

North Battleford  
Smoking Cessation  
La Ronge Industry Relations Saskatchewan  
Wart treatment Erectile Dysfunction Mental Health  
Examination Preoperative assessment Swift Current  
Abortion Education Regina  
Sexually Transmitted Infection Saskatoon  
Prince Albert Appropriateness of care Cannabis Act  
Sport injuries Hospitalist program No-show policy  
Moose Jaw Sexual Exploitation Transgender  
Diet counselling Rural  
Chronic disease  
Genetic testing  
Pain Management

# 30<sup>th</sup> Annual Resident Scholarship Day Abstract Book

Department of Academic Family Medicine  
College of Medicine  
University of Saskatchewan  
[medicine.usask.ca/family](http://medicine.usask.ca/family)



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## 30<sup>th</sup> ANNUAL RESIDENT SCHOLARSHIP DAY

### DEPARTMENT OF ACADEMIC FAMILY MEDICINE

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Planned for Friday, May 29, 2020  
but due to COVID-19 was reframed.

### **Adjudicators**

#### **Fred Burge, BA, MD, MSc, FCFP – Halifax, NS**

Dr. Fred Burge is a Full Professor and Research Director, Department of Family Medicine at Dalhousie University, Halifax, NS. His research interests lie in health services research in primary care with a focus on end-of-life care.

#### **Darren Nickel, MEd, PhD – Saskatoon, SK**

Dr. Darren Nickel is the Clinical Research Associate in the Department of Physical Medicine & Rehabilitation at the University of Saskatchewan. His research focuses on health and physical activity.

#### **Tiffany Blair, MSc, PhD(C) – Saskatoon, SK**

Tiffany Blair is the Manager for Kidney Health at St. Paul's Hospital in Saskatoon which is a part of the Saskatchewan Health Authority. Her research focuses on kidney health, chronic kidney disease, home-based therapies, peritoneal dialysis and culturally tailored programs.

### **Acknowledgements**

The Research Division of the Department of Academic Family Medicine, University of Saskatchewan gratefully acknowledges the Saskatchewan College of Family Physicians and the Department of Academic Family Medicine, University of Saskatchewan for the Resident Scholarship Awards.

Research Support – Rhonda Bryce, Adam Clay, Nicole Jacobson,  
Michelle McCarron, Tanya Verrall, Vivian R Ramsden

May 29, 2020

Congratulations to all of you who have contributed to the creation of these new pieces of scholarship in family medicine. This is the 30th Anniversary of our Resident Research Program in the Department of Family Medicine. While it is disappointing to not be able to celebrate this work together, I hope that in reviewing these abstracts, you will learn new things and be inspired to ask more questions about how we practice our discipline in all of its facets.

We are living in unprecedented times. The COVID-19 Pandemic is not the first of its kind, but it is the first time we have had access to so much information from so many sources so quickly. This gives us incredible power to learn and adapt in ways that have not been present at any other point in history. At the same time, this highlights how critical our skills in evaluating information, our knowledge of and participation in the research process, and our ability to implement, evaluate and adapt new processes are in our efforts to provide the best possible care to our patients and communities.

To our graduating second year residents - I wish you all the best in your future careers.

Stay well

*e-mail from Dr. Lawrence on May 26, 2020*

Kathy Lawrence  
Provincial Head  
Family Medicine



Congratulations on arriving at this stage of your Family Medicine Training.

As a former participant in the Resident Research Day in Saskatchewan, I am well aware of the feelings and emotions associated with completing a resident project. It is highly unfortunate that due to the CoVID-19 pandemic we are unable to come together to celebrate your success. Please know that your contributions to Family Medicine Scholarship are greatly appreciated and valued.

The skills of research, scholarship and critical appraisal have never been more important than they are now. The rate of increase in medical information has never been more apparent than during this pandemic. It seems that information was changing almost hourly. Your investment in your project has exposed you to skills that will be critically useful as your career progresses.

It is my hope that as you read this collection of abstracts you are inspired to ask questions and find the answers. For most of us, Scholarship does not look like a long list of publications. However, for all of us, as conscientious providers of care, it looks like life long learning, inquiry, and critically appraising the information with which we are presented.

We should all pause and thank those people who have made this moment possible: the Research Division, faculty advisors, and award sponsors, are only a partial list of the many important contributors. Thank you to all who make this day happen.

I would like to take this opportunity to wish the graduating FMRs all the best in the future and their chosen careers.

Personal regards,

A handwritten signature in black ink, appearing to read 'B. Geller', written in a cursive style.

Brian Geller, BSc, MD, MBA, CCFP (EM), FCFP, FRRMS  
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May 29, 2020

Colleagues

On this occasion, the 30<sup>th</sup> Annual Resident Scholarship Day, I want to take this opportunity to recognize the Residents, Faculty Coach/Supervisors, Faculty, Staff and members of the research teams for:

- all the hard work that has gone into making this possible;
- your commitment; and,
- for the many contributions that you have brought to these learning endeavours.

Since its inception in 1990, we have gathered together once a year to: celebrate our successes; learn about the scholarly questions that have been systematically answered over the past two years; ask and answer questions that will enhance our knowledge and understanding; and, provide feedback (peer-review). The Annual Scholarship Day in the Department of Academic Family Medicine has evolved and grown over the years providing us with the opportunity to celebrate our academic achievements and to plan for the future.

Over the past 30 years, we have come a long way but we must continue to transform to meet the standards used by the College of Family Physicians of Canada to accredit Residency Training Programs.

Winston Churchill indicated that, “to improve is to change; to be perfect is to change often”. Viktor E Frankl said that, “when we are no longer able to change a situation - we are challenged to change ourselves.” Mahatma Gandhi stated, “you must be the change you wish to see in the world.” Improving practice provides these opportunities each and every day.

I would also like to recognize the support that we receive from: the Department of Academic Family Medicine; the College of Medicine; and, the University of Saskatchewan.

Due to COVID-19 and the fact that we can not share a meal or celebrate your work in person, I want to take this opportunity to wish you much success and the very best as you move forward in your chosen vocation.

Yours sincerely,



Vivian R Ramsden, RN, BSN, MS, PhD, MCFP (Hon.)  
Professor & Director, Research Division  
Department of Academic Family Medicine

# **Mental Health Literacy in Canadian, Immigrant and Refugee Young Adults: A Comparison**

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## **ABSTRACT**

### **Background**

According to Immigration, Refugees and Citizenship Canada, 88,140 Refugees settled into Canada with 3375 of those settling into Saskatchewan between January 2015 and September 2017. Studies suggest multifactorial and multi-faceted challenges faced by both Refugees/Immigrants and Canadian health care providers including low utilization of mental health services, inappropriate use of healthcare resources (ex. emergency departments) and multiple barriers to seeking and receiving mental health resources. Therefore, the present study aims to explore further on one of these barriers – mental health literacy.

### **Research Question(s)**

Is there a significant difference between Refugee/Immigrant young adults and Canadians young adults in their understanding/knowledge of the symptoms of depression and anxiety according to the DSM-V criteria and about symptoms that may be psychosomatic in nature?

### **Methods/Methodology**

This study, which took place over six months, included an anonymous and voluntary cross-sectional survey with twenty different symptoms of depression and/or anxiety based on the DSM-V Criteria; participants were asked to categorize symptoms as (1) Depression (2) Anxiety (3) Both (4) Neither or (5) I don't know. Participants were patients aged 19-25 years attending a scheduled medical appointment at one of three primary care clinics in Regina, Saskatchewan. A Certificate of Approval was obtained from the Research Ethics Board of the former Regina Qu'Appelle Health Region.

### **Results/Findings:**

We found that overall Canadians were able to more correctly identify anxiety and depression symptoms based on the DSM-V, as compared to Immigrant/Refugee young adults.

### **Discussion:**

As evidenced by our data, it can be seen that Canadians had a higher ability to identify Depression and Anxiety according to the DSM-V criteria, as compared to Refugee/Immigrants. This lack of knowledge of psychiatric symptoms in Immigrant and Refugee populations, can lead to unnecessary investigations, multiple appointments and therefore an increased cost burden on the healthcare system. This reflects the need for better access to mental health resources in the primary care setting.



## Conclusions:

It can be concluded, from the data analysis, that Canadians are more likely to correctly identify the signs/symptoms of Depression and Anxiety, as outlined by DSM-V, than Immigrant/Refugees, with statistically significant differences.

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## Sexually Transmitted Infections: What is the awareness among patients in Swift Current, Saskatchewan?

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### ABSTRACT

**Background:** Canada has been struggling with rising sexually transmitted infection (STI) rates since the early 1990s. Despite mandated educational curriculum in the province, the rates continue to rise. The cause of the rise is likely multifactorial; however, it is essential to understand patient's awareness to guide future public health interventions.

**Research Question(s):** What is the awareness of sexually transmitted infections among the population of people age 18-35 at a local family practice medical clinic in Swift Current, Saskatchewan?

**Methods/Methodology:** A survey on sexual health awareness in patients aged 18-35 was conducted at a family practice clinic. The data was analyzed using chi-squared, Fisher exact tests, and thematic analysis to determine trends in the respondent's answers. The project was reviewed and approved by the University of Saskatchewan's Behavioral Research Ethics Board.

**Results/Findings:** 98% of the patients reported a good understanding of STIs and 61% saying that they have received some STI education. Despite the majority of respondents reporting a good understanding of STIs, there was a significantly significant difference between the level of education on STI's and self-reporting that sexually transmitted infections is a public health concern for the province. The top three preferred resources to receive education included schools, from their doctor, and public health website. Gender and age did not appear to influence the preferred methods of education.

**Discussion:** The results provide insight to patient's understanding of STI's. It is evident that there is relationship between sexual health education and awareness that STI rates are a concern in the province. The thematic analysis provided valuable information on how patients prefer to receive sexual health education with clear emphasis in benefits to school based education programs and discussion with health care providers.

**Conclusions:** The sampled population had adequate understanding of STIs and almost entirely approved of dissemination of information from their physician or via the school curriculum.

**Recommendations:** This study highlights the role educators, physicians and public health can have on sexual health awareness. Specifically, physicians can improve patient understanding of STIs during regular encounters. Further research into barriers to accessing care and following sexual health recommendations would be beneficial.

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## Stillbirth Analysis of Prince Albert, Saskatchewan: A Comparison of the National Average

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### ABSTRACT

**Background:** Stillbirth risk factors include smoking, advanced maternal age, primiparity, intrauterine growth restriction, fetal malformations, abruption, maternal infection, obesity, diabetes, substance use and hypertension. Characterizing local stillbirth rates, risk factors and local intervention effectiveness could improve outcomes, particularly among diabetic pregnancies.

**Research Question(s):** 1. What is the stillbirth rate in Prince Albert, Saskatchewan? 2. How does the stillbirth rate in Prince Albert compare to that of the national average? 3. What maternal and fetal risk factors for stillbirth are present in the Prince Albert population? 4. How did the introduction of the maternal diabetes clinic in Prince Albert affect stillbirth rates?

**Methods/Methodology:** All medically coded stillbirths occurring at the Victoria Hospital in Prince Albert, Saskatchewan between 2007-2011 and 2014-2019 were reviewed. Analysis utilized descriptive statistics and negative binomial regression. Approvals were obtained from the University of Saskatchewan's Biomedical Research Ethics Board and the Saskatchewan Health Authority.

**Results/Findings:** Prince Albert's stillbirth rate was 7.2/1000 births (95% CI 5.9/1000, 8.9/1000), similar to provincial and national rates. Known risk factors were frequently present in our sample, including obesity, substance use and limited prenatal care. Stillbirth rates were 3.6 times higher (95% CI 2.1, 6.2) in diabetic versus non-diabetic patients. The rate of stillbirth in diabetic patients was reduced by 2.1 fold after Maternal Diabetic Clinic initiation (95% CI 0.83, 5.5).

**Discussion:** The stillbirth rate in Prince Albert, Saskatchewan is similar to provincial and national rates. We demonstrate high levels of modifiable risk factors such as obesity, tobacco use, alcohol use and low prenatal attendance, targets for physician-patient engagement; this is currently undertaken by the Maternal Diabetic Clinic in caring for diabetic pregnancies. There is an interesting, but not statistically significant, reduction in stillbirth rate associated with the initiation of the Maternal Diabetic Clinic.

**Conclusions:** Local stillbirth rate is similar to provincial and national rates. Recognized risk factors provide targets to improve outcomes. The proportion of diabetic patients referred to and engaged in the Maternal Diabetic Clinic could be further optimized.

**Recommendations:** Continue engagement with patients regarding obesity, substance use and prenatal care. Refer diabetic patients to the Maternal Diabetic Clinic and encourage engagement.

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## Abortion training in residency: a comparison of two urban family medicine sites in Saskatchewan

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### ABSTRACT

**Background:** Abortion is common in Canada, but abortion training in residency is not. Though residents themselves welcome abortion training, many programs continue not to offer routine abortion training. The Regina site has a mandatory experience for first year residents in providing abortion care. Saskatoon does not have equivalent mandatory exposure.

**Research Question:** Does routine abortion training in residency influence family medicine residents' self-reported confidence and competence when it comes to not only abortion provision itself, but also to commonly encountered women's health issues such as options counseling, contraception counseling, and general knowledge about abortion?

**Methods:** First and second year family medicine residents in Regina and Saskatoon were surveyed regarding their skills, confidence, and knowledge surrounding abortion care and women's health. This project was reviewed and approved by the Research Ethics Board of the former Regina Qu'Appelle Health Region.

**Results:** Second year residents in Regina generally outperformed their Saskatoon counterparts especially with procedural experience. Most of the differences between second year residents at either site were not statistically significant due to the small sample size.

**Discussion:** The results seem to indicate that the mandatory abortion training in Regina does impact resident procedural skills, knowledge, and attitudes. The study should be repeated in order to improve the power of the findings.

**Conclusions:** Family medicine residents view abortion as important and are open to abortion training and the residents who get this training gain skills, knowledge and attitudes that will help them help their patients who are in need of abortion care.

**Recommendations:** Mandatory abortion training should remain part of family medicine residency in Regina. Family medicine residency programs should make an effort to include abortion care in the curriculum. This survey should be repeated in the future in order to gather more data and potentially strengthen the conclusions found thus far. Elective abortion should be added to the CFPC's list of 99 priority topics for family medicine.

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# Screening Practices Related to Sexually Transmitted Infections Undertaken by Family Physicians in Moose Jaw, Saskatchewan

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## ABSTRACT

**Background:** Saskatchewan has the highest rates of gonorrhea and human immunodeficiency virus (HIV) in the country. Saskatchewan is also experiencing an increase in the number of syphilis cases. Family physicians play a substantial role in primary prevention of sexually transmitted infections (STIs).

**Research Question:** Were patients aged 15 – 25 who visited Alliance Health Clinic in Moose Jaw, Saskatchewan during 2018 screened for STIs according to the guidelines set by the Public Health Agency of Canada?

**Methods/Methodology:** A retrospective chart review was conducted of all patients aged 15 - 25 who saw a family physician at Alliance Health Clinic in Moose Jaw, Saskatchewan from January 1st, 2018 to December 31, 2018. Data extracted included gender, age, number of visits in 2018, STI testing results, public health reporting forms and prenatal records. Inter-group comparisons were conducted using Mann-Whitney, Chi-squared or Fisher Exact tests, as appropriate. The project received ethics approval from the Research Ethics Board of the former Regina Qu'Appelle Health Region

**Results/Findings:** 1725 patients were included. Of the 1725, 11.5 % were tested for chlamydia and gonorrhea, 5.3% were tested for syphilis and 5% for HIV. Of these, 25 tested positive for chlamydia, two for gonorrhea, one for syphilis and none for HIV. Females were screened over twice as frequently as males. Females presenting for prenatal care were three-times more likely to be screened, but not all pregnant women were screened. The median number of visits per patient was two, and women had more visits than men. No 15 year-olds were screened. Eighty-four percent of the positive results were reported to public health.

**Discussion:** The greatest challenge in STI screening is a lack of opportunity to offer screening. Females were over twice as likely to be screened for STIs over males. This is likely because females visited the doctor twice as often as males resulting in more opportunity to be offered screening.

**Conclusions:** The screening practices relating to STIs undertaken by family physicians at Alliance Health do not follow the PHAC Guidelines.

**Recommendations:** Increase physician education about the PHAC Guidelines and increase efforts to offer patients screening at every visit.

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# Bringing It Up: Barriers to Consultation and Management of Erectile Dysfunction at West Winds Primary Care Center

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## ABSTRACT

**Background:** There have been multiple studies evaluating barriers to discussing erectile dysfunction (ED) as well as seeking and engaging in treatment; however, the generalizability is often a concern due to the array of cultural, demographic, patient, and health-care driven factors. The purpose of this study is to gather patients' barriers, attitudes, and behaviours regarding ED to inform recommendations and resources, better equipping both patients and practitioners to engage in the discussion and management of ED.

**Research Question(s):** 1. What are patients' attitudes towards speaking to their physician regarding ED? 2. What barriers keep patients from speaking to their physician regarding ED? 3. Does age, income, or education level affect the patient's decision to discuss ED with the physician?

**Methods/Methodology:** The research was formatted as a quantitative cross-sectional study using a paper-format questionnaire to gather data. Eligible subjects were adult (age >18) male patients of WWPCC that were present for any scheduled visit. Sixty-one questionnaires were completed and used for data analysis. Ethics approval was received from UofS Beh-REB.

**Results/Findings:** A participant's total IIEF-5 (International Index of Erectile Function) score had no bearing on their likelihood to speak to a physician regarding ED, however there were three factors that had a statistically significant positive impact: decreased confidence in achieving and maintaining an erection, severity of dysfunction, and uncertainty in ability to complete sexual activity.

**Discussion:** Comfort in discussing ED with family physicians is not equally distributed across the population. Our results helped to identify both barriers and catalysts to discussion of ED. This aids our understanding of the factors our patient population may be facing and lead-points to future research looking to delineate what tools could be used to overcome such barriers.

**Conclusions:** Men continue to be hesitant to discuss ED with their physician due to embarrassment, and many simply forget to bring up the subject. Further research needs to be done to look into effective ways to normalize ED. Consultation and treatment of ED improves quality of life, sexual function and relationship measures in men, and primary care providers need to find better ways to approach this largely evaded problem.

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# Education and Attitudes Towards the Pharmaceutical Industry of Family Medicine Residents Saskatchewan

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## ABSTRACT

**Background:** In recent decades interactions between physicians and the healthcare-pharmaceutical industry (HPI) have been increasingly recognized as an ethical issue. Medical schools have responded to this threat by taking measures such as instituting policies to limit interactions between trainees and HPI, with evidence of some effectiveness.

**Research Question(s):** What is the current state of Saskatchewan family medicine residents' knowledge, attitudes, and behavioural expectations towards HPI? What medical ethics educational interventions do residents believe would be most beneficial?

**Methods/Methodology:** An anonymous, online cross-sectional survey was distributed to all 100 family medicine residents in Saskatchewan. Descriptive statistics were used to summarize the results of each question. Two open-ended, short answer questions were included. As a secondary analysis, International Medical Graduates and Canadian Medical Graduates attitudes toward interaction with HPI were compared with Mann-Whitney U and Chi-square tests. The study was reviewed and approved by the Research Ethics Board of the former Regina Qu-Appelle Health Region.

**Results:** Attitudes and belief towards HPI showed reticence towards large transactions, such as paid trips, but general acceptance towards smaller transactions, including free drug samples. The majority (62.5%) recognized that such interactions lead to increased patient costs. There was a high degree of recognition of disadvantages of HPI interactions, such as information bias (91%), sales motive (91%). Less than 10% of respondents considered emphasis on medical ethics education to be high or very high at any stage of training. Qualitative review of short answer responses showed desire for further guidance on interacting with the HPI.

**Discussion:** Responses from this study appear to be similar to previous studies, with a trend towards increased awareness of risks of interacting the HPI as increased reluctance towards engaging in such interactions. Incorporation of medical ethics and HPI interactions in medical curricula continues to be moderate at best, despite increased awareness of the issue.

**Conclusions:** Residents display greater awareness and wariness toward the HPI. However, it remains unclear how to best address medical ethics.

**Recommendations:** A larger scale survey of residents from various specialties and provinces and a greater number of participants should be conducted.

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# Assessment of knowledge, attitudes, and skills working with transgender clients of Saskatchewan family physicians, family medicine residents and nurse practitioners

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## ABSTRACT

**Background:** People who are trans and gender diverse (TGD) often report suboptimal quality of care when interacting with healthcare providers. A growing body of literature is emerging that highlights health care providers' lack of knowledge and comfort with providing culturally safe care to individuals who are TGD.

**Research Question:** Do family physicians (FPs), nurse practitioners (NPs) and family medicine residents (FMRs) in Saskatchewan lack knowledge about providing medical care, specifically transition-related, to patients who are TGD? Is there a subset of these who would be interested in further training to provide optimal care to these patients?

**Methods/Methodology:** A survey was designed to assess the knowledge, attitudes, and skills of FPs, FMRs, and NPs in Saskatchewan with regards to working with TGD patients. The survey was reviewed and approved by the Saskatchewan Trans Health Coalition, which consists of people who are TGD, service organization representatives, and healthcare providers. Participants across Saskatchewan were recruited via email through their respective professional organizations and the University of Saskatchewan family medicine residency program. Survey data was collected online using REDCap. Analyses included descriptive statistics (aggregate and by professional group) and comparisons between groups using Analyses of Variance (ANOVAs). Ethical approval was obtained from the Saskatchewan Health Authority Research Ethics Board (REB 19-90).

### Results/Findings:

Of the 188 respondents, only 30.3% (n=57) reported comfort providing transition-related medical care (such as hormone therapy and trans-related surgical referrals) to patients who are TGD. The majority (95.8%, n=180) of participants indicated they would be comfortable providing non-transition-related medical care to patients who are TGD. Interest in further training in providing transition-related medical care (75.6%, n=142) and cultural safety (67.1%, n=126) was high. No statistically significant differences between provider groups were observed.

**Conclusions:** Almost all participants felt comfort providing non-transition related care to patients who are TGD, but only a small portion reported comfort in providing transition-related care. Interest in further training on both transition-related care and cultural safety was high.

**Recommendations:** Training initiatives, both on cultural safety and transition-related therapies, for physicians, residents, and nurse practitioners will be undertaken, incorporating the results of this survey.

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# Implications of The Cannabis Act: Are Canadian family physicians prepared?

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## ABSTRACT

**Background:** The Cannabis Act took effect on October 17, 2018. There is minimal research assessing family physicians' abilities to address cannabis use with patients. Up to 75% of family physicians do not feel prepared to answer patients' questions. The full impact of cannabis legalization is currently unknown and it will be pertinent to evaluate the preparedness of family physicians in practice.

**Research Question:** Do Canadian family physicians feel competent counselling patients on legalized recreational cannabis consumption, toxicity, management, and legislation?

**Methods/Methodology:** Saskatchewan family physicians were invited to complete an online survey, distributed by the Saskatchewan Medical Association, in January-February 2020. The survey captured family physicians' knowledge of recreational cannabis counselling practices and continued training needs. The research team reviewed the survey for face validity. The study was reviewed and approved by the Research Ethics Board of the former Regina Qu'Appelle Health Authority.

**Results/Findings:** A total of 87 surveys were completed (10% Response Rate). Regarding cannabis legislation, the majority (92.7%) of participants were aware of the implementation of the Cannabis Act. While 78% of physicians were aware of the Canadian cannabis consumption driving regulations, only 25% considered themselves very comfortable counselling patients regarding safe driving. Of all the participating physicians, less than half of them (46.3%) felt moderately to very comfortable identifying vulnerable populations. Fifty-seven point three percent of participants were uncomfortable counselling patients on recreational cannabis use based on current level of knowledge.

**Discussion:** Saskatchewan family physicians are uncomfortable counselling patients on recreational cannabis use. Most are not aware of assessment tools which may account for the lack of screening for cannabis use disorder and identification of vulnerable persons. Family physicians' knowledge on the topic is incomplete and they frequently lack confidence to safely counsel their patients.

**Conclusions:** Saskatchewan family physicians lack experience and knowledge to appropriately counsel patients on recreational cannabis use, demonstrating a need for increased research and training.

**Recommendations:** Evidence-informed educational programs and resources need to be

developed. These should be made available to Saskatchewan family physicians, residents, and medical students to address specific knowledge gaps, as well as to improve the level of comfort when counselling patients on recreational cannabis use.

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# Feasibility of a Nurse-led Smoking Cessation Intervention in the Emergency Department

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## ABSTRACT

**Background:** Cigarette smoking is a leading cause of morbidity and mortality. Multiple studies have established that cigarette smoking prevalence is higher in Emergency Department (ED) patients than their respective communities. Previously, we confirmed this to be true for Saskatoon ED patients and found that the majority of these patients were receptive to ED-specific cessation support.

**Research Question(s):** What are ED nurses' beliefs regarding smoking cessation in the ED? What are potential barriers to implementing a smoking cessation intervention in the ED?

**Methods/Methodology:** We administered a questionnaire to St. Paul's Hospital ED nurses in Saskatoon assessing attitudes toward three potential interventions: brief counselling, referral to community support programs, and distributing educational resources. The questionnaire included Likert scale numerical ratings and written responses for thematic analysis. Ethics approval was obtained from the University of Saskatchewan Behavioural REB.

**Results/Findings:** 83% of eligible nurses completed the survey (n=63), which showed that ED nurses rarely attempt to provide cessation support and would be minimally comfortable with personally providing cessation support. Barriers identified through thematic analysis included time constraints (25.4%), appropriateness of location (19.0%), and lack of cessation knowledge (14.3%). Overall, 93.3% of nurses indicated at some point throughout the survey that time and workloads were barriers to providing counseling.

**Discussion:** While the ED appears to be a place where patients feel that smoking cessation interventions could be useful, ED nurses are inundated with tasks and have little extra time for smoking cessation interventions. Referral to community support programs was deemed most feasible and likely to be beneficial by nurses, while counseling within the ED was believed to be least feasible and beneficial.

**Conclusions:** Although the ED is a critical location for providing cessation support, the proposed interventions were viewed as a low priority task outside the scope of the ED.

**Recommendations:** While introduction of a referral program has some merit, having professionals dedicated to ED cessation support would be most effective. Staff education



regarding the importance of smoking cessation in the ED, and finding simple ways to incorporate smoking cessation into routine nursing care, could be beneficial and should be further examined.

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## **Diet counselling and its feasibility in family practice: Is a targeted template a useful tool in a typical family practice setting?**

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### **ABSTRACT**

**Background:** The increasing prevalence of preventable chronic disease is a major challenge. Despite recommendations for nutritional counselling during patient encounters, rates are low. To improve counselling confidence and frequency, we developed a simple template from the 2019 Canada Food Guide.

**Research Question(s):** How do Saskatchewan family medicine residents report their confidence regarding nutrition knowledge, and what are their reported rates of nutritional counselling? Do they feel that the template provided would increase their counselling frequency?

**Methods/Methodology:** All Saskatchewan family medicine residents were sent an anonymous online survey, capturing demographic information, nutritional education/knowledge, and both counselling confidence and frequency. They also reviewed the template for practice feasibility. We used descriptive statistics to assess the responses, then cross-tabulations comparing respondent characteristics with counselling confidence and frequency. The University of Saskatchewan's Behavioural Research Ethics Board approved this cross-sectional study.

**Results/Findings:** Only 37% of participants (N=19) felt fairly confident regarding counselling, and 47% counsel often. Of those fairly confident, only 57% counsel often. Barriers included insufficient time (90%), insufficient knowledge (60%), and insufficient reliable data (30%). Of respondents feeling moderately knowledgeable about the 2019 Canada Food Guide, 80% also felt fairly confident counselling; only 21% feeling less knowledgeable shared this confidence. All participants viewed the template as appropriate, 84% felt it would increase their counselling, and 89% indicated they would integrate it into practice.

**Discussion:** Counselling rates were comparable to the literature. Our study implies that increased familiarity with recent evidence and more nutrition training increases counselling likelihood; however, despite this knowledge, other barriers remain, predominantly time. This strengthens our proposal for an easy-to-use, reliable tool. Most study participants agreed that they would be more likely to provide dietary counselling with access to a similar template, which could be incorporated into regular visits.

**Conclusions:** Many residents lack nutritional counselling confidence; they also counsel infrequently. Given positive participant responses, our template has potential to mitigate identified counselling barriers.

**Recommendations:** Future studies could utilize this template in patient visits and assess patient understanding of the template. This could then be extended to prospectively evaluate patients' behavioural changes after the template was used in an encounter.

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# Sterile vs. Non-Sterile Gloves in Primary Care Practice

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## ABSTRACT

**Background:** The effectiveness of using sterile gloves for in office procedures has recently come into question in a number of settings, including dentistry, dermatology and the emergency department. Several studies have shown no difference in infection rate between sterile and non-sterile glove use. However, there is minimal evidence regarding the use of sterile versus non-sterile gloves in a Family Medicine practice. If infection rates are similar regardless of glove type, significant cost savings could be implemented for Family Medicine practices, without compromising patient care.

**Research Question(s):** We aim to determine whether, in a primary care practice, the use of sterile versus non-sterile gloves results in any difference in infection rates after in-office minor procedures.

**Methods/Methodology:** The methods will include chart reviews both before and after the implementation of use of clean, non-sterile gloves for office procedures at the Family Medicine Unit (FMU) in Regina, Saskatchewan. We did a retrospective chart review on charts including any in-office procedure done on the FMU between July 1, 2015 and June 30, 2016 as our control group (sterile gloves) and after the implementation of non-sterile glove use for procedures for cases from July 1, 2017 to June 30, 2018. This study was approved by the Research Ethics Board of the former Regina Qu'Appelle Health Region. Operational approval was granted by the Saskatchewan Health Authority.

**Results/Findings:** Of the 43 patients in the sterile glove cohort that had follow up at the FMU, 5 had signs of infection at the follow up (12%). Of the 31 patients in the non-sterile glove cohort that had follow up at the FMU, four had signs of infection at follow up (13%).

**Discussion:** Based on review of 138 charts between the periods of July 1, 2015-June 30, 2016 and July 1, 2017-June 30, 2018. There is no difference in infection rates between the two cohorts, however our sample size was too low to achieve statistical significance.

**Conclusions:** This study suggests that the use of non-sterile gloves for in-office procedures results in no increased risk of infection, and therefore is a safe and potentially cost-friendly option for patient care.

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# **An Evaluation of the Buprenorphine-Naloxone Treatment Protocol Initiated at the Battlefords Union Hospital Emergency Department**

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## **ABSTRACT**

**Background:** Canada's opioid crisis is generating rising rates of opioid-related deaths and overdoses. Buprenorphine-naloxone opioid agonist therapy (OAT) is first-line treatment of opioid use disorder (OUD). Advantages include reduced risk of fatal overdose and respiratory depression. Buprenorphine-naloxone OAT initiated in the Emergency Department (ED) is associated with successful primary care engagement due to safe, unobserved, take-home dosing. There is a paucity of evidence evaluating patient retention of buprenorphine-naloxone OAT initiated in a rural ED setting.

**Research Question(s):** To evaluate patient adherence with buprenorphine-naloxone OAT initiated at the Battlefords Union Hospital (BUH) ED for OUD.

**Methods/Methodology:** Upon approval from the University of Saskatchewan's Behavioural Research Ethics Board and the Saskatchewan Health Authority, a retrospective chart review for this cross-sectional study was performed on all patients initiating buprenorphine-naloxone at the BUH for OUD from January 1, 2019 to January 1, 2020. Variables: (1) months since treatment initiation until April 2020; (2) active prescription for buprenorphine-naloxone; (3) follow-up primary care attendance; (4) expected vs unexpected urine drug screen (UDS) consistent with patient history; and (5) demographics of age and gender. Fisher's exact and Mann-Whitney-U testing was used for comparisons by follow-up and active prescription status.

**Results/Findings:** Twelve participants were initially included; one participant was lost to follow-up. Analysis included 7 female and 4 male participants at the time of data collection (April 2020). Active buprenorphine-naloxone prescriptions were held by 54.5% (6/11); 90.9% (10/11) attended follow-up after ED initiation. Females had a retention rate of 42.9% (3/7) compared to men at 75% (3/4). Of the 54.5% of participants with an active prescription, 100% (6/6) attended follow-up primary care appointments; of those without an active buprenorphine-naloxone prescription, 80% (4/5) also attended ( $p=0.46$ ). Of participants with an expected UDS, 75% (6/8) maintained an active prescription and 25% (2/8) did not. All participants with an active prescription provided an expected UDS compared to 40% of those without an active prescription (2/5) ( $p=0.06$ ). None of the study participants were previously prescribed methadone.

**Conclusions:** Our study provides preliminary evidence supporting successful retention and adherence of buprenorphine-naloxone in primary care when initiated in a rural ED for OUD.



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# Attitudes towards a Hospitalist Program in Prince Albert

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## ABSTRACT

**Background:** Many Canadian hospitals are adopting an inpatient hospitalist model to manage growing numbers of complex patients without a family doctor. Hospitalist implementation has shown decreased length and cost of admissions. Utility of a hospitalist program in Prince Albert has been long debated, but stakeholder attitudes have not been surveyed formally.

**Research Question:** What are the opinions of stakeholders, including family physicians, emergency physicians, specialists, administrators, and nurses, regarding implementation of a hospitalist service in Prince Albert?

**Methods/Methodology:** A survey (online or paper-based) was distributed to nurses, physicians, and administrators involved with the adult medicine wards at the Victoria Hospital. Data regarding demographics, the need for inpatient care reform, support for a hospitalist approach, which patients should be under hospitalist care, which physicians should provide care, and interest in becoming a hospitalist was collected using multiple-choice questions. Response frequencies were determined overall and compared by cross-tabulation (Chi-square/Fisher's exact tests) for differences by profession and years of experience. Multiple-choice questions offered some open-ended "other" options; one text field also recorded views about the ideal hospitalist model. These qualitative responses were analyzed by thematic analysis. Approvals for this cross-sectional study were obtained from the University of Saskatchewan's Behavioural Research Ethics Board and the Saskatchewan Health Authority.

**Results/Findings:** Respondents (95%) strongly supported a hospitalist model. Physicians favored a version in which family physicians could opt out of care provision (74%), contrasting nurses who most often preferred hospitalist-only care (47%,  $p < 0.0001$ ). Among family physicians, 61% were somewhat or very interested in becoming a hospitalist. Open-ended responses centered on support for the hospitalist model, retaining an opt-in/out approach, and the improved physician accessibility the hospitalist approach provides.

**Discussion:** Currently, inpatient care in Prince Albert is conducted by family physicians caring for their own patients. The results of this survey strongly supports change and emphasizes that a hospitalist model would be desirable.

**Conclusions:** We have clarified perspectives of stakeholders regarding a hospitalist model for Prince Albert. Overall, they support this approach.

**Recommendations:** Due to the COVID-19 pandemic, an interim hospitalist service was implemented in Prince Albert. Further research should evaluate if attitudes have changed following implementation.

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# **Methadone for chronic pain management: A cross-sectional analysis of patient experiences in Prince Albert**

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## **ABSTRACT**

**Background:** More people live with chronic pain than cancer, heart disease, and diabetes combined. Research has shown methadone to be a promising analgesic for the management of chronic pain. Despite its proven efficacy, methadone is not covered by the province of Saskatchewan for chronic pain.

**Research Question(s):** In patients with chronic pain, what were the indications for initiating methadone? Has their treatment given them adequate pain relief when other analgesics have failed? What were the barriers, if any, in accessing treatment? This study aims to gain a better understanding of the patterns of utilization of methadone for chronic pain in Prince Albert and to learn about patient experiences with methadone.

**Methods/Methodology:** This was a cross-sectional analysis. Data was collected using a survey distributed to chronic pain patients at the Prince Albert Co-operative Health Centre. Microsoft Excel was used to input data and generate graphs. Ethics approval was granted by the University of Saskatchewan's Behavioural Research Ethics Board.

**Results/Findings:** Twenty-five surveys were collected. Most participants (68%) were using methadone alone for pain control, but all had tried other medications prior to methadone. The most common type of pain treated with methadone was neuropathic, and the most common location was back pain. All participants reported a decrease in their pain severity with methadone. Most (72%) reported side-effects from methadone, but none considered stopping because of them. No one identified being hesitant to start methadone, and no one reported stigma as playing a significant role in their decision to take methadone.

**Discussion:** The results were consistent with previous studies in showing methadone to be an effective form of chronic pain management. Based on the literature, it was surprising to see that stigma did not act as a barrier in patients' decision to use methadone for their pain.

**Conclusions:** Methadone was effective at managing chronic neuropathic pain when other medications had failed, and no barriers were perceived by patients in accessing this medication.

**Recommendations:** We hope the province of Saskatchewan will consider coverage of methadone for the purpose of chronic pain management, as it has been shown to be an effective treatment option.

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# **An examination of factors that enhanced or inhibited successful presentation to counselling services in patients of the North Battleford Primary Health Centre with depression and/or anxiety disorders**

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## **ABSTRACT**

**Background:** Referral from the Primary Health Centre to the North Battleford Mental Health Clinic (MHC) for mental health counselling services operates predominantly on a self-referral model. Factors that influence attendance elsewhere have been described in the literature, but local data is lacking, and the effect of a formal referral has not been well described.

**Research Question(s):** What is the influence of demographic factors on attendance rates to counselling appointments? What are patients' perspectives on the process of securing and attending a counselling appointment?

**Methods/Methodology:** This was a mixed-methods study. Phase 1 of the study employed a retrospective chart review. Phase 2 involved semi-structured telephonic interviews patients of MHC. Analysis utilized logistic regression, Kaplan-Meier survival analysis, and thematic analysis. The University of Saskatchewan's Behavioural Research Ethics Board approved this study as did the Primary Health Centre, MHC, and the Saskatchewan Health Authority

**Results/Findings:** Attendance rate to counselling services at the MHC was 32.8%. Age over 30 years, home-to-MHC distance of less than 3km, and presence of a formal referral were associated with increased attendance to MHC. Odds ratios were 5.6 (95% CI: 1.2-26.9), 4.2 (95% CI: 1.4-12.7), and 17.8 (95% CI: 4.9-64.6) respectively. Three themes emerged through interviews: 1) Facilitators: rapid access to services, intake via phone, ability to self-refer, and feeling listened, 2) Barriers: impact of psychiatric/comorbid illnesses, and personal feelings of weakness, 3) Areas for improvement: lack of knowledge about emergency services.

**Discussion:** Living less than 3km from MHC is likely significant as this distance corresponds with the city limits of North Battleford. Formal referral is likely to have significant impact as patients are called to make an appointment and followed when a referral is sent. Based on the interviews, patients largely prefer to self-refer, but this may be explained by selection bias. The effect of their psychiatric or comorbid illnesses on their ability to attend appointments was notable.

**Conclusions:** Formal referral appears to have the most significant effect on attendance rates to MHC. Qualitative factors that assist and hinder attendance must also be addressed in any future interventions, including consideration of the impact of patients' comorbid illnesses.



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# Examining the appropriateness and associated cost of routine preoperative examinations in a Saskatoon Primary Health Care Clinic

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## ABSTRACT

**Background:** Routine preoperative examinations performed by family physicians, regardless of surgery type or patient comorbidities, is common. In Saskatoon, these assessments are performed prior to all elective surgical procedures. Despite their frequency, evidence supporting their effect on intraoperative and post-operative surgical outcomes is lacking (1). This leads to uncertainty as to whether routine preoperative assessments should be required and if these resources could be better utilized elsewhere.

**Research Questions:** Among adult patients attending a primary care clinic, do preoperative visits done by family physicians change patient management as assessed by preoperative test ordering and medication adjustment? What are the associated costs of completing these exams?

**Methods/Methodology:** Patients who had a preoperative assessment (Billing Code 15B) completed from August 1st, 2018 to July 31, 2019 who were  $\geq 18$  years old at West Winds Primary Health Centre were included. A total of 273 patients were identified, with subsequent chart review and descriptive analysis performed.

**Results/Findings:** Of the 273 patients included, it was found that 21 (7.7%) underwent preoperative medication adjustments, 21 (7.7%) had preoperative investigations ordered, and 39 (14.3%) received either or both. Of total patients, 36 (13.2%) were evaluated by both the pre assessment clinic (PAC) as well as their family physician. For each preoperative examination a family physician bills MSB \$66.60. Over the course of our study, West Winds Primary Health Centre billed a total of \$18,181.80 for all adult preoperative assessments completed. The study was approved by the University of Saskatchewan Biomedical Research Ethics Board and the Saskatchewan Health Authority.

**Discussion:** Despite medical comorbidities being common, preoperative management by a family physician, including adjusting medications or ordering investigations was infrequent. Some patients had preoperative evaluations by both their family physician as well as at the PAC, indicating the evaluation by the family physician may be duplicated by the anesthesiologist.

**Conclusions/Recommendations:** Although our data demonstrated that a change in preoperative management was uncommon after preoperative examination completed by family physicians, further discussion and research into this topic should continue in order to determine whether such

evaluations are essential and whether family physicians are the correct practitioners to be performing them.

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## Does implementing an appointment no-show fee decrease the amount of no-shows within a one-year period?

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### ABSTRACT

**Background:** The Associate Family Physician's Clinic in Swift Current implemented a no-show fee policy on January 1st, 2019 in an effort to reduce missed patient appointments and improve clinic flow.

**Research Question(s):** Does the implementation of no-show fee decrease the number of patient no-shows over a one-year period in a family medicine clinic?

**Methods/Methodology:** This study was a pre and post implementation cohort analysis. The clinics EMR was used to extract the age, gender and attendance status for each appointment booked in the year before and after the implementation of the policy. Chi-square or McNemar tests were used to compare no-show rates before and after the implementation of the no-show policy, as appropriate. Chi-square or Mann-Whitney U tests were performed to ascertain the effect of age and sex on the likelihood of patients missing an appointment in 2019. An Exemption was obtained from the University of Saskatchewan's Biomedical Research Ethics Board.

**Results/Findings:** There was no significant reduction in the proportion of patient who no-showed after the fee policy was implemented (9.5% vs 10.1%,  $P = .256$ ). There was also no significant reduction in the proportion of patients who no-showed more than once (1.5% vs 1.4%,  $P = .595$ ). There was no difference among the sexes in terms of no-show rates in 2019, but the median patient age who no-showed (41 years; IQR 25-63 years), was significantly lower than those who showed for all appointments in the same year (50 years; IQR 28-66 years),  $P < 0.001$ .

**Discussion:** The no-show fee did not have any significant reduction on the number of patients who no-showed over a one-year period. Nor was there a decrease in the number of patients who no-showed more than once. Possible reasons for this include patients not knowing about the no-show fee, the no-show fee only being applied after missing two visits, or patients not finding this enough incentive to change their usual behavior.

**Conclusions:** Overall, this no-show fee did not reduce the number of missed appointments in the year after it was implemented.

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# **Illnesses and injuries at the 2019 Western Canada Summer Games: a description of the polyclinic and regional hospital Emergency Department visits**

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## **ABSTRACT**

**Background:** Sports injury data is key to devising programs to help reduce such injuries in the future. It is unclear if or how large sporting events impact local emergency departments. This study aimed to describe the incidence of injuries and illnesses at the 2019 Western Canada Summer Games, and the impact of the Games on the regional hospital emergency department.

**Research Question(s):** What was the incidence of injuries and illnesses at the 2019 Western Canada Summer Games? What was the impact of the Games on the regional hospital emergency department?

**Methods/Methodology:** We used a retrospective cohort study design. We performed a chart review using two data sources – the polyclinic and emergency department (ED) electronic medical records. For the ED data, we compared 2019 with the year prior. An Exemption was provided by the Research Ethics Board of the former Regina Qu'Appelle Health Authority.

**Results/Findings:** The overall clinical incidence of illness was 51 per 1,000 athletes, and for injury was 100 per 1,000 athletes. The most common illness was respiratory (n=17, 25.8%), and the most common injury was a strain/sprain (n=74, 56.9%). In 2019, length of stay increased from 105 minutes to 120 minutes ( $p = 0.002$ ), and level of acuity was also higher ( $p = 0.037$ ). However, there were fewer procedures done in 2019 (n=74) compared to 2018 (n=122) ( $p < 0.001$ ). Overall, 21 patients attended the ED and indicated they were in town for the Games.

**Discussion:** The data was incomplete in many cases, which made it difficult to draw conclusions and make recommendations. However, it appeared consistent with previous studies.

**Conclusions and Recommendations:** Injuries were twice as common as illnesses at the Games. Strains/sprains and respiratory illnesses were seen the most. The Games were associated with increased ED length of stay and level of acuity increased, however, not with the number of procedures. Further studies should use established methods for recording and reporting epidemiological data on illnesses and injuries in sport, and in emergency departments. Further research and external validation studies are needed.

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## **Child sexual exploitation: A survey of knowledge and comfort level of primary care providers in Saskatchewan**

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### **ABSTRACT**

**Background:** Human trafficking is a worldwide issue and the majority of victims are not identified by governmental or law enforcement agencies. A quarter of these victims are under the age of eighteen. About 30% of human trafficking victims access health care, but most are not identified. Surveys of health professionals show there is a lack of confidence in training regarding recognition and management of human trafficking victims.

**Research Question(s):** What is the knowledge and comfort level of healthcare providers who come in contact with children in identifying and managing sexually exploited children currently in Saskatchewan?

**Methods/Methodology:** An anonymous online survey was distributed to healthcare providers in Saskatchewan. Univariate analysis was used to compare the responses of physicians and other healthcare providers. The Research Ethics Board of the Saskatchewan Health Authority awarded ethics approval for this study (REB 19 122).

**Results/Findings:** There were 125 survey respondents composed of 90 physicians, 30 nurses and 5 psychologists. Only 7 had greater than 4 hours of formal training, and 40% of physicians and 51.4% of other health professionals had no formal training. 74.3% of respondents were neutral or uncomfortable with identifying or managing sexually exploited children. 97.8% of physicians and 97.1% of other healthcare professionals identified the legal requirement to report suspected victims of sexual exploitation, but only 84.4% and 65.6% respectively correctly identified the reporting body. Providers correctly identified risk factors and presenting complaints of sexually exploited children when given a list; however, there were gaps in identifying common signs of sexually exploited children, most notably signs of branding and grooming.

**Discussion:** Healthcare providers lack confidence in identifying and managing sexually exploited children. Their overall knowledge in identifying sexually exploited children was strong; however, the lack of knowledge surrounding specific signs alludes to a general knowledge of child abuse rather than knowledge specific to sexual exploitation.

**Conclusions:** There is a knowledge gap when identifying specific signs of child sexual exploitation, and a knowledge gap of where to report suspected child sexual exploitation victims.



**Recommendations:** We recommend the development of a child sexual exploitation educational module for healthcare providers in Saskatchewan.

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# An Examination of Advance Care Directives in the Emergency Department

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## ABSTRACT

**Background:** Advance care directives (ACDs) are important in protecting patient autonomy and helping with end-of-life decision making. However, ACDs are widely underused, resulting in poor completion and documentation rates. This study aimed to depict ACD completion amongst elderly patients presenting to the Battlefords Union Hospital Emergency Department (BUH ED).

**Research Question(s):** Among male and female patients 65 years of age and older presenting to the BUH ED, how many have completed an ACD or appointed a health care proxy? If they have completed an ACD, who helped them, and did they bring it to the ED?

**Methods/Methodology:** Using convenience sampling and a 5-question survey, we investigated what percentage of patients 65 and older had completed an ACD or appointed a health care proxy. We also assessed potential relationships between age, gender, having a family physician, and having a health proxy using t-tests and chi-square/Fisher's exact analysis. The University of Saskatchewan's Behavioural Research Ethics Board approved this cross-sectional study.

**Results/Findings:** Sixty-three patients aged 65-97 years completed the survey, with a mean age of 77.2 years (standard deviation 8.5). Of total participants, 33.3% (n=21) had completed an ACD (95% confidence interval [CI] 22.0%-46.3%), and 38.1% (n=24) had appointed a health care proxy. Among those who had completed an ACD, a 'health care professional' had assisted only 4.8% (n=1) of the time, while family members were named in 42.9% of responses, and lawyers in 38.1%. Of the total participants, only 7.9% (95% CI 2.6%-17.6%) brought their ACD to the ED. The only statistically significant relationship was between those who completed an ACD and those who had appointed a proxy ( $p < 0.0001$ ).

**Discussion:** Only 33.3% of participants presenting to BUH ED had completed an ACD. For those who had one, physicians were rarely involved, and most people did not bring it to the ED. If an ACD was completed, likely a proxy had also been appointed.

**Conclusion:** ACD completion rates are low in rural Saskatchewan and correlate poorly with having a family physician.

**Recommendations:** More discussions from family physicians and awareness are needed to encourage better engagement with patients regarding their wishes for care.

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# Child Life Services: An Environmental Scan of Care in Pediatric Bleeding Disorder Programs

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## ABSTRACT

**Background:** The care of children with bleeding disorders is a specialized field. Child Life Specialists work with pediatric patients and their families as part of a multidisciplinary team to provide family and patient-centered care. There was limited research within the field of Child Life services, and no studies have been published to date about the role of Child Life Specialists in bleeding disorders care.

**Research Question:** What is the Canadian experience of Child Life Services within the Canadian Pediatric Bleeding Disorder Programs?

**Methods/Methodology:** A literature review following by an Environmental Scan of Canadian Pediatric Bleeding Disorder Programs was undertaken. One or two individuals from each of the Canadian Pediatric Bleeding Disorder Programs were invited to participate. The telephone interviews were transcribed. Participants were given the opportunity to review their transcript. An inductive, thematic analysis was undertaken using NVivo 12 Pro. Ethics Approval was received from the University of Saskatchewan's Behavioural REB prior to commencement.

**Results/Findings & Discussion:** Fifty-seven percent of the programs reported limited or inadequate access to Child Life Services. Benefits were identified for not only the child but the parents/guardians and the healthcare system overall. Child Life Services were identified as being important in several domains, including: procedure preparation and support, education, and therapeutic play. There were also a variety of barriers identified that limited access to Child Life. Centers with minimal to no access identified that Child Life Services would be very beneficial for patient care.

**Conclusions:** There is currently inadequate access to Child Life Specialists for pediatric patients with bleeding disorders in Canada. A desire for improved access to Child Life Specialists was identified by many programs across Canada.

### Recommendations:

- Children with bleeding disorders would benefit from having Child Life Specialists as team members within Canadian Pediatric Bleeding Disorder Programs. They have valuable skills to help this unique population to cope with their medical condition.
- It is critical that Family Physicians are aware of the unique needs and stresses of pediatric patients with bleeding disorders so they can assist in helping to provide psychosocial support for the pediatric patient and family.

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# **Cryotherapy vs. salicylic acid for treatment of non-genital warts at the Alliance Clinic in Moose Jaw, Saskatchewan**

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## **ABSTRACT**

**Background:** Warts are growths in the top layer of skin, which are caused by the Human Papillomavirus (HPV) family. Left on their own, most warts will spontaneously involute by 1 to 2 years. The two most used treatments with the best available evidence are topical salicylic acid and cryotherapy. Both options seem to be equivalent in efficacy, however, neither one provides a large difference compared to watchful waiting.

**Research Question(s):** Is there a difference in outcomes of non-genital warts between cryotherapy alone and cryotherapy plus salicylic acid treatments? Does the location of the wart influence how well the treatments work?

**Methods/Methodology:** This was an observational cohort study comparing cryotherapy with and without prior salicylic acid. Patients who were seen in the Alliance Health Clinic for wart treatments were recruited. Participants were contacted via phone to answer a questionnaire about treatment outcomes and satisfaction ratings. Ethics approval for the study was obtained from the Research Ethics Board of the former Regina Qu'Appelle Health Region.

**Results/Findings:** A total of 30 participants were included in this study, all of whom received cryotherapy. There were 18 who used salicylic acid prior to cryotherapy, and 3 who used it after. Demographics were similar when comparing both treatment groups, and when comparing different wart locations. Outcomes from cryotherapy were similar with or without prior salicylic acid use. Participants reported much higher satisfaction with cryotherapy than with salicylic acid.

**Discussion:** Participants generally reported disappointment that salicylic acid treatments took too long but they liked the ease of use, whereas they were satisfied with how quick cryotherapy was but complained about pain, blistering and scarring. This study unfortunately has many weaknesses, notably the low study numbers and recall bias.

**Conclusions:** Although there was no significant difference in outcomes of the two treatment groups and the wart location did not affect the outcomes, patients were significantly more satisfied with cryotherapy than with salicylic acid.

**Recommendations:** Treatment should ultimately be the patient's decision, especially since no treatment has been proven to be superior. Patients should be informed of what is available, pros and cons of treatments, as well as costs.

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## Examining patients' attitudes and perspectives towards medicinal and recreational cannabis use

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### ABSTRACT

**Background:** With legalization of cannabis in Canada, it is important to consider implications of increased use. Evidence assessing its benefit has been inconsistent, with one of the largest cohort studies demonstrating increased pain severity and anxiety with use, while other studies have yielded contrary evidence.

**Research Question(s):** The purpose of this project was to identify gaps in patients' knowledge of indications and risks of cannabis, while understanding patterns of use. Thus, our research question was, "What are family medicine patients' understanding of the medicinal uses of cannabis and the potential harms from both medicinal and recreational use?"

**Methods/Methodology:** Using an 18-item questionnaire, we conducted a single-centre KAP study at the Regina Family Medicine Unit evaluating 112 patients' attitudes and perspectives towards cannabis use from November 18, 2019 to January 10, 2020. Ethical approval was obtained from the former Regina Qu'Appelle Health Region Research Ethics Board.

**Results/Findings:** Overall, 87% of participants stated that their cannabis use was unchanged postlegalization. Furthermore, men were significantly more likely to use cannabis regularly than women ( $p=0.029$ ). Younger patients ( $<40$  years old) were significantly more likely than older patients to have tried cannabis to treat medical conditions ( $p<0.001$ ) and were also more likely to believe that cannabis had side effects ( $p=0.022$ ).

**Discussion:** The majority of participants reported unchanged cannabis use, suggesting that use may be dictated by individual preferences as opposed to ease of access. Regular cannabis use in males was considerably higher in the study population (29.4%) compared to national figures (18.4%). Furthermore, participants were unclear as to indications and risks associated with use; greater than 50% of individuals believed there was benefit in treating anxiety, suggesting previously demonstrated associations between cannabis and anxiety as a potential explanation.

**Conclusions:** There are significant gaps in patients' knowledge towards cannabis use and associated benefits and harms. We hope that this research will serve to enact change on a public health and patient education level.

**Recommendations:** It would be valuable to quantify cannabis consumption before and after legalization to evaluate for significance while also exploring patients' knowledge of use and regulations regarding impaired driving and other legal ramifications.

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# **Interpretation and management of genetic test results by Canadian family physicians: A multiple choice survey of performance**

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## **ABSTRACT**

**Background:** Family physicians (FPs) will encounter genetic concerns within community practice. Studies show that FPs receive very little training in genetics, and lack knowledge about genetics and confidence in both taking family histories and managing this information. Nonetheless, FPs are ordering genetic tests, particularly for common genetic disorders; but their performance interpreting and managing genetic issues when presented with genetic test results has not been assessed.

**Research Question(s):** How do Canadian FPs compare to Canadian genetic counsellors (GCs) in interpreting and managing genetic testing results?

**Methods/Methodology:** FPs in Saskatchewan and Alberta, as well as GCs across Canada, were recruited to complete an anonymous online survey. With the exception of demographic data, all participants completed an identical survey which included genetic test reports for each of 4 case histories (scenarios), representing a basic mixture of inheritance patterns and genetic conditions that could be expected to present commonly to the FP's office. Ten multiple choice questions assessing interpretation and management of the genetic information were completed (2-3 per scenario). Data were analyzed via SPSS using descriptive statistics, Chi-square testing and Mann Whitney analysis. Ethics approval was obtained through the Research Ethics Board of the former Regina Qu'Appelle Health Authority.

**Results/Findings:** A total of 97 GCs and 75 FPs responded to the survey. FPs performed significantly less well than GCs on total survey score and on question-by-question analysis ( $p < 0.001$ ). Median total survey scores were 6/10 for FPs, compared to 10/10 for GCs.

**Discussion/Conclusions:** As a group, FPs consistently underperformed in the assessment and management of basic genetic information and test results compared to GCs, which may have adverse implications for patients seeking genetic testing and treatment.

**Recommendations:** Further training in genetic testing and analysis would be beneficial for medical students, FP residents, and currently practicing FPs.



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# Care Provider Needs Assessment of Chronic Non-Cancer Pain Management

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## ABSTRACT

**Background:** Chronic non-cancer pain (CNCP) is a common health condition facing 19% of the Canadian population. On a national scale CNCP is inadequately managed. Multidisciplinary pain clinics have been shown to be the gold standard of CNCP care, however in Saskatchewan we do not have access to one. To our knowledge this is the first study completed to assess the specific needs of Saskatchewan practitioners related to CNCP management.

**Research Question:** The goals of the study were to evaluate the burden of CNCP care to providers, identifies competencies and deficiencies, barriers to care, and identifies resources needed to improve CNCP in Saskatchewan.

**Methods/Methodology:** All practicing physicians, residents, and nurse practitioners across Saskatchewan were invited to anonymously participate in the survey sent by email through the Saskatchewan Medical Association (SMA), Saskatchewan Health Authority (SHA) and the Saskatchewan National Association of Nurse Practitioners (SANP). Ethics was approved through the Behavioural Research and Ethics Board at the University of Saskatchewan.

**Results/Findings:** The total response rate was 5.1%. Few respondents were confident in opioid rotation and tapering (51.7%, 65.3% respectively). Overall, confidence with managing primary pain and secondary pain conditioners were 60.5% and 75.5% respectively. Frequently occurring barriers included financial barriers (87.7%), lack of time for patient education (86.3%), and lack of access to a physician pain specialist (84.1%) or interdisciplinary pain specialists (89.0%).

**Discussion:** Saskatchewan practitioners have low confidence in opioid prescribing and CNCP management. Multiple Canadian surveys in other provinces have shown similar results. There is a lack of pain education at both the pre- and post-licensure levels. Practitioners in Saskatchewan also face significant barriers to treating CNCP. Significant systematic barriers limit ability to care for patients with CNCP. A multidisciplinary pain clinic has been proven to be a very effective way to manage CNCP. The majority of these barriers could be addressed with access to this type of clinic in Saskatchewan.

**Conclusions:** Practitioners are faced with managing CNCP in the setting of inadequate pain and opioid education, lack of expert resources, shortages of time, and significant cost barriers to patients. Province wide strategies are required to address these concerns to improve care to patients suffering with CNCP.

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