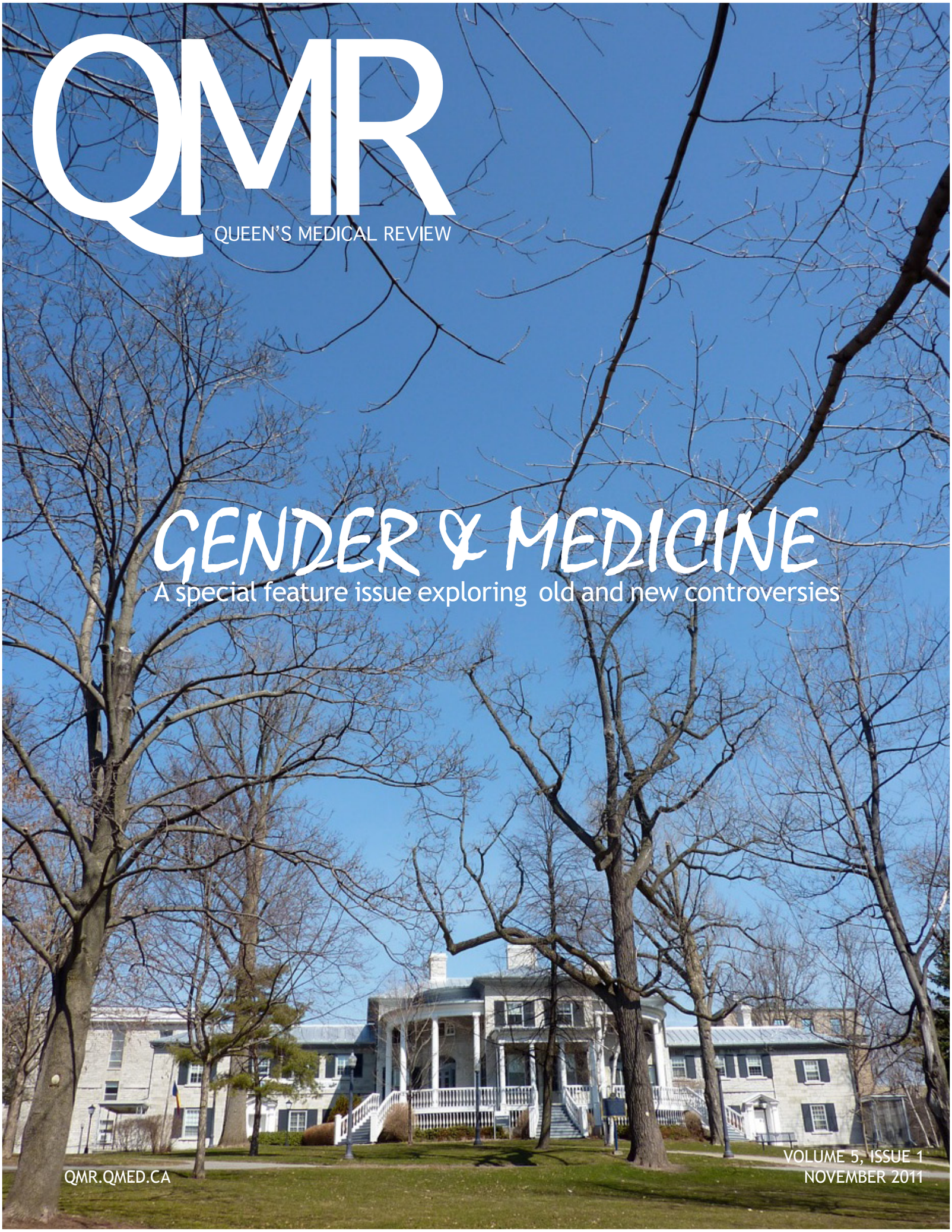

QMR

QUEEN'S MEDICAL REVIEW

GENDER & MEDICINE

A special feature issue exploring old and new controversies

QMR.QMED.CA

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NOVEMBER 2011

The Queen's Medical Review gratefully acknowledges the financial support of Queen's Alma Mater Society

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by Katrin Dolganova

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CORRECTION:
Credit to Elizabeth Tai was accidentally omitted in QMR v.4.1 and v.4.2. She worked as part of the Editorial team and held the position of QMR Chairperson since January 2010. We thank her for her longstanding contribution and apologize for this oversight.

From the Editors

The Canadian medical community has transformed substantially since 1868, the year Dr. Emily Stowe became the first Canadian woman to practice medicine in Canada. Born in an age when women had little political power and few rights, let alone access to medical education, she had to turn to the New York Medical College for Women to receive her medical degree. It was not until 1883 that her daughter, Dr. August Stowe-Gullen, became the first female Canadian medical school graduate. It took sixty more years for Queen's medical school to discard its men-only policy and re-admit female medical students in 1943, becoming the last medical school in Canada to do so.

Although the gains of women were slow at the beginning, the face of medicine has nevertheless been changed forever. We hope that this Gender and Medicine edition of QMR provides an insightful look at the progress that has been made so far and the unique obstacles that still face both men and women in health care today. In keeping with the theme, we are featuring the alumni profile of Dr. Shawna Johnston, a female obstetrician who entered the specialty while it was still largely male-dominated.

In the last decade, female medical graduates began to outnumber men and the public discourse has shifted towards the "feminization" of medicine – a highly contentious topic. It raises questions about whether there are innate differences undermining the abilities between men and women, and how health care delivery is changed by the influx of women into the profession. This edition's "Point/Counterpoint" has Lucy Horvat (Class of 2013) and Whitney Huggins (Class of 2013) weigh in head-to-head with their compelling arguments on whether gender balance is necessary in medical school enrolment. In addition, Sahil Koppikar and Daniel Mok (Class of 2014) give readers an overview of the novel admissions tool referred to as CASPer, which has been implemented at McMaster University as an attempt to maintain gender balance in medical school enrolment.

Investigating the concept of gender and its implication to medical conditions, Melissa Pickles (Class of 2011) writes about the religious, gender, social and the historical influences driving anorexia. Seth Climans (Class of 2014) comments on the traditional and evidence-based approaches to infants with ambiguous genitalia.

QMR is not the only student initiative at Queen's Medicine that attempts to explore this interesting topic. Renee Farrell and Erin Rogers (Class of 2014) summarize the successful inaugural event of the Women in Medicine Chapter where female medical students and residents gathered to discuss the medical profession with female physicians. Sarah Leonard, the Class of 2013's Medicine in Society Representative, mesmerized the 2014 class during Orientation week with a walking tour to explore the abundant history of medicine at Queen's. She highlights more of her research on the history of medical education for females at Queen's, through her interview with Dr. Ruth Galbraith (Class of 1957).

Lastly, new to QMR is the modification of the Internal News. Linda Xing (Class of 2013), Aesculapian Society Secretary, has compiled all the updates from the representatives in the Aesculapian Society to offer a holistic look at the initiatives directly affecting Queen's medical students.

Thank you to our team of writers and editors who have brought back the issue of gender in the context of medicine back to the minds of our readers. Thank you to our faculty advisor, Dr. Jacalyn Duffin, for her guidance and wisdom. We hope you enjoy this issue!

Katrin Dolganova Jennifer Lee
Editors in Chief

QMR

Internal News

UPDATES FROM THE AS COUNCIL

COMPILED BY LINDA XING

It's an exciting time for Meds! We welcome the arrival of the Queen's Medicine Class of 2015, who have shown themselves to be a group of bright, energetic and keen individuals - it is great to have you as part of our close-knit community here in Kingston! We also have a gorgeous, state-of-the-art new medical school building. The transition to the new two-year pre-clerkship program is almost complete, with the Class of 2013 now the last in Queen's history to spend the fall of their third year in the class room. If all these changes were not enough, the AS is hard at work to make the student experience at Queen's Medical School even better.

We're currently working to create a student-managed database of alumni information (including location of practice, specialty, and area of research) to facilitate connections between current students and alumni, specifically those practicing at other institutions.

Projects that have debuted this year include half-price individual licenses to UpToDate for clerkship students, the implementation of a standardized application process for club and interest groups under the AS, as well as an easy-to-access calendar of events to keep track of the numerous interesting speakers and workshops that are available for students to attend.

Queen's is proud to run a new and exciting mentorship program. Altitude MD is run out of the Ontario Medical Student Association, and includes regional programs run out of five Ontario medical schools. Queen's medical students act as mentors to first-year undergraduate students from rural or low SES backgrounds who are interested in health care professionals. A pilot version of this project took place last year at the University of Toronto and McMaster University and has received overwhelmingly positive feedback.

An effort is being made to provide financial support to the many great student initiatives that are being led and utilized by our colleagues, including - but not limited to - fundraisers, social events, lobbying efforts and student wellness. To accomplish this, a new student initiatives fund has been established in this year's budget. The fund can be accessed through requests made to the AS council and is intended to foster student leadership and innovation by supporting new programming and events conceived by students. We are also moving towards offering more convenient, electonic ways for members and alumni to pay for any of the services offered by the AS, including Goodlife memberships, the Toronto Notes order, and the AS clothing order. This will hopefully be accomplished through the new QMed.ca website in the near future.

OPENING OF THE NEW MEDICAL SCHOOL BUILDING

On September 23, 2011, hundreds came to celebrate the opening of the new medical school building – which included Health sciences donors, alumni, students, faculty, and university officials. This was a highly anticipated opening from all medical students and faculty alike, as a multiple year plan finally came into fruition. Students have been eager to use this building for their lectures, clinical skills sessions, and small group interactive sessions.

H.G. KELLY LECTURE

Queen's School of Medicine was extremely lucky to have Dr. Robert Buckman visit and enlighten us with his unorthodox but refreshing perspective on death and our role as physicians on guiding patients through one of the most difficult stages of life. Unfortunately, shortly after his lecture, word broke news in the media that Dr. Buckman passed away on October 9, 2011. We would like to pay our respects to a beloved and inspiring physician and send our condolences to his family.

HEALTH AND HUMAN RIGHTS CONFERENCE (HHRC)

The annual HHRC was held from September 30 – October 1, 2011. The HHRC is an award winning and annual event, organized by the medical students. The theme of this year's conference was "Maternal and Child Health" and the keynote speakers included Libby Davies (politician and activist) and Ilana Landsberg-Lewis (activist and a pivotal member of the Stephen Lewis Foundation). They received an overwhelming response, reaching registration capacity.

External News

BY AYAZ KURJI & MICHELLE WANG

A NEW WAY TO VISUALIZE HIV

The winning illustration from the 2010 International Science and Engineering Visualization Challenge was featured on the cover of the February 2011 issue of Science. At first glance, Ivan Konstantinov and colleagues' first place image seems to depict a non-descript, fluffy ball of wool. However, on closer inspection, the image reveals a creative and intricate portrayal of the 100-nanometer HIV particle. This competition is hosted annually by Science and the National Science Foundation.

NEW MARKER FOR HEART DISEASE DISCOVERED AT THE UNIVERSITY OF CALGARY

A 10-year observational study on 1574 firefighters published in the January 4 issue of Circulation, a journal of the American Heart Association, has found that endothelial dysfunction can predict who is at risk for developing coronary heart disease. The identification of this new marker in patients can facilitate earlier intervention in order to halt the progression of heart disease. This study comes out of the Libin Cardiovascular Institute at the University of Calgary's Faculty of Medicine and was led by Dr. Todd Anderson and his colleagues.

VIRTUAL EXPERIMENTS

In an effort to attract more young people to health science research careers, the European Commission on Research and Innovation recently launched their new browser-based game called Power of Research. In virtual laboratories around the world, players can engage in health research projects while performing experiments using state-of-the-art molecular techniques such as DNA sequencing, PCR, and protein isolation. Players can even win science prizes, collaborate with teammates worldwide, become institute leaders and get published in virtual science journals!

HOPE RESTORED IN THE WAR AGAINST POLIO

Despite the existence of an effective vaccine, polio is still endemic in at least four nations: Pakistan, Nigeria, Afghanistan, and India. Steps are now being taken to completely eradicate polio once and for all. Two large steps were taken in January. First, a massive vaccination campaign was launched in India that immunized 172 million children in a span of 5 days. The second was a pledge of millions of dollars towards the fight against polio by several philanthropists and organizations. Hope is being restored and optimism is high, but there are several hurdles to overcome. For example, the oral vaccine is being used, which, while being 20 times cheaper than the injected vaccine, is also known to cause polio in rare cases.

COUNTERFEIT PHARMACEUTICALS KILL 700,000 PEOPLE ANNUALLY

The counterfeit drug market is worth $75 billion a year according to the US Centre for Medicine in the Public Interest. The sale of counterfeit drugs accounts for the deaths of 700,000 people a year. Individuals living in developing nations are the most affected, as the prevalence of counterfeit medications exceeds that of real medications in many of these countries. Sadly, whereas in most countries the penalties for smuggling real drugs is high, the penalty for smuggling a box of fraudulent pharmaceuticals is roughly equivalent to the penalty for smuggling a box of clothes.

RARE DISEASE DAY 2011

In anticipation of Rare Disease Day 2011 on February 28, the patient advocacy group Inspire published a compilation of narratives written by patients living with rare, chronic diseases. Their struggles, and the personal lessons they learned are documented in an online 65-page paper. This document may be an interesting read for those who are affected by or know of someone with a rare condition.

QMR

Empathy and Gender

WHICH GENDER IS THE BETTER CAREGIVER?

BY JENNIFER LEE

In the past decade, Canada witnessed a change in its professional landscape with a greater number of females entering the workforce. Women are increasingly becoming involved in the once male-dominated disciplines of medicine, law, and dentistry. According to the 2001 census, females comprised 33 percent of all medical doctors, and this number is expected to rise in the coming years [1]. One must wonder how medicine as a professional practice will change as a result of these gender influences, if at all. Does changing the gender composition of practicing physicians ultimately influence the quality of health care?

One way that health care delivery may potentially change is within the doctor-patient relationship. An important cornerstone in the successful practice of medicine is the ability to display empathy – the capacity for a physician to view the world from the patient's perspective. As Sir William Osler stated, "It is as important to know what kind of a man has the disease, as it is to know what kind of disease has the man" [2]. It has long been speculated that females have a significant and innate advantage in demonstrating empathy since females are considered to be more perceptive to emotions than men. This, in turn, may provide a greater emphasis on humanistic care delivery, and arguably a "better" health care system.

There may be some truth to this stereotype. A meta-analysis by Roter et al. found that female physicians were more likely to devote time to psychosocial and preventative counseling, encouraging and reassuring their patients, and explicitly asking about feelings while providing statements of empathy and concern [3]. For instance, female physicians were shown to provide more preventative services such as breast and pelvic examinations compared to male physicians [4]. This may be due to female doctors having better perceptions of their own susceptibility to cancer, and thus having a greater understanding of what their patients are thinking.

However, more empathy may not translate into a more efficient health care system. Male physicians choose to spend more of their patient encounter on technical practice behaviours, including medical history taking, physical examination, and treatment planning [4]. Studies found that gender is not an important or significant contributor to the distribution of important medical information such as the discussion of diagnosis, prognosis, and medical treatment. In fact, males may be more efficient at it – female physicians on average would spend two extra minutes with their patients than their male counterparts. Yet, with the increasing burden of larger caseloads in medicine, this slight increase of two minutes per encounter could put a female an hour behind a male colleague at the end of a busy day [3].

An important caveat to recognize in all of this is that patients themselves may also alter the patient-physician relationship based on their own perceptions, expectations, and biases toward a female and male physician. A meta-analysis by Hall et al. found that patients often spoke more to female physicians and disclosed more biomedical and psychosocial information [5]. Thus, it is possible that male physicians were just never given the same opportunity as female physicians to show their "empathetic" side.

At the end of the day, who provides better care? Studies have reported mixed conclusions with respect to patient satisfaction. Certain studies reported better satisfaction with male physicians, some with female physicians, and others showed no difference [3,5]. Furthermore, whether a patient's health outcome significantly changes because of the gender of the attending physician has yet to be answered. As medical students, it may be more reassuring to believe that while there is research that indicates there may be an influence of gender on health care delivery, it is merely in one aspect and is not the principal determinant of quality of care.

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Women in Medicine Evening

PANEL DISCUSSION AND Q&A

BY RENEE FARRELL & ERIN ROGERS

The 2010-2011 school-year marked the inaugural year of the Women in Medicine chapter at Queen's University. The founders of the Queen's chapter, Sarah Kawaguchi and Jacqui Willinsky (Class of 2012) marked the occasion with a Women in Medicine evening on October 27th, 2010. At this event, over 100 female medical students and residents listened and asked questions to a panel of female physicians. This panel consisted of Dr. Stephanie Baxter (Ophthamology), Dr. Rachel Holden (Nephrology), Dr. Michelle Gibson (Geriatrics), Dr. Paula James (Hematology), Dr. Colleen Webster (Family Medicine), Dr. Susan Phillips (Family Medicine), Dr. Karen Yeates (Nephrology), Dr. Jennifer Carpenter (Emergency Medicine), Dr. Linda O'Connor (Family Medicine), Dr. Jacalyn Duffin (Hematology) and Dr. Sarah Jones (Pediatric Surgery).

Questions underscoring the various challenges and unique opportunities experienced by female physicians during the course of their career, including their experiences with gender-based discrimination and their thoughts on how to achieve work-life balance, were addressed. Each of the panel participants were a thrill to listen to, holding the room captive with their honest and real-life perspectives.

In addition to the larger panel event, the coordinators hope to initiate smaller meet-and-greet speaker sessions. These sessions are more intimate and consist of eight students and center around a particular discussion with a female physician from a field of interest. For more details on becoming involved in the Women in Medicine chapter at Queen's, contact erogers@qmed.ca. For more information on our national organization, the Federation of Medical Women of Canada, and to sign up please visit www.fmwc.ca.

Organizers Sarah Kawaguchi and Jacqueline Willinski introduce the evening's panel of women physicians.

QMR

Embracing Ambiguity

GENDER AMBIGUITY IN PEDIATRICS

BY SETH CLIMANS

Children born with ambiguous genitalia challenge our concept of gender divisions. Enough children are born with this condition to make us seriously consider the possibility that male–female gender is a false dichotomy. An estimated 0.018% of individuals will be born with ambiguous genitalia [1]. These individuals have disorders of sexual development, which can be caused by genetic changes or by maternal androgen exposure [2]. In some cases, investigations reveal the child to be more clearly male or female. Parents can then choose to raise their child as a boy or girl accordingly. In other cases - such as disorders of incomplete or unknown androgen synthesis or action, or ovotesticular disorders of sexual development - the projected gender identity is less clear [3]. Management decisions in these cases are often susceptible to our innate compulsion to classify.

The traditional approach to a child with ambiguous genitalia has been to assign that child a gender as soon as is possible. Early gender-assignment surgery was believed to improve the child's outcomes and also to make the caregivers' lives easier[3]. This traditional approach was based on three primary assumptions: (1) that gender identity is imposable; (2) that maintaining fertility is paramount where possible, and maintaining the potential for adequate sexual function is the next most important goal; and (3) that an adequate cosmetic result of the surgery will lead to adult satisfaction [4]. This traditional approach is still very much in current use. In Pediatric Clinical Skills, a textbook used in the Queen's curriculum, the authors write: "Early definitive assignment of the infant's sex is important for both medical and psychological reasons. Also, for family reasons, the child must be assigned a sex" [5]. Though this approach was and is used extensively, it is waning.

The traditional approach to a child with gender ambiguity is unsatisfactory because many of its assumptions have not been supported by long-term studies. First of all, few data support the idea that the effectiveness of gender assignment improves with early genital surgery [3]. Second, the appearance of external genitalia does not seem to impact gender role decisions in later life [3]. Lastly, gender identity and psychosexual orientation do not seem to be linked to early genital surgery [3]. Since we are in the practice of using evidence-based medicine, we must heed to these warnings.

Thankfully, there are alternative approaches to managing children born with ambiguous genitalia. These approaches accept the psychological dissonance that may come from leaving a child in a state somewhere between male and female. In doing so, they allow for evidence-based medicine to take precedence. The goal of these alternative approaches is to respond to a few long-term studies [6-8] that show inadequacies in the traditional approach, by aiming to separate gender assignment from genital surgery. Under this alternative approach, surgery is primarily performed for medical reasons, whereas purely cosmetic surgery is reserved for those patients who can exercise autonomous choice Caretakers are encouraged to reinforce the chosen gender role, but also be accepting if the child prefers another gender role [9].

The power imbalance in a doctor–patient relationship is enormous. In managing individuals with genital ambiguity, doctors must use this power very carefully. If one simply gives in to the urge to classify for the sake of classifying, then one may have a very unhappy patient many years into the future. Cosmetic genital surgeries and hormone replacement can cause life-long detriments [9]. Doctors must look to the long-term evidence and decide what is truly best for the patient. The good news is that management is changing: there is a shift away from the traditional approach [3]. The management of patients with ambiguous genitalia will continue to evolve. Let us hope that in the future, decisions will be based less on cognitive biases and more on long-term data. Q

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Point

Maintaining Gender Balance in medical school enrolment is important

BY LUCY HORVAT

The past few decades have seen a shift in medical school enrolment, with a larger number of females entering medical school than ever before. According to the Association of Faculties of Medicine of Canada (AFMC), since 1995, enrollment of women in Canadian medical schools has consistently been greater than 50%. This past year, females represented 57% of those enrolled in Canadian Faculties of Medicine. Perhaps most striking was McMaster medical school's entering class of 2002 - a whopping 76.9% female. This trend is international and has sparked a major debate over concerns for future health care delivery. Given varying practice patterns among male and female physicians, I believe that maintaining gender balance in medical school enrolment will help ensure adequate provision of health care services in the future.

Do not be mistaken; I am ever so grateful to my female physician predecessors for having paved the way for my female colleagues and I to practice medicine. Undoubtedly, women bring strength to the practice of medicine and deserve equal opportunities. However, I myself recognize that this gender imbalance or the so-called "feminization of medicine" may have unforeseen implications on future health care delivery.

A recent BMJ Head to Head on this topic cited that as compared to their male counterparts, female physicians were more likely to: practice in a few "family friendly" specialties (e.g. family medicine and psychiatry), work part time, publish less, hold less senior positions, participate less in training, teaching and research, and leave the medical profession sooner. This is not to say that every female physician intends to work part time, enter family practice, and retire early - far from it! I myself have little intention of fitting into a mould. Yet, one fact remains, despite great feminist movements in society, on average, women today still carry the role of primary care-givers, and are forced to reduce work commitments to care for their children and aging parents.

If the above trends are true, it is possible that accessibility to health care, one of the five basic principles of Canada's Health Act, may be threatened by the growing number of female physicians, particularly given the challenge of an aging population.

While we move forward to a future where there might be a shortfall of labour in health care due to my female colleagues' and my own desire to find a balance between medicine and family, I have to ask myself, where have all the men disappeared to? Surely medical schools only accept the best and brightest. Are we finally seeing what us women have long known, that we are the gender with supreme intelligence? Humour and jest aside, it is troubling to see the gender equality movement in the education system overshoot its target leaving men short-changed.

This very issue was explored last fall by a series in the Globe and Mail entitled "Failing Boys". It appears that an emphasis on marks and GPA may be responsible for the decreased presence of males in medical schools. Moreover the past 25 years have seen a decline in the percentage of males seeking post-secondary education at all levels. Given this trend, maintaining gender balance in medical school enrolment may prove difficult without some concessions in admission requirements. Similar admission changes have been made (with success) to meet other specific areas of need. For example, in an effort to boost physician retention in rural Southwestern Ontario, Schulich School of Medicine implemented special admission requirements for applicants meeting their Southwestern Ontario Medical Education Network (SWOMEN) criteria. Implemented in 1997, this program has already seen success. Perhaps a similar model might help increase male enrollment in medical schools?

Lucy Horvat (2013) a

One thing remains clear. As Canada's population ages, so too do its older, predominantly male physicians. If the issue of gender balance in medicine is not addressed soon, a cohort of female physicians will inevitably prevail. I believe that gender balance in medicine may be necessary to help ensure accessibility and equity to future delivery of health services, though various means of maintaining gender balance may need to be explored. Q

Counterpoint

Maintaining Gender Balance in medical school enrolment is not important

BY WHITNEY HUGGINS

id Whitney Huggins (2013)

Equality should be paramount in medical school and the medical profession. Just as I feel it is ludicrous to not pay physicians the same based on their gender, I believe mandating gender balance in medicine does not promote equality.

In recent years, there has been a shift towards more women entering medicine. This shift however, is not at all due to mandated gender balance, but rather the increased number of well-qualified female candidates.

Let's consider the various activities, grades and efforts medical school applicants put towards their applications and interviews. Most people would be enraged to find out that desirable candidates were not being admitted to medical school solely on the basis that the medical school in question had already met the quota for a particular gender. Better luck next year! There's always gender reassignment surgery.

This isn't the first time that the issue of balance in medical school enrolment has been raised. This was the case in the 1960s when racial quotas were introduced into many American medical schools. And while this may have encouraged applications, it did not change racial attitudes. Previous to that, in the 1930s, Jewish quotas were used in universities such as Cornell and Columbia to curb the number of Jewish medical students. In hindsight, this reflects a time when segregation was more tolerated.

Today, the issue of gender balance seems to have risen from recent concern over the number of women beginning to surpass men in the medical field. Some articles, including a Globe and Mail feature entitled "Is affirmative action for men the answer to enrollment woes" (Oct 21, 2010), are concerned that a greater proportion of female doctors will ultimately result in physicians working fewer hours, increased maternity leave, and fewer doctors willing to take on the rigorous time commitment of surgical specialties. In reality, this shift reflects a general movement of physicians (both male and female) changing their willingness to work extended hours with frequent call in order to spend more time with family or non-medical pursuits. The Globe and Mail article also hinted at the fact that subtle affirmative action to increase numbers of male medical students has already begun to occur in medical schools across the country.

I would by no means call myself a feminist, however, and my viewpoints do not arise because I feel that women should have everything men should have. But, I do feel that although there should be equal opportunity in medicine, the best candidates should be rewarded with admission based on criteria that has been proven to create excellent doctors; and these criteria do not and should not include the presence or absence of a Y chromosome.

If you are concerned about the underrepresentation of men in medical schools, then my suggestion is to head back to primary and secondary schools. There, girls are excelling more than boys at math and science and forming their dreams to become physicians. Male students should be given the same encouragement and help to strive for the same aspirations. Encourage more men to apply; don't choose them based on their gender.

The bottom line is this: I would be infuriated to know I got into Queen's Medicine not just because I had good marks, a breadth of volunteer activities and social interests, but because the male quota had been reached and they needed another pair of breasts. Q

CASPer

Closing the Gender Gap

BY SAHIL KOPPIKAR AND DANIEL MOK

There's no question about it – with medical schools looking for the most well-rounded individuals, the finest minds, and the most motivated students, all in one package – getting in is hard. With the aim for solid GPA and MCAT scores, the dedication to extra-curriculars, and the preparation involved in the application and interview, the whole process takes years before that final acceptance. When you add the fact that most medical school applicants are screened out pre-interview, you can see why applying to medical school may discourage many people.

In the last few decades, marks and a panel interview were the norm. If you met the grade point average (GPA) and MCAT cut-offs you then sat with physicians, medical students, and community members to explain how your experiences would make you a good doctor. GPA counted for about half of each application at certain schools, scaring some people from applying, especially males. Research has shown that females, on average, earn higher GPAs than their male counterparts throughout high-school and undergraduate studies [i]. Thus, the strong focus on grades discouraged males from applying to medicine [ii].

The irony behind this whole process was that it still could not predict which applicants would make good doctors. Training bright people is not enough in medicine. There is a general concern that universities are failing to discern what are referred to as "soft skills" such as good decision making, ethics, communication, and cultural sensitivity, and hence accepting people who will not necessarily be the best doctors [iii].

This concern, coupled with the fear that an overemphasis on marks was driving male applicants away, led professor Reiter (Chair of Undergraduate Admissions at Michael G. Degroote School of Medicine) to redesign the way that McMaster University screens medical school applicants. This is not the first time that Reiter has been involved in the evolution of the medical school interview process. He was also instrumental in designing a new interview style, now the Canadian standard, which appears to have narrowed the program's gender gap.

Seven years ago, the Multiple Mini Interview (MMI) was introduced at McMaster which replaced the traditional style by putting applicants in challenging, live scenarios with multiple interviewers. Studies showed that it was successful in identifying the "soft skills" that were originally being missed. However, the process still relied heavily on marks and an autobiographical sketch. Nothing stopped people from enlisting outside help on their essay and it did not really predict who would interview well. They needed a way to evaluate the skills and strengths of all of their applicants every year, rather than the 500 that were screened through marks. McMaster hoped that this would bring out the characteristics in each individual that would signal their potential to be good doctors, rather than identifying those with the highest marks, which still resulted in a gender imbalance favouring females.

In order to resolve this issue, the same principles behind the MMI were used to build an innovative online test. Hence, CASPer was born.

The Computer-based Assessment for Sampling Personal Characteristics – CASPer for short – represents a novel addition to McMaster's 2011 medical school admissions process. A web-based screening test administered by McMaster, CASPer consists of twelve sections with two or three questions each. The applicant is required to watch a video prompt prior to answering questions that attempt to assess the applicant's critical-thinking, decision-making, and communication skills. Five minutes are allotted to each section, including a break section, and the total time to finish is approximately ninety minutes [iv].

For those who have had interviews at McMaster or elsewhere, CASPer sounds strangely familiar to the Multiple-Mini Interview. In fact, CASPer was essentially designed as an online extension of the advantages of the MMI, which many medical schools – including Queen's University as of 2011 – have come to adopt. In the context of a traditional-style interview, it has been shown that inter-rater reliability of an applicant's performance varies greatly, making it difficult to accurately predict the applicant's performance in a subsequent similar situation. The MMI assesses applicants over multiple encounters, providing a better "average" picture of an applicant's characteristics than would a single encounter (ie. a traditional-style interview) [v]. In the same way that the OSCE assesses a medical student's overall clinical competency, the MMI provides information on an applicant's suitability for medical school. Furthermore, the structure of the MMI easily facilitates assessment of "soft skills" that medical schools are looking for [v].

CASPer takes the principles of the MMI and uses it as a screening tool to assess applicants' suitability to the medical profession even before the interview process. Prior to CASPer, McMaster employed the Autobiographical Submission to assess the same qualities that CASPer and the MMI examine. The difference with CASPer is that applicants no longer have the luxury of time to craft and edit (and re-edit) their responses.

For McMaster, CASPer seems to be a highly useful admissions tool. As an online application, it allows all applicants to be screened with the effectiveness of an MMI with reasonably high inter-rater reliability [vi]. For the applicant, CASPer can be taken using a personal computer in the comfort and familiarity of one's home. Whether CASPer will gain widespread acceptance, however, like the MMI remains to be seen. As with all things contingent upon technology, there is the risk for error and unreliability. Additionally, the possibility for cheating still exists. Integrated within CASPer is a keystroke recognition system. Much like a fingerprint, the typing profile of an individual is unique and can be used as identification [vii]. This does not prevent applicants, however, from seeking help while writing CASPer or sharing questions afterwards. From an applicant's point of view, another disadvantage may be the discrepancy between how one communicates while typing as opposed to while talking. Some applicants may be better able to communicate their ideas through talking than typing or may find that the 5-minute time limit per station in CASPer is more suited to conversation.

The hope is that CASPer will work toward accomplishing two goals: first and foremost, finding individuals with the characteristics, other than academics, which will make them good doctors, and second helping to reduce the gender gap in medical school. Hope is on the horizon on both fronts due to the MMI's success, on which the CASPer is based. In 2002, nearly 77% of students admitted to McMasters's MD program were women. However, by 2009, the school had reduced that number to 61% and restored some balance. The MMI has been credited with this change due to its neutrality toward an applicant's gender. Given CASPer's many similarities to the MMI, it is also expected to be unbiased and hopes to reduce the gender gap before the interview process begins.

The MMI has radically changed the way that medical schools are interviewing people and who they are accepting. The goals set out for the MMI were met at McMaster and now over seventy five percent of the schools have adopted it. CASPer is McMaster's new brainchild, designed to keep up with the admissions paradigm shift, aiming to reduce the gender imbalance, and hoping to be the new future. Q

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Fumbling Toward Equity

Women in Medicine at Queen's, 1880-present

BY SARAH LEONARD

The history of medical education of women at Queen's began in 1880 with three candidates: Elizabeth Smith, Elizabeth Beatty, and Alice Skimmen McGillivray. They began mid-year, and therefore, had a separate class with nearly individual attention from professors. The fall of 1881 brought the first attempt to fully integrate both genders, which was a dismal failure. It was the first coeducational medical program in Canada. Though the professors and community welcomed the young women, the junior male medical students were incensed, openly harassing their female colleagues with lewd comments, graffiti, and catcalls. In November of that year, the female students took offense to a comment Dr. Fenwick made in lecture comparing the position of the female larynx with that of a great ape, and they walked out of class. The male students seized the opportunity to urge the school to dismiss the female students and end coeducation at the Royal College of Physicians, Kingston.

Dr. Ruth Galbraith

Despite an initial denial of this petition by the faculty, the young men were industrious, sending telegrams to other medical schools across the country requesting transfers. Due to the fact that other schools were willing to grant them admission, the men had a powerful ultimatum: remove women from their classrooms or face the threat of closure due to a loss of enrolment. The school was forced to comply, and re-instituted gender-segregated classes by forming the Women's Medical College, Kingston in 1883. Although it was the very first school for higher professional education for women in Canada, it faced competition for female students from similar new colleges in Toronto and Montreal, eventually closing its doors in 1894. Medical coeducation was not re-established at Queen's until 1943, during the Second World War. (Travill, A.A. Medicine at Queen's, 1854-1920: a peculiarly happy relationship.)

In the late 19th and 20th centuries, discrimination against women did not exist solely in medicine. Rather, it was everywhere in society. Women had worked in factories, built munitions, run organizations and fulfilled most employments vacated by soldiers through the Second World War; yet when the war was over, the surviving men returned to their jobs and the women were sent back home. According to Dr. Ruth Galbraith, the local Canadian Red Cross was managed by a medical doctor named Hannah Robertson during the war, who was unable to continue this role or even practice medicine following the war because she was a woman.

In 1951, Dr. Galbraith entered Queen's as one of six female medical students. It never occurred to her at the time that there might be a gender difference or that it might be difficult to get into medical school despite there being 2,000 applicants for 60 places. She thought, "you go in on your merits, not your chromosomes… gonads are immaterial" (Galbraith, R, personal communication). In the social context of her time, it was common for women to become nurses, teachers, or secretaries. The popular perception of those women who were in university was that they were "going for their MRS" rather than for a BA or MD.

During her time in medical school and postgraduate training, Dr. Galbraith was acquainted with many women who were working as teachers or secretaries to support their husbands who were studying medicine or working toward PhDs. Those women, like the women who were studying medicine, often faced roadblocks because neither effective birth control nor child care were available at the time. The social order requiring women with families to work in the home and raise their children applied universally.

Dr. Galbraith was pregnant as an intern and had a baby as a resident in paediatrics, but she was expected to leave medicine and stay home with her family as there were no child

Dr. Ruth Galbraith, Kingston Ger

care options available at the time. Because the paediatrics department in Kingston was desperately understaffed at the time, they asked her to return to work with her baby, who slept in a linen closet while she rounded on patients.

In the 1960s, several female doctors in Kingston, including Marjorie Boyle, Jean Alexander, Vera Sudek, Jan McConville, and Ruth Galbraith, had small children and taught on the wards. There were at least four full-time paediatrics professors, all male. Departmental budgetary problems led to a scaling down in the salary of women because "the idea at the time was, their husbands made good money and their work should be like a hobby, something they would be glad to do instead of going to the hairdresser" (Galbraith R, personal communication). Dr. Galbraith regrets not fighting back at that time: "We all should have quit and said 'Okay, do it by yourselves' rather than accept a ⅜ pay cut for doing the same work" (Galbraith R, personal communication).

She, another female doctor, and a friend babysat on rotation so they could each work four days per week, and she returned to work full time when her children were in school. She started a special infant clinic at Hotel Dieu and held a wide variety of jobs: research in obstetrics, teaching and service in paediatrics, and directing the clerkship program for ten years. These were not prestigious jobs, but rather bits and pieces of jobs no one else wanted.

Dr. Ruth Galbraith

Although she does not regret taking jobs that allowed her to spend more time with her children, she rejects the popular notion that a current push for greater work-life balance is specifically about women wanting to be home with their families. She recalls her husband being on call every night for seven years, and because there were no cellular phones, that meant they always had to be at home or near a phone and would have to have a spare bridge partner in case he was called in to work. Now, doctors of both sexes who are salaried have more balanced call schedules. This is partly driven by financial restraints on the health care system, great concern about work exhaustion leading to more medical errors and erosion of patient safety, as well as a new attitude of concern for work-life balance in society in general. Dr. Galbraith contends that women are made to be scapegoats on this issue, but the reality is that men share their wish to be less consistently on call.

There has been great success integrating women into medicine, particularly with changing societal expectations for women. However, this has not changed some persistent negative attitudes about female doctors, as we have seen with the recent outcry in the news regarding the current dominance of female candidates in medical school. In the late 1990s, Dr. Ruth Galbraith met a colleague at their 40th class reunion who thought he was paying her a compliment when he said "it wasn't so bad after all that you got into medicine because I always thought you shouldn't have" (Galbraith R, personal communication). Dr. Galbraith reflects on her experience, recognizing that it must be considered in the context of the society in which she lived: "I did something I loved, and I was damned lucky. I'm not unique, but because of society I probably appreciated it more because I had to fight so hard to get it" (Galbraith R, personal communication).

The history of women in medicine at Queen's and in Canada is far from over, and the fight Dr. Galbraith and her colleagues waged for equity continues. The current belief that a large number of women doctors will erode the quality of medical care in the future because these women will supposedly neglect their patients and work part time hours more than their male colleagues is blatant sexism. That this view is so prevalent and socially acceptable, in the face of evidence to the contrary, is reprehensible (Herbert et al, Ending the Sexist Blame Game, CMAJ 178(6), 2008). Q

ıeral Hospital residents,1957-1958

"Thou Shalt Not Eat"

Religious Elements of Pro-Anorexia Discourse

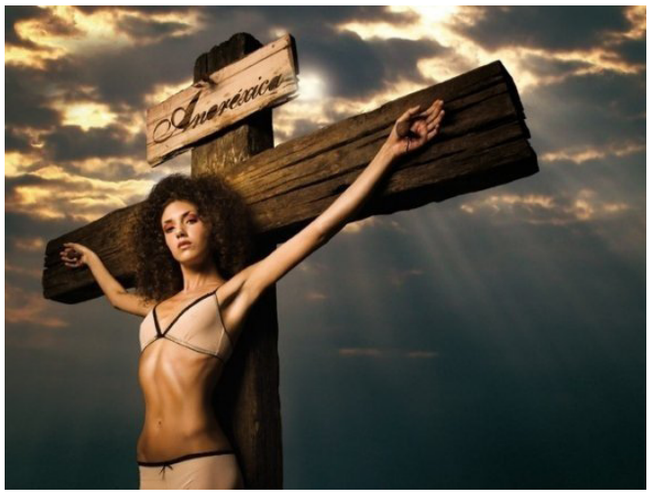
BY MELISSA PICKLES

The image is as striking as it is horrific: a beautiful, impossibly thin young woman on a cross. She's scantily clad; tousled and sexy, as she gazes towards the observer. On a scroll above her head, is written simply "Anorexia." It is one of many "thinspirational" photos in an online pro-ana group [1]. These groups have become something of a phenomenon, alternatively fascinating and frustrating those who study anorexia. Many religious features are present on these sites, often revolving around Ana, the anthropomorphism of the disease [2]. An analysis of this religious symbolism may provide treatment providers with a better understanding of the social aetiologies of anorexia, as well as the meaning patients have ascribed to their illness experience.

Anorexia nervosa is one of the most lethal psychiatric disorders [3], a fact which may cast pro-anorexia social groups in an almost perverse light. In these groups, which can be found through simple Internet searches, individuals, almost entirely female, congregate in support of eating disorders. Pro-ana groups can range from a supportive environment for those suffering from the disorder, to those with the philosophy that anorexia is a legitimate lifestyle, like homosexuality [4]. These sites tend to contain "tips and tricks" for diets, exercise and evading detection, as well as group weight loss goals. "Thinspiration" photo albums are often present to promote weight loss, containing images of extremely thin individuals and deterring photos of the morbidly obese [5].

Religious undertones are also frequently present. The photo described above contains many of the contradictory features present in online postings: suffering and struggle, the threat of death, and simultaneously the promise of salvation: beauty and perfection. Throughout it all is the presence of "Ana," an often deified figure created by members. Women on pro-ana sites will often refer to Ana as an entity to be served, one who demands much but who rewards her followers. It is not uncommon however, for Ana to be spoken of in negative terms, even as an enemy [6].

Other spiritual motifs are also frequently seen on pro-ana sites; prominent scapula are named "Ana wings," and the notion of purity is frequently discussed – users frequently mention the feeling of hunger as being akin to feeling "light" and "pure" [6]. "Bones are clear and pure. Fat is dirty and hangs on your bones like a parasite. Let me be empty and



One of many "thinspiration" photos posted to the photo album "I Love You to the Bones, Ana!" on the Facebook group "Ana's Secret Agents"

weightless" [7]. The concepts of attaining perfection and self-control, themes also present in Christianity, are pervasive on these sites and have been well discussed in anorexia literature [8, 9].

While men have been diagnosed with anorexia nervosa, females represent the vast majority of many pro-ana site members. As a female phenomenom, pro-ana sites have thus been the source of feminist research [6, 10, 11]. In the hopes of better understanding current starvation behaviours, much of this research reflects on the history of starvation and women in Western civilization. Female saints in antiquity often engaged in fasting as a sign of devotion and discipline. This means of spiritual expression was in line with past cultural expectations of women, such as obedience and a willingness to sacrifice needs. Christianity, as the dominant religion in Europe and North America in past centuries, idealized the struggle toward a perfect ideal, as well as the repression of urges considered "sinful." Sexuality, particularly female sexuality, has historically been considered sinful, deviant behaviour. It was not uncommon for women to engage in fasting as a means of developing the discipline necessary to repress their own sexuality [10].

More recently, female sexuality has become amorphous and its expression has arguably become more acceptable in mainstream Western society. Gender identities are also in a current state of change and ambiguity, yet many feminists argue that a woman's body still tends to embody the

patriarchal expectations of the time. This is viewed as a means of social control, as it shifts a woman's focus onto attaining an acceptable body [10]. Our expectations of women and their bodies has become arguably more superficial: female sexual activity is no longer as overtly restricted as in past decades, with focus shifting instead towards attaining an acceptable, if increasingly unattainable, body type. It is difficult, however, to separate concepts of sexuality and appearance. The individual with anorexia initially aspires to the body presented by society as the most sexually attractive: one that lacks the curves typically associated with female sexuality. The mixed message presented is that the socially acceptable "sexy" woman is one who lacks feminine sexuality.

The relationship between morality, as it relates to desire, self-control and anorexia, can be further examined through our relationship with food. Morality in this sense can be defined as a value judgement placed on a particular action, with the assumption being that some actions are deemed "good" and others deemed "bad", based on values commonly held to be true. Much as the promiscuous woman in the past was considered "immoral", it has been argued by some researchers that food and eating has attained a moral status in North America [2]. A commonly used platitude amongst those who consider anorexia to be a legitimate lifestyle choice is "I eat to live, not live to eat," [12] implying contempt for the addiction-like over-indulgence perceived amongst their non-anorexic peers. This viewpoint is also present throughout the general population; as argued by Driscoll, "slenderness [is] the measure of one's moral calibre" [10]. Bell elaborates on this theme: "Though pro-anorexia may invoke the affect of disgust, it is still only obesity that signifies the cultural 'grotesque'. The fat girl is called out as freak, whereas the thin girl may be pitied but she is still secretly envied" [6]. While anorexia nervosa itself is widely viewed as pathological, the sinful-like relationship held with food is one that is shared throughout North America. A study done by Rozin displayed that when shown a picture of a chocolate cake, French participants were most likely to respond with the word "celebration." Americans, however, responded with the word "guilt" [13]. Interestingly, one of the many "Ana Creeds" present in a Facebook group, "Ana's Secret Agents" states: "Thou shalt not eat without feeling guilty" [1].

The avoidance of deviant behaviours through the use of guilt and shame is a strategy found in Christianity as well. Frequent modeling is displayed in the Bible, in which the appropriate response of an individual who behaves in an unacceptable manner is shame and guilt. One example exists in the Book of Genesis, in which Adam and Eve are made to feel shamed for disobeying their god by eating fruit from the tree of knowledge. Examples are also present in the New Testament; i.e. the shame felt by Peter after denying knowing Jesus, the night before Jesus' crucifixion. In addition, it is believed that the afterlife will contain a "Judgement Day" in which all people will be deemed worthy of either heaven or hell. This implies that undesirable behaviours are deserving of harsh punishment, and that one can be either a "bad" person (a notion which causes ensuing feelings of shame or guilt) or a "good" person as determined by one's actions. One could argue that the act of Catholic confession, in which a person can be cleared of past misdeeds if he/she expresses repentance can be construed as further emphasizing the necessity of shame or guilt - one cannot, it would seem, avoid hell without it.

Lelwica argues that this "religion of thinness" comes with its own "set of convictions, myths, rituals, images, and moral codes that encourage women to find meaning and purpose in their lives through the pursuit of a "perfect" body" [2]. Of course, there is also guilt and shame for those who do not comply. Pollan argues that Americans in particular, with their Puritan origins, have long associated food with morality. "[Our] Puritan roots also impeded a sensual or aesthetic enjoyment of food ... to the Christian social reformer of the 19th century, 'The naked act of eating was little more than unavoidable … and was not to be considered a pleasure except with great discretion'" [14]. It is interesting to reflect upon this quotation in light of Rozin's findings: that a piece of chocolate cake does not provoke considerations of taste, or the social context in which it would be eaten. Rather, it caused thoughts of guilt [13].

The "religion of thinness" may be considered reasonable in light of the current obesity epidemic in America, and the effects that are felt throughout the healthcare system. Yet in spite of feelings of shame, few individuals manage to make long-term changes to their weight and obesity rates continue to rise. This "religion" also has many negative effects on psychological well-being, producing substantial feelings of anxiety and failure, both of which have negative impacts on self-esteem and mood [13].

Nowhere is the danger of this religion more present than in the extremes of the pro-ana community. Women often continue to diet past the point of attractiveness, in spite of the threat of negative health effects or even death. The drive to be thin, which is the ultimate promise of salvation from Ana, is strong enough to counteract this, as seen in one thinspiration post: "Being thin is more important than being healthy" [15]. It is interesting to note that others have taken the opposite standpoint; they understand the risks, and view the pro-ana community as a form of harm reduction. They often share advice on nutritional supplements, and advise other members who appear to be engaging in particularly high-risk restriction [4, 16]. The point, as argued by some

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The Male Nurse

THE FLIP SIDE OF THE GENDER DIVIDE

BY KATRIN DOLGANOVA

The feminist discourse on gender inequality in employment has focused on the struggles of women in male-dominated professions and the proverbial "glass ceiling." However, as girls start to outpace boys in academic achievements at the elementary, high school and post-secondary levels [1,2], it becomes evident that equal attention must be paid to both sexes. In fact, medicine is currently seeing a reversal of gender inequality trend. A century ago, women struggled to gain acceptance into medical school, but today, British Medical Journal[1] and other media outlets [2] express concern over the "feminization of medicine" (see Point/Counterpoint and CASPer – Closing the Gender Gap in this issue of QMR for more on this topic).

At the core of the debate are questions regarding why gender inequality exists in the first place, whether the gender of health care professionals matters and what it means for the delivery of care. To better understand these questions, some researchers turned to nursing to explore the flip side of the gender divide – how men fare as minorities in a traditionally female dominated profession. The literature on the subject suggests that the existence of gender inequality in health care is ingrained in the history of the birth and evolution of the profession and the societal definitions of what is appropriate male and female work, rather than as a result of inherent differences between the sexes.

Nursing is often cited as a paragon of a female-dominated profession [3], but historical records reveal that men have had an important place in nursing from its very conception, dating back to European monasteries in the 11th century. The men in these monastic orders attended to the mentally ill, lepers [4] and plague victims and created international healing and nursing orders, some of which exist to this day [5]. After the dissolution of monasteries in England in the 16th century, however, most organized nursing activity ceased.

The re-birth of nursing began in charitable, voluntary hospitals established in the 18th century as well as workhouse infirmaries and asylums which followed in 19th century [4]. Early on, these institutions were sex-segregated and staffed by both male and female attendants. The work was undesirable, physically-taxing, unfulfilling and was thus considered a low status occupation reserved for the poor and uneducated.

The trajectories of men and women's roles in nursing soon diverged significantly. In 1860, a sisterhood of Nightingale-trained or "reformed" nurses organized themselves, took over the nursing work in voluntary hospitals and offered training for a new generation of well educated, respectable, middle class "ladies." The success of the movement was two-fold: first, it defined nursing as a natural female task and, second, it was opportunely set in the context of the Victorian class structure [4]. A division of labour by both social class and sex characterized this society; so nursing as a compassionate, patient-centered, deferential and modest vocation fit the idealized notion of middle class femininity. This was a pivotal development, because it made training accessible and socially acceptable to middle class women, thus effectively discouraging men from the profession. Finally, the establishment of a self-governing council and accreditation body in 1919 further reaffirmed nursing as a self-determining all-female occupation in Britain [4].

Meanwhile, asylums for the mentally ill continued to be staffed by predominantly low class, poorly educated male attendants. Unable to contend with the well-connected and highly educated women's movement, males were relegated to physically demanding work, such as restraining violent patients in asylums [6]. Nevertheless, accreditation of male nurses was not completely obsolete. Private contracting firms, navy and military provided a small but ever-present supply of male nurses for medical, surgical and mental health services [4]. The historical forces that defined the feminine and masculine aspects of nursing were so powerful, that, even over a century later, the most popular specialties among male nurses are still more physically demanding and procedure-based: the OR, ER, trauma and psychiatry [7]. They all have a strong connection to the history of military and mental institutions.

It was only a severe shortage of nurses during World War II that finally allowed males to enter nursing in greater numbers in the UK. In fact, so great was the demand for labour that the 1947 Working Party on the Recruitment and Training of Nurses openly conceded that:

"… all nursing posts should be thrown open equally to males and females. Experience in the services and elsewhere has shown that there is no valid reason for sex distinctions and we do not find it incongruous that a male nurse of suitable personality, with the necessary qualifications, would be eligible for appointment as superintendent of nurses. … But the success of such a scheme which is a departure from recognized practice will depend on the reaction of the profession and the Public"[4].

Therefore, stereotypes and assumptions about male and female "innate" abilities, personalities and roles within the health care system are deeply rooted within a historical context.

Yet, modern Western society is becoming egalitarian, with more women entering medicine and more men entering nursing. Some argue that these trends are misleading. Men in gender atypical work are still at an advantage, riding the

"glass escalator" to secure better-paying, higher level, authority positions than their female co-workers. However, the reality – at least in nursing – is more complex.

Snyder and Green used data from the National Sample Survey of Registered Nurses (NSSRN) 1977-2000 to determine whether the "glass escalator" exists. Contrary to popular conceptions, male nurses are not more likely to be administrators, supervisors or head nurses. Indeed, they are more likely to perform direct patient care than their female colleagues [7]. They did find that the mean hourly wage for men was slightly higher — $25.74 in comparison to $23.54 that women earned. Yet, there is no gender difference in the likelihood of getting a promotion or receiving higher remuneration when educational attainment, years of service and race/ethnicity are controlled for. Instead, what likely accounts for the difference in pay is the fact that males are clustered in departments that are higher paying, especially coronary care, than those that are gender neutral. Important to note, though, is the observation that female-clustered areas also pay more than sex-neural departments [7], so it does not seem to be the case that males negotiate their pay better or have an unfair advantage.

Another important observation made in the study was that instead of vertical segregation, whereby one gender occupies more of the administrative and supervisory positions, nursing employment has horizontal segregation, characterized by a presence of female-dominant, male-dominant and sex-neutral specializations. Men, for example, are over-represented in the ICU, OR and ER, whereas women make up a higher proportion of nurses in outpatient, post anesthesia, labour/delivery and general-surgical departments. In addition, men are more likely to choose work in male-clustered specialties than women are to choose female-clustered over gender-neutral specialties [7].

Male nurses, it appears, are consciously gravitating towards specialties that are perceived as more appropriate for their gender or that resonate with masculinity. Interviews with male nurses reveal that the stigma of coming across as feminine or homosexual leads many to opt for more masculine kind of nursing work, which is characterized by greater autonomy, procedures, physical labour and necessity for cool-mindedness and quick decision making [3,7]. Here are just a few quotes from different male nurses, who highlight the stereotypes they face as a result of their gender:

"… there has always been snickers because you are a male nurse… Probably because they think of it as a female job…"[7]

"I do remember one time my seven year old saying that I couldn't be a nurse because I was a man. So somewhere she saw it and got it in her head that men can't be nurses!" [7]

"I worked for a female physician for two years, and anytime there was a procedure involving a female, they would always go find another female, and I'd be sitting around twiddling my thumbs, so I felt ineffective at my job"[3]

Yet competency in nursing is not predetermined by sex. By extension, neither is ability to listen, empathize and provide good patient care. We all have the capacity for human feeling and empathy, but culturally embedded definitions of femininity and masculinity play an important role in segregating individuals into gendered specialties. Both women and men make excellent nurses, physicians and other allied health professionals [3,5-7]. As two male nurses point out:

"Men, bless their souls, have this homophobic idea about what nurses are and that they think it is very effeminate… As a society, as a social phenomenon, we need to get over the idea that men cannot – the idea that men can't be as sensitive, as empathic, and as caring when it comes to taking care of other people" [7].

"... the concept that men can be nurturing in this role that is seen as more feminine… it's not that moms are nurturing, dads are the authority figure… [but] that both people can be both"[3]

What this analysis of male nursing shows is that the gender divide in nursing – and arguably in other health care occupations – is socially determined. Historical, political and economic forces shape gender role stereotypes and employment patterns. Society defines gender-appropriate work based on the dominant ideology in a particular place and time. Family upbringing, socialization and the hidden curriculum are just some of the ways that these large social forces trickle down to the level of the individual man or woman and determine the extent to which their career choices are influenced by these social norms.

At the end of the day, arguments about which gender is better at doing a certain task are missing the basic point that both sexes have an equally important contribution to make to every field. There is enough variation within each gender in personalities, interests, problem-solving approaches, and tendencies for nurturance versus cool-mindedness. It is these individual characteristics that determine one's suitability for a particular specialty or work environment.

Regardless of whether or not there are gender differences in care, the population is an almost equal split between male and female patients, and, with respect to provision of health care, there is room for both kinds of health care professionals as well. What we should be focusing on is removing the barriers to entry into nontraditional gender work, and alleviating the gender role conflicts that the "minority" sex experiences in nontraditional occupations.

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Alumni Profile:

Dr. Shawna Johnston

BY JASMINE BAHRAMI

Dr. Shawna Johnston's journey at Queen's began in 1986 when she moved from Cape Breton, Nova Scotia to Kingston to study medicine. Upon receiving her MD degree in 1990, Dr. Johnston began an obstetrics and gynecology residency program at Queen's and continued with a fellowship in urogynecology at St. George University in London.

Dr. Johnston's passion for her profession is clearly evident. Her dedication to her patients and enthusiasm for teaching, in addition to her busy KGH clinic, is inspiring. Dr. Johnston was very open in discussing what led her to a career in urogynecology, her experiences during training, and what life is like for a female surgeon.

Dr. Johnston's interest in obstetrics and gynecology was solidified during the rotating observerships she completed as an intern. Queen's was her top choice for residency based on its reputation as one of the best programs in the country. This reputation was supported by Queen's remarkable mentors and hands-on-training and the very competent, confident graduates the program produced. While she was also interested in urology, Dr. Johnston viewed the obstetrics and gynecology field as more friendly and welcoming of women compared to other specialties. She credits her colleagues' and mentors' encouragement in her development towards becoming a competent surgeon. Dr. Johnston also recognized gaps in the clinical and medical aspects of urology, such as pelvic floor surgery, and developed her research interest in this field. She is now a world-renowned expert in pelvic floor surgery.

"Obstetrics was welcoming of young women, there is a lot of excitement in the field including emergency delivery".

Dr. Johnston does not shy away from challenges and is dedicated to helping her patients experiencing difficult circumstances. The "OB personality", which is characterized by traits such as hard work and a lack of cynicism is a source of pride for Dr. Johnston. There were certainly many inspiring role models here at Queen's who became mentors and helped her further develop such traits.

In her current practice, Dr. Johnston focuses on urogynecology but still practices obstetrics routinely. The lifestyle of an obstetrician can be quite different from that of a urologist – obstetrics practice requires more call and patient visits. She emphasizes the higher clinical obligations to obstetrics patients – for example, clinics cannot just be cancelled on the spot without coverage as pregnant patients need to be monitored regularly. While the lifestyle of an obstetrician may seem demanding, Dr. Johnston insists that obstetricians' passion for their profession and patient care and lack of cynicism allows them to do the best possible job. It certainly takes a passionate professional to be enthusiastic at 4 a.m., handle a difficult delivery, while mentoring trainees all at the same time.

While completing her rigorous training program here at Queen's, Dr. Johnston managed to maintain a healthy work-life balance. Dr. Johnston had three children while completing her training and helped shape a maternal leave policy here at Queen's. When asked about any real or perceived gender imbalances in her field, Dr. Johnston enthusiastically points out that she was never given special treatment because of her gender and was expected to carry the same weight as her male counterparts. In fact, one of the perceived gender imbalances in obstetrics is that it is not welcoming of men: patients prefer female doctors and residency program directors regularly chose female candidates so as to not deal with the "hassle" of a male doctor. Dr. Johnston stresses the lack of truth in such notions – in her experience program directors chose the best candidate, regardless of gender.

Dr. Johnston's career in urogynecology has been, and continues to be very successful. In addition to her clinical practice, Dr. Johnston has also been involved in research focusing on non-invasive diagnostic methods and management strategies for urinary incontinence. Witnessing Dr. Johnston's evident passion for her career, teaching, research as well as her commitment to her family is inspiring. She is clearly a remarkable role model for Queen's University medical students. Q

"Thou Shalt Not Eat", continued from page 14

social scientists, has changed from attaining the ideal body to obliterating the body and liberating oneself from the dependency of food [4]. As one thinspiration quote claims, "In the body, as in sculpture, perfection is not attained when there is nothing left to add, but when there is nothing left to take away" [4, 17].

While the religious symbolism present in pro-ana groups fits in both a historical and current social context, it also represents an attempt by those with the disorder to make sense of their condition. Narrative therapy, in which patients are encouraged to create narratives from their experiences, has been shown to be effective in increasing both mental and physical health. According to Peterkin, this form of therapy, particularly when the narratives are written, allows the patient to develop a fuller understanding of their experience and to derive a sense of meaning. Sharing the narratives with others who have similar disease experiences is also helpful, as significance can be found by both the individual and the group [18]. It makes sense that the common narrative found in pro-anorexia groups is modeled upon religious elements found in North American cultures, as religion is often perceived as a means of gaining deeper meaning and understanding of one's life.

Those who study psychological resiliency maintain that most individual experience is framed as narratives, and that the content of these narratives have a profound effect on psychological well-being. For example, after undergoing a traumatic event an individual may frame their role as a victim or alternatively a survivor, each with very different psychological consequences [19].

While there is currently little research on the effect religious framing of anorexia has on prognosis, the impact of group participation has been examined. Much like other theologies, a community has developed around "Ana." One study displayed that members who actively participated in these groups showed improved mental state after visiting, and seemed to be less affected by what was considered to be "dangerous content." These findings point in favour of pro-ana sites as being a potentially positive source of social support for anorexic girls [20]. The underground nature of these groups supports the development of extremist viewpoints because their ideas and evidence remain largely unchecked by an oppositional voice, leading to the espousal of more extreme and potentially unhealthy points of view [21].

What remains to be determined are the therapeutic and destructive effects of this story. The anthropomorphism of anorexia nervosa as "Ana" is a story written en masse in which those with the disorder create new meanings, usurping definitions created by the medical and psychiatric communities. Those in the pro-ana community are adamant to assert their agency against those who would pathologize their world-view [22]. This resistance may represent a protest against the one-sided discourse of what constitutes "disease" [6] Instead of the "good" and "bad" present in religion, there is "healthy" and "unhealthy", and the more damning "sane" or "insane", an insane person being one who acts in a manner different than a "reasonable" person. Indeed, the scientific method is based on the concept that truth and reality can only be understood through reason and rationality. Lacking these characteristics makes one a deviant; and a punishable one at that. Should the behaviour be deemed abnormal by a physician, the patient may be forced, to enact more socially acceptable behaviours, through forced hospitalization, and the ensuing removal of rights that this entails, i.e. the right to refuse food, or the right to personal mobility. From this standpoint, the story of "Ana" may represent an act of self-determination.

Pollack argues that care must be taken, however, to not romanticize pro-eating disorder rationale into a political statement, as this form of "protest is one that has a 20% long-term mortality rate" [22]. Instead, users should be encouraged to adopt another, less destructive, means of asserting themselves [22].

Although the behaviour displayed in anorexia nervosa is one with potentially dire consequences, it is important for treating physicians to understand the rationale behind the pro-ana movement, for it is in these spaces that users are most honest. As stated by Smith et al., "Individuals with eating disorders appear to use pro-anorexia sites as an exclusive place where they can experience tremendous personal freedom to be themselves and not have to hide their eating disorder from others'" [23]. These communities are not merely enabling their members' illness; users also receive validation and support, and in the creation of Ana they have been able to construct an identity they find meaningful. Future research could perhaps address this need for meaning and honesty in the anorexia illness experience, and its treatment implications.

Further analysis of the religious elements of pro-ana groups could also provide greater understanding of the social and historical factors driving anorexia. It may be beneficial to explore "treating" these additional aetiological factors. This may alleviate the large responsibility a psychiatric diagnosis places on the individual for their illness. This is especially important to consider with a population obsessed with attaining perfection, of which a subset has rejected the medical pathological interpretation of anorexia with the ideology of Ana.

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Drop of a Hat

BY SARAH LEONARD

There lives this tiny creature in my throat,
A camouflaged beast with shiny exoskeletal armour, reflecting its host
Like a mood ring

The prickly thing sprawls o'er my epiglottis
Lazing on its lawn chair, basking in a breezy, hazy heat
At the beach

But then! Like a wolf it senses a threat
The shallower pool of saliva, the tenser tensors and
Clenching teeth

Not now! I hiss, through narrowed glottis
Desperately, I suck the wetness back to swirl an eddy
That it might drown

Like a fickle feline it yawns with ennui
Until I try to slip it undercover, too visceral and raw
For polite company

Alert and springing to battle
It whirls upon my larynx, mallets pounding and choking
The conga drums

Drawing itchy quills across my flesh
Its bristles sting the nerves, launching caustic ribbons to the orbits
Draining the reservoir

This creature's freedom seems likely won
Writhing and pounding and bashing its head on my cords
A bellicose roar

My thrashing intensifies, its impatience mounting
Betraying my struggle, it emerges from the depths of my body
A geyser

I am weary from war and resigned to death
Go ahead! Bludgeon me 'till I squawk and drip and leak
A broken doll

Alas bored, the beast flops upon its divan
The need to struggle abolished with no shackles
Or chains to rattle Q