medical Association, 307(5), 491-497.*

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: a meta-analytic review. *International Journal of Eating disorders*, *31*, 1-16.

McCabe, M. P. & Ricciardelli, L. A. (2001). Parent, peer, and media influences on body image and strategies to both increase and decrease body size among adolescent boys and girls. *Adolescence*, 35(142), 225-240.

Ogden, C. L., Fryar, C. D., Carroll, M. D., & Flegal, K.M. (2004). Mean body weight, height, and body mass index, United States 1960–2002. Advance data from vital and health statistics; no 347.

Posavac, H. D. (1997). Reducing the impact of exposure to idealized media images of feminine attractiveness on college-age women with psychoeducational interventions. *Department of Educational Psychology, University of Utah.*

Rohde, P., Stice, E., & Marti, C. N. (2015). Development and predictive effects of eating disorder risk factors during adolescence: implications for prevention efforts. *International Journal of Eating Disorders, 48, 187-198.*

"Being Mortal: Medicine and What Matters in the End by Atul Gawande From the Perspective of a Medical Student"

Before I began medical school, I had never heard of Atul Gawande. Yet, from the first day of classes, it seemed that not only had everyone read his novels - they all loved them. Naturally, my curiosity was piqued. When it came time to choose a book to read over Christmas break, I borrowed a copy of Gawande's most recent work, "Being Mortal: Medicine and What Matters in the End," from the library. Now, just a few short weeks later, it is difficult to remember exactly what I was hoping to gain. I think I expected some light vacation reading. I would satisfy my curiosity, learn about geriatrics, glean a few anecdotes to share with peers and generally showcase the fact that I was a well-rounded medical student. While I suppose I got all of these things out of the experience, I also gained a new perspective on caring for the aged.

For those who have not read the book, "Being Mortal: Medicine and What Matters in the End" is a study of the medicalization of aging and dying. In a series of powerful stories, Gawande travels to the homes of the elderly to gain an understanding of their thoughts, feelings, living situations and life circumstances. In my opinion, the novel strives to answer one basic question: where is the line between simply being alive and living a life worth living?

Over the course of the novel, Gawande's stories uncover one indisputable fact: the elderly are unhappy. Stripped of their independence and passions in the name of minimizing the effects of disease and time, they are fading into quiet anonymity and little is being done to balance the quality of their lives with the quantity of their years. More specifically, the independence and self-efficacy we are taught to value in Western society slowly gets taken away. We are put into care, told what to eat, when to sleep and what activities are off-limits. Clinicians treat and counsel perhaps without truly considering their recommendations in the context of the natural course of aging. As a society, we are so obsessed with safety, survival and physical health that we have not quite realized that these variables do not equate to happiness.

By the time I put down the book, I was demoralized. I could not believe that such a large subset of our population had fallen through the cracks in such a big way. Though their physical needs were being cared for, their emotional needs had been put on a shelf and sacrificed for safety and minute improvements in health. This revelation scared me. However, it was the first moment that I acknowledged the overwhelming responsibility that comes with the medical profession. As a physician, I will be part of the team that provides the elderly with both the care due to them and care that takes into account their passions and priorities. In the future, it will be my generation's responsibility to optimize geriatric care so that it addresses both the physical and emotional needs of the aged. While this is a huge undertaking, it is one I will take on gladly to ensure that my parents, grandparents, and their peers, receive the care they deserve.

LA MD Program Cumming School of Medicine, University of Calgary

"Considering Nepal: A Medical Elective Experience"

"Certainly, travel is more than the seeing of sights; it is a change that goes on, deep and permanent, in the ideas of living."

Mary Ritter Beard

Recently, as a second year medical student at the University of Calgary, I had the privilege to participate in a four week global health pre-clerkship elective in Nepal. Even though this was an incredible opportunity, I realized that I had mixed feelings about international medical electives. There are many benefits to studying abroad: learning medicine in a different context, experiencing different cultures, and meeting new people. However there are also challenges. These include language barriers, cultural barriers and learning medicine that is not necessarily applicable to practice in Canada. In addition to these concerns, there are many ethical issues surrounding the practice of sending learners into hospitals that are already burdened with limited resources and preceptors needed to train their own students. Would visiting elective students merely add to this burden? Yet despite challenges I was still motivated to pursue an international elective.

In 2009, I visited Nepal and fell in love with the people and the country. As a result, it was exciting to set up a 4 week elective and imagine the prospect of traveling back there with 7 other Canadian medical students. We planned to spend the first 2 weeks doing a non-clinical community health elective. During this time we would learn about the social determinants of health in Nepal through meetings with various international and local organizations. The second two weeks would be the clinical portion of the elective; we would spend our time in a tertiary care hospital in Kathmandu.

Then the unexpected occurred. On April 25, 2015, while we were organizing the details of the elective, Nepal was hit by a deadly 7.8 earthquake. This disaster was followed by another 7.3 earthquake on May 12, 2015. As the initial reports emerged, we had to determine whether or not our elective would still be possible. There were safety considerations to evaluate, but we also wanted to make sure that if we did go to Nepal we wouldn't be using up scarce resources or slow down the rebuilding process. After consulting with contacts in Nepal, it was decided that our trip would proceed as planned.

Our program began with a number of discussions about both international influence in developing countries and international aid, particularly in the post-disaster context. These discussions encouraged me to think more deeply about my choice to do an international elective. Why would I spend money on flights, spend 14 hours travelling each way to do an elective in a place where I knew that the clinical experience would have many additional challenges and might not be as relevant or complete compared to completing an elective in Canada? Subconsciously, did I just want to return to a beautiful country that I love? Did I just want a vacation? I would like to think that I had more reasonable intentions than those, but still I struggled to find the root of my decision to go to abroad.

My experiences in Nepal helped me find the answers I was seeking. It was important for me to come to terms with the questions of whether this elective was benefiting my medical education as well as whether or not I was interfering with the training of Nepali medical students. During one of the community health presentations, the facilitator emphasized that in order to be a truly effective and outstanding physician one must see firsthand and directly practice medicine in a community context. He stressed that in order to have a good understanding of the social determinants of health in a community, it is important to have a global perspective of health. He emphasized that this kind of deep understanding can only be realized if experienced in context. This was one of my "Ah ha!" moments. At least one of my questions had been answered.

As medical students in Canada, we learn about the social determinants of health in school. We even get limited experience within the community relating to these social determinants of health. However, in countries like Canada the social aspects of health often take a back seat in terms of money and attention compared to sexier, seemingly more exciting areas of medicine such as complicated surgeries and diagnostic testing. As a result, less time is spent on addressing the social determinants of health and preventative medicine. In countries such as Nepal, the social determinants of health have a more critical role in day to day health. For example, in Nepali social structure women are usually at the bottom of the priority list and as such have very little decision-making power. During my elective in Obstetrics and Gynecology I saw how this imbalance in gender roles affects healthcare as women would only be admitted onto the ward if they provided the name of their husband or male family member. While gender equality is significantly better in Canada, learning about how other cultures approach gender is extremely relevant for a multicultural country such as Canada. During the two weeks of community health I learned firsthand how education, gender, physical environment - particularly post-earthquake - and social environment can affect health. While

perhaps I didn't get the same clinical experience as I would have received in Calgary, the learning I obtained in Nepal around how social factors affect health was unique and much more valuable.

Nonetheless, there was still the matter of how my presence affected the training of the Nepali medical students. Fortunately, a new component of my elective was a mentorship program that paired the Canadian medical students with the Nepali medical students. Our Nepali mentors received some formal training in mentorship and were in the same rotation at the hospital as we were. This mentorship program included both social activities as well as more practical issues such as helping us familiarize ourselves with the hospital. My mentor became an invaluable resource for helping me understand about standard hospital practice, learn about Nepali culture, as well as gaining an understanding of their experience of the earthquake. I was fortunate to hear our mentor's opinions about the disaster plans that were in place at the hospital. The Canadian medical students received many benefits from the mentorship and we were integrated into the hospital learning environment as unobtrusively as possible. It is my sincere hope that our conversations and interactions - as well as the training they received in mentorship - were equally beneficial and rewarding for the Nepali medical students.

I have spent much time contemplating the usefulness and ethical issues surrounding experiences such as mine in Nepal. I have come to realize that the answer to my question "Why do an international elective in a developing country?" was really quite simple: you are there to learn about all aspects of medicine. As long as you go in with an open mind and with the appropriate preparation and resources, you will learn as much, if not more, than if you stayed in Canada. To do this kind of trip in a respectful way it is important to spend a significant amount of time learning about the cultural context in which you will work, the local health problems there, and how the social determinants of health affect the area. Mentorship programs are an excellent way to help with understanding cultural issues as well as improving medical learning. I am immensely grateful for the opportunity to travel to Nepal for my medical elective and for the many experiences that greatly exceeded my expectations. My time in Nepal confirmed for me that seeing and experiencing different cultures gives one a wider, deeper perspective that allows doctors to connect with patients no matter where they are practicing.

Jessica Tamura-Wells MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

"Educating the Future Physicians of Canada"

In the final year of medical school, students move from the classroom to clinics and hospital wards to apply theoretical knowledge to practice. It is a thrilling, grueling, inspiring, anxiety provoking, physically and mentally taxing, necessary right of passage into the profession. A time for us to learn how to apply our understanding of the science of the human body and our tools of the craft, to the real world needs and desires of our patients and their families.

Our working environments are diverse and range from physician run clinics to acute care hospitals in both rural and urban settings. Each has their own unique culture, practice, and politics that can require cat-like agility and adaptability to survive as the newest, and lowest, member on the totem pole. Our medical knowledge is tested daily by members of the health care team, an inevitably humbling experience as the cases we saw in the classroom often lack the layers of complexity seen in practice. This new reality of frequently being incorrect can weigh heavy on the fragile ego of the perfectionist medical student. We are used to being right, we are used to feeling valuable, we are used to having self-esteem. Alas, as we wade past the sleep deprivation-induced depression, the feelings of inadequacy are eventually replaced with an acknowledgment of the vastness of medical science, recognition of the time it will take to command the subject matter, and a noticed improvement in our knowledge base as the days march on.

As in any profession, knowledge is acquired through experience. We immerse ourselves by frequently starting early, ending late, and adhering to demanding call schedules. Bathroom breaks, lunch breaks, and sleep can be mere fantasies on some rotations, an experience that is not exclusive to the medical student but climbs the ranks to the staff physician. There are many days when we do not get the pleasure of fresh air, or seeing sunlight, which often leads to a deep seeded desire for heavy, refined, carbohydrates or something deep fried. The whole process can leave one feeling exhausted and frustrated, particularly when the schedule is coupled with regular certifying examinations.

This extreme marathon that is medical training has frequently provided fodder for television and film. It is common knowledge that we are required to pour our blood, sweat and tears into our education, and I trust that the public at large generally takes a sense of comfort in our dedication. After all, we are in the business of life and death, illness and wellness. It is inevitable that expectations will be high. And indeed, our educational programs are tailored to meet those expectations.

The Royal College of Physicians and Surgeons of Canada articulates a framework within which Canadian students are to be trained to become *medical experts*. The framework is based on a set of traits that are to be cultivated to ensure we can effectively meet the health care goals of the people we serve, while preserving the values that underlie our cherished Canadian system. This is not an easy feat given our increasingly complex medical environment. We will be faced with growing costs and tightening resources that could have a less than desirable effect on the quality of life of our patients. At present, it is not uncommon for me to see patients occupying hospital beds in the end stages of their lives because we have a dearth of more appropriate accommodation. New technologies and pharmaceuticals with astronomical price tags are threatening already stretched budgets. And there are an increasing number of people in our communities suffering from chronic disease despite new treatments, because the new treatments are rarely cures.

Learning the vast subject matter that forms medicine is a feat unto itself taking years to master. It is an art to understand the nuances of the human body, its sounds, textures, appearance, as well as the contribution of a particular family history or social environment. Adding in the requirement to cultivate skills to help usher our health care system into the demanding future, takes a mastery that will be as difficult to learn, as I believe it must be to teach. Regardless, it is a challenge we must accept as workers in the trenches of a system that we will come to know better then most, and which has so much meaning to us all as Canadians.

Sheila Acharya Van Horne MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

"Hands"

Awarded the Best Short Story in the Cumming School of Medicine Student Writing Competition

I've been told that there are certain patients who will never leave your mind, regardless of how long they've been out of your care. And there are definitely patients who teach you lessons that are not learnable in a classroom, a podcast, or a textbook. Kahya was one of those patients.

Second year, addictions medicine program elective, final day.

I've been on an elective in addictions medicine for the past week. Though short, to call it intense would be an understatement. It's now our final day, and we're spending it with the patients. This morning they are scheduled for Wellness Group, and a guided meditation is on the agenda. My student partner and I join the women, pulling the thin, institutional pillowcases over flat pillows and unrolling neon yoga mats, slightly worn from years of heavy-duty spray sanitizer.

I kneel and then lie down, attempting to get comfortable as my spine presses against the hard floor through the padded plastic. I feel a finger hesitantly touch my shoulder and look to my left to see Kahya, my patient "buddy" stretched out on her mat. She rolls her slight body a few inches closer and asks if this is our last morning. When I nod my assent, her voice lowers to an intense whisper – "I need to talk to you after this. Before you go."

As the voice of the recreation therapist guides us into the meditation and the canned sounds of birds chirping over the rush of what is presumably a mountain brook spill from the aged stereo, I let my mind drift, reflecting on what I've seen over the course of the week. The flood of thoughts and emotions come with a pressure that reflects that of the recorded water flowing in the background. From the immediate enveloping and welcoming of the newest patient at the start of the week, to the gentle but firm calling-out of detrimental behaviours and attitudes in group, to the candor with which Kahya shared her darkest moments in group last evening and the outpouring of warmth and support that her "sisters" (as the program calls them) provided afterward, I have been struck by the fellowship and kindness that the recovering women show to each other.

At the same time, despite the clinical staff's clear caring and desire to help, even in this supportive environment I was equally struck by the somewhat veiled flippancy present when patients were discussed in rounds. It was not an attitude of adults caring for equals, but more in the vein of adults caring for children, or at least for a group evidently considered "the other". While the women accepted their fellow patients at face value, trusting first, the staff were the opposite: an inherent level of distrust pre-empted patient actions – untrustworthy until proven otherwise. It was an interesting dichotomy, particularly with the background knowledge that many of the staff had at one point gone through addiction and were in recovery themselves. The threshold between "recovering" and "in recovery" clearly signalled some shift, however tangibly imperceptible, from a space where one was a patient first, their words ever in doubt, to a place of being a full person again, able to speak and be heard as valid, without justification. Although magnified in this environment, I pondered how this validity had already shown up in so many of my clinical encounters, whether via preceptor distrust of a patient's words, or the ever-so-subtle nuances of the language in which we are taught to chart – "reports pain", instead of "is having pain", as though even their subjective experience is at risk of being a falsehood, subpar to clinical observation.

The recreation therapist's voice pulls me back to reality, and as the meditation ends, I open my eyes. Artificial nature sounds are replaced by chatter as the patients gather up their mats, stripping pillowcases and replacing supplies in cupboards. I scan around the room for Kahya, spotting her at the same instant that she finds me. She glances towards the therapist, busy packing up at the front of the room, and, satisfied that we have a few moments, pulls me over to a corner.

"I want to tell you what to look for in your patients. You're going to be caring for people with addictions and you need to know the signs."

I thought that I did know. The entire week had been focused on learning what addiction is: its symptoms and presentation, its causes, how to treat it, what different treatment modalities and philosophies exist, how to access resources, et cetera. We've heard patient stories, lectures from staff, had question-and-answer sessions. But. I don't know everything. Just as every person is a bit different, so is every patient. I focus back on the petite woman standing in front of me.

She holds out her hands, palms down, fingers splayed. Her nails are trimmed and manicured with a pale shade of peach, impeccable but for the slight chips at the edges where her anxiety has caused her to peel off shards. A plain wedding band and thinner band with a square diamond glint on her ring finger. These are hands that pushed her two children on the swings, hands that wrote a novel, hands that cared for her dying mother, hands that crocheted blankets for her friends, and hands that squeezed those of her own patients in reassurance and comfort. They're strong hands, skilled hands, gentle hands. But they're also hands that display evidence of her addiction. Fine track lines from her intravenous drug use snake along their surface, some paler and faded, others still blatant.

"This is what you look for." Her voice is steady. "I hid it from five doctors. FIVE. I wore gloves; I sat on my hands during appointments; I put on bandages; I kept my hands in my pockets. Make sure you see your patients' hands. ALL of your patients, not just the ones you assume are potential addicts – I was a professional, middle-class, a mom. I was hiding it, but at the same time, I wanted my doctor to find out. I needed them to ask; I needed them to see it and offer the help that I couldn't reach out for. Gloves in the summer aren't normal. Even things that seem normal might not be normal. Pay attention to the details!" She looks up at me, her intense blue eyes rimmed by metal-framed glasses.

I nod. "I'll look. I'll pay attention. In everyone. I promise." I like to think that I would have picked up on these things, but maybe not. The excuses roll through my mind: clinics are busy; you have focus on the presenting complaint; someone else should have picked it up too; in some patients it just wouldn't be necessary. But those aren't acceptable. I'm responsible for my patients. Busy isn't an excuse. Assumptions cause harm.

The room has nearly emptied now and the other student is lingering in the doorway waiting for me. I turn back to Kahya. "Thank you." I mean it. It's not only a thank you for the advice she's just shared, but for the trust that she's placed in me, for the openness in sharing her story and struggles, for being the person that she is – even if that person is one who felt pain so deeply that the only solution she saw was medicating it away. She seems to understand that my thank you goes deeper than that moment. She reaches out, embracing me, and I return the hug. A final tight squeeze of her hand, and I say goodbye, retreating down the hallway with my colleague.

Second year, family med clinical experience, day one.

My patient this morning is a thirty-two-year-old woman named Sarah. According to the appointment schedule, she's here because of fatigue and persistent low mood. That's all I know.

I walk into the exam room and sit down, pausing a moment before I greet her to take in her expression, her posture, her choice of attire. As Kahya and her story flashes through my mind, I remind myself why I'm here. I'm not here to "fix" a patient – I'm here to connect with a *person* and help them to heal. I let my eyes linger on her hands.

Emily Macphail MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

*Winner of the Cumming School of Medicine Student Writing Competition in the Best Short Story Division

"Resolutions for Clerkship"

Her smile was unmistakable. She sat still for several moments, reflecting upon a nursing career in oncology spanning more than 30 years, and still going strong.

"It's not like it used to be anymore," she surmised.

"I visit my doctor and am out in less than a few minutes," she explained.

"You know, there used to be a time when the doctor would always place a stethoscope on my back and a thermometer in my mouth. Always. Every visit, no matter what," she exclaimed, almost defiantly.

We had been talking about the New Year, ushering of change, and its relentless pace.

"It's getting better, though. The new doctors that I visit and that come through our wards...it's fascinating to watch them. Sometimes they forget how much experience I have, but I'm always happy to help and share what I can. I love what I do, and I think you will too," she ended, encouragingly.

"Maybe that should be your resolution for the New Year, to love what you do," her husband added, with a chuckle.

"Maybe it should be that I resolve to make good use of my stethoscope and thermometers," I retorted. We all laughed. She and her husband packed her delectable baked goods and I put on my coat.

I left their home unsure if I am going to love clerkship – the monumental part of medical school that all medical students discuss in hushed tones, to ensure it never truly becomes as all-consuming as our upper-year peers describe it to be, at least not before it needs to be. As a medical student, it's the next stop for me. Clerkship is legendary among medical student circles. We've all heard stories of miracles, horror and meltdowns – tales as unique and ubiquitous as their raconteurs, and the challenges and blessings that give them rise. It's the stage in our training following classroom learning; practical and full-time; the time where everything we've learned gets put to test, at once, rather than one ring-of-the-bell at a time. It's what every medical student works towards (in addition to MPL (minimum pass level), and, well, of course, the other milestone, CaRMS (Canadian Resident Matching Service)).

As I drove home that evening, undistracted, as required by Alberta Law as of January 2016, I began formulating resolutions that I resolve *never* to make. If you have identical resolutions, read a bit more closely. The moments in clerkship are going to be the moments that define us, and our future careers, and determine whether and how our reputations precede us, for better or worse.

This personal reflection stems from lessons learned in the classroom, from textbooks, from many patient presentations, and especially, from interactions with instructors, mentors and shadowing before clerkship.

1. I resolve to economize on time.

Five minutes is too long for a Snapchat story, Vine video, pick-up line or voicemail. But it's not nearly enough time to recite simple multiplication tables. There can't be a standard and single approach to all things. The same is true in medicine, where there is inherent complexity in patient presentations, histories, dispositions and dynamics. As we progress through our training, inevitably, we will develop routines and strategies that help us be most effective and efficient as clinicians. As the novelty of the work and routine begins to wear off, let us not forget why we chose medicine – every patient should get the time and attention they deserve. In the face of several conflicting pressures that we are certain to face on a daily basis as clerks, let our overall efficiency not be at the expense of the quality of time spent with our patients. Building rapport and trust requires investment, which in turn facilitates improved patient understanding and joint decision-making, and patient satisfaction.

2. I resolve to eat, sleep, and breathe clerkship.

Justin is the second Trudeau Prime Minister, and most recent Canadian politician to grace the pages of Vogue Magazine. He's also promised to improve Canada's standing internationally, and progress domestically through deficit spending for the next several years. Deficit spending certainly resonates with clerks in medicine, who are constantly running a sleep-food-energy-mortgage tomorrow deficit. But it's not going to improve anyone's standing or progress if it's the *de facto* and only strategy. As clerks, we are going to have to be careful about where, when, and how we expend our time and energy. For the longer term, success can only come from balance, not from burning the

candle at both ends with the multiple fires we're managing. If this continues, we too will end up in Vogue, that is, if you replace the "vo" with "mor." Instead, let's resolve to make time for regular self-care, personal development, family time and relaxation, in addition to the requisite study and diligence required for success in clerkship. After all, the things we do outside of medicine are just as important for our clinical practice as the things we do in medicine.

3. The only perspective I resolve to consider is my own.

Although binge-watching House, M.D. would lead you to believe that it's always lupus and that breaking and entering into your patients' homes is the best way to learn about them, it's not. Medicine engages all of our faculties and requires us to learn and teach by listening, observing, feeling, adjusting, speaking and doing – sometimes all in a single interaction. But we're not alone, and that makes for very rich immersion and learning opportunities. We are supported and fortunate to share these interactions and to be part of care teams that consist of health care providers from across the continuum of care who bring valuable, unique skills and perspectives, which when collectively harnessed, can result in nuanced clinical decision making and the provision of very effective patient-centered care.

4. I resolve to continue pretending that I don't make mistakes.

Were Ross and Rachel really on a break when Ross became intimate with another woman? For fans of the hit TV show Friends, it's been a source of endless debate. Wouldn't it just have been easier if Ross admitted to making a mistake immediately? I, for one, would like to think so. However, then we wouldn't have had seven more seasons of this fantastic TV show, and let's be honest, that would have been the greater tragedy. In medicine, though, not admitting to one's mistakes can have much graver consequences – our patients' health, or possibly even her life. Mistakes are inevitable but invaluable. Admitting to them and learning from them is the foundation for growing as a physician, and as a human being. While we are always seeking to improve, there is nothing to be ashamed of for erring, especially at our stage. Being upfront about our errors may be painful, but it is necessary. So the next time we forget to do a neurological exam on a patient and our preceptor asks us if the neurological exam was normal or not, let's just admit we didn't do it, and then offer to go back and do it. And for the record, my personal opinion is that no, they were not on a break. Sorry, Ross.

5. I resolve to never let my patients' ailments affect me.

Have you ever seen Simon Cowell cry? If not, then it's because you've never seen him slice an onion. Believe it or not, however, aside from his frequent acerbic dismissals, he too – arguably the most stoic of all reality television program judges – has been moved to tears in moments of sincere and genuine connection. What makes a good clinician is his/her ability to remain human and to both remember and practice his/her humanity. Much has been written in recent months about the need for arts immersion and exposure to the humanities for the development of empathy in medical students. Several programs, including *Looking for Story (Seminar Series for Health Care Professionals in Training)* and the *Humanities in Health Care Symposium* at the University of Calgary, have sought to cultivate greater sensitivity in medical students. We all learn, feel and express differently, as do our patients. Greater patience, attention to detail and an open, receptive heart can make all the difference in a single consultation, if we allow for it. Reflection and greater introspection can also help facilitate such connection, through personal time, self-care and more open conversation with the colleagues on our care teams, across disciplines. Here is a quotation by Persian poet Sa'adi upon which I continue to reflect, prominently displayed at the United Nations alongside a beautiful carpet whose interwoven threads exemplify its beautiful message:

"All human beings are members of one frame, Since all, at first, from the same essence came. When time afflicts a limb with pain The other limbs at rest cannot remain. If thou feel not for other's misery A human being is no name for thee."

So, how do we want to look back on our time in clerkship? What kinds of stories and experiences do we want to be able to share? While it's hard to forecast how things will unfold, with so many unknown variables before us, we can and do have the power to at least influence part of that narrative.

In conclusion, and drawing from the aforementioned, here are some of my real resolutions for clerkship:

1. I resolve not to economize on time – quantity and quality

- 2. I resolve to maintain as much balance as possible
- 3. I resolve to do my best to collaborate with others and to harness every team member's unique skills, contributions and perspectives
- 4. I resolve to be honest when I don't know, to admit when I am wrong, and to learn from and correct my mistakes
- 5. I resolve to interact with my patients with an open mind and open heart

Not everyone whose New Year's resolution is to get six-pack abs succeeds. Likewise, it is possible that we will struggle with some or all of these resolutions, but that doesn't mean we shouldn't aspire to them. We have a duty and responsibility to our patients and our profession to be the best we can be. And I resolve never to forget that.

Nabeela Nathoo MD/PhD Program, Class of 2017 Cumming School of Medicine, University of Calgary

Zaheed Damani MD/PhD Program, Class of 2019 Cumming School of Medicine, University of Calgary

"SIRI MRI (A Short Story)"

I had heard this voice before, although it was under much different circumstances. It was among the chatter and laughter as we all, in our short white coats, stethoscopes around our necks, gathered around the doctor teaching us. Wide eyed and eager, coffee in hands, staring at the screen trying to make sense of the images of that beating heart. Between teaching points, I heard it for the first time, that voice. A glance across the mirrored glass to where it was coming from, I didn't think anything of it at the time. I hadn't pinpointed it before, but now I know it all too well. "Breathe in. Breathe out. Stop breathing."

Fast forward a few months, now I am on the other side of the mirrored glass. As I transfer to the machine, I am careful not to trip over my new purple hospital gown. I've been told, purple is my color. I am instructed to lie down in this tube. This very small tube. I close my eyes tightly and try not to think about how confining this space is, and as I do, tears squeeze out the sides of my eyes. I try to be brave, forty minutes they tell me. 'Forty minutes! Are you kidding me?' I think to myself. Just as I'm about to wind myself up in a fury of stress and emotion, there it is, that voice again. Siri MRI. I couldn't pinpoint it the first time I heard it but of course! That stoic, concatenated, yet oddly mesmerising voice. "Breathe in. Breathe out. Stop breathing." How had I not recognised it before? Maybe it was because I didn't have to, for after all, I was in the comfort of the other side of the mirrored glass. Suddenly I'm overwhelmed by quilt, how could I have not, for one second, thought about the person on the other side of the mirrored glass? That person, stuck in this tube. Who was it? Were they just like me? World turned upside down, trying to make sense of it all? Were they scared and vulnerable like I am now? Were they newly born claustrophobes, as I now felt I was, the moment I entered this tube? I wondered, if there was a group of young, wide eyed students in that room at that very moment, sipping coffee, casually chatting about their weekends discussing my heart, while I lay here consumed with emotion, utterly frustrated and confused. Has one of them even thought of me? "Breathe in. Breathe out", SIRI MRI snaps me out of my train of thought. Ok here we go, I follow along with her, "Breathe in. Breathe out. Stop breathing." I gasp for air. "Breathe in. Breathe out. Stop breathing." Another gasp. 'C'mon SIRI MRI!' my thoughts getting more panicked, as more tears squeeze out of the corners of my eyes. I fight the urge to open them, for fear of exposing the reality that is. With my eyes closed, I can at least imagine that I am not in a small, small tube. "Breathe in. Breathe out. Stop breathing.". 'YOU stop breathing!' I find myself exclaiming in my thoughts, 'that doesn't even make sense SIRI MRI, you can't stop breathing at the end of an expiration! It doesn't make sense!'. as I begin to sob. Why? Why is she so calm and robotic? Even Siri on my phone is capable of humor, of some sort of emotion. 'C'mon SIRI MRI!' I sob. Just give me something, some encouragement, anything to make this seem ok. What I would give for some encouragement, to hear someone's voice, not this virtual assistant. How can I keep going like this for forty minutes? I'm overrun by emotion. Just as I think I cannot continue on, a voice, my nurse's voice, a real voice, comes overhead, "You're all done Miss Burek". Until we meet again SIRI MRI.

Grazyna Burek MD Program, Class of 2017 Cumming School of Medicine, University of Calgary

"Staying Alive"

Just five short weeks into my first year of medical school, I was shadowing in the emergency room. I had never really considered myself a good fit for the ER, but I thought I'd never know for sure until I tried. Everything was new and exciting and I understood next to none of what was happening around me, save for the odd word here and there. Joined at the hip to my preceptor, I hopped from room to room clad in my white coat, trying to think like a doctor. I had shadowed this preceptor twice before so I was eager to show that I did, in fact, learn something since our last encounter. To my dismay, I still met many of his questions with a "deer-in-the-headlights stare". Fortunately, a resident was also with us, so I was not the center of attention for most questions. It was a morning shift and I hadn't been there too long before a code came in.

An obtunded patient, Ms. Smith*, was brought in by EMS; we rushed to the code room where I tried to pick a nice corner to stand in so I could stay out of the way. The staff moved swiftly about the room like performers in a choreographed dance where I'd missed all the rehearsals. I wanted to be useful but, I didn't even know what that would entail and asking didn't really seem feasible. I wasn't sure what to do with myself so I would grab gloves and put them on – just in case (that's what doctors do, right?). I'd wear them for a while and realize I must look silly since I wasn't even near the patient, so I would take them off. And repeat. My preceptor was busy attending to Ms. Smith, although he would call out to me every so often to explain things. I nodded, despite understanding very few of the words he said.

The code lasted several hours, with Ms. Smith frequently crashing and requiring CPR. A line-up of nurses would form: they would take turns doing chest compressions until she was stable again. After a few repetitions of this cycle. I could see the nurses stretching and shaking out their arms in line. I had taken a CPR course a few weeks prior, so I technically knew what to do. I offered to help, explaining quickly that I'd never actually done it on a real person before. The nurses ushered me into the line and I glanced at my preceptor for approval. He looked, but continued what he was doing so I took that as a go-ahead. When I was next up, I'm sure I was visibly shaking. I kept thinking of how I'd never been able to get the practice dummy's "good CPR" indicator click to sound during my course, which was doing nothing for my confidence. The moment that I took my turn and stepped up on the stool next to Ms. Smith is burned into my mind - I will never forget it. I felt all the blood drain from my face and, for a second, thought I might pass out. I started chest compressions and singing "Stayin' Alive" in my head, to make sure I had the right beat. I was relieved that the patient was intubated because there is no way I could have counted the compressions. I kept going until my back ached and I could feel my compressions getting weaker, then I switched off. My preceptor told me I "did some good CPR", and I tried not to beam too much. After that, Ms. Smith stabilized for a while so we went to speak with her family. Her husband was in the code room with us, which is not how they do it on Grey's Anatomy, so naturally I was surprised. I wanted to talk to him but I didn't know what to say, so I would just smile a little – but not too much, every time I caught his gaze.

Ms. Smith continued to crash for most of the day, until she passed away during a code. There were already enough doctors and staff in there so I wasn't in the room when it happened. The words were never explicitly said, at least not that I heard. I eventually had to ask. I was in disbelief, even though I shouldn't have been. I just felt like she would get better. I had no good reason to feel that way, but I did. I was shaken. It's difficult to describe that feeling. It was brand new, I had never had to deal with it before.

When the shift was over, I sat down to de-brief with my preceptor. I was trying to be tough and stoic even though I could feel my eyes welling up. I tried to keep my answers short so as not to disturb the flood gates. We were talking about other things when he suddenly excused himself and came back with a box of tissues for me, which was unfortunately just enough to let the tears out. I was embarrassed about crying which, of course, just made me cry more. He was kind and gave me some advice on how he handles these things, and told me not to be embarrassed (though I still was). I thanked him, collected myself, and drove home.

Since beginning medical school, I have experienced some of the most memorable feelings I have ever had in my life. And it's only been 6 months.

*Name has been changed for privacy

Tahireh (Rae) Shams MD Program, Class of 2018 Cumming School of Medicine, University of Calgary