Managing Anaphylaxis: Evaluating Teaching Methods in Family Medicine Residency

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ABSTRACT

Background: Simulation training in medical education is increasing. It improves reported self-confidence levels and physicians’ knowledge. It encourages skill acquisition through experience and has a role in assessment and acquisition of competencies.

Research Questions: Residents receiving simulation teaching would report higher levels of confidence and demonstrate more competence in office management of anaphylaxis and they would exhibit a higher level of sustainability in learning compared to residents who received didactic teaching.

Methods/Methodology: Family Medicine Residents (n=25) were randomly assigned to a simulation (n=12) or didactic (n=13) teaching session. All were examined using an OSCE following the session and at seven or eight months. Participants completed pre- and post-questionnaires that measured their management experience, confidence and comfort levels.

Results/Findings: There was a significant improvement in confidence and comfort level in both groups following initial teaching (p<0.05). There was no significant difference between groups in confidence or comfort level at follow up. There was no significant difference in OSCE performance initially or at follow-up between the groups. Participants rated simulation teaching as a more effective teaching method than didactic teaching (p<0.05).

Discussion: Residents in the didactic group may have had previous experience with management of anaphylaxis and their OSCE performance may have been influenced by this factor. The interval between baseline and follow-up may have been too long. Also, the combination of didactic and simulation teaching may be superior to either method alone.

Conclusions: All Residents reported improvement in their levels of confidence and comfort with anaphylaxis management after baseline teaching sessions. Participants who received simulation teaching were not more competent in anaphylaxis management nor were their performances more sustainable.
Recommendations: Future studies with a larger number of participants and a longer duration of simulation teaching would be valuable in assessing its role in Family Medicine Residency training.

References:
What are the Reasons Patients with Non-Life Threatening Problems/Conditions present to the Emergency Department in the Regina Qu’Appelle Health Region?

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ABSTRACT

Background: In Canada, many patients with non-urgent (CTAS IV/V) medical problems account for a large proportion of Emergency Department (ED) visits. Commonly cited reasons for non-life threatening ED attendance include: the lack of a primary care provider (PCP); the inaccessibility of an existing PCP; the perceived urgency of the patient’s problem; the need for specific services; and, timely access to specialists.

Research Question: To identify patient’s reasons for attending Regina Qu’Appelle Health Region (RQHR) EDs for non-life threatening problems? Do patients have access to PCPs and PCP after-hours care in the RQHR?

Methods/Methodology: A self-completed 9-item questionnaire was distributed to all consenting CTAS IV and V patients presenting to RQHR EDs between June and September, 2013.

Results/Findings: A total of 239 eligible patients completed the questionnaire. Most (82%; n=191/233) had a PCP; of these patients, 59.4% could not get an appointment within 24 hours with their PCP and 82.2% stated that their PCP did not offer after-hours care. More than half (52.9%, n=234/239) of patients felt that their problem was serious and 51.5% (n=123/239) of patients attended the ED in anticipation of specific services. Thirty-nine percent (n=215/239) of patients felt that their presenting problem could have been treated elsewhere. Most (86.9%, n=222/239) of patients would attend an urgent care centre (UCC).

Discussion: These results may reflect the lack of access to timely services by PCPs in the RQHR. PCPs may no longer offer these services (e.g: suturing) or patients perceive the ED superior in terms of access to diagnostic investigations and specialist care.

Conclusions: It is not the lack of PCPs that result in the presentation of non-life threatening medical problems to RQHR EDs. It is untimely access (within 24 hours) and unavailability of after-hours access to PCPs, in addition to patient’s perceived need for specific services that account for the presentation of non-urgent patients to RQHR EDs.

Recommendations: Increased availability of PCP after-hours care and the use of UCCs should be considered in this Health Region.
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Improving the Emergency Department Clinical Encounter through Culturally and Linguistically Appropriate Patient Communication Tools in Prince Albert

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ABSTRACT

Background: Research to assess the utility of patient communication interventions that are culturally and linguistically appropriate is limited, particularly in the Emergency Department setting.

Research Question: Is the creation of a culturally- and linguistically-appropriate patient communication tool perceived as acceptable and useful by community members who represent the Indigenous community?

Methods/Methodology: A written pamphlet was designed to enhance communication between a patient and the emergency room physician by inviting the patient to ask four key questions. The pamphlet was to be validated through a focus group of indigenous community members. Feedback was collected and concepts were subjected to qualitative data analysis, with assignment to codes, categories, and themes.

Findings/Discussion: Four major themes were identified. Health care professionals tend to work and think in terms that can be incongruous with the priorities and illness experience of the patient. Barriers to reciprocal communication are influenced by culture, language, education, and situational circumstance – these features need to be recognized in patient interactions. Oral communication is the most important and effective form of communication to promote patient understanding and satisfaction. The health care system has a responsibility to work directly with Indigenous patients to develop sustainable resources and adapt current resources that facilitate patient engagement.

Conclusions: When the tool was evaluated by the focus group from the target audience, it was evident that, although appreciated, the tool was culturally, linguistically, and contextually inappropriate, and could not be validated for use. The key messages gathered from the participants were that the health care system is fraught with barriers to optimal patient-physician communication, and that culturally and contextually appropriate solutions should include access to language interpreters, in the spirit of valuing oral communication.

Recommendation: Further investment is needed in promoting the value and use of oral communication in the medical encounter.
References:
Methadone Bridging: From Community Prescriber to In-Patient Drug Administration

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ABSTRACT

Background: Patients on methadone maintenance treatment require timely dosing of their once daily methadone to ensure stable drug levels and to avoid withdrawal effects. Patients on methadone in the community often have co-existing chronic diseases and acute conditions that require admission to the hospital. Sparse research has been conducted to examine the quality of care surrounding the hospital admission of patients who are on community methadone maintenance treatment programs.

Research Questions:
1) What are the demographic characteristics of community prescribed methadone patients who have been admitted to the hospital?
2) How much time elapses between admission, the hospital doctor ordering methadone, and the patient receiving methadone?

Methods: One hundred and thirty-one (131) randomly selected patient visits from the year 2012 were included in the analysis based on inclusion criteria. Patient demographics, timeline surrounding hospital admission and the timeline surrounding methadone dosing were recorded. The data collected was entered into SPSS v.21 for analysis, including descriptive statistics, Chi-square and ANOVA where appropriate.

Results: Of the 131 patient visits, 61% were female, the mean age was 38 (SD=11.8) years. Maternity patients comprised 19% of patient visits. Respiratory conditions were the most common admitting diagnosis (25%), followed by pregnancy related conditions (18%), infectious conditions (14%), drug & alcohol related conditions (13%), gastrointestinal conditions (12%), pain (8%), cardiac (4%), psychiatric (2%) and trauma (2%). The mean time between methadone doses was 48 (SD=33) hours, from admission to dosage was 29 (SD=30) hours, from admission to order was 21 (SD=25) hours, and the mean time from order to dosage was 11(SD=21) hours.

Discussion/Conclusions: Despite medical knowledge and hospital policy around methadone maintenance therapy, over 90% of the patients had more than 24 hours between methadone doses. The largest delay is in time from admission to dosage, suggesting physicians are not capable and/or present to order methadone in a timely manner.
**Recommendation:** All admitting physicians in the hospital should be encouraged to obtain a methadone prescribing license. This will likely decrease the delay in dosage and improve patient care in the RQHR.

**References:**


How Would You Investigate? An Analysis of Laboratory Test Ordering by Family Physicians

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ABSTRACT

Background: Family physicians are obliged to be stewards of healthcare resources primarily due to costs to the system and patient well-being. Laboratory tests represent a substantial portion of the health care budget, and ordering of same is practiced by most physicians.

Research Questions: What laboratory investigations would be selected in common, ambiguous patient presentations by Family Medicine practitioners and residents in the Saskatoon Health Region? How accurate are they in estimating costs of a few common laboratory tests?

Methods/Methodology: Participants were recruited through the College of Physicians and Surgeons of Saskatchewan and the Saskatoon Family Medicine Residency unit. The survey consisted of two common clinical scenarios with laboratory requisition forms, and questions regarding practice setting; years in practice/residency; and knowledge of costs. Data were analyzed using SPSS v.21. This study was approved by the Behavioural Research Ethics Board of the University of Saskatchewan.

Results/Findings: There was a 26.7% response rate. Respondents estimated the costs of five common laboratory costs accurately 16-37% of the time, with a wide range of incorrect estimates. Lower estimates tended to be provided by urban physicians, and those with greater than 20 years of practice experience. However, 64% of physicians felt their knowledge regarding costs was at least average, and only 36% believed knowledge would change their ordering practices. In the two clinical scenarios, only 7% of respondents would order only the indicated tests in the first case and 79% in the second. 380 extra tests were ordered between the two scenarios.

Discussion: Lack of knowledge about laboratory costs may be because costs are not part of the medical curriculum and/or this information is not readily accessible. Additional tests may have been ordered based upon respondents’ clinical experiences, convenience, and insufficient information provided in the scenarios.

Conclusions: Family physicians have the responsibility to be sagacious in ordering tests, in the context of increasing healthcare costs, evidence of wasted healthcare resources, and potential for patient harm. Physicians should have proficient knowledge of the costs of tests they order, and
be cognizant of the guidelines in choosing necessary tests. Although our study is limited in size and scope, it substantiates this fundamental responsibility.

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Are Saskatoon Family Physicians Referring Patients who Smoke for Bone Densitometry based on the Osteoporosis Canada 2010 Clinical Guidelines: A Retrospective Study of West Winds Primary Health Centre

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ABSTRACT

Background: Clinical practice guidelines were developed by Osteoporosis Canada in 2010 to screen for 10-year fragility fracture risk. Studies demonstrate that smokers are at an increased risk for the development of a hip fracture versus non-smokers. Assessing fragility fracture risk, by using the clinical risk factor of smoking to refer for Bone Mineral Density (BMD) testing, may lead to earlier treatment and possible decrease in morbidity and mortality.

Research Question: Are patients at West Winds Primary Health Centre, aged 50 to 64 years, with the specific risk factor of current smoking being referred for BMD by family physicians according to the 2010 Osteoporosis Canada Guidelines?

Methods/Methodology: A retrospective chart review was performed which collected information including age (50 to 64 years), current smoking, other risk factors, referrals and results for BMD, from January 1, 2011 to December 31, 2012. Data was entered into SPSS v. 20 for analysis, including descriptive statistics, t-tests, Chi-square and regression.

Results/Findings: Of the 225 subjects (77 males, 148 females; mean age of 54.9 years, SD=3.47) analyzed, 50 patients had a positive smoking status. Ten percent of these were referred for BMD testing. It was also noted that 24% of non-smoking patients (n= 175) had risk factors but were not referred for BMD testing.

Discussion: The results of this retrospective chart review confirmed our research question that there was a deficiency in physician BMD referrals for current smokers. Not only did it show a lack of BMD referrals for these patients, it also occurred for non-smokers with risk factors.

Conclusion: Patients aged 50 to 64 years are not being adequately screened for 10-year fragility fracture risk based on the new guidelines.

Recommendation: Future research could explore whether there is a reduction in morbidity or mortality observed in the screened, diagnosed and treated smokers aged 50-64 years.
References:


Strategies to Improve Infant Sleep: Reflecting upon Practice and Experience

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ABSTRACT

Background: Many parents have questions for their physicians, family & friends regarding how to get their babies "sleep trained" yet we receive little to no formal training on this topic in medical school and residency. As residents in family medicine, we feel inadequate in counseling our patients on this issue. As recent new Moms, we experienced firsthand the stress and frustration of sleep deprivation and the desperate lengths parents go to in order to improve their infants' sleep habits.

There is an abundance of different approaches to encouraging infant sleep and many different books on the subject. Much of the information in the popular press seems to be strongly worded but largely unfounded, experiential or based on pseudo-science. Furthermore, there are major social influences and pressures that influence parent responses to their infants' sleep habits. Our hope is to reflect upon and analyze our own physician practices, parenting experiences and interpret them within the context of available medical literature which will enhance our patient counselling strategies on this very important issue.

Research Question: How can our own experiences as new Moms inform our counselling of new parents as a physician?

Methods/Methodology: Narrative inquiry.

Results/Findings: Our understanding and professional knowledge was challenged by our lived experiences as parents. On reflection, the professional advice that we had given in the past made us aware of the gap between theory and practice as there are many contextual and cultural factors that influence whether the expert advice is appropriate for the patient or in this case the parent and whether or not it was successfully applied. Our feelings of inadequacy, frustration as parents trying to implement the "expert advice" and replicate the successes of others created an awareness that an individual's reality can be in stark contrast to that anticipated by the physician.

Discussion: There is a paucity of evidence on infant sleep strategies. Most evidence is limited to opinion or small sample sizes and the majority of studies were not randomized.

Conclusions/Recommendations: In light of the wide array of information parents may find and the limited evidence, we, as physicians should listen to parents and attempt to understand
culturally appropriate parenting styles and personal preferences. Parents should be supported in their choices regarding infant sleep and educated on implementing these practices safely.

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A Merger between Intravenous Catheterization and Venipuncture: Will it Result in Better Patient Care?

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ABSTRACT

Background: In North American emergency departments (EDs), intravenous (IV) catheterization for administration of fluids and medications is typically performed separately from the venipuncture used for the collection of blood for laboratory tests. There are potential benefits from the collection of blood for laboratory tests at the time of IV catheterization. These benefits may include one needle poke instead of two. There may also be benefits in terms of improved patient flow in the ED.

Research Question: Is there a difference in the time interval between IV catheter insertion and venipuncture in the ED such that it would be important to consider combining the two procedures?

Methods/Methodology: A retrospective chart review of a randomized sample of 190 charts was performed on patients, who had registered at the St. Paul's Hospital ED in the month of November, 2013. Ethics approval was obtained. Adults aged 18 years and older were included in the sample.

Results/Findings: Twenty-eight percent of patients had both IV catheterization and venipuncture. The mean time interval between IV catheterization and venipuncture was 45.40 minutes. This time difference was similar between CTAS groups. There was a difference in this time interval between sexes, with mean time intervals of 18.88 minutes for males and 58.43 minutes for females (p=0.05).

Discussion: The time interval between IV catheterization and venipuncture is likely a result of multiple factors. It is difficult to explain the pattern of females having a longer time interval between procedures than males.

Conclusions: It is important to consider combining IV catheterization and phlebotomy. Any such discussion would have to consider the limitations of performing phlebotomy from an IV catheter, such as increased rates of hemolysis.

Recommendations: Further studies are needed to examine if this interval between procedures is present in other EDs. For patients who had a larger time interval between procedures, a more detailed analysis of the circumstances would help determine if decreasing this interval would be clinically significant.
References:
The Electronic Health Record: Does it make a difference?

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ABSTRACT

Background: Usage of electronic medical records (EMR’s) continues to grow and while there is a plethora of research into the benefits of EMR usage there is limited research examining how EMR usage affects the quality of the relationship and interaction between physician and patient.

Research Question: Which factors affect a patient’s satisfaction with the care that they receive including the use of the EMR?

Methods/Methodology: Patients at the Regina FMU anonymously completed a questionnaire designed to examine patient feelings regarding EMR usage and its effect on their overall satisfaction with the care they received. The responses to these questionnaires were then analyzed using correlation matrices to determine which elements of the interaction were related to increased or decreased satisfaction.

Results/Findings: The study found that 57.6% (n = 92) felt that EMR had improved their medical care and that this feeling was positively correlated to feelings that medical care received was nearly perfect (0.210, p = 0.045, n = 91) and the feeling that the physician was being complete (0.208, p = 0.048, n = 91). Conversely, the study also showed that feelings that the doctor spent too much time looking at the computer screen were correlated with dissatisfaction with the medical care received (0.364, p = 0.00, n = 91).

Discussion: The study showed that EMR’s can be successfully employed in the clinical setting. However, it potentially could be detrimental to the relationship between patient and physician if the physician becomes overly involved with the computer.

Conclusions: EMR’s can be used effectively without damage to the relationship between physician and patient, provided there remains a strong emphasis on the overall quality of communication.

Recommendations: Based on the results of this study, we recommend that usage of EMR’s continues to increase and grow into additional areas of medical practice. Perhaps more conscious attention paid to communication skills is required.
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Keeping Our Eyes on Our Kids: Child Well-being in Swift Current, Saskatchewan

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ABSTRACT

Background: Childhood obesity is related to several co-morbid conditions and recent studies have shown that its prevalence is increasing. Due to a lack of robust data concerning the prevalence of overweight and obesity in rural pediatric populations there is poor understanding if these children are at increased risk of childhood overweight and obesity and related co-morbidities.

Research Question: What is the prevalence of unhealthy weight in the pediatric population of the Cypress Health Region and are there any related co-morbid conditions?

Methods/Methodology: A quantitative cross-sectional study employing anthropometric measurements and a questionnaire was performed over 3 months from 2013 to 2014. Frequencies and Chi-square analysis were conducted to determine the extent of age adjusted nutritional status outside the normal range and the relationship to co-morbid illness for children in these categories.

Results: The analysis resulted in a final sample of 200 patient encounters, with a response rate of 98.1%. The rate of underweight, overweight, and obesity varied by age. The rate of overweight and obese children was similar to previously published rates. There was no relationship found between overweight and obese children and related co-morbidities.

Discussion: The data did not support a relationship between overweight and obese children and co-morbid conditions, but did for children in the underweight group. There was a statistically significant difference in waist circumference between weight categories, though our study lacked the power to determine age-appropriate weight category ranges for this measure. There was a phenomenon of interest: There were no overweight or obese children up to 1 year of age; at the same time the combined rate of overweight and obese 2 year olds was 30.8%

Conclusions: The rates of overweight and obesity for several ages was greater than the previously published rates for children in Saskatchewan. For the rate of underweight in children less than 2 years, there was no locatable comparative data.
Recommendation: The rate of under-weight children less than 2 years of age and rates of overweight and obesity in children age 2-12 years suggests that the implementation of a multidisciplinary clinic is warranted for the rural pediatric population studied.

References:
Pain Anxiety and Pain Acceptance as Correlates to Physical Activity in Patients with Arthritis

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ABSTRACT

Background: Levels of physical activity are uniformly lower for those with arthritis. This is a major public health problem, as they are at a higher risk of morbidity and mortality due to inactivity alone. This results in an increase in obesity rates and a decrease in functional independence. Barriers include arthritis-specific factors such as fear of pain and lack of tailored exercise programs.

Research Question: Do pain anxiety and pain acceptance correlate to levels of physical activity in patients with arthritis?

Methods: Participants were recruited from patients attending the West Winds Primary Health Centre. This included all patients with self-reported arthritis that has been diagnosed by a physician. Ethics approval was obtained from the Behavioural Research Ethics Board at the University of Saskatchewan. Participants were invited to complete a written questionnaire, which included subscales measuring exercise behavior, pain intensity, pain acceptance, and pain anxiety.

Results: A total of 25 participants completed the survey. Pain acceptance scores had moderate positive correlation to levels of physical activity \( r(23) = 0.370, p = 0.158 \), and pain anxiety had moderate negative correlation to levels of physical activity \( r(15) = -0.250, p = 0.333 \) in a primary care population with self-reported arthritis.

Discussion: Those who are more accepting of pain are more likely to continue with usual activities in spite of their pain, including physical activity. Conversely, pain anxiety can interfere with an individual’s overall function. This suggested that in spite of generally low pain anxiety and high pain acceptance, physical activity was still rare. This suggests that there must be other important factors that influence exercise frequency for individuals with arthritis.

Conclusion: For patients with arthritis, those with low pain anxiety and increased pain acceptance were most likely to be physically active.

Recommendations: Future studies should examine the factors influencing pain acceptance and pain anxiety. It would be worthwhile to investigate if pain acceptance and anxiety related to pain could be modified. If so, interventions to improve pain acceptance and pain anxiety could be undertaken in order to increase physical activity levels in those with arthritis pain.
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Can a Cost Effective Alternative to Physical Restraints be Developed for Elderly in Long-Term Care Facilities?

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ABSTRACT

Background: Physical restraints have been used to manage confused or combative patients in an attempt to prevent falls in the elderly. An alternative to physical restraints is needed, as restraints have not been shown to prevent falls. Risks associated with use of physical restraints include loss of dignity, accidental strangulation, impact on psychological well-being and decreased mobility. Psychotropic medications have been used to manage behaviours secondary to dementia, with considerable side effects. In addition, the efficacy of this class of medication for management of problem behaviours is not well established.

Research Question: Can a cost effective alternative to physical restraints be developed for elderly in long-term care facilities?

Methods/Methodology: A transmitter unit consisting of two motion sensors fastened to the patient's abdomen and thigh and a bed sensor transmitted wireless signals about the patient's position to the nursing station wireless receiver. A software program interpreted the information into visible diagrams displaying patient position. The device was tested using a randomized script of one hundred positions at fifteen-second intervals over twenty-five minutes and monitored through video recording. Temperature of the transmitter unit, battery life and the range of data transmission between sensors were also assessed.

Results/Findings: The device recorded the position of the patient with 100% accuracy. The maximum temperature of the transmitter unit over a four-hour period was 35.2°C. The maximum detectable distance from the base station was 41.5 meters. The battery life exceeded 24 hours after full charge.

Discussion: A motion detection device to prevent falls has the potential to avoid adverse affects of restraints including psychological distress and accidental injury while allowing the patient to maintain mobility. By avoiding medications used for behaviour management fall risk can be decreased.

Conclusions: A cost effective alternative to physical and chemical restraints in the elderly using motion sensors was created. The device was found to be 100% accurate in recording the position of a simulated patient.
**Recommendations:** Further testing is needed to assess the real time accuracy and usability of the device in a clinical setting. Modifications can be made to increase durability, assess more than one transmitter unit and monitor other patient factors such as vital signs and location.

**References:**


What You See is What You Get: Physician Characteristics and How They Affect Patient Confidence in Care

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ABSTRACT

Background: The College of Family Physicians of Canada states that “the patient-physician relationship is central to the role of the family physician.” Physician features such as gender, dress and obesity can influence interpersonal interactions with patients. We are interested in exploring how these factors, in addition to physician age, affect a patient’s confidence in their care.

Research Question: Do the characteristics of a physician including: age, sex, dress and level of fitness affect the patient’s confidence in the care they receive?

Methods/Methodology: Ethics was approved by the University of Saskatchewan Behavioural Research Ethics Board. A qualitative cross-sectional study was conducted with participants completing a short interview exploring the influence of physician features on their confidence in their care. A purposive sample was obtained from a local clinic. Participants were all over the age of 18 and were classified according to sex and age. Coding of responses and analysis of emergent themes was undertaken.

Findings/Discussion: Three themes emerged from the data. Physician physical characteristics do not affect confidence in the care they receive: A frequent comment was “a doctor is a doctor” and that competence in the position was more valued. Physician physical characteristics do affect confidence in the care they receive: In terms of age, older physicians were felt to be more experienced yet less up-to-date with knowledge and technology while the opposite was perceived for younger physicians. While confidence did not seem to be affected by physician sex, preference and comfort for a same-sex physician was a common theme. Other non-physical factors were important in patient care: These factors included physician personality traits and elements of the physician-patient relationship. In addition to being knowledgeable, it was important to patients that physicians were compassionate, caring, honest and friendly and had a good bedside manner. Subthemes around the physician-patient relationship placed value on a relationship based on understanding, communication and mutual decision-making.

Conclusions: While physical characteristics were deemed important to some, others felt that age, sex, weight and manner of dress did not affect confidence. Physician personality traits, good communication and a solid physician-patient relationship were of more importance to the patients. These findings reinforce the value of the behavioural medicine aspects of our Family Medicine training and support the traditional Family Medicine model of continuity of care and longitudinal physician-patient partnerships.
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Participation in a Saskatoon Community-Based Program for People at Risk for Developing Diabetes: Who is Attending and Having Success?

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ABSTRACT

Background: The community-based Building Resistance (BR) to Diabetes program, offered by the Saskatoon Health Region for people at high risk for type 2 diabetes, educates participants about diet, exercise, and helps participants set goals towards lifestyle change.

Hypotheses: (1) There is both a lower referral rate and under-participation rate to the BR program for people living in Saskatoon's deprived neighbourhoods versus the affluent ones. (2) There is an age difference between BR program participants and non-participants. (3) There are differences between BR program participants who made positive lifestyle changes following participation in the BR course and those who did not.

Methodology: Review of 512 BR patient charts over the period January 2011 to January 2013 was undertaken. Demographic and participation data were analyzed using SPSS v.20 software.

Results: For 440 urban referrals, the more deprived Saskatoon neighborhoods had fewer (33.9%) and the more affluent had more (46.3%) referrals than expected based on the Saskatoon population distribution (40.6% and 41.4%). Neighborhood deprivation was not associated with program attendance. Attendees had a mean age of 56.6 years (SD=11.8); non-attendees: 52.5 years (SD=12.5) p = 0.001. Between 58% and 69% of program participants self-reported positive change; no study variables were significantly different between those who made change and those who did not. Objective measures indicated that participants did make positive change overall: around 40% had favourable Physical Activity scores and 60% maintained or lost weight.

Discussion: Only 48.1% of Saskatoon family physicians made referrals, which may play a role in the deprivation index-based referral patterns that were observed. Factors contributing to program participant success were not identified, which may have been in part due to low follow-up numbers; lack of standardized documentation of follow-up contacts likely contributed.

Conclusions: There was a lower referral rate but not an under-participation rate for those people living in the deprived neighbourhoods of Saskatoon. Program attendees were older than non-attendees. No study variables were associated with participants making positive change.
Recommendations: (1) Standardized EMR templates should be used to capture data more consistently. (2) Marketing strategies should target physicians and at-risk individuals in deprived neighbourhoods. (3) Invest in increasing engagement of younger individuals in the BR program.

References:
2. Lemstra M, Neudorf C. Health disparity in Saskatoon: analysis to intervention. Saskatoon, SK: Saskatoon Health Region; 2008.
Intimate Partner Violence Screening in an Academic Family Medicine Training Centre

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ABSTRACT

**Background:** Intimate partner violence (IPV) is defined as physical, sexual, or emotional abuse between intimate partners. In Canada, 7% of women and 6% of men reported IPV in the last 5 years. IPV can lead to negative health outcomes and increased economic burden. Risk factors include age less than 36, low SES, mental illness, pregnancy, and substance abuse. Various IPV screening tools, including the Woman Abuse Screening Tool (WAST), are available for healthcare professionals.

**Research Question:** Are academic family medicine training centres adequately identifying patients at risk for intimate partner violence?

**Methods/Methodology:** Women and men attending an academic family medicine primary care centre for a health related visit self-completed a WAST to assess for intimate partner violence. All participants with a positive screen were counselled and a referral was left to the discretion of the treating physician and patient. A follow up chart audit was completed on all positive screened participants to assess for a previously documented history of IPV.

**Results/Findings:** A total of 86 WAST questionnaires were completed over a six week period, 23 were completed by men and 63 by women. Two participants screened positive for IPV and they were both women. Follow up chart audits revealed that neither of the participants had a documented history of IPV in their EMR’s or paper charts.

**Conclusion/Recommendations:** This study was unable to adequately comment on IPV screening practices in an academic family practice due to low sample size secondary to time constraints. Recommendations for future research include further evaluating screening frequency in academic family medicine centres, and examining IPV screening in heterosexual men.
References:


An Investigation of Post-Call Fatigue in University of Saskatchewan Third and Fourth Year Medical Students

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ABSTRACT

Background: Most of the research as to the adverse effects of fatigue on the practice of medicine has been with resident physicians. Such research has failed to identify the consequences of fatigue due to excessive work hours on undergraduate medical students such as Junior Undergraduate Rotating Student Interns (JURSI), who often work consecutive hours in excess of resident physicians.

Research Question: What are the effects of 24 hour in-house call shifts on University of Saskatchewan JURSI medical students?

Methods/Methodology: University of Saskatchewan College of Medicine undergraduate students in their 3rd and 4th years of training were invited to participate anonymously and voluntarily in the study by e-mail sent out via the College of Medicine office. Surveys were to be filled out pertaining to how the learner felt post-call regarding 24 hour in-house call shifts that they had completed within the past month, demographics, responses to the effects of call on decision making, ability to fall asleep post call, sleep pattern, patient safety, education, as well as questions relevant to assessment on the Epworth Sleepiness Scale.

Results/Findings: A total of 27 participants (17 female, 10 male) responded to the survey, with a mean age of 25.22 years. Learners, averaged 3.2 hours of sleep per night on call; the average maximum number of hours awake on call during a 24 hour in-house call shift was 22.4 hours. Opinions were split pertaining to any difficulty in falling asleep the day after a call shift, perceived patient danger, and whether or not the learner’s education was negatively affected.

Discussion: The results of this study suggest that, much like resident learners, undergraduate learners are often not getting sufficient sleep on call and are often greatly fatigued post call. Consistent with previous research involving medical residents, opinions pertaining to the benefits and risks of 24 hour in-house call varied widely, but the results show that as a group, undergraduate learners in this study are extremely fatigued post call.

Conclusion: Reducing the number of sequential working hours or potentially implementing a system that would allow the learner to choose between 24 hour in-house call and shorter more frequent call shifts could provide numerous benefits, including a decrease in medical errors, an increase in patient safety, and potentially lead to an increase in quality of medical education.
References:


