University of Alberta

Caring for adolescents who visit the emergency department for alcohol use

by

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I dedicate this thesis to my father

Dr. Syed Fazli Mabood

ABSTRACT

A ‘safety net’ and a key system entry point to access care for alcohol-related events, the emergency department (ED) can play an important role in the early identification of harmful effects of adolescent alcohol use thus making it crucial to understand the clinical care experiences of pediatric emergency physicians and their attitudes and beliefs towards providing alcohol-related care. This thesis includes two studies, a systematic review examining literature on the attitudes and beliefs of ED health care providers towards patients with alcohol-related presentations and a descriptive, qualitative study conducted with pediatric emergency physicians exploring their clinical care experiences when providing alcohol-related care to adolescents in the ED. These studies demonstrated that physicians’ attitudes, beliefs, and experiences can influence care provided in the ED for alcohol use.

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Table of Contents

LIST OF TABLES

LIST OF FIGURES

Chapter 1

INTRODUCTION

This paper-based thesis includes two research papers one of which has already been published and the other being prepared for journal submission. These papers are based on my graduate research (MSc in Pediatrics), which focused on alcohol-related care provided to patients in the emergency department by physicians. This introductory chapter contextualizes my graduate research by providing background literature on alcohol-related care provided in the emergency department, presenting my personal research interests, describing my chosen study methodology, and outlining each chapter's contribution to my thesis work.

BACKGROUND

Alcohol use increases during adolescence and peaks during early adulthood. Alcohol use that is problematic occurs across a spectrum from hazardous (use that increases the risk of harmful consequences) to harmful (use that results in physical, social, or psychological harms).[1-3] Recognized as an important health concern, early, problematic alcohol use is considered a strong predictor of later dependence and persistent dysfunction. Adolescents who drink before age 15 are at a four-fold increased risk of developing alcohol dependence (a precursor to alcohol abuse) compared to those who have their first drink at age 20.[4-5] In Canada, by age 14, 29% of boys and girls have consumed alcohol to the

point of intoxication; this percentage increases to 44% by age 15.[6] Accidents and injuries are common consequences of harmful and hazardous alcohol use by adolescents,[7-8] as are other consequences such as dating violence, unplanned sexual intercourse,[9-10] and antisocial behaviours.[11] There is also evidence suggesting that alcohol-related death in young people aged 18-24 years is a leading cause of mortality in Canada[12] and the US.[13] As a 'safety net' and a key system entry point to care for alcohol-related consequences,[14] the emergency department can play an important role in the early identification of harmful effects brought by harmful and hazardous alcohol use.

Patients with alcohol and other substance-related problems presenting to the emergency department have a longer length of stay compared to other patients.[15] There is evidence suggesting, however, that simply asking a young adult about his/her drinking behaviours can change drinking outcomes.[16] Patient management approaches using the SBIRT model (Screening, Brief Intervention, Referral to Treatment) have been evaluated in the emergency department with mixed results.[17-18] A large number of studies have demonstrated short-term effects on reducing alcohol use or associated harms;[19-30] however, several studies have also reported statistically non-significant effects.[31-40] The current position of the U.S. Preventive Services Task Force is that the there is at least fair evidence to support the use of screening and brief intervention for adult patients who screen positive for hazardous alcohol consumption.[41] In 2006 in the US, the American College of Surgeons mandated alcohol screening and intervention for trauma patients admitted to Level 1 and 2 trauma centers.[42] Canadian organizations have

not published similar recommendations. Despite recommendations for US emergency care settings, recent evidence suggests that emergency department-based SBIRT is largely absent in these settings.[43] This absence may be due, in part, to the attitudes and beliefs of emergency department staff.[44] At this time, there are no formal recommendations for pediatric emergency department care providers related to SBIRT, and further, the experiences of providing emergency-based, alcohol-related care to adolescents and the attitudes and beliefs that accompany this care have not been systematically explored.

The purpose of my graduate research was to understand the clinical care experiences of emergency department physicians, and their attitudes and beliefs towards providing alcohol-related care to adolescents in the emergency department.

PERSONAL INTEREST

My interest in understanding the clinical care experiences of emergency physicians towards alcohol use in adolescents stems from volunteering in the emergency department at the Stollery Children's Hospital in Edmonton, Alberta over the last year. During this time I had the opportunity to observe the adolescents who presented to the emergency department because of alcohol use. I became well acquainted with the sometimes violent behaviour of an intoxicated adolescent and struggling department staff members in making sure the adolescent was safe and medically stable. The emergency department staff often shared the frustration they felt during the clinical care experience, particularly the

physicians working in the department. Their stories sparked my curiosity about the clinical care of these adolescents and to understand 'being in the world of a physician' during these care experiences.

OUTLINE OF THESIS

My thesis consists of two papers. Chapter 2 presents a systematic review of published literature I conducted examining the attitudes and beliefs of emergency department health care providers towards patients with alcohol-related presentations. This review informed my qualitative study, which is presented in Chapter 3, and was my primary thesis project. In this study, I explored the clinical care experiences of emergency physicians when providing alcohol-related care to adolescents in the emergency department. My thesis concludes with Chapter 4, Conclusions, which are based on the findings of my graduate work. Lastly, **Appendix A** includes documents related to ethics, and **Appendix B** includes the data collection tools I used to conduct my qualitative research project.

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Chapter 2

Title: Attitudes and Beliefs towards Patients with Hazardous Alcohol Use: A Systematic Review

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Abstract

Background: Recent evidence suggests that mandated alcohol screening and intervention for trauma patients who screen positive for hazardous alcohol consumption is largely absent in Level 1 and 2 trauma centers.

Objective: To describe emergency department (ED) staff attitudes and beliefs towards patients presenting with hazardous alcohol use and their clinical management.

Methods: A search of MEDLINE®, EMBASE, CINAHL, SCOPUS from 1990 to 2010, and reference lists from included studies was conducted. Two reviewers independently screened for inclusion and assessed study quality. One reviewer extracted the data and a second checked for completeness and accuracy.

Results: Nine studies were included. Four studies reported varied beliefs on whether screening was worthwhile for identifying hazardous alcohol use (physicians: 42%−88%; nurses: 50%−100%). Physicians in three studies were divided on intervention provision (32%−54% in support of) as were nurses in two studies (39% and 64% nurses in support of). Referral for treatment was identified in two studies as an important part of ED management (physicians: 62% and 97%; nurses: 95%). Other attitudes and beliefs identified across the studies included concern that asking about alcohol consumption would be seen as obtrusive or offensive, and a perceived lack of time and resources available for providing care and referrals.

Conclusions: ED staff had varying attitudes towards ED management of patients with hazardous alcohol use. Investigations into improving clinical care for hazardous alcohol use are needed to optimize ED management for these patients.

Introduction

Hazardous alcohol use is well-known to increase an individual's risk of injury due to violence or accidents.[1-2] Acute treatment and care for alcohol-associated morbidities are often sought in hospital emergency departments (EDs), with ED patients more likely than primary care patients and the general population to report hazardous alcohol use.[3-7] In 2007, almost 3 million ED visits across the U.S. (2.3% of all ED visits) were primarily related to alcohol, and cost the health care system $1.3 billion dollars.[8]

The high volume of alcohol-related presentations to the ED presents an opportunity for staff to detect hazardous alcohol use, optimize care decisions, and initiate preventative interventions.[4] Patient management approaches using the SBIRT model (Screening, Brief Intervention, Referral to Treatment) have been evaluated in the ED with mixed impact.[9-10] A large number of studies have demonstrated short-term effects on reducing alcohol use or associated harms and cost-effectiveness for adult patients; however, several studies have also reported statistically non-significant effects.[11-33] The current position of the U.S. Preventive Services Task Force is that the there is at least fair evidence to support the use of screening and brief intervention (BI) for those patients who screen positive for hazardous alcohol consumption.[34] In 2006, the American College of Surgeons mandated alcohol screening and intervention for trauma patients admitted to Level 1 and 2 trauma centers.[35] Despite this, recent evidence suggests that ED-based SBIRT is largely absent in these settings.[36] This absence may be due, in part, to attitudes and beliefs of ED staff.[4,37] Translational research for ED-

based SBIRT with specific attention to barriers to successful implementation including attitudes and beliefs has been recommended.[37] The objective of this systematic review was to describe ED nurses' and physicians' attitudes and beliefs towards patients with hazardous alcohol use and their clinical management.

Methods

Search Strategies

Guided by input from the research team, a research librarian developed and implemented a systematic search strategy using language (English) and year (1990 to 2010) restrictions. The search was conducted in February 2010 and updated in June 2010. We used the EBSCOHost portal, encompassing the MEDLINE, EMBASE, CINAHL and Scopus databases to conduct the search. We also searched our keywords in Google Scholar and the reference lists of retrieved studies. In our search we used the following key words and MeSH headings: 'alcohol', 'attitudes OR beliefs', 'emergency department', 'Alcohol-Related Disorders', 'Attitudes of Health Personnel', 'Emergency Service or Emergency Medicine', and 'Physician-Patient Relations'.

Study Selection

Two reviewers independently screened the search results (NM, HZ). The full manuscripts of potentially relevant studies were retrieved if they were identified as relevant by at least one of the reviewers, and then independently confirmed for inclusion by two reviewers (NM, HZ). The same reviewers also independently assessed study inclusion/exclusion. Studies were included at the

screening and inclusion/exclusion stages if a primary objective was to determine attitudes and beliefs of ED staff (physicians and nurses) towards patients presenting with hazardous alcohol use, or their clinical management in the ED. No restrictions were placed on study design (qualitative or quantitative) or patient age. Studies were excluded if they met any of the following criteria: (1) they were conducted in any language besides English, (2) they studied a non-ED setting, (3) the study of attitudes and beliefs was not a primary objective, or (4) they examined attitudes and beliefs towards polysubstance use or the hazardous use of substances other than alcohol.

Assessment of Quality

Two reviewers (NM, HZ) assessed study quality. Disagreements were resolved with third party discussion (ASN) until mutual agreement was achieved. The quality assessment of quantitative studies depended on study design. Observational studies were assessed using questions adapted from Guyatt, Sackett, and Cook's (1993) User Guide to Medical Literature by the Critical Appraisal Skills Program.[38] The questions targeted the study's focus, methods, biases, and results presentation including practicality and applicability. Qualitative studies were assessed using a tool developed for the study by the research team (available from the corresponding author upon request). The tool evaluated studies based on the following domains: validity of the study design, setting, and sampling; informed consent and appropriately addressed ethical issues; methodological reporting; efforts to establish credibility and validity; and the dependability and reliability of study data.

Data Extraction and Synthesis

Data from the final set of studies were extracted using a standardized form that assessed key study characteristics (e.g., year of publication, country), characteristics of the study population and setting, and results specific to ED staff attitudes and beliefs. Data were extracted by one reviewer (NM) and checked for accuracy and completeness by a second reviewer (HZ). Discrepancies were resolved by consensus. Published data and tests of significance reported by study authors were included. In the case of unclear or unreported information in the original studies, primary authors were contacted. Meta-analyses were not conducted due to heterogeneity of study definitions and measurement. A qualitative analysis was conducted and detailed findings are presented in evidence tables. Results are presented by design: controlled trial, observational studies, and mixed method and qualitative studies.

Results

Description of Included Studies

Figure 1 describes the flow of studies through the selection process. The search strategies identified 352 studies as potentially relevant. After title and abstract review, 37 papers were selected for manuscript retrieval and full review, with 9 studies meeting our inclusion criteria after full-text review: seven observational studies, one qualitative and one mixed method study (39-47). General characteristics of the studies are summarized in Table 1. These studies, published between 1998 and 2009, were conducted in the United States (n=2), United Kingdom (n=2), Sweden (n=2), Scotland (n=1), Australia (n=1), and

China (n=1). The majority of studies sampled physicians only (n=4), but studies reporting information from both physicians and nurses (n=3) or nurses only (n=2) were also included in the review. Study objectives were similar between studies; they either examined ED health care professionals' attitudes and beliefs towards adult patients with presentations for hazardous alcohol use or towards the SBIRT model.

Methodological Quality

Observational studies

The seven observational studies met requirements for many of the critical components identified by the Critical Appraisal Skills Programme.[38] Four studies were limited by a lack of power calculation.[39,41,44-45] Two studies were limited by volunteer bias resultant from convenience sampling.[44-45] Study strengths included providing a clear focus and presenting results with adequate data analyses.[39,41,44-45] Four studies also had clear discussions addressing the research/clinical implications of the findings with references to other studies.[39,41,44-45] Study applicability was addressed by two studies.[44-45] Three studies were prone to methodological weaknesses such as volunteer bias resultant from convenience sampling.[40,42] Three studies did not provide a sample size calculation.[40,42-43] There was no description of analytical procedures in 1 study.[40] One study did not use validated measures.[43] Across all observational studies, many had limited applicability to North American emergency care settings, as they were conducted in European and Asian settings utilizing different health care systems and models.[39,42-43,45]

Mixed Method and Qualitative Studies

Both the mixed method and qualitative studies in this review were clear in research focus, but did not provide sufficient explanation to justify the specific qualitative methodology used.[46-47] However, sampling strategies and data collection methodology were carried out appropriately in both studies. The studies did not describe informed consent procedures or the issue of participant anonymity. Use of multiple data sources and data triangulation enhanced the credibility and validity of one study's findings.[46]

Attitudes and Beliefs of ED Staff towards SBIRT

Figures 2 to 4 present the attitudes and beliefs of ED staff towards SBIRT for patients presenting with hazardous alcohol use. ED staff attitudes towards screening varied (Figure 2). Across two studies, 42% to 88% of physicians and 50% to 100% of nurses believed that it was worthwhile to identify hazardous alcohol use in the ED.[39,45] One study reported that 60% of surveyed physicians and residents believed screening for hazardous alcohol use would improve treatment success.[44] Beliefs regarding who was responsible for screening differed. Huntley *et al.* reported almost all of surveyed physicians believed that it was their responsibility to screen for alcohol use (98%) while Indig *et al.* reported only 50% of physicians and 35% of nurses believed that they were responsible for screening.[43,45] Support for BI for hazardous alcohol use was variable amongst ED staff (Figure 3). Both the Anderson and Waller studies reported that 65% of physicians and 71-75% of nurses believed it was worthwhile to perform BI.[39,41] Two studies reported less support (51% and 54%) by physicians in the use of

BI.[40,44] A minority of ED staff in Indig *et al.*'s study believed they were responsible for providing BI (32% of physicians and 39% of nurses).[45] Indig also reported that 62% of physicians and 95% of nurses believed it was worthwhile to make referrals for specialist treatment (also reported by Huntley *et al.*) although only 53% of physicians and 51% of nurses believed they were responsible for referring to a specialist (Figure 4).[43,45]

Attitudes and Beliefs Related to the Treatability of Hazardous Alcohol Use

The majority of ED staff felt that something could be done in the ED setting to assist patients with hazardous alcohol use. Only a minority of ED staff in the Waller study believed that the ED setting could do little to assist patients with hazardous alcohol use (33% of physicians, 17% of nurses), a belief also held by a similar percentage of physicians (15%) and very few nurses (2%) in Indig's study.[39,45] Attitudes and beliefs related to the treatability of hazardous alcohol use were conflicting across the studies. O'Rourke *et al.* reported that 75% of surveyed physicians believed that alcohol use disorders were treatable, although 80% of those surveyed also believed that current treatments did not work.[44] Graham *et al.* also reported similar conflicting attitudes and beliefs with 77% of surveyed physicians who agreed that alcohol use disorders were treatable, but also believed that they were difficult to treat (97%).[40] In contrast, almost all physicians (97%) in the Huntley study believed that treatment could be successful.[43]

Attitudes and Beliefs Regarding the Health Care Provider-Patient Relationship

Several studies identified reluctance on the part of ED health care providers to engage in treatment for hazardous alcohol use. Anderson *et al.*

reported that 35% of surveyed physicians and 53% of nurses were hesitant to ask patients about alcohol consumption, and believed formal training was required to be able to respond to patients with hazardous alcohol use (53% of physicians, 78% of nurses).[41] Physicians (46%) and nurses (48%) in Waller's study reported reluctance to question or interact with such patients.[39] Among nurses, Chung *et al.* reported mixed attitudes towards patients with hazardous alcohol use (mean=106, SD 13; minimum/maximum score of 27/189 indicating negative/positive attitude).[42] The belief that patients with hazardous alcohol use lacked motivation to change was cited by physicians (12% and 88%) and nurses (15% and 85%) in two studies.[41,45] In a qualitative study, Nordqvist *et al.* found that physicians did not trust the reliability of patients' responses and believed that asking about alcohol use could make patients feel guilty. Physicians in this study also believed that there was little chance of patients reducing their drinking as a result of their interaction with medical staff and did not believe that BI was effective.[47] In Karlsson's study, 11% of nurses believed BI would negatively impact the relationship with patients and that patients would object to participating.[46] Nurses also believed that the subject of alcohol consumption was too sensitive to be discussed in a brief ED visit, with 61% of nurses believing that patients would respond negatively to questions about alcohol use. These concerns also surfaced in other studies. Indig's study found that 24% of physicians and 39% of nurses believed questions about alcohol use were offensive while Andersen *et al.* reported that 56% of physicians and 90% of nurses surveyed believed that patients

found questions about alcohol use offensive and intrusive.[41,45] Nurses (72%) and physicians (61%) in Waller's study also held similar beliefs.[39]

Discussion

This review identified significant variation in ED physicians' and nurses' attitudes and beliefs towards patients with hazardous alcohol use and their management, which may help explain variations in SBIRT model use in the ED. Findings highlight the need to address key issues that underpinned the attitudes and beliefs: perceived time constraints and a lack of resources by ED, concerns that patients would respond negatively to SBIRT, communicating emerging evidence on the SBIRT model to ED staff, and identifying and responding to ED staff learning needs.

The studies in this review identified that while ED physicians and nurses believed it is worthwhile to screen for hazardous alcohol use, provide BI, and refer for further treatment, far fewer believed they were professionally responsible for these aspects of clinical care and management. The low reports of ED-based SBIRT may be related, in part, to barriers cited across studies in this review including a perceived lack of time to provide BI, a lack of resources for SBIRT implementation (including specialist staff and support services), and the patient's intoxicated state. The relationship of these barriers to attitudes and beliefs, however, were not examined in the studies. The issues of who is prepared and best able to conduct SBIRT in the ED, and whether SBIRT is appropriate for this clinical setting remain debated. ED-based studies have employed different strategies for SBIRT delivery in the ED including training ED staff (physician,

nurse/nurse practitioner, social worker, and emergency medical technician) and health promotion advocates to augment ED staff roles.[18,48] Another study used designated mental health nurses to conduct post-ED, follow-up appointments.[49] Time constraints and workload concerns voiced by physicians and nurses may be addressed by introducing specialized SBIRT care providers available for ED or post-ED care. ED-based SBIRT providers may address concerns raised by ED staff about patient reactions to SBIRT while post-ED care can address intoxication as a barrier to ED delivery.

The low reports of ED-based SBIRT as a clinical responsibility identified by this review could also be the result of providers' beliefs that screening would not improve treatment success (believed by 40% of physicians in one study), current treatments do not work (believed by 80% of physicians in one study), or that hazardous alcohol use/substance use disorders are difficult to treat (believed by 97% of physicians one study). According to Nordqvist *et al.*, physicians need to be assured that performing BI is effective and worth the time.[47] Establishing effective and timely mechanisms to communicate the growing body of evidence supporting ED-based screening and BI to ED staff may be necessary to address the negative beliefs cited in a large number of studies. Financially compensating physicians for the time it takes to perform SBIRT in the ED, providing adequate supports (personnel, easy access to treatment and referral mechanisms), as well as personalized audit and feedback may also help to improve physician adherence with current recommendations. Further, as new studies address existing methodological limitations (e.g., standardizing outcome measures, establishing

effectiveness among patient subgroups such as sex and age) and clinical gaps (e.g., practical screening tools and interventions that complement the busy and hectic nature of an ED) establishing mechanisms to inform ED staff of new evidence in this field will keep staff appraised as to whether SBIRT is not only an effective model, but a feasible model for the ED.[37]

A number of issues related to adequate training were cited in the studies. ED staff in two studies cited training as a needed facilitator for patient care and management, and a high percentage of staff in another study identified a lack of confidence in performing screening (50% of physicians and 71% of nurses), BI (71% of physicians and 73% of nurses), and referral (44% of physicians and 59% of nurses).[39,41,45] Several studies have shown an increase in screening and BI delivery in primary and general care settings and in the ED following a variety of educational and training modalities.[50-54] Confidence has also improved for some staff, but not all.[53-54] Significant changes have not been reported for attitudes and beliefs and readiness to change clinical behaviors.[53] In-person training has been suggested as more effective than web-based resources while educational support and training are suggested to be more impactful with staff who enter training already therapeutically committed to working with patients with hazardous alcohol consumption.[55-56] Widespread adoption of the SBIRT model in EDs will require more than a small number of studies demonstrating the effects of training programs. An extensive structured literature review conducted by Williams *et al.* looked at implementation programs of nine countries having geographically diverse clinical settings and research infrastructures.[57] The review found different

implementation programs and looked at their success/failure in implementing robust SBIRT strategies.[57] This review, and similar papers indicate the need for change in the policies related to SBIRT in the ED and related clinical settings.[18,37] Policies and guidelines set at the institutional level and the presence of faculty/administrators that promote and train for the usage of the SBIRT model may also warrant further attention.

Limitations of the Study

This review has several limitations. We assessed the methodological quality of studies based on published methods and did not contact corresponding authors to verify the methods used. As a result, some studies may have been adequately conducted, but the methods were poorly reported. We also did not include studies that explored attitudes and beliefs as a minor objective. As a result, two studies were screened but excluded from our review, and others may have been missed in our search strategy.[53-54] We chose not to include studies that did not have a primary focus of attitudes and beliefs because the depth and breadth of the investigation may have differed from those studies with it as a primary objective. No pediatric studies were identified in this review. Given that underage drinking is widespread and ample evidence exists that underage hazardous alcohol use leads to adult substance use disorders and persistent dysfunction, the role of the ED in addressing hazardous alcohol use by adolescents could play a critical role in identifying those youth who could benefit from treatment and the initial management of hazardous alcohol use through BI and referral.[58-69]

There were also limitations in this review that stemmed from the included studies themselves. The majority of the studies in this review were weak to moderate in quality. Studies that reduce the biases and methodological weaknesses observed in the current body of literature are needed. This includes eliminating biases from convenience or selective sampling through randomized sampling procedures or population sampling, and reducing the likelihood of volunteer bias through low response rates (6 out of 9 studies had response rates < 80%). Future qualitative and mixed methods studies require justification for the chosen methodology to demonstrate that they study answered the research questions and evidence needs to be provided that the researcher took steps to ensure that the conclusions reached are dependable and confirmable. It would be helpful to explore the variations in attitudes and beliefs and create an opportunity to evaluate whether they are substantial barriers to the SBIRT model in the ED.

Conclusion

Detection of hazardous alcohol consumption followed by BI in the ED setting has large potential benefits due to the wide population that can be captured and a growing body of empirical evidence favoring ED-based SBIRT. This review suggests that attitudes and beliefs of ED physicians and nurses may be key barriers to the widespread uptake of SBIRT for hazardous alcohol use in the ED setting.

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Figure 1. Selection of studies

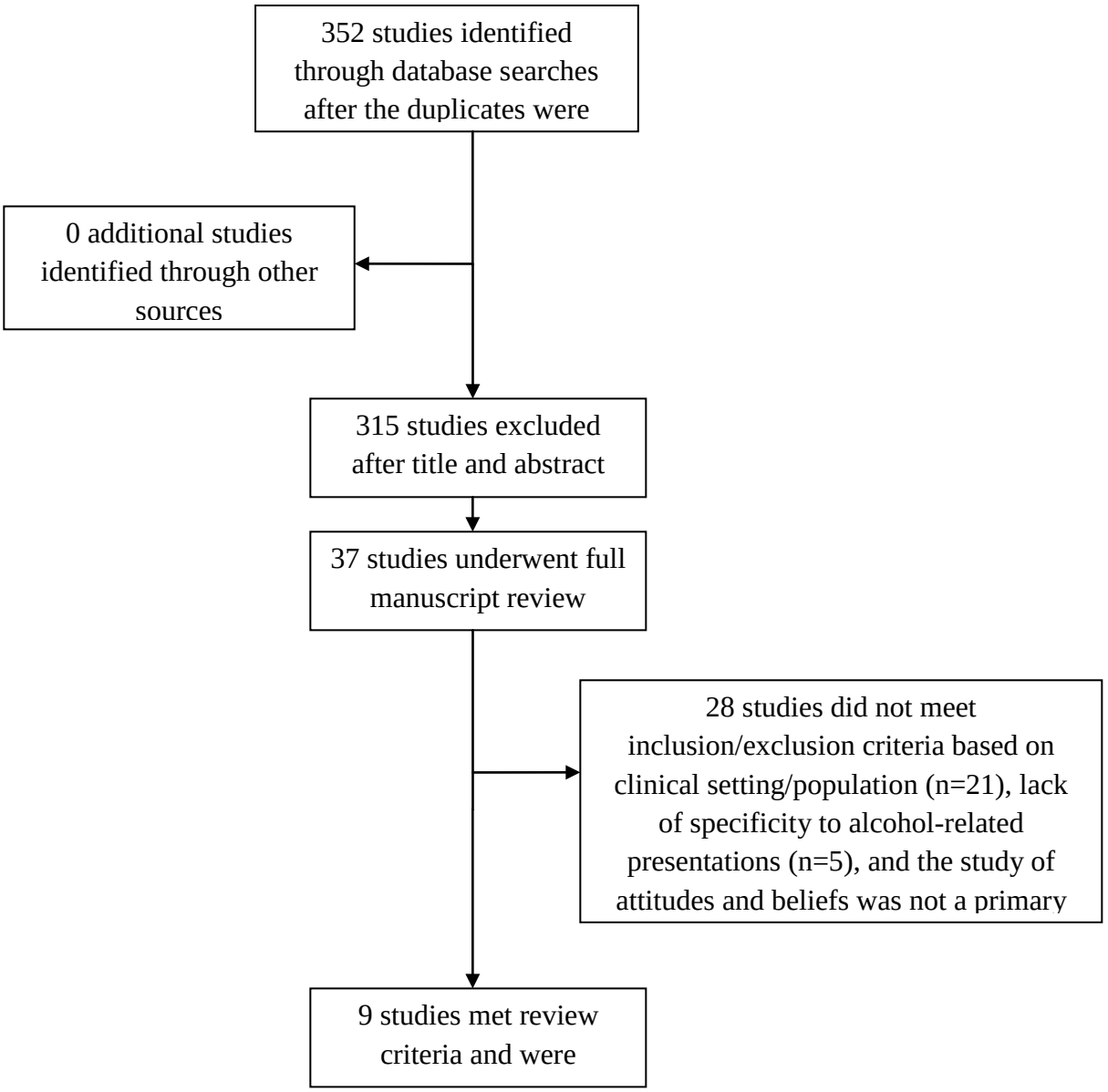

Figure 2. Attitudes and beliefs towards screening for hazardous alcohol use in the ED

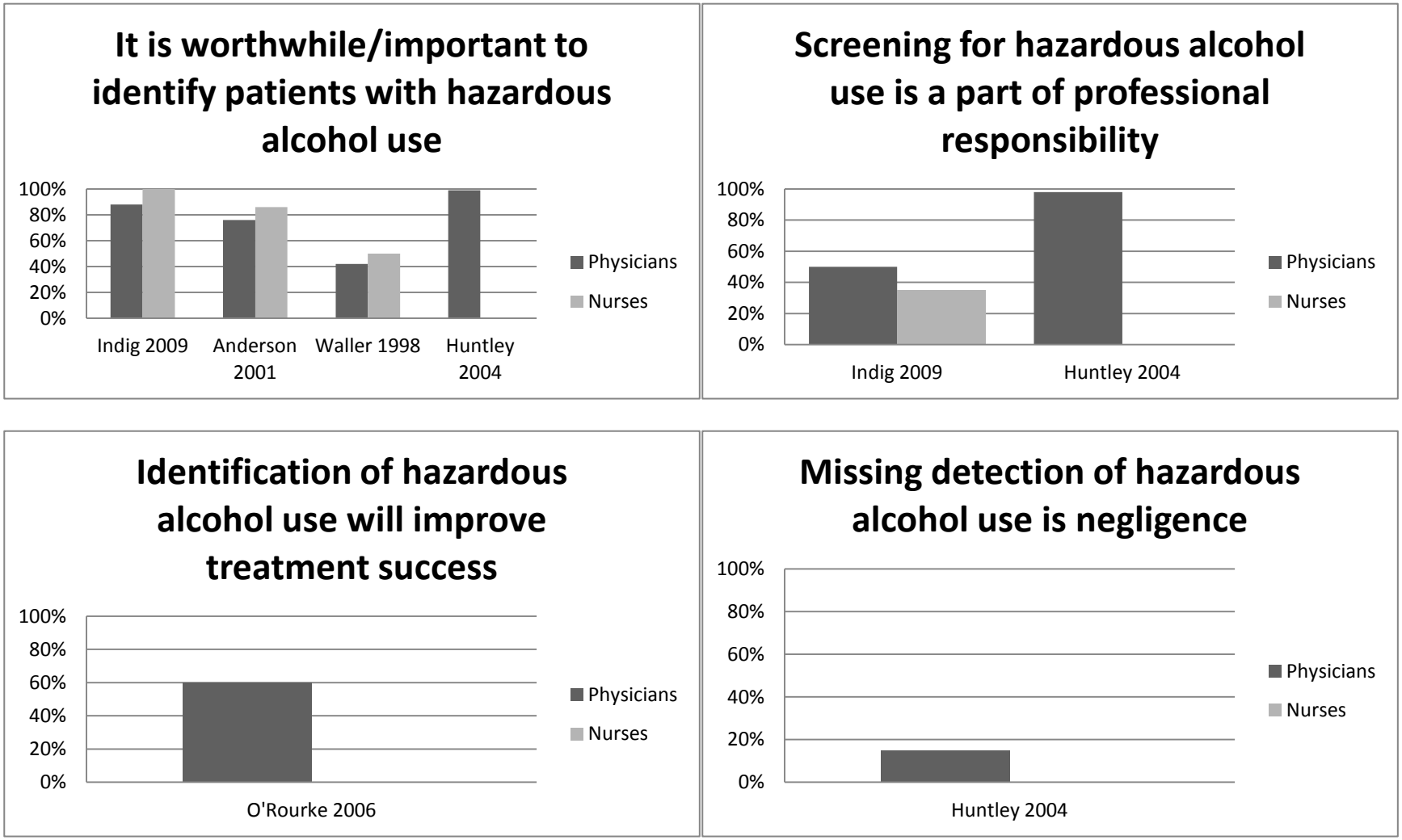

Figure 3. Attitudes and beliefs towards brief intervention (BI) for hazardous alcohol use in the ED

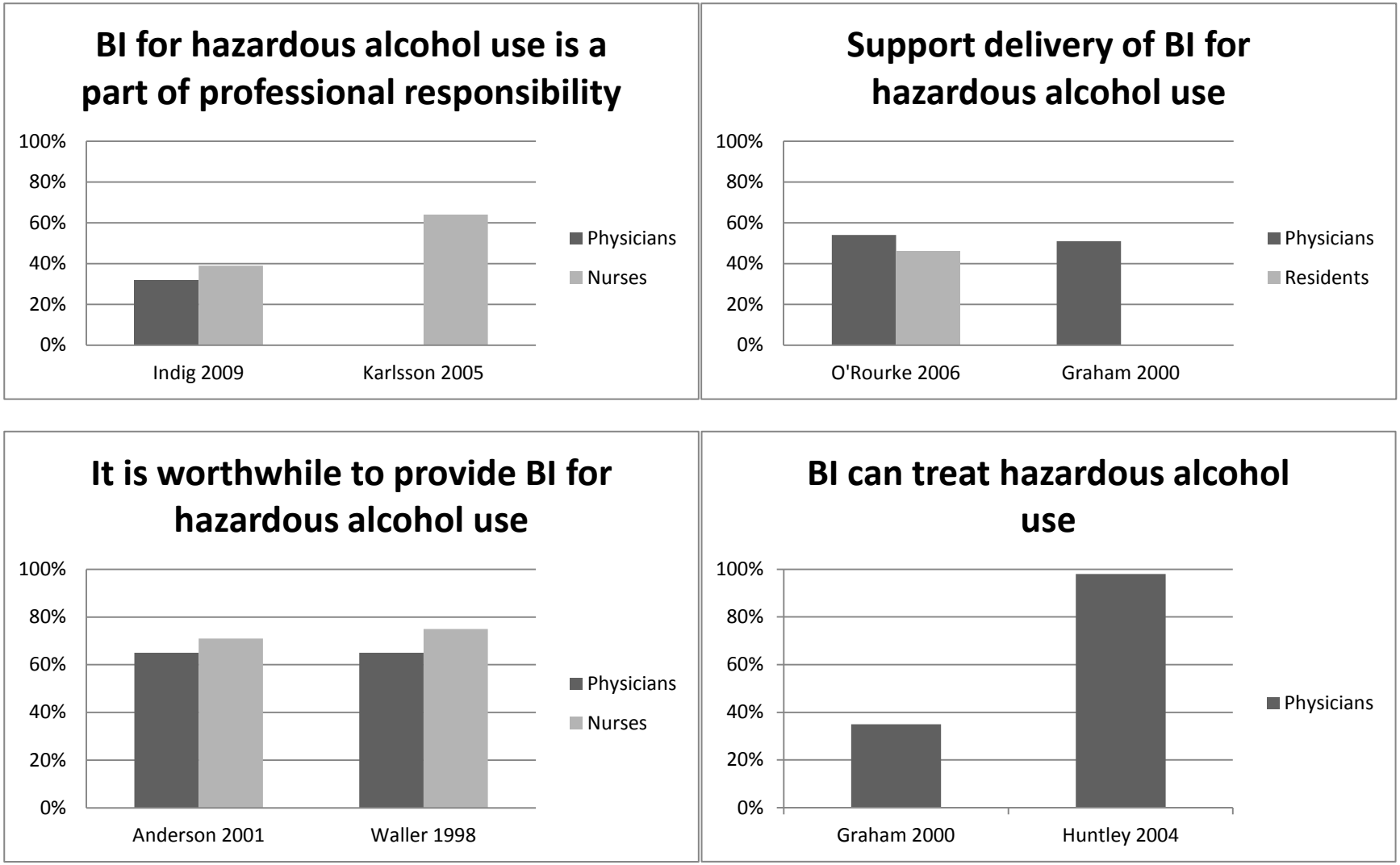

Figure 4. Attitudes and beliefs towards referral to treatment for hazardous alcohol use in the ED

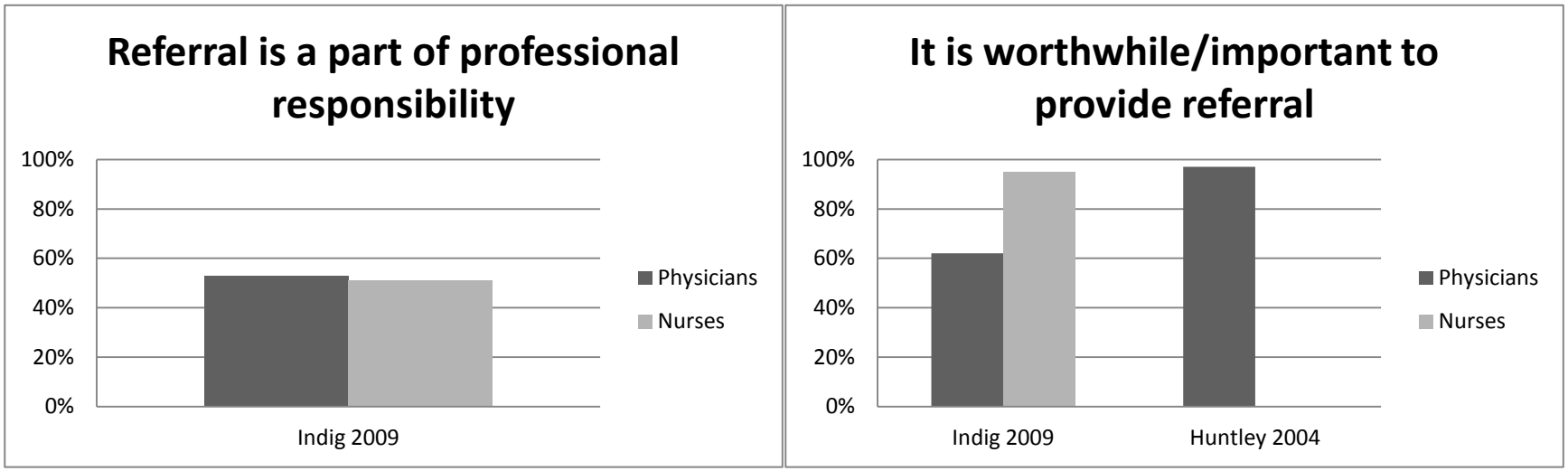

Table 1. Study characteristics

First Author (country, year)	Study Design	Participants		
		Sample	Gender (% F,M)	Response Rate (%)
D'Onofrio (USA, 2002)	Non-randomized controlled trial	N=36 Physicians[‡]: 100%	28%F, 72%M	100
Indig (Australia, 2009)	Cross-sectional survey	N=78 Nurses: 54%; Physicians: 46%	Physicians: 44%F, 56%M Nurses: 80%F, 20%M	30
O'Rourke (USA, 2006)	Cross-sectional survey	N=598 Staff Physicians: 66%, Residents[‡]: 34%	32%F, 68%M	17
Huntley[§] (UK, 2004)	Cross-sectional survey	N=127 Physicians: 100%	NS	100
Chung (China, 2003)	Cross-sectional survey	N=190 Nurses: 100%	84%F, 16%M	32
Anderson (Scotland, 2001)	Cross-sectional survey	N=96 Physicians: 36%; Nurses: 63%	Physicians: 9%F, 91%M Nurses: 83%F, 17%M	57
Graham (USA, 2000)	Cross-sectional survey	N=257 Physicians: 100%	19%F, 81%M	46
Waller (UK, 1998)	Cross-sectional survey	N=367 Physicians: 46%; Nurses: 54%	Physicians: 15%F, 85%M Nurses: 78%F, 22%M	82
Karlsson (Sweden, 2005)	Mixed method	Interview, N=9; Questionnaire, N=72 Nurses: 100%	NS	75
Nordqvist (Sweden, 2005)	Qualitative	N=6 Physicians: 100%	34%F, 66%M	100

[‡]Medical residents; NS=not specified; [§]Huntley also reported qualitative results from a separate study

Chapter 3

Title: Experiences of pediatric emergency physicians in providing alcohol-related care to adolescents in the emergency department

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Abstract

Introduction: The emergency department (ED) is a key clinical care setting for identifying and managing patients with alcohol-related presentations. We explored the experiences of emergency physicians in providing alcohol-related care to adolescents.

Methods: We used Hermeneutic Phenomenology, a qualitative methodology, to conduct this study. Purposeful sampling was used to identify pediatric emergency physicians with at least one year of experience (n=12) from pediatric EDs across Canada. Data were collected via telephone using a semi-structured interview guide and analysed using Moustakas' immersion/crystallization technique.

Results: Physicians expressed frustration with patient behaviours accompanying intoxication, and described providing care as a struggle with notable challenges to developing a therapeutic alliance. Physicians believed intoxicated adolescent patients required more clinical time and resources than they could offer. While physicians described the ED as unsuitable for ensuring continuity of care and addressing the broader social issues that accompany alcohol use, they did view the ED as a place to medically stabilize the patient and initiate a discussion on alcohol use and its harmful effects.

Conclusions: Pediatric ED physicians struggled during the caring experience and believed the broader social issues that may underpin an adolescent's alcohol use should not be managed in a clinical setting where they feel primarily responsible for providing medical stabilization. Physicians did believe the ED was an appropriate place to start talking about alcohol use and its harmful effects.

Introduction

Alcohol is the most commonly used drug among adolescents,[1-2] and early onset and regular alcohol use among adolescents poses a significant clinical and public health problem.[3-4] Problematic alcohol use occurs across a spectrum, ranging from hazardous (alcohol use that increases the risk of harmful consequences to the adolescent) to harmful (use that results in physical, social, or psychological harms for the adolescent) drinking.[5-7] By grade 12, up to 57% of North American adolescents report having consumed 5 or more drinks on one occasion with intoxication as a result.[8-9] Studies indicate the rise of alcohol-related, harmful effects in adolescents;[10-12] this risk is higher in younger adolescents compared to older adolescents.[13-15] Early onset drinking has been related to unintentional injuries to one's self as well as others. Alcohol use among youth is also responsible for violence and aggression making it an important cause of morbidity and mortality in this population.[16-17]

Unanticipated treatment for complications associated with hazardous and harmful drinking is often sought by adolescents in emergency departments (EDs).[18-19] Alcohol consumption has been related to injury severity, with data suggesting that adolescents who have a positive alcohol test experience/suffer the most severe injuries.[20] Screening for alcohol use in the ED is supported by such research, employing the premise that reduction of harmful and hazardous drinking may also significantly reduce injuries for these adolescents.[20] It has been shown that motivation to change alcohol use can increase in adolescents after an acute alcohol-related event (e.g., injury, drinking-related motor vehicle collision)

making the ED an ideal setting to provide brief interventions and/or referral to services for harmful and hazardous drinking.[21]

Concerns have been raised regarding emergency physicians' attitudes towards alcohol-related presentations by adolescents, and their willingness to provide Screening, Brief Intervention, and Referral to Treatment (SBIRT) to these patients.[22-25] Emergency physician attitudes and beliefs have been shown to vary towards adult patients, as well, in terms of the type and extent of SBIRT provided and confidence in providing this care model.[26-31] A lack of training in SBIRT (namely brief intervention) and a perceived lack of time for SBIRT elements have been identified as barriers to implementation with adult patients.[30] A recently conducted systematic review found that physicians and nurses were also concerned that asking patients about alcohol consumption would be seen as obtrusive or offensive and their comfort level with treating such patients varied.[26] Despite several studies documenting a high percentage of alcohol-related visits to the ED by young persons[32] and others having investigated the role and impact of brief interventions in the ED,[33-36] few studies have been conducted regarding the emergency care of adolescents to better understand the pediatric clinical care experience.

A recent study by Chun *et al.* found that formal training and experience in counselling differed between ED providers and were significant predictors of whether this type of care is provided to pediatric patients with alcohol-related presentations.[37] In this study, physicians who were more experienced and had formal training in counselling were more likely to counsel patients. Chun *et al.*

stated, however, that training and experience, alone, did not account for differences in counseling practices and that a better understanding of clinical care differences is needed. Although many areas warrant further investigation around pediatric alcohol-related ED care, a better understanding of the attitudes, beliefs, and perceptions of ED physicians is needed to gain further insight into practice variation. The objective of this phenomenological study was to explore pediatric ED physicians' perspectives related to adolescent alcohol use and their clinical care experiences with alcohol-related presentations.

Methods

Study Design

The phenomenological method by Moustakas[38] and Van Manen's[39] approach to hermeneutics informed the qualitative study design. Hermeneutics is concerned with the structure of experiences and the way things are understood by people who live through these experiences.[39] This research approach allowed for an in-depth exploration of ED physicians' 'everyday' clinical care experiences as opposed to eliciting their ideal attitudes, beliefs, and perceptions about working with adolescents who present to the ED following harmful and hazardous alcohol use (e.g., studying experience as it is 'lived' rather than conceptualised).

Participants and Sampling

Purposeful sampling requires the selection of participants who are best suited to discuss the phenomenon of interest.[40] Purposeful, snowball (recommendation by others) sampling was used to identify and enroll pediatric emergency physicians (n=12) who had at least one year of experience managing

adolescents with alcohol-related ED visits. Study participants were recruited from 12 pediatric EDs across Canada.

Study recruitment occurred between February 2011 and February 2012 using a modified Dillman approach via e-mail. Potential participants were recruited using the following process: (1) a letter was e-mailed explaining the study and inviting participation; (2) a follow-up/reminder e-mail was sent several weeks later; and (3) a replacement cover letter providing a study description was sent to initial non-respondents several weeks after the follow-up/reminder e-mail. E-mail notices were sent using publicly available address information and our research team's professional contacts, and included study information sheets. E-mails invited physicians to contact a member of the research team (NM) to confirm participation; consent was inferred if the team member was contacted.

Data Collection

Enrolled physicians took part in a semi-structured telephone interview, which allowed them to share individual perspectives while maintaining a focus on the study's objective. The interview guide consisted of open-ended questions, which were organized to start with a broad approach; probing and short follow-up questions were then used to focus on specific aspects that needed further explanation. Interviews were scheduled at the physicians' convenience; they were 30–60 minutes in length and digitally recorded for data integrity and analysis. Field notes were written following the interview to ensure the interview setting (e.g., time of day, location of participant) and participants were adequately described. Interviews were transcribed into Microsoft Word by a contracted

transcription service (www.commapolice.com), and the documents were merged into the qualitative data management software program *N-Vivo* 9 (2008, QRS International; Melbourne, Australia) for data analysis. Follow-up interviews were conducted, as necessary, to improve the clarity and descriptions from initial interview. A revised interview guide with original quotations from the participant's first interview transcript was used to structure probes and follow-up questions.

Data Analysis

Qualitative data analysis involved the analysis of codes, themes, and patterns in the data. While there are no steadfast rules for data collection, analysis, and interpretation, there are procedural interpretations of phenomenology that served as our guidelines. For this study, the analytic framework for phenomenology, as outlined by Moustakas, was employed.[38] Within this framework, Moustakas emphasizes phenomenological reduction and an emphasis on universal structures in analysis.[38] The following steps were employed in our study:

a) Individual statements by participants were reviewed and all data were treated with equal value during examination. Immersion in the texture, tone, mood, range, and content of the physicians' descriptions was achieved by listening to the interview recordings, and, at the same time, reading and re-reading the physicians' descriptions.
b) 'Meaning units' were created by grouping data that described similar experiences into clusters. These clusters were later refined as textural and

structural descriptions and repetitious data within these themes served as a measure of data saturation. Non-repetitive, non-overlapping experiences were identified and further explored in follow-up interviews to determine whether they were central to physicians' experiences.

c) Meaning units were written as textural and structural descriptions (e.g., study themes). Textural descriptions offered content and illustration to the physicians' experiences (*what* happened), while structural descriptions revealed the underlying (deeper) meaning (*how* the phenomenon was experienced) with alternate meanings and perspectives explored during analysis. Aspects of the experience, which were universal to all the participants are considered essential, invariant structures (or essences) by Moustakas, and as such, were retained as main study findings.

d) Textural and structural descriptions were merged to create a comprehensive description of the physicians' experiences.

Methodological Rigor

Rigor is described as the demonstration of integrity as well as competence during a study.[41-43] Five measures to promote methodological rigor in qualitative inquiry suggested by Miles and Huberman[44] were employed from the onset of study development and present throughout its conduct. These measures were as follows:

1. *Ensuring objectivity/confirmability involved addressing researcher biases.* This was achieved by acknowledging (or 'bracketing') research team attitudes and

beliefs about adolescent alcohol use as to remove influence on research questions, data collection, and analysis.[45]

2. *Ensuring reliability/dependability involved examining whether the study process was consistent over time.* Approaches to demonstrating reliability included using a study objective congruent with phenomenological inquiry, an interview guide to collect data, and Moustakas' guide to data analysis and interpretation.

3. *Promoting internal validity/credibility involved ensuring the study's thematic results represented the physicians' experiences.* We employed 'member checking,' whereby the textural and structural descriptions were verified by presenting them to physicians who agreed to a second interview to confirm/disconfirm their accuracy. The study also included peer review during data collection and analysis by research team members (SA, KD, CW, and ASN) who acted as external auditors supervising and regularly reviewing the study's progress in order to promote internal validity.

4. *A review of external validity/fittingness to address whether the study conclusions had transferability to other contexts and assessed the extent to which results could be generalized.* To promote external validity, the final description in this paper is meant to allow ED health care providers and researchers to assess the potential transferability and appropriateness for their own clinical and research settings based on its comprehensibility.

5. We addressed the ability of the study's findings to enhance the level of understanding ED physicians' experiences with alcohol-related presentations by

adolescents (study application) by making recommendations for future studies and clinical practice change.

Results

Study Participants

The pediatric emergency physicians in this study (n=12) worked in pediatric EDs across Canada with comparable representation of men (n=7) and women (n=5). The physicians were between the ages of 32 and 45 years with the majority having been in clinical practice for more than 3 years (range, 3 to 18 years).

In this study, physicians described the difficulty of treating adolescents with alcohol-related presentations and considered the ED an inappropriate setting to address complex patient needs. Physicians also described the challenges of treating and caring for adolescents who are intoxicated, and their sense of responsibility for such patients. Themes reflecting their attitudes, beliefs, and experiences are outlined in Table 1 and described below.

The ED isn't the place to address alcohol-related issues.

Physicians described the belief that the ED is not a setting where intoxicated adolescents should be treated beyond acute medical care. As two physicians stated, *"The emergency department is not an alcohol, binge drinking, weekend party place"* and *"I don't think the emergency department really is the place to counsel someone about their alcohol, weekend party habits."* Rather, the ED was felt to be the setting for medical stabilization and where the effects of acute alcohol intoxication could be allowed to safely wear off. Physicians

expected that once the adolescent was medically stable, they should be discharged and that addressing alcohol-specific psychosocial needs should not be a part of their responsibility. The predominant belief among the physicians was, *"it's very difficult to address the sorts of underlying issues in the emergency department"* that can accompany alcohol consumption such as social and mental health needs. As one physician stated, *"My goal is not to provide an [alcohol-related] intervention for most of these kids."*

Complicated social and mental health issues are difficult to address in the ED setting.

Physicians described the challenges of working with intoxicated adolescents who have complex social and mental health concerns. One physician described, *"… kids who end up doing this [presenting to the ED due to harmful/hazardous drinking], there is a whole host of reasons, of other things going on in their lives that get them to this point, and most of those [complex social situations] are not easy to fix"* while another physician stated: *"You know their life experiences taught them to put up barriers so they are not easy to reach."* Stereotypes based on socio-demographics were also identified for 'usual' adolescents who presented to the ED due to alcohol: *"usually Aboriginal, usually horrific social situations… they come in, 'oh it's so and so again'. It's sad."*

Physicians described being hesitant to inquire about such needs because once they became involved, they felt an obligation to spend more time with them:

"You come across information that isn't really affecting their current [medical] presentation, but now that you know it you're in this bind of what are you gonna do."

"A disadvantage would be that you uncover a whole bunch of information that you don't really know what to do with and that you don't have the resources to deal with... For example, we find out they're dating a man in his mid 20s. By law it's statutory rape and like those sorts of things, you're like 'oh what am I gonna do about that now?'"

Social and mental health concerns were also seen as beyond the influence of the treating ED physician, and therefore not concerns that should be addressed during the ED visit: *"[It is] largely out of our control as medical people to fix those kinds of broader social issues which are significant, which are obviously very difficult to change."*

Follow-up with these kids is tough, and I'm not sure it's my responsibility.

Physicians believed that while follow-up care for adolescents with complex needs needed to be pursued, there were no clear answers as to who that person should be. As one physician stated, *"I think there's need for these kids to have some kind of follow-up to discuss how they drink and talk about why they end up here… but I just see that we don't have the time and the resources to do it in the emergency department."* Another physician stated, *"It would be ideal to have somebody contact them and make sure that they've had their resources but am I as an emergency physician going to, am I going to do that? No. Who's going*

to do that? I don't know." Another physician described adolescents as not being receptive to follow-up: *"A lot of times they just don't attend the follow-up clinic so you just sort of feel like, 'I'm not sure how to reach them.'"*

Working with these kids can be frustrating.

An adolescent who used abusive language, spat, and swore was commonly described (*"some are violent and really rude"*); they were felt to be a difficult patient to treat: *"I just see them as very difficult patients to manage, and I think that's related to what's wrong with them really regardless, and not my specific training or abilities so much as they just are difficult patients to look after."* Physicians also described not feeling *"in control"* of the clinical situation during these interactions, which evoked feelings of frustration and challenged their ability to treat the adolescent as well as other patients. As one physician explained, *"If they have the aggressive form of intoxication, that's kind of frustrating to deal with those people because they're hard to handle when they put other people at risk. Medically it's not difficult, but I guess it's frustrating in the sense that there is not a lot that we can do for them."*

The clinical interaction can be unpleasant when they are drunk.

Physicians described adolescent patients who were intoxicated as *"not an easy population to deal with."* Physicians recalled how the adolescent's intoxicated state could, at times, obstruct and influence the care being provided. Patients were described as *"difficult to communicate with."* As one physician stated, *"You try as much as possible to keep your own emotions out of it, but if*

you have a kid who's been up half the night and taking swings at you, you know, it does affect your desire to want to help them."

I struggle to build a meaningful therapeutic alliance.

Physicians described struggling to establish rapport with intoxicated adolescent patients: *"I try to come from a place of caring and at least try and make it clear that I care and that I really was worried about them and I sort of hope that at least coming from a place of compassion will carry through but I don't know. I'm not sure coming from a teenager's point of view is that [I am] cool."* This struggle with the intoxicated patient prevented developing a meaningful therapeutic alliance: *"usually, they're not able to talk much so I usually get the story from the EMS."* Another physician described, *"Sometimes when you talk to them they ignore you even though you say all the stuff, like you can tell they don't really acknowledge what you're saying"* while another described the experience by saying, *"If they were rude and belligerent it would be 'why are you making my job harder than it needs to be?'"* For the physicians in this study, this alliance was described as the base for providing proper care. As another physician explained, *"You can't really examine them when they're spitting at you or combative so you wait until they sober up and become more cooperative and then you see what you can do."*

These kids can take up a lot of resources and time.

To the physicians, the time available to spend with each patient was limited and therefore, time *"well spent"* was described as important. Physicians detailed needing to perform multiple tasks for all their patients in limited

timeframes including obtaining lab results, talking to parents, and providing referrals to make sure patients have ongoing support and care. They believed that treating the intoxicated adolescent took more clinical time than they could afford. As one physician described, *"Time is probably the biggest factor. It's hard to sit down and talk to a child about alcohol use when there are 40 people waiting in the waiting room."* Physicians also felt that these patients increased their workload by requiring more resources: *"When they're really agitated, they often require security, multiple nurses, [me] as the physician, medications to settle them down, physical restraints, more monitoring. So they're quite resource intensive."* Attitudes towards the time spent with alcohol-related patients ranged from negative: *"here's another drunk to take up my time in the emergency"* to struggling with feeling the responsibility to make sure the adolescent is stable: *"you're torn between like this person is taking up too much of your time when you need to focus your energy elsewhere [and] at the same time you have this worry that 'what if you're wrong, what if they're not intoxicated, what if there's a head injury or something else going on that you're attributing to alcohol that isn't just alcohol?'"*

I feel responsible for these kids.

Alongside the challenges physicians described facing with intoxicated patients, they also felt responsible for their care. Medical stability was considered a priority for all patients, and although physicians felt the ED was not a setting for them to address any complex psychosocial needs associated with harmful and hazardous alcohol use, they still felt responsible for providing health information

at the time of the adolescent's discharge. As one physician stated, "*I'm wondering 'what happened, is this a child who is in trouble and this is a cry for help that I need to look for other things, is this a first time experiment that got out of hand, are there serious injuries I need to worry about?' So there are a lot of different questions going through my mind about I want to make sure I provide the best care possible."*

My first priority is always to ensure that they are medically stable.

Medical stability was something the physicians did not compromise. They were steadfast about having the adolescent clinically stable before any next step; they would investigate for any co-existing illness and injury (namely head injury) depending upon the age and sex of the child. They also expressed concerns about alcohol being consumed with other drugs as well as sexual assault. As two physicians described:

"First thing is always to address any urgent medical issues or clinical needs. So assessing how stable the patient is and intervening, providing any care, any supportive care that is required."

"My first priority is their airway, breathing, circulation and have they ingested something that I actually need to treat. Have they taken too much ecstasy and are they gonna get into trouble, or have they taken something else that's gonna make them in trouble. Then there's safety, physical, injury, sexual assault, the list of potential problems."

I need to ensure they have some support when they leave the ED.

While physicians in this study believed they were not responsible for ensuring continuity of care outside the ED, they felt responsible to provide health service information at the time of discharge: *"I wouldn't just want them to sober up and send them out; they need more care than that."* As one physician stated: "*So we are the entry point for many of them and I think and believe that this is one of the purposes of having an emergency department is to allow those individuals to get the care they need and if needed to have support further on."* Physicians also felt responsible to discharge adolescents with an adult if they came to the ED without one: "*The biggest challenge from my point is often figuring out [for some adolescents] who they are, and where they live, and where they come from, who their guardians are, and trying to get a hold of their guardians to come and take them home."*

Ensuring support for when an adolescent leaves the ED was also described as being done in the presence of a social worker or a mental health nurse. Physicians who worked alongside such professionals described how difficult it would be to provide care and facilitate ED discharge without those professionals. As one physician stated,

"We are fortunate in the fact that our department has a consult liaison service with the psychiatry team. Our mental health team has mental health nurses who are in our department who assess their mental health status and so we once we've cleared them medically we frequently have the mental health team come in and assess for other potential resources and interventions that they can provide to help those children."

There was frustration among those participants without or limited access to these team members in the ED, *"Our mental health team is only in certain hours. So if children come in the middle of the night and they don't stay very long then they may not have the chance to see our mental health team, so that's a potential gap."*

I need to ensure they receive necessary alcohol-related information.

The need to provide alcohol-related information was a care aspect that the physicians believed was necessary in order to prevent return ED visits. As one physician described, *"I think we need to take an opportunity in the emergency to initiate educational endeavours and educational efforts as well as create a setting where the adolescents can take home some more material and look at."* This information was described as being provided by the participants themselves or the social and mental health services in the ED. Whether or not this information would be effective in changing drinking behaviours, however, was questioned by physicians: *"I'd be happy to advise them not to drink, but I don't know how much good it does."* and *"Unless you recognize that it's a maladaptive behaviour yourself and are committed to changing it, it's pretty difficult to do anything about it. Teenagers, in general, are not the most introspective and self-evaluative people."*

Discussion

Underlying the experiences of physicians in this study was a contradiction — a desire to treat youth while feeling frustrated with (a) the youth's intoxicated behaviours, (b) accompanying social conditions that can complicate the youth's life, and (c) having limited time to treat and care for these youth. Physicians

described feeling responsible for these patients yet unable to address all of a patient's needs during the ED visit. Navigating this experience involved a tension between a professional responsibility to treat and care and frustration due, in part, to patient behaviours.

In this study, physicians did not believe that long-term and complex social situations that accompany alcohol-related presentations could be managed effectively in the ED. Rather, they considered the ED as a place for treating and establishing medical stability, and felt it was not possible for them to address complex, social-based issues (e.g., adolescents in foster care, homeless, or from unstable home environments) in the time they had to treat the adolescent. These very issues, however, may underpin or influence drinking behaviours, and the ED may be a critical setting in which to identify issues that place a youth at risk for harmful/hazardous drinking, and supports that can mitigate these risks.[46-48] Several non-ED studies have explored the role of nurses in addressing alcohol-related care for adults with reports of positive impacts on care,[49-50] a role which could be evaluated in the ED for identifying and addressing the complex, social needs of pediatric patients as well as others such as pediatric social work. Given that physicians in this study also felt that adolescents with alcohol-related presentations were resource intensive, exploration of complementary clinical roles (e.g., social worker, nurse and junior resident's assistance in providing care) in the ED may expedite care, streamline clinical processes, and address reported concerns that alcohol-related presentations increased the workload for ED staff and patient wait times.[51] There is also research that suggests physicians who are

interested and dedicated to changing patient's alcohol-related behaviours are more likely to provide related interventions.[52] A study by D'Onofrio suggests that emergency medicine residents who receive training in providing alcohol-related intervention show improvements in knowledge and practice.[53] As such, there may also be benefit in exploring the impact such training has for staff physicians with the goal of increasing their awareness of the psychosocial needs of alcohol-using adolescent patients and addressing these needs when specialized roles for psychosocial or mental health care are not available in the ED.

Adolescents receiving treatment in the ED for harmful and hazardous drinking can exhibit different types of consumption patterns and should be regarded as a diverse group with some adolescents drinking more than others and some having co-existing psychosocial problems.[54] Fairlie *et al.* found that adolescents who reported higher alcohol consumption also reported more substance use/tolerance by peers, and recommended that adolescents' backgrounds be considered before a treatment plan is recommended.[54] We recommend that EDs formally define the scope of responsibilities for different health care team members (e.g., physician, nurse, social worker) regarding alcohol-related care to ensure any psychosocial needs that accompany harmful and hazardous drinking by adolescents are identified and addressed. There is also evidence supporting the involvement of parents/guardians during follow-up planning to reduce alcohol use, which for this clinical population, could involve parental monitoring and support.[55-57]

A common feeling among physicians in this study was frustration with clinical interactions, which were often described as unpleasant. Such interactions were felt to create an environment where physicians felt disengaged from the patient and struggled to establish a therapeutic alliance and rapport due to patient behaviours and time constraints. Recognition of the challenges that accompany intoxicated adolescents via brief protocols or clinical care pathways, and open communication among physicians, residents, and medical educators may help explore ways to effectively reach out to this population.[58-60] It is also critical that physicians practice self awareness and acknowledge the frustration that can occur during clinical encounters; they must identify ways to manage this reaction so as to minimize any negative impact on the clinical encounter. Ongoing professional development for physicians to increase awareness of their reactions to intoxicated patients and how it can affect the clinical encounter may also be a worthwhile pursuit for continuing professional development initiatives. This continuing learning experience could also include case discussions and departmental meetings to review literature related to the SBIRT model and other similar interventions.[60]

Physicians in this study felt the need to provide the patients with resource material upon discharge that may serve as a starting point and open dialogue about alcohol use. Starting such conversations appears to an appropriate first step upon which to build further initiatives for this challenging patient population. A Swedish study in an occupational health care setting has indicated positive outcomes after having conversations related to alcohol use with adult patients,

especially when advice is included on how to achieve reduction in alcohol consumption.[61]

In this study, physicians believed that, while follow-up care for adolescents with complex needs should to be pursued, there were no clear answers as to who the person who performs the follow-up care should be. There are studies suggesting nurses should be the people to train for this role.[62-63] There is also evidence suggesting poor compliance with policies promoting preventive strategies within the ED.[64] Studies, however, show follow-up strategies carried out by text-messaging, understood to be more acceptable by young adults, have the potential to reduce heavy drinking after discharge following an alcohol-related visit to the ED,[65] along with promising results in reducing alcohol consumption after the ED visit through the use of computerized ED-SBIRT (Screening, Brief Intervention, Referral to Treatment), integrated personalized messaging and brief negotiated interview (BNI), and computerized alcohol screening and intervention (CASI) kiosk.[66] While these results suggest follow-up with patients can be conducted, evaluation has been for research purposes only and real-time use of personnel or resources to perform these tasks and their effect have not been evaluated.

Study Limitations

The limitations specific to this study are similar to other qualitative approaches. First, our study used snowball sampling. While this method identified physicians through other study participants and research team members who met study inclusion criteria, other physicians (not identified through this method)

could have been equally eligible for study participation. The sample of physicians in this study, however, was adequate for data saturation. Second, we interviewed participants via telephone so we could include physicians from a wide geographic area in the study. This interview medium, however, limited data related to non-verbal cues (e.g., facial expression) found in a face-to-face interview, which are not critical to a study's findings but helpful to interpret underlying tone to the data. Third, across interviews, there was variable response to the depth of participant's answers to interview questions. Probes were used to encourage physicians to elaborate on brief responses and in some cases; follow-up interviews were conducted to optimize the quality of the data.

Conclusion

This study used phenomenological inquiry to explore the experiences of pediatric ED physicians in providing alcohol-related care to adolescents. Physicians struggled during the caring experience and described difficulty in building a therapeutic alliance with intoxicated patients; this was due to the unpleasant clinical interaction during the adolescent's acute intoxicated state. They described a professional responsibility towards caring for the intoxicated adolescent, but did not believe the ED to be a place for continuity of care, especially for complex social and mental health needs that can accompany alcohol use. Physicians believed, however, that it was important to initiate a discussion with adolescents in the ED on alcohol use and its harmful effects.

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Table 1. Attitudes, beliefs, and experiences of pediatric emergency physicians in working with adolescents with alcohol-related presentations.

Themes and subthemes
Theme 1: The ED isn't the place to address alcohol-related issues
Complicated social and mental health issues are difficult to address in the ED setting
Follow-up with these kids is tough, and I'm not sure it's my responsibility
Theme 2: Working with these kids can be frustrating
The clinical interaction can be unpleasant when they are drunk
I struggle to build a meaningful therapeutic alliance
These kids can take up a lot of resources and time
Theme 3: I feel responsible for these kids
My first priority is always to ensure that they are medically stable
I need to ensure they have some support when they leave the ED
I need to ensure they receive necessary alcohol-related information

Chapter 4

CONCLUSIONS

Summary of Major Findings

Systematic Review

My review demonstrated that emergency department (ED) physicians and nurses vary significantly in their attitudes and beliefs towards patients with hazardous alcohol use and their management in the ED. The review also indicated that, while physicians and nurses believed it was worthwhile to screen for hazardous alcohol use and provide brief interventions (BI) and referral for further treatment, they did not necessarily feel professionally responsible for these aspects of management. Further, while many physicians in this review believed it was worthwhile to conduct BIs for hazardous alcohol use, less believed that it was their professional responsibility to provide BIs. These attitudes and beliefs could be related to time constraints for clinical care, lack of resources in the ED for alcohol-related care, concerns about the patient's negative response to an intervention, as well as a lack of professional training and educational support. Findings from the review suggest that the attitudes and beliefs of ED physicians and nurses may be barriers to the widespread uptake of SBIRT (Screening, Brief Intervention, Referral to Treatment) for hazardous alcohol use in the ED setting. For my qualitative study I was curious to know whether paediatricians caring for adolescents with alcohol-related presentations would have the same response as physicians who care for adults including whether they would feel responsible for

providing care, but believe someone else needed to provide alcohol-specific management. This review provided a solid foundation from which to develop a qualitative study so as to better understand *how* and *why* physicians feel the way they do about patients with alcohol-related presentations; my personal interest was in physician experiences with pediatric patients.

Qualitative Study

My phenomenological study aimed to provide an in-depth understanding of pediatric emergency physician experiences in providing alcohol-related care to adolescents in the ED. I was interested in how and why physicians in my study experienced patient care. Specifically, I wanted to explore if the physicians in my study: (a) had any concerns regarding adolescents taking offence when asked about their alcohol use, (b) felt that adolescents lacked motivation to change, and (c) whether physicians struggled with clinical time management.

In my study, physicians universally felt responsible for, and competent to, manage the medical aspects of caring for an intoxicated patient. In contrast, these physicians did not believe that long-term and complex social situations accompanying alcohol use could be managed in the ED. Physicians in my study also believed alcohol-related presentations were resource intensive especially when accompanied by psychosocial issues. Frustration was a common feeling described by the physicians during clinical interactions with the adolescents in their intoxicated state. Physicians struggled during the clinical experience and found it hard to build a therapeutic alliance, while at the same time; they felt a professional responsibility to provide care. While the physicians interviewed in

my study believed the ED to be a place where they can *start* talking with adolescents about alcohol related harms, they did not believe it to be a place for continuity of care (e.g., follow-up, referrals, and dealing with complex social issues).

Comparing study findings: commonalities and differences between the systematic review and qualitative study

There were several notable similarities between the systematic review and qualitative study findings. Both the studies found that physicians believed patients with alcohol-related presentations were resource intensive. There were noted time constraints and workload concerns in the review that were also found in the qualitative study. Further, elaboration of resource and time constraints were described in the qualitative study, and included adolescents requiring prolonged observation, social services, and/or a mental health liaison team. Both studies also showed that physicians believed follow-up (e.g., referral to treatment or post-ED support) after the ED visit was important, however, physicians in both studies could not indicate what the appropriate or most effective solution might be.

Physicians in one of the studies included in the systematic review commented on the reliability of patient responses believing that the patient's answers were not trustworthy. However, this was not a point that emerged in the data from the qualitative study. In the qualitative study, physicians described a focus on the therapeutic alliance with the adolescents and the challenges to this clinical relationship aspect.

Findings from the systematic review indicated that physicians and nurses believed addressing alcohol-related behaviours would negatively impact the therapeutic relationship and that patients would respond negatively to an alcohol-related discussion/intervention (e.g., find it offensive, object to participating). On a related note, in the systematic review, physicians and nurses also described a negative stereotype that patients lacked a motivation to change. Another stereotype was identified by the physicians in the qualitative study when they described intoxicated adolescents as: *"another drunk to take up my time in the emergency."* Physicians in the qualitative study questioned whether an adolescent would actually change his or her behaviour based on their experience in the ED, but did feel providing information at discharge was important. In the qualitative study, the experience of physicians was explored beyond whether providing alcohol-specific intervention was worthwhile, to *what it was like* to work with patients who come to the ED for alcohol-related complaints. This logical extension of the systematic review provided a rich insight into the frustration experienced by physicians, and their struggle with caring for a patient whose behaviours and intoxicated state interfered with aspects of the clinical relationship and care.

My systematic review suggests the need for education and training in Screening, Brief Intervention, and Referral to Treatment (SBIRT) for ED health care providers and policies supporting financial compensation to those who provide SBIRT. These clinical responsibility aspects did not emerge in the findings from the qualitative study; the physicians in this study did not identify a

need for additional training or compensation and described their primary role as providing medical stabilization. Personally, I believe it is very important to provide SBIRT-related education and training to ED care providers, as I believe it can improve the clinical interaction (therapeutic alliance, discussions) between the adolescent and the physician, and help physicians provide alcohol-related care that is congruent with the busy clinical environment of the ED.

Personal Reflections

On conducting my systematic review

During my first year of graduate studies, I enrolled in an independent study course (PSYCI 603) where I had the opportunity to examine literature related to attitudes and beliefs of emergency physicians in providing alcohol-related care to patients in the ED. Several of the articles I reviewed in this course were ultimately included in my systematic review. Conducting this review was a rewarding experience as it introduced me to background literature relevant to my thesis and the findings from the review helped me decide the methodology of choice for my qualitative study (hermeneutic phenomenology). The findings from my systematic review also helped me develop my interview guide; my interview questions focused on gaining a better understanding of the attitudes, beliefs and caring experiences of ED physicians. The background literature I read also made me aware of what was already published and what areas needed to be further explored so that I didn't duplicate a pre-existing study. This allowed me to provide a unique contribution to the field of emergency medicine.

On conducting my qualitative study

Prior to enrolling in graduate school, I completed in a qualitative graduate course (INTD 540) as an Open Studies student. This was my first experience with qualitative research, and the course provided me with the theoretical basis for my graduate research. Shortly after the course was done, I employed qualitative research methods in my role as a research assistant for one of my supervisor's projects. This was a rewarding experience as I had the chance to see the project from start to end. This study experience gave me greater confidence when conducting my own graduate project, particularly the interviews. I enjoyed interviewing participants the most for my research project.

Inherent to any research project are some challenges. I will now outline those that I came across while doing my qualitative project as related to participant recruitment, interviews, and coding data.

Participant recruitment

Finding the best possible group of participants for a study is a very important part of qualitative research in general; for my study, it was physicians with more clinical experience who were able to give insight. I had the privilege of initiating recruitment through two members of my graduate committee (a pediatric emergency physician and a clinician scientist) working in the field of pediatrics. However, despite being provided potential participants' names and the power of snowball sampling, it was not easy to gain access to these individuals due to their busy schedules within the limited timeframe I had for recruitment. I found the telephone interview to be a great way to reach study participants

because of its ease and privacy; this also made it possible to encourage open and flexible communication using my semi-structured interview guide. I found the physicians to be willing participants, so, once scheduled, it became easy to conduct the interview within the chosen time.

Data collection

I used individual telephone interviews to collect my data. This data collection strategy was not a challenge given the experience I had gained with doing qualitative interviews for another project. However, I was concerned about attaining enough depth to the physicians' experiences and asking sensitive questions that might not be well received. For example, asking questions related to patient follow-up would, at times, elicit strong reactions from physicians. In these instances, I would memo their reactions but move away from the topic for a while and return to the question after a period of interview time. Overall, I found communicating with the physicians to be a very positive experience, which encouraged me to ask the more sensitive questions. I also found it interesting to hear the personal perspectives physicians had regarding my area of study. I felt a sense of exhilaration by the end of almost every interview. I conducted follow-up interviews with study participants who were available, which gave me a chance to probe further and deeper into attitudes and beliefs. The follow-up interviews also allowed me to verify physician experiences and in this sense acted as a 'member check' and promoted methodological rigor. Member checking provided physicians the opportunity to confirm what was interpreted and understood. It also

enabled physicians to reassess what they intended to say in the first interview, and helped me refine my interpretations.

Data analysis

After each interview, I looked forward to reading the transcript in preparation for data analysis. I was pleased with most of the participants' responses during the first interview, as I thought were very honest and blunt. Having said that, some of the physicians' responses really surprised me. It was while analysing the initial data set that I felt the need for follow-up interviews with some of the participants. I constructed a new interview guide based on their previous responses and developed new follow-up questions to delve deeper into these responses. I also added probes to the questions to either capture or confirm what I thought was an essence to the physicians' clinical experiences.

The aim of data analysis was to highlight the common themes that appeared across the data and have these themes lead the coding process (considered study essences). During this project, there were times when I was so immersed in the data that I forgot to step back and refer to my research purpose as a guide. Meeting my supervisor every week was very helpful in keeping me on track. I also had the opportunity to meet with one of my committee members and record her comments and thoughts regarding my data analysis. There were times when I was overwhelmed by the data and I felt the tremendous pressure of always maintaining rigor in my analytic approach to these qualitative data. I would document my responses during interviews and data analysis, and found this to be helpful when I would want to step away from the data for a little while and return

to it with fresh eyes. Regular graduate committee meetings were also key in providing input and ensuring objectivity during data analysis.

Thesis Implications

My graduate research has provided an in-depth understanding of various attitudes, beliefs, and experiences of ED clinicians that have not been explored previously. Findings from my research can inform future studies to better understand the impact specific attitudes and beliefs have on pediatric emergency care, and studies with the purpose of improving alcohol-related care for adolescents in the emergency setting both during the intoxicated and post-intoxicated state. Based on the results of my graduate work, below are the subsequent research areas that I feel need to be addressed:

1. Being in the world of a nurse: The qualitative methodology I learned helped me understand what the physicians experienced, but I feel it would be equally valuable to better understand the experiences of a nurse when she/he cares for an intoxicated adolescent in the ED, as nurses often are the primary caregivers.

2. Being in the world of an adolescent: A qualitative study examining the experiences of adolescents who receive alcohol-related care in ED is needed to understand the essential patient perspective, including barriers in receiving care, alcohol-related interventions in the ED, their feelings regarding how they are treated by clinicians, and referral for post-ED care/treatment.

3. A prospective (real-time) study of the attitudes and beliefs of ED physicians: Such a study could examine the attitudes and beliefs of the ED physicians *before* they treat an intoxicated adolescent and *immediately after* the adolescent is

discharged. This study would help determine what preconceived notions a clinician brings to their clinical encounter with an intoxicated adolescent, and how the actual clinical encounter influences their ultimate actions.

4. Examining the culture of the ED: Using ethnographic methodology to examine the culture of the ED, this study could explore if and how the ED facilitates alcohol-related care including care for those adolescents who also have complex chronic mental health needs and use the ED repeatedly because of harmful and hazardous alcohol use.

5. The barriers towards using SBIRT (Screening, Brief Intervention, Referral to Treatment): Using a qualitative approach, one study could aim to explore the barriers towards using SBIRT in Canadian EDs. A better understanding of the attitudes, beliefs and perceptions of ED staff related to SBIRT is important to promoting widespread uptake. Other studies could explore complementary yet different roles and responsibilities for ED health care providers (e.g., physicians, nurses, social workers, etc.), who would be the best person to deliver SBIRT in the ED, as well as identify factors related to SBIRT delivery adherence in the ED. Finally, a study exploring policies related to financial compensation to those providing SBIRT in the ED may help identify whether such policies are effective in promoting SBIRT delivery.

Concluding Remarks

My graduate work provides an understanding of pediatric emergency physician's attitudes, beliefs, and experiences in alcohol-related care provided to adolescents in the ED. The first part of my thesis was to conduct a systematic

review on the subject to determine what was known in this area (Chapter 2). Findings presented in the review revealed that attitudes and beliefs of the ED physicians and nurses may be barriers to the widespread uptake of SBIRT for hazardous alcohol use in the ED setting. In Chapter 3, my qualitative study is presented, and it provides an understanding of pediatric emergency physician's experiences in providing alcohol-related care to adolescents in the ED. Findings from the study identified that physicians did not believe long-term and complex social situations related to alcohol use should be managed in the ED beyond medical stability, and believed that alcohol-related presentations are resource intensive. In this study, physicians described feeling frustrated during the clinical interaction because of the adolescents intoxicated state and struggled with building a therapeutic alliance; at the same time, these physicians felt a professional responsibility to provide care. The physicians believed the ED to be a place to start talking about alcohol related harms, but did not believe it to be a place to provide continuity of care. In conclusion, I feel these two studies will contribute to the overall medical literature that informs the care of intoxicated adolescents in the ED.

UNIVERSITY OF ALBERTA

Caring for Adolescents Who Visit the Emergency Department for Alcohol Use: A Phenomenological Study

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Dr. Kathryn Dong, Assistant Professor, Faculty of Medicine and Dentistry, University of Alberta
Dr. Cameron Wild, Professor, School of Public Health, University of Alberta
Dr. Samina Ali, Associate Professor, Faculty of Medicine and Dentistry, University of Alberta

Background: You are invited to take part in a study about adolescent emergency care. Your taking part in this study will help us understand the professional experience of health care providers when caring for adolescents with alcohol-related presentations in the emergency department.

Purpose: We want to know about your professional experiences related to the care provided to adolescents with alcohol-related presentations.

Procedures: If you decide to take part, you will be interviewed by telephone by a graduate student for about 30-60 minutes. The student will ask you to answer questions related to your professional experiences in the emergency department. The session will be digitally-taped for research purposes. The recorder can be shut off at your request and the graduate student can take hand-written notes.

Possible Benefits: The possible benefit of participating in this study is helping better understand the emergency health care system to improve alcohol-related care for adolescents. Your participation will help provide an in-depth account of care provided by physicians and nurses in the emergency department. This will lead to recommendations on how to provide care.

Possible Risks: You may be asked questions you don't like or don't want to answer. You can choose to decline those questions.

Confidentiality: Everything that you say will be highly confidential and will remain anonymous. All digitally-taped interviews will be reviewed and names/locations that could identify you will be removed when the interview is being transcribed to an electronic Word document. The graduate student will re-check the Word document after transcription to ensure there are no identifying data remaining. Digital recordings that contain identifying information will be stored separately from the transcribed data and will not be used during the research process. All data will be stored in a locked cabinet specific to the study in Dr. Newton's research office for 5 years after completion of the study. Electronic documents will be digitally encrypted and stored on password protected computers in this office.

Data from the study will comprise the graduate student's thesis project. Study findings will be presented as part of an oral defense at the University of Alberta to the research team, and in written format (final paper) to satisfy requirements for an MSc in Pediatrics. The graduate student will only use de-identified data/findings in this work.

Voluntary Participation: You don't have to take part in the study at all, and you can withdraw. If you would like to withdraw from the study, you must do so before the end of the telephone interview. This is

the last possible moment to withdraw from the study. After the interview is completed, interview transcription and data analysis will have already begun. Because the data will be de-identified at this time, there will be no way to identify your specific interview.

Reimbursement: You will receive a $20 dollar gift certificate to cover your time.

Contact Names and Telephone Numbers: If you have questions, please contact Dr. Amanda Newton who is the Principal Investigator on this study. Dr. Newton can be reached at 780-407-2018. You can also speak with Dr. Neelam Mabood who is the study research coordinator and a graduate student working with Dr. Newton. Dr. Mabood can be reached at 780-407-2752.

If you have concerns about your rights as a study participant, you may contact the University of Alberta Health Research Ethics Board (HREB) office at 780-492-0302. This office has no affiliation with Dr. Newton's research group.

UNIVERSITY OF ALBERTA

Caring for Adolescents Who Visit the Emergency Department for Alcohol Use: A Phenomenological Study

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Dr. Samina Ali, Associate Professor, Faculty of Medicine and Dentistry, University of Alberta

Please circle participant answers (read aloud over telephone prior to interview):

Do you understand that you have been asked to participate in a research study?	**Yes**	No
Have you received and read a copy of the attached Information Sheet?	**Yes**	No
Do you understand the benefits and risks involved in taking part in this research study?	**Yes**	No
Have you had an opportunity to ask questions and discuss this study?	**Yes**	No
Do you understand that you can refuse to participate or withdraw from the study? You don't have to give a reason.	**Yes**	No
Has the issue of confidentiality been explained to you? Who explained this study to you? Information Sheet	**Yes**	No
Do you understand who will have access to the information you provide?	**Yes**	No

I agree to be in this study. **YES ☐ NO ☐**

Verbal Consent from Participant **YES ☐ NO ☐**
Printed Name: _____

Date : _____

I believe that the participant signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Interviewer: _____ Date: _____

Interview Guide (Questions and Probes)

Intent: To Elicit Descriptions of Professional Care Experiences with Adolescents

1. How long have you worked as a [ ]?

Notes:

2. What is involved in your work?

Probe: Could you describe your daily routine?

Notes

3. Describe the most memorable adolescent patient you have had who presented with alcohol use.

Probe: What made this patient memorable?

Notes:

4. In general, what are your experiences in delivering care to adolescents with alcohol use?

Probe: How often does it happen? Do you have any trouble/challenges/positive experiences in delivering this care?

Notes:

5. How well does your emergency department take care of this patient population?

Probe: What would improve this care?

Notes:

6. Can you talk about your experiences working with other doctors, nurses, and other health care professionals in adolescent alcohol management?

Probe: Has working with other doctors/nurses made it easier/harder? Why/why not? Do you have some examples that you can share?

Notes:

7. What is you experience regarding the referral process for the management of alcohol-related issues?

Probe: How often do you refer adolescent patients with alcohol-related care needs and where?

Notes:

Intent: To Determine Attitudes and Beliefs

1. In general, is it more difficult or easy to manage adolescents with alcohol problems?

Probe: Why/why not?

Notes:

2. What factors do (or would) enable you to talk to adolescents with alcohol problems in the emergency department? What would make it difficult to discuss these issues?

Notes:

3. How confident do you feel in asking adolescents about their alcohol use?

Notes:

4. What do you believe are the advantages/disadvantages of providing brief psychosocial interventions for alcohol use in the emergency department?

Notes:

5. How do you feel about referring adolescents to special clinics dealing with alcohol misuse?

Probe: How do address/manage follow-up care?

Notes:

6. Do you feel you can change the drinking behaviour of a patient in the emergency department?

Probe: Why/why not?

Notes:

Intent: To Determine Opinions and Values

1. What are your thoughts about advising adolescents regarding changing their drinking behaviour?

Probe: Do you think your discussions affect their behaviours after they leave the emergency department? Why/why not? What would be a good example?

Notes:

2. Is the emergency department the place to provide treatment for alcohol misuse?

Probe: Why/why not?

Notes:

3. What motivates you to discuss problems related to alcohol use in adolescents?

Probe: Can you share an experience as an example?

Notes:

4. What is your opinion on following up with these adolescents after treating them in the emergency department? Is there a role for the emergency department in ensuring they receive follow-up services?

Notes:

Intent: Interview Closure

Closing Interview Points

1. Closing summary and thank-you

Notes:

2. Allow time for outstanding participant questions

Notes:

3. Remind participants of what will happen with the interview content (analysis, confidentiality, use of summary data)

Notes:

Follow-up interview guides (interview quotes, probes and follow-up questions)

Sample Quote	Probe	Follow-up Question
"Kids who are not behaving as we would like them to"	What are your expectations from such kids?	Does it bother you when you see intoxicated adolescents?
"Lots of cursing and swearing. And even though we have a room that's designed to be used for mental health assessments, there's still some noise and travelling of loud belligerent behaviour to other rooms. So that's one memory of things where you think you're doing good and trying to help but in actual fact it backfires for other people, or other kids."	How is it like to be around an intoxicated adolescent?	What are your personal perceptions about the kids who come in intoxicated?
"show some video and some real tangible stuff that will make sense to them even if it's in the form of YouTube videos and showing them consequences"	How do you feel about any intervention in the ED e.g. screening, MI etc?	How often do you advise adolescents about their drinking? What circumstances (e.g., department resources/busyness, adolescent factors) make it possible/not possible to do this?
"I think teenagers are a tough population to deal with on any matter, but I think certainly when they're throwing alcohol in there I think that can be very difficult."	How do you deal with the "very difficult" situation, what happens?	
"Distress that it's interfering with my interaction with the kid and my ability to do anything for them"	What influences your care approach towards this group of kids?	Can you talk more about the distress you referred to in your quote?
"Teaching them about the consequences may affect some of them to be more careful if you get to them early enough and frequently enough"	Tell me more about what you might say to an adolescent.	
"I think there is the dilemma of do you call parents or not depending on the age of the child."	Dilemma? Can you explain more?	How do you handle such a situations and what does go through your mind at the time?
"I think there's two groups, and maybe that's too black and white 'cause I recognize that there's a lot of grey but the two main groups that I see are the ones that are belligerent and uncooperative and not gonna talk to you anyway"	What goes through your mind, when they are not co-operative?	
"they're just not interested in talking no matter how	And so what are you thinking	How do you feel about that?

much you try to get a rapport going"	at that time?	
"I don't know maybe we don't reach out enough to them or recognizing that they might not respond so we don't reach out."	What makes you feel that way?	What could/should 'reaching out' look like?
"I think there's always potential for a lot of layers of things going on that may be difficult to get to"	Tell me more about these layers.	What are the important ones to consider? Why?
The downside or disadvantage is that it does tie up your Emerg. for a bit longer potentially, also I'm tying up physician, nursing staff, other staff for longer which depending on how many inebriated kids you were seeing on a Friday or Saturday night might have an impact on departmental flow		I hope its okay to ask, if they would have a different problem than having alcohol (other drugs) involved, would you feel the same (like a trauma patient)? Why/Why not?

Sample Quote	Probe	Follow-up Question
"It can be quite difficult because, because of the way they present it's difficult to make sure you can do a thorough exam because they're not cooperative."	What are your expectations from such kids?	Does it bother you when you see intoxicated adolescents?
"Some of these drunk kids, you end up doing a CAT scan of their head just to make sure they don't have a bleed or fracture because they can't remember what happened but they remember they got into some sort of fight. Or we subject them to more radiation than they probably need as well"	How is it like to be around an intoxicated adolescent?	What are your personal perceptions about the kids who come in intoxicated?
"I think all of us in emergency department have a similar philosophy. You know, there are definitely some physicians who don't like to see those patients because they can be a challenge to deal with but I think everyone's pretty good about trying to examine them and see what we can do in terms of figuring out where they belong and how to get them home so I think, in general, everyone treats them or deals with them the	Can you explain what you meant by that?	Can you talk about the similar philosophy? What kind of philosophy? Is there an example that you can share?

same way”		
“I do spend the time trying to talk to them about their alcohol use and what it means and the fact that given their age and if they start drinking like this then that’s what I talk to them”	How do you feel about any intervention in the ED e.g. screening, MI etc?	How often do you advise adolescents about their drinking? What circumstances (e.g., department resources/busyness, adolescent factors) make it possible/not possible to do this?
“I don’t think there is anything anyone can really do to make them better when they come in because that’s just the way they are when they come”	How do you deal with the “very difficult” situation, what happens?	
“I find often the families that these kids come from, I find them kind of lacking the motivation to help these kids or they lack the insight to realize what’s happening as well. Often these families, these kids don’t come from the greatest families or they’re in foster care or group homes so it’s more difficult and more of a challenge to help those kids as well”	What influences your care approach towards this group of kids?	Can you talk more about this particular group of kids you referred to in your quote?
“Sometimes if they come in overnight, they’re not sober enough until sometime in the morning when we’ve already signed over care to a different physician. That makes it difficult too because then you haven’t seen that kid when they came in the night before then it is difficult to talk to them about how they presented and what was going on”	Tell me more about what you might say to an adolescent.	
“They (adolescents) are intoxicated so it is difficult to communicate”	Can you explain more?	How do you handle such a situations and what does go through your mind at the time?
“Sometimes it’s hard to get them to acknowledge that they have an issue too.”	What goes through your mind, when they are not co-operative?	
“They don’t always tell the truth about the quantities or how frequently they’re drinking alcohol. They just don’t have the insight given their age.”	And so what are you thinking at that time?	How do you feel about that?
“Sometimes when you talk to them, you can see these kids and you can see them start to think about it but *whether it actually makes a difference I have no idea*”	What makes you feel that way?	What could/should ‘make a difference?

“It’s an issue of their whole social environment and their whole social situation and how do you fix that?”	Tell me more about when you say, “how do you fix that?”	What is more important to consider? Why?
“I think time’s a huge issue”		“I understand time being an issue, however if time was not an issue, how would you handle these kids, when they come to the ED intoxicated”
		I hope it’s okay to ask, if they would have a different problem than having alcohol (other drugs) involved, would you feel the same (like a trauma patient)? Why/Why not?

Sample Quote	Probe	Follow-up Question
“We certainly will see teenagers who arrive to the emergency room for treatment of their intoxication. I’ve taken care of dozens and maybe even 100 over my career.”	What are your expectations from such kids?	Does it bother you when you see intoxicated adolescents?
“I can have a child who is critically ill, a 3-year-old with a heart defect in one bed and then my intoxicated patient comes in the other and every word coming out of that young girl or young boy’s mouth is a curse word. F this, f that and that poor family with a curtain between them has no ability to protect their child from seeing or hearing that.”	How is it like to be around an intoxicated adolescent?	What are your personal perceptions about the kids who come in intoxicated?
“I think just speaking honestly that as a whole, our department would be happy if not to have to deal with them in the sense that it’s not a pleasant interaction”	Can you explain what you meant by that?	Can you talk about the unpleasant interaction? Is there an example that you can share?
“A prolonged discussion or a prolonged conversation while likely valuable may not be feasible in the demands of an emergency room unless it’s performed by someone else rather than the doctors”	How do you feel about any intervention in the ED e.g. screening, MI etc?	How often do you advise adolescents about their drinking? What circumstances (e.g., department resources/busyness, adolescent factors) make it possible/not possible to do this?
“To be perfectly honest I think there’s a lot of variation from doctor to doctor. Some doctors will say they’re drunk, I want an IV in, park them in there, and I’ll see them in a while. Other doctors will say I’m gonna see him and I’m gonna encourage the family to take him	How do you deal with the “very difficult” situation, what happens?	What would you do in such a situation?

home if they're OK to go home. Or I'm gonna see him and I'm not gonna give him an IV because I don't want them not to get a hangover tomorrow."		
"I would not want them [kids with other illness] to be in the waiting room watching a teenager come in swearing, cursing, spitting, yelling, and fighting, because those are behaviours, all of those, in which I want to prevent my child from doing. But in the emergency room because we are not their parents we don't have the ability to actually discipline them. We can tell them that that's not acceptable behaviour but we really have no avenue to stop that disruptive behaviour."	Tell me more about what you might say to that adolescent.	
"it was a child who was being very belligerent to our nurses in their intoxication."		What goes through your mind, when they are not co-operative?
"She filmed how inappropriate her child was to the department and that she was spitting, swearing, etc. at the nurses and the team that was trying to care for her, right? We were trying to put on monitors, cursing at them, spitting at them, yelling at them, telling them to leave her alone, etc"	And so what are you thinking at that time?	How do you feel about that kind of action?
"In a perfect world where everyone was 100% professional all the time people probably would not do those sorts of things[making jokes about intoxicated adolescents coming into the ED], so how do we handle it? I think we handle it well. Could we be perfect? Could we be better? I think so but at the same time it's a stressful job and making light of the situation, not necessarily of the individual, helps people cope with their jobs better.	What makes you feel that way?	What makes it stressful? Is it the intoxicated adolescent? Or any patient in the ED?
"They're taking up a bed in the emergency room for a child who may need it at that point."		I hope its okay to ask, if they would have a different problem than having alcohol (other drugs) involved, would you feel the same (like a trauma patient)? Why/Why not?