

**Perspectives on the opioid epidemic in Southern Ontario: Can the opioid epidemic be managed by practices within Emergency Management?**

By

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A MASTERS RESEARCH PROJECT (MRP)

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*To my mother and father for believing in me,  
and for always being my pillars of support  
&  
for the love of learning.*

*Thank you  
Dr. J.L. Rozdilsky and Dr. A.A. Mamuji  
for the lessons learned, and for  
an unforgettable journey.*

## **ABSTRACT**

### **Perspectives on the opioid epidemic in Southern Ontario: Can the opioid epidemic be managed by practices within Emergency Management?**

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Ontario is in the midst of an opioid epidemic. The opioid epidemic is becoming an increasing concern in Ontario because of the growing numbers of misuse and overdose cases. It is not unconventional for emergency management practitioners to participate in managing aspects of health-related emergencies (i.e., Severe Acute Respiratory Syndrome or SARS). Thus, it should be determined whether emergency management practitioners should be involved in managing southern Ontario's opioid epidemic. This study explores the following three questions: 1) How do emergency management practitioners understand the opioid epidemic? 2) What (if any) emergency management activities have practitioners in southern Ontario been engaged in with respect to the opioid epidemic? 3) What are effective emergency management measures that they feel would address the opioid epidemic? The study adopted a qualitative methods approach. During 2018, interviews were conducted with six participants within the field of emergency management in Ontario. The six interviews provided in depth insights into understanding the

research questions. Coding methods were applied to discern seven themes which reflect the participant's understandings of the opioid epidemic. The themes are: 1) Understanding what is the opioid epidemic in the context of Emergency Management? 2) Opioid epidemic reform: How emergency management is taking action 3) Collaboration and Communication 4) Politics Matters 5) The evolving field of emergency management 6) Best practices in relation to the opioid epidemic 7) The opioid epidemic as a focusing event. In conclusion, for emergency management practitioners the opioid epidemic is a nonroutine social problem that is a form of slow violence.

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## **Chapter 1: Introduction**

### **1.1 Defining the Intent of the Research**

Canada is in the midst of a deadly epidemic. This epidemic is a result of opioid misuse, overdose, addiction, and it can cause death. This paper considers how the field of emergency management in Ontario is evolving by exploring whether emergency management practitioners believe the opioid epidemic can be managed using practices in the emergency management domain. From January 2018 to June 2018, in Canada, there were 2,066 apparent opioid related deaths, a death rate of 1.2 per 100,000 population (Health Canada, 2018, n.p.). Now, to put the opioid related deaths that have occurred in the first six months of 2018 in context, since confederation (post 1867) the only other Canadian disaster events having death counts in the thousands would be the Spanish Flu of 1918 (an estimated 50,000 deaths), the Halifax Harbour explosion of 1917 (an estimated 2,000 deaths), and the shipwreck of the Empress of Ireland in 1914 (an estimated 1,000 deaths). It is not unlikely to suggest that when communities' face events that lead to high death tolls that the emergency management community can contribute by supporting the community via efforts that ultimately seek to reduce harm and the overall death toll. Although the healthcare community maintains a primary role in addressing the opioid epidemic, it is evident that all stakeholders of the opioid epidemic have a role to play. It has been suggested that:

“public health’s work and advocacy with relevant stakeholders (government, housing, social services, law enforcement, and others) will be most critical in reversing the

[opioid] epidemic; while these have a long-time horizon, they are what will ultimately address the antecedent factors that contribute to use and poor mental health”

-- (Loh, 2018, n.p.)

## **1.2 Emergency Management**

At the core, the primary goals of individuals working as emergency management practitioners include the promotion of life safety, the preservation of property and infrastructure, and the stabilization of an incident, event, emergency, or disaster. The opioid epidemic poses a threat to the life safety of humans, and it is not unconventional for emergency management practitioners to both cooperate and participate in actions that seek to reduce and eliminate the chance of serious harm or death. The opioid epidemic is a nonroutine, social problem. This epidemic is an example of the atypical nature of problems confronting contemporary emergency management practitioners across Canada. The field of emergency management will no longer be responsible for only managing natural hazards (tornado), technological hazards (chemical spills) and anthropogenic hazards (Three Mile Island accident). JoAnne Darlington (2000), characterized the situation as:

“[e]mergency. . . [management practitioners] are now faced with problems they have seldom before confronted. They are expected to understand complex physical and social systems, conduct sophisticated outcomes analyses, and offer long-term solutions to recurring problems”

-- (p.11)

### **1.3 Opioids in Relation to other Health Problems/Emergencies**

A problem or pending emergency that confronts the province of Ontario's emergency management community is the opioid epidemic. Opioids are a class of controlled pain management drugs with a morphine and opium base. In Ontario there has been a visible increase in the cases of opioid misuse and overdose.

There are notable differences between the opioid epidemic, and other health problems/and emergencies Ontarians have endured in the past. For example, the SARS (Severe Acute Respiratory Syndrome) outbreak of 2003, the H1N1 (Swine Flu) pandemic in 2009, and the EVD (Ebola Virus Disease) of 2014 have been significant health emergencies impacting Ontario. The health related emergencies referred to directly above have had a definite start date, and these health emergencies came to a pause or an eventual end. However, Ontario's opioid epidemic is currently nowhere near being resolved, as recent data indicates that in 2016 the number of accidental apparent opioid related deaths involving fentanyl—an opioid substance, or fentanyl analogues was 726, and in 2017 that same number jumped to 1127 (Health Canada, 2018, n.p.). Despite the mitigation efforts' developed and implemented by Ontario's healthcare community and across Canada; the opioid epidemic continues to grow, and the consequences of this epidemic continues to worsen.

During the SARS outbreak the emergency management community in Ontario played a direct role, as members were involved in the preparedness, response, and recovery phase of the health emergency. During the SARS outbreak, Alain Normand was the official CEMC (Community Emergency Management Coordinator) of Brampton, Ontario. Following the SARS

outbreak, an address was given to the members of parliament in Canada's House of Commons where Alain Normand stated:

“[w]e were involved during SARS ourselves and we had to respond. We had a number of situations that were . . . under the radar because all the attention was on the health aspect and on hospitals. Meanwhile, . . . our bus operators threatened to walk off the job completely, en masse, because they felt they had inadequate protection during SARS”

-- (Open North, 2009, n.p.)

According to Normand, as emergency managers, they were aware that the bus operators did not require special PPE (Personal Protective Equipment), but:

“ there was not enough information flowing to the front-line workers to enable them to make those judgment calls [themselves]”

-- (Open North, 2009, n.p.)

This scenario is indicative of areas in a health emergency that demand the knowledge and skills sets of the emergency management community. The role of emergency management personnel during health problems and emergencies is sometimes undermined, especially because the healthcare community has its own unique emergency management branch under the MOHLTC (Ministry of Health and Long-Term Care). Health problems or emergencies are complex and affect all facets of a community. Whether or not the healthcare community maintains an in house emergency management team, the emergency management community in Ontario (government or non-government) must be able to act, and fulfill their responsibility to the public when confronted by a health problem, or health emergency.

## **1.4 Declaration of an Emergency**

In 2016, BC (British Columbia), Canada made an emergency declaration in response to the rise in drug overdoses and deaths (Provincial Health Services Authority, 2018, n.p.). An attributing factor leading to drug overdoses in BC is the use of illicit drugs, including opioids. In BC, opioid misuse, overdose, addiction and death has also been alluded to as consequences of the opioid epidemic.

“BC’s recent epidemic is characterized by the increasing proportion of deaths in which illicit fentanyl has been detected. Fentanyl was detected in 5% of illicit drug deaths in 2012, and this has increased annually reaching 60% in 2016”

-- (Provincial Health Services Authority, 2018, n.p.)

The BC emergency declaration will allow for medical health officers to collect more robust, real-time information on overdoses. These actions are taken in order to identify immediately where risks are arising and take proactive action to warn and protect people who use drugs (BC gov News, 2016, n.p.). Despite BC’s emergency declaration and the emphasis put forth by the healthcare community in Ontario about the severity of opioid misuse and overdose; Ontario has not yet declared an emergency regarding the opioid epidemic. Since the year:

“2000, the number of cases of opioid related misuse, addiction disorder admissions to hospitals for treatment programs” and deaths in Ontario have continued to grow”

-- (Fischer et al., 2016, p.1240)

## **1.5 Responding to the Opioid Epidemic**

In previous health emergencies, stakeholders and agencies external to Public Health Ontario, MOHLTC, and its respective Health System Emergency Management Branch were

active participants in initiatives surrounding preparedness, prevention, mitigation, response, and recovery. However, there is still ambiguity as to what the role of emergency management practitioners would be in regards to Ontario's opioid epidemic. In part, the role of the emergency management community (different emergency management offices, Emergency Management Ontario-EMO, Public Safety Canada-PSC, municipalities, and ministries) in Ontario involves taking preliminary steps to assess hazards. As practitioners in the emergency management field they are also responsible for forming preparedness, prevention, and mitigation plans to cope with any imminent threats within the different municipalities of Ontario, while working closely with other levels of government. The incorporation and involvement of multiple agencies is beneficial in not just managing the opioid epidemic, but in distributing information about the opioid epidemic, bringing public awareness about the opioid related deaths, and the consequences related to opioid misuse and overdose to individuals outside of the healthcare community. In the past inter-collaborative efforts had proven to be resourceful in providing a successful response, as seen in certain locales and their response to H1N1. Community centers were used as flu assessment clinics, accommodated by emergency management practitioners, which in turn controlled the spread of the virus, reduced the influx of patients entering the hospitals in that locale, and reduced the workload for the hospitals more generally (Sam, personal communication October 16, 2018). Ontario's response approach to the SARS outbreak, provided emergency management practitioners with lessons learned, which can now be used to better handle future health emergencies. For example, during SARS:

“the focus was really all about hospitals, whereas the background, the infrastructure needed to make sure those hospitals actually continue to function, [this] was . . . ignored.

We would like to see a lot more municipal involvement in the development of plans, [or plans for health emergencies] in order to make sure that when the H1N1 comes around again we have the capacity to respond in a better way than we did during SARS”

-- (Open North, 2009, n.p.)

It has been argued within academic settings and professional settings that the opioid epidemic in Ontario is in fact a public health concern that should be remediated through the healthcare domain. However, antithetical to this, it is also argued that emergency management practitioners should have their own stake in the epidemic.

### **1.6 Purpose of Research**

The opioid epidemic is not only considered a health related problem, it can be interpreted as: a crisis, a hazard, a social emergency, and a problem that has solutions that require the support of other agencies including the emergency management community. More importantly, emergency management practitioners cannot medically treat opioid misuse and addiction without having the specific training, knowledge, certifications or degrees (medical doctorate, nurse practitioner), there are other aspects (planning, preparedness, mitigation) of the opioid epidemic that do demand action from the field of emergency management.

This research is significant not only to the field of emergency management, but provides knowledge to Ontario’s healthcare community regarding future collaboration in managing the opioid epidemic. Also, this research sets the precedence in disaster research by providing further insight to what the role(s) of emergency management practitioners are in relation to the opioid epidemic. The research also seeks to determine how participants of the study foresee the field of

emergency management evolving, and if this means redefining the parameters of their specific roles and responsibilities when managing nonroutine, social problems.

The purpose of this phenomenological (understanding lived experiences) study is to understand the lived experiences of emergency management practitioners and determine whether they believe the opioid epidemic in Ontario can be managed by practices within emergency management. Going forward the opioid problem will be referred to in this paper as the opioid epidemic. A total of six interviews were conducted, all of which were conducted in locales in southern Ontario. Participants include emergency management professionals, and public sector stakeholders of the opioid epidemic. Throughout this paper, gender-neutral pseudonym names (Sam, Alex, Dylan, Blake, Charlie, and Erin) will be used to refer to relevant statements made by study participants. This study specifically seeks to identify whether stakeholders and professionals of the disaster and emergency management field believe the opioid epidemic can be managed by practices within emergency management. For the purpose of this study, emergency management practitioners are defined as CEMCs (Community Emergency Management Coordinators) and/or emergency management specialists. This study aims to reflect and answer the following research questions: 1) How do Emergency Management Practitioners understand the opioid epidemic? 2) What (if any) emergency management activities have practitioners in southern Ontario been engaged in with respect to the opioid epidemic? 3) What are effective emergency management measures that they feel would address the opioid epidemic?

In order to address the research questions in this paper, I will provide context to the field of emergency management, as it is understood in Ontario, while also providing insight to what

has already been done by the healthcare community in Ontario in regards to managing the opioid epidemic. Next, I will review relevant interdisciplinary literature to provide an academic context for consideration of the opioid epidemic in the literature review chapter. Following the literature review, the methodology adopted, and methods utilized for data collection will be described, including notes on potential bias and limitations. The findings chapter presents highlights from interviews and the discussion chapter will highlight information culminated around five main points: Understanding what the opioid epidemic is in the context of emergency management; Needed opioid epidemic reforms; The necessity of collaboration and communication; The circumstance that politics matter with respect to the opioid epidemic; And, the fact that emergency management's involvement or lack thereof in coping with the opioid epidemic is indicative of the evolution of the profession of disaster and emergency management; A need for best practices; And the focusing event. Lastly, the conclusion will address how the field of emergency management copes with the opioid epidemic, and these results reflect an agglomeration of perspectives. While some emergency management practitioners took their own initiatives to become involved in managing the opioid epidemic as a nonroutine, social problem, in other instances the management of the epidemic fell under the domain of Ontario's healthcare system.

## **Chapter 2: Background**

### **2.1 Introduction**

In this section I will provide context to the opioid epidemic in Ontario. I will provide context to the field of emergency management, as it is understood in Ontario, while also providing insight to what has already been done by the healthcare community in Ontario in regards to managing the opioid epidemic.

### **2.2 Emergency management in the private and public sphere**

The disasters field is visible in private, non-governmental, and government sectors in Ontario, and has notably evolved over the years. This field has broadened and is now more inclusive as it encompasses an agglomeration of work titles related to emergency management, public safety, and other sectors. For example, the private sector of the disasters field maintains micro/macro businesses and/or environments (i.e. financial institutions), where a person, or team is appointed to use disaster and emergency management or BCM (Business Continuity Management) (BCM) to plan, prepare, and respond to a disaster scenario, that has the ability to impact the day to day operations and the well being of personnel within the organization or institution. Most businesses in the private sector do not have legally binding mandates enforcing that businesses have a disaster and emergency management plan or a BCP (Business Continuity Plan). However, by not opting for the business to have a contingency plan(s), the business could face potential liabilities if something were to happen to compromise the business and its primary functions. Despite the fact that businesses can utilize disaster/emergency management, it is important to note that there is no standard of what people in disaster and emergency management do per se, or what their individual roles consist of, as both depend on other contextual factors

such as where (space) disaster and emergency management is practiced. The difference in time, space, and context in relation to a disaster or emergency is suggestive that disaster/emergency management is not homogenous, as its functions vary, and actions are exercised differently dependent on the circumstance.

On the contrary, disaster/emergency management within the public sector is enforced by Ontario's legislation (Emergency Management and Civil Protection Act), which mandates each municipality in Ontario to have a designated CEMC (Government of Ontario, 2018, n.p.). In some instances, alternate CEMCs are assigned for when the CEMC is unavailable. Currently, Ontario has 444 municipalities, and besides having an appointed CEMC each should maintain a designated emergency management office with its own emergency management program, unique staff, functions, and routine for day-to-day operations. For example, in Mississauga, Ontario the CEMC is responsible for the development and implementation of the Emergency Management Program for his/her city (Emergency Management Program Committee, 2010, p. 3). He/She is responsible for the functionality of the EOC (Emergency Operation Center), and during EOC activation the CEMC assumes the role of EOC Manager (Emergency Management Program Committee, 2010, p.3). Some municipalities vary in the roles, responsibilities, and other functions adopted by the respective emergency management office. Similarly, the hazards encountered by an emergency management office in Ontario vary in the different cities, municipalities, or townships, and are specific to the locale and its unique characteristics. Prominent hazards are stratified under the following hazard characteristics: natural hazards, technological hazards, and human made hazards. Natural hazards are identified as those, which are caused by forces of nature. While, technological hazards arise from manufacture,

transportation, radioactive materials, chemicals, explosives/flammables modern technology and critical infrastructure (EMO, 2012, p.12). Lastly, human induced hazards or anthropogenic hazards result from direct human action or inaction, either intentional or unintentional (EMO, 2012, p.8). The literature presents various ways that have been used to classify hazards, but a majority of cities, municipalities, and townships in Ontario have adopted the classification system introduced directly above. These hazards and hazard classifications are often organized into a HIRA (Hazard Identification Risk Assessment), which is created by the CEMC and other emergency management specialists of a municipality. The HIRA encompasses relevant hazards, temporal and spatial characteristics, while also disclosing both qualitative (consequence(s) or impact of hazard) and quantitative (likelihood scale of hazard occurring) information corresponding to each hazard.

### **2.3 Ontario's Opioid Epidemic**

According to Ballantyne and Mao (2003), and Hariharan et al. (2007) prescription opioids are potent psychoactive medication used for the treatment of severe and/or chronic pain (as cited by Fischer et al., 2010, p. 257). In North America, chronic pain is one of the primary reasons for seeking medical attention, and opioids are as a result prescribed for chronic pain (Gupta and Rosenquist, 2018, n.p.). Opioid use is associated with misuse and overdose. In fact, cases of short-term treatment with opioids have led to long term use, abuse, and overdose (Gupta and Rosenquist, 2018, n.p.). Opioid misuse and overdose in Ontario has been regarded to as an epidemic. According to the CDC (Centers for Disease Control and Prevention) an epidemic is:

“an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area”

-- (CDC, 2012, n.p.)

Evidence indicates that since 2003, the number of deaths has:

“increased 246 per cent; [as] more than 1,250 Ontarians died from opioid-related causes in 2017”

-- (Ontario Agency for Health Protection and Promotion, 2018, n.p.)

Trends and relevant literature provide justification for referencing the opioid problem as an epidemic. In recent times, various branches of government and other sectors have also adopted the terms opioid epidemic to refer to what was initially recognized as an opioid crisis.

#### **2.4 The Opioid Epidemic—the Role of Ontario’s Healthcare Domain**

To better comprehend the epidemic within the context of disaster and emergency management it is vital to understand how it is understood within Ontario’s healthcare community first. Ontario’s health care community has given and continues to give precedence to the opioid epidemic, by not only admitting to the severity of the problem but refers to the opioid matter using words such as a hazard, a crisis, an epidemic, and an emergency. According to the CBC news (2017) article: “Why Ontario won't declare the opioid crisis a provincial emergency”, 700 healthcare workers called for more action to address the opioid crisis in the form of a letter (n.p.). As a response to the action letter, Ontario’s Health Minister Eric Hoskins announced that the government:

“would invest 222 million dollars over the course of three years as a form of prevention [and, mitigation] action for opioid users”

-- (CBC news, 2017, n.p.)

Hoskins states that, all costs were intended to make three safe injection sites available in Toronto, Ontario, and other programs such as the needle exchange program that would also be covered (CBC news, 2017, n.p.). The article also reveals how additional funding would be allocated for the development of pain management clinics across the province. Other tools have also been made available: introducing quality standards for better patient care in regards to proper opioid usage, and patient education via brochure and posters to educate patients about prescription opioid use (Ontario Agency for Health Protection and Promotion, 2018, n.p.)

Unlike the healthcare community, other government officials are careful in the vernacular they use to refer to the opioid epidemic. In most instances they avoid alluding to the epidemic as an emergency. Hoskins suggests that some emergencies are finite in nature and can be declared as an emergency, but the:

“ . . . opioid crisis has been with us for quite some time and will [continue to] be with us for a long time”

-- (CBC news, 2017, n.p.)

The opioid epidemic is presumed to be long lasting, and as a result, government authorities in Ontario avoid referring to it as an emergency. Though, if the opioid epidemic were to be declared an emergency by the province, it would be presumed that more funds would be allocated to form mitigation efforts to address the opioid epidemic. However, allocation of funds by the province is not necessarily guaranteed. Funding would be beneficial in the recruitment of more emergency

management personnel to help combat the opioid epidemic, and invest in more resources required to properly assess and respond to the opioid epidemic. Whether or not the province declares an emergency, there is no negating the increase in deaths as a result of the opioid epidemic. According to the International Narcotics Control Board (2008), Canada consumed 18,914 Standard Daily Defined Doses (S-DDD) of prescription opioids per million residents in the period of 2005-2007 (as cited by Fischer et al., 2010, p. 257). Joranson et al., (2006) and Fisher et al., (2008) say, not only has there been an increase in prescription opioid use, but simultaneously an increase in non-medical use of prescription opioids, relating to morbidity and mortality (as cited by Fischer et al., 2010, p. 257). Non-medical use of prescription drugs has been common amongst both students, and street drug user populations (as cited by Fischer et al., 2010, p.258).

In Ontario, health care is largely funded publicly, but there are some aspects of the health domain that receive private funding. Under the Canadian constitution health care primarily falls under the authority of the provinces. Thus, in the case of Ontario the provincial government has the power to pass laws governing the financing and delivery of health services to a majority of Canadians (Makarenko, 2010, n.p.). However, the federal branch of government is primarily responsible for annual spending in support of the provincial health care systems in Canada. More specifically, the health system emergency management branch under the MOHLTC, and public health Ontario prepare for community resilience by strengthening public health preparedness and security against naturally occurring and human caused health threats. The MOHLTC have implemented routine monitoring and engagement in response to the opioid epidemic. On Behalf of Sean Court, director of the strategic policy branch of the MOHLTC a prevention strategy was

developed in support of combating opioid addiction and overdose. In 2016, Dr. Eric Hoskins the minister of Health and Long-Term Care announced the government of Canada's plan to improve access to quality addiction services and interdisciplinary pain management teams (Court, 2017, n.p.). The actions ensued include the development of appropriate pain management and opioid prescribing, harm reduction, treatment for opioid use disorder, surveillance, and public reporting and education (Court, 2017, n.p.).

In 2017 there was an establishment of an Opioid Emergency Task Force. This team was composed of clinical and health experts who maintain experience with opioid addiction in different capacities. The Task Force forged a plan, aiming to have regular meets over the course of 2018, and provide the government with targeted public education campaigns to raise awareness about the risks associated with the opioid epidemic. A list of tools were proposed and/or developed to remedy the opioid problem including various programs. The ONP (Ontario Naloxone Program) provides naloxone through community-based agencies like PHUs (Public Health Units) and community partners leading needle exchange/syringe programs, withdrawal management programs, supervised injection and consumption services (MOHLTC, 2018, n.p.). Naloxone is a pure antagonist that is administered for prevention or reversal of opioid effects (Gupta and Rosenquist, 2018, n.p.). ONPs are also available in participating pharmacies. These pharmacies provide injectable and intra-nasal spray naloxone kits to eligible recipients (MOHLTC, 2018, n.p.). Finally, the needle exchange program provides free sterile harm reduction supplies at over 370 distribution points in Ontario (MOHLTC, 2018, n.p.).

Additionally, Ontario's CMHA (Canadian Mental Health Association) operates locally, provincially, and nationally, and is funded by Ontario's MOHLTC. CMHA has also proposed a

harm reduction plan aiming to recognize and respond to opioid misuse. CMHA reports suggest a training option in partnership with pharmacies for staff training. It is said:

“organizations in Ontario are working in partnership with local pharmacies to provide naloxone delivery training”

-- (CMHA, 2018, p.19)

In this way, pharmacists will educate staff on the use and administration of naloxone, and provide kits (CMHA, 2018, p.19). Individual organizations that are not eligible to receive publicly funded naloxone can now purchase is directly from manufacturers as well.

There are proposed future strategies and plans for harm reduction and mitigation in order to take steps towards helping to respond to the opioid epidemic. There is hope of building a standardized provincial training program, and a plan to develop this has already been iterated by Ontario’s MOHLTC (CMHA, 2018, p.19).

## **2.5 Future Management of the Opioid Epidemic via Emergency Management as a Practice**

There has been and continues to be constant efforts made by Ontario’s healthcare community: by actively proposing plans, taking action, expanding the discussion, and bringing awareness to the opioid epidemic. However, the roles other agencies will play with respect to preparedness, prevention, mitigation, response, and recovery initiatives in relation to the epidemic still remains unknown. Currently, emergency management practitioners, and academics quibble over future prospects in terms of their cooperation and participation in preparedness, prevention, and mitigation initiatives with respect to the opioid epidemic. Sam reveals that there has been ongoing discussion regarding the opioid epidemic in a round table discussion composed of different key players (emergency management practitioners and academics) (Sam, personal

communication, October 16, 2018). There is currently ongoing discussion of what the next steps will look like regarding each of their individual involvement in helping to manage the epidemic and supporting the healthcare community. The opioid epidemic poses a conundrum for emergency management practitioners. For example, by declaring the opioid epidemic as an emergency, this may allocate some funding towards helping to mitigate the consequences of the opioid epidemic, however the allocation of funds will not necessarily solve the opioid epidemic. There is a consensus that there is no quick fix solution, and instead inter agency, cross jurisdictional support, robust addiction support social programs is required for Ontario to be better equipped, while utilizing more existing resources in order to reduce the death toll resulting from misuse, overdose, and addiction.

Not only is the epidemic a multilayered problem, that is complex in nature, but also the consequences of the opioid epidemic are also highly problematic. A problem of this magnitude cannot be managed with the knowledge and resources of Ontario's healthcare platform alone. In order for CEMCs, emergency management specialists, and members of specific communities to acknowledge the opioid epidemic as an emergency that can also be managed by emergency management practices, the health care community must also demand the support of the wider emergency management community (Sam, personal communication, October 16, 2018). Also, there is need for upper tier government to acknowledge the epidemic as an emergency. This will cause a shift in perception, and how the epidemic is viewed. It is vital for emergency management practitioners to identify the opioid epidemic as a hazard in the areas (cities, municipalities, townships) affected by the epidemic, and include the opioid epidemic in their respective HIRA. This level of acknowledgement can unfold once the conversation about the

opioid epidemic becomes pervasive, allowing key players to begin to discuss how they will manage the epidemic together. Currently, there are uncoordinated ideas of whether a particular community is affected by the epidemic, and whether the epidemic should be considered an emergency at all (Blake, personal communication, November 28, 2018). Thus, appropriate trends and statistics of misuse, overdoses and deaths are required for all parts of Ontario. This can be achieved through the sharing of research and resources. Sharing data amongst key players will provide the insight needed to assess the imminent level of risk associated with opioid misuse and overdoses within each respective area.

A greater awareness for the opioid epidemic in civil society will increase a demand for action. This demand for action by communities in Ontario will result in the start up of opioid epidemic related initiatives and contingency plans formed by municipalities and the province in the field of emergency management. Emergency management focuses on protecting lives, property, infrastructure, and the overall environment, ultimately helping to ensure the continuity of operations and critical assets, and recovery (assisting individuals, businesses and communities to return to a state of normalcy) (Office of the Auditor General of Ontario, 2017, p. 229). There is need for active participation of emergency management practitioners and academics in helping to manage the opioid epidemic. One of the last provincially declared emergencies was the SARS outbreak. The SARS outbreak caused a total 44 deaths in Ontario, and left 375 other with serious lung disease (Office of the Auditor General of Ontario, n.d., p. 229). In order for active participation of emergency management personnel to occur, efforts from the bottom up must be initiated. Pressures and demands from the community will ultimately increase organizational

involvement and participation. Like in the case of the SARS outbreak, many lives have been claimed due to the opioid epidemic.

## **Chapter 3: Literature Review**

### **3.1 Introduction**

The literature review will review and analyse relevant interdisciplinary literature to provide an academic context for consideration of the opioid epidemic. The literature review informs the findings and discussion by using sources that are from, but not limited to disciplines: social sciences, environmental studies, and emergency management.

### **3.2 What is a disaster?**

The term disaster has posed a conundrum to the disasters field and stakeholders since the beginning, back to a time when early disaster literature was being introduced. Pioneers of the field have contributed to existing understandings of ‘what is disaster’? This further enabled recent scholars and practitioners to continue to write about disasters by alluding to, and expanding on existing understandings, while offering new insight. Existing interpretations of disaster are not always homogeneous, as the term is interpreted or perceived differently depending on context, but is also defined by temporal and spatial characteristics, and is unique to the individual or community based on the different intersectional identifiers (age, sex, gender, socio-economic status to name a few) pertinent to a person or group.

Historically, a disaster was perceived as an act of God, and there is evidence that even in our present time this notion continues to be reiterated. The BBC (British Broadcasting Company) article, “Letters from Africa: Is Nigeria being punished by God”, reports on Nigeria’s recent meningitis outbreak, which had:

“claimed 450 lives in Nigeria’s north . . . , while the Zamfara state . . . suffered the most deaths and hospitalizations out of all” the areas affected

-- (BBC News, 2017, n.p.)

Abdulaziz Yari, the state Governor, did not hold his administration responsible for the spread of the disease; instead he offered a different perspective. He suggested that the meningitis outbreak was a result of:

“ . . . people . . . sinning against God” (BBC News, 2017, n.p.)

He then offered a solution to remedy the health emergency/disaster, suggesting that people should “repent and everything will be alright” (BBC News, 2017, n.p.). Ultimately, disaster perception varies. Rohit Jigyasu, a contributor to the disasters field, further elaborates on this notion of disaster perception and it being shaped by non-secular motifs. He informs readers through an eastern perspective, one that he infers as being predominantly non-secular. According to Jigyasu, shared values, thought processes and visions:

“are consciously or subconsciously shaped by religious philosophies . . .”

-- (Jigyasu, 2005, p.50)

Thus, similar to Nigeria’s meningitis outbreak, other health emergencies or disasters can also be alluded to as being a result of spiritual or religious cause; either as a form of didacticism or to cause harm for disobedience.

Disaster is defined by time and space, and Jigyasu refers to the writings of Dombrowsky (1998) to support this notion (Jigyasu, 2005, p.50). Dombrowsky, proposes that disaster is concentrated in time and space, while Jigyasu proposes that disaster maintains two types of “reality”: 1) spatial 2) temporal, and adds another component called, 3) experiential dimension

(as cited by Jigyasu, 2005, p.50-53). Although, Jigyasu's interpretation differs slightly from the original work of Dombrowsky, both their understandings disaster being a product of time and space are analogous. According to Jigyasu, spatial reality is a disaster that maintains geographical characteristics with defined extent and boundaries (Jigyasu, 2005, p. 50). On the other hand, temporal reality is a disaster that has a point of beginning and an end. Temporal reality adopts vernacular such as before, during, and after as labels that reflecting time for the emergency or disaster in focus (Jigyasu, 2005, p.50). However, Jigyasu's view of temporal reality as a disaster that has a point of beginning and an end is problematic, because it presupposes disaster as being viewed in a linear scale (Jigyasu, 2005, p.52). Instead, Jigyasu suggests that the eastern perspective, views:

“time as cyclic loop . . . implying that there is no beginning and end . . . , and that the reality for time is what we construct in order for us to comprehend it”

-- (Jigyasu, 2005, p.51-53)

Unlike Dombrowsky, Jigyasu discusses a third component in regards to disaster called the experiential dimension. He makes remarks, suggesting that this dimension enables people to accept disaster as part of the endless cycle of birth and death, because disaster is not an event to fight with; it is part of the existence to live with (Jigyasu, 2005, p.50). This reveals that disasters as a form of reality cannot be eliminated, it is apart of what we experience, and is ingrained into the human psyche, as a disaster:

“ . . . reality, constructed by the self. . . ”

-- (Jigyasu, 2005, p.54)

Jigyasu turns to traditional, philosophical conceptualizations of disaster, one that still exists, but may be considered antithetical to the perspectives of the more secularized west.

Disaster as a social construct is a commonly shared perspective by many pioneers (E.L Quarantelli, Thomas E. Drabek and Charles Fritz) of the disasters field. David Alexander also shared this view of disaster as a social construct (Alexander, 2005, p.29). Disaster as a social construct is supported by Paul A. Boghossian's interpretation of social constructionism.

Boghossian says:

“[t]o say something is socially constructed “is to suggest that it is contingent on aspects of our social selves”

-- (Boghossian, n.d., n.p.)

This notion of disaster being socially constructed is in agreement with Jigyasu's point made earlier, which alludes to reality being constructed by the self. Thus, disaster and disaster perception is dependent upon social characteristics that are particular to a person or group. Ultimately, these understanding of disaster help shape disaster and emergency ideology.

The disaster perceptions presented directly above offer different perspectives that are pertinent to understanding disasters more generally, while also helping to understand other postmodern problems, or emergencies. Despite the many years dedicated to disaster research, there still is ambivalence in defining what is a disaster? In Canada the opioid epidemic is receiving more acknowledgment from the disasters field (academic and government). Opioid related misuse, overdose, addiction and death have been in the forefront of media headlines, and the healthcare community in Ontario. However, government officials have not yet put a name (a disaster, a emergency, or other identifier) to the opioid epidemic. In Ontario, the opioid epidemic

has proliferated, causing practitioners, academics, and other stakeholders to quibble over what this problem means to the emergency management community. As of late, the opioid epidemic has neither been classified as a hazard or emergency by any of Ontario's respective emergency management organizations. However the number of opioid related deaths is staggering, as Canada experienced about 4000 deaths in 2017, and about 3000 deaths in 2016 (Tam, 2018, p.221). It is important to take note that that the 4000 deaths in 2017 and 3000 deaths do not account for deaths caused from illicit usage of opioid. Despite, there being no declaration of emergency in association to the opioid epidemic by Ontario, the PHAC (Public Health Agency of Canada) and MOHLTC has and continues to play an important role in government coordinated response to the opioid epidemic. This initiative is led by the Health Canada's opioid response Team (Tam, 2018, p. 221).

There are variables (time and space) that help to inform society of the opioid epidemic and the negative consequences associated with opioid misuse and overdose. Time and space are important in determining whether the opioid epidemic is perceived as a disaster, a emergency, or neither. The epidemic has been a recurring concern for Ontario's healthcare community and has also been a newly emerging concern for the Ontario's emergency management community. On the one hand Ontario's opioid epidemic is considered non linear (temporal), because the consequences of this epidemic are cyclical in nature and difficult to eliminate. The opioid epidemic does not have a definite beginning or end. Locality is also important, and shapes how the epidemic is perceived. In Ontario, only 40 percent of deaths are caused by opioid misuse and overdose (Fischer, Vojtila & Rehm, 2017, n.p.). This is lower than the total deaths as a result of opioid misuse and overdose in provinces like British Columbia and Alberta (Fischer, Vojtila &

Rehm, 2017, n.p.). Whether the opioid epidemic is perceived as a disaster or emergency is dependent on the extent to which the now epidemic is seen as threat to a person or community in both time and space. The severity level (more or less intensity) and prominence the opioid epidemic is characterized by is an indicator of how people perceive the epidemic, or whether it will be prioritized, and managed by Ontario's emergency management practitioners.

Despite disaster perception being contingent on time and space, how a disaster or emergency is viewed is also unique to the individual or community. A positive and/ or negative connotation can be associated with disaster, depending on the risk-benefit ratio of a hazard. Disasters can pose harm to citizens and the wider earth community, but in turn it can also benefit a locale's re-growth, revive an ecosystem, provide mutual aid assistance, and initiate the building of new infrastructure. The opioid epidemic is still anew, and is recognized for the ambiguity it possesses. There are still ongoing debates of what the epidemic means to Ontario, for many Ontarians the opioid epidemic is used analogously with crisis, disaster, or emergency. Media headlines have largely contributed to pairing opioid with crisis, disaster, or emergency. Media representation of the opioid epidemic can influence how the world sees to the opioid epidemic, and whether or not they see it as a disaster or emergency. Different worldviews, socio-political beliefs, and bias can influence the way in which the opioid epidemic is interpreted. Thus, if media undermines or exaggerates the opioid epidemic for anything more than or less than the truth, this allows for the formation of both false and inaccurate perceptions amongst individual(s) or the community at large.

Perception of the opioid epidemic is also contingent on intersectional identifiers (sex, age, ethnicity, class, other) of the self, and social characteristics of a person or group. These

aspects shape perception, and reflect the way in which disaster is perceived. In a earlier section Jigyasu discusses how thoughts are influenced either consciously or subconsciously by religious philosophies, and even in the case of the opioid epidemic there is influence of religious philosophies, where groups may allude to opioid misuse as an act of a higher power, either representing good or evil. This notion further supports the idea of a disaster as a social construct. Disaster reality is personal, communal, and is co-constructed by various variables like time and space, and the cultural pluralism in Ontario. The opioid epidemic is socially constructed, and this can be attributed to the fact that all disciplines and professionals do not look at this epidemic as being disastrous, or an emergency. Instead, the opioid epidemic can be recognized as a nonroutine social problem, as this epidemic exemplifies what Gary A. Kreps and Thomas E. Drabek description of a nonroutine social problem (Kreps and Drabek, 1996, p.131-135). The opioid epidemic can be defined using its own terms, while being compared to other social problems too. To the health community this is a growing epidemic, however, whether or not this view will transpire and be adopted by other parts of society remains under speculation.

### **3.3 Slow Violence**

The “oxymoronic notion of slow violence was introduced in Rob Nixon’s (2006-2007) expository piece “Slow violence, gender and environmentalism of the poor”. Nixon conveys to his readers that slow violence is visible during cataclysmic events, that are characterized by descriptors such as: incremental, exponential, cause severe, undesirable, long-term effects. The author makes references to proponents of slow violence such as deforestation, desertification, all of which attribute to the cumulative problem, being–climate change (an example of slow violence) (Nixon, 2006-2007, p. 16). Nixon further elaborates by discussing the Green Belt

Movement, a movement in which slow violence served as a primary trope. The Green Belt Movement was originally founded by Wangari Maathai, and was established as a form of resilience to a repressive:

“struggle against illicit deforestation perpetrated by Kenya’s draconian regime”

-- (Nixon, 2006-2007, p.17)

Although, there was no immediate threat of deforestation or desertification in Kenya’s territory at the time, there was evidence of potential negative long-term consequences. These actions could severe Kenya’s long-term human and environmental prospects (Nixon, 2006-2007, p.17).

Thus, efforts to replant trees were underway in order to topple down Kenya’s authoritarian rule.

The motivation behind replantation was aimed at mitigating future risks because, as Nixon points out

“human and environmental casualties were most likely to be discounted”, whether it be by media, government, or by organizations

-- (Nixon, 2006-2007, p. 15)

He discusses the dichotomy of slow violence exhibited in Kenya, and the events of 9/11 in the United States. Nixon does not provide insights outlining how both scenarios are disasters in their own right, but he does detail the differences between them. Unlike the events in Kenya, the 9/11-terror attack resulted in thousands of fatalities instantaneously, and left many hundreds injured. The effects following 9/11 were immediate, and the pain and suffering was transparent as:

“the collapsing tower[s] was burned into the national psyche . . .”

-- (Nixon, 2006-2007, p. 15)

According to Nixon, there is a representational bias against slow violence, despite the fact that slow violence is simultaneously incremental and exponential, and the severity of the problem is no less a threat than hazards that cause negative ramifications from the onset.

This notion of slow violence has been recurring in disaster literature. For example, the Deepwater Horizon oil spill that took place on April 20, 2010, which led to the degradation of an ecosystem in the northern Gulf of Mexico, affecting various facets of the wider earth community (Beyer et al., 2016, p. 28). More than 2100 km (kilometres) of shoreline and coastal habitat were reportedly affected (Beyer et al., 2016, p.28). Nixon's notion of slow violence applies here, as the effects of the oil spill seem minimal, and not as consequential at first glance, but later reporting's suggest that there was a large concern for the long term impacts of large fish species, dead sea coral, sea turtles, cetaceans. When non-humans are affected, this in turn also affects the well being of those dependent on certain large fish for consumption and/or for the purpose of sales to generate revenue. Humans and non-humans are interconnected, and thus what affects the wider earth community can result in health scares, and undesirable social, economic, and environmental ramifications for humans.

The increase in total deaths and near deaths due to opioid misuse and overdoses is exacerbating in Ontario. A number of opioid related deaths are related to fentanyl products and illicit fentanyl products. In Canada, six pan- Canadian provinces with respective (coroner-based) data have been made available from 2010 to 2016 (Fischer, Vojtila & Rehm, 2017, p.109). The two western provinces: British Columbia and Alberta maintain the majority of opioid related deaths, while Ontario is associated with a minority (40 %) (Fischer, Vojtila & Rehm, 2017, p.109). However, this number is expected to grow, while uncertainty overarches affected

communities regarding the legitimacy of fentanyl related deaths accounted for due to the use of illicit fentanyl products (Fischer, Vojtila & Rehm, 2017, p.109). The opioid epidemic is a form of slow violence, as the number of deaths is growing incrementally, and exponentially. Though the effects of this epidemic are not as instantaneous as other events that have been declared an emergency or disaster, this does not negate the fact that the long-term consequences to Ontarians are destabilizing. Unlike the Green Belt movement, preventative actions or measures have yet to be sought in Ontario's emergency management community, or the different emergency management organizations within the different branches of the government of Canada.

### **3.4 Power Geometry of Time-Space Compression**

Doreen Massey introduces the concept of power geometry of time-space compression in her article, “A global sense of place” (1994). This concept uncovers the relationship between different social characteristics or intersectional identifiers (economic status, age,) of a person/group and mobility, access, and communication. Massey subliminally equates an individual or group, and their ability to move, have access and communicate, as modes of exercising power. However, there is an unequivocal disparity amongst different individuals and groups and their ability to exercise these different modes of power. She further elaborates, by suggesting that some people can initiate movement, others cannot, some are on the receiving end, and some are imprisoned by movement (Massey, 1994, n.p.). For example, members of society who “are both doing the moving and the communicating . . . [are partially in a] position of control, like those involved in the political sphere [and] hold more authority than those on the “receiving end of the spectrum” (Massey, 1994, n.p.). This thought further perpetuates the idea that mobility and communication as a form of control, or power can:

“actively weaken other people”

-- (Massey, 1994, n.p.)

The various modes of power are exercised through, can undermine, and spatially imprison other groups. The individuals or groups Massey alludes to as having the most movement and communication are often the people who maintain a high social class, with economic means. However, there are members of society who are mobile, but are not in position to effectively communicate or have the same accessibility to economic means or opportunities. These individuals or groups can be seen resisting the status quo prevalent to time and space. Massey further expands on this idea by making reference to an analogy, which describes:

“refugees from El Salvador or Guatemala and the undocumented migrant worker from Michoacan in Mexico . . . mak[ing] . . . a dash for it across the border into the US to grab a chance of new life”

-- (Massey, 1994, n.p.)

Despite, the fact that some refugees from El Salvador and Guatemala, and the migrant worker from Michoacan in Mexico do not have the attributes of class and affluence during the time of their escape, they are still able to practice autonomy through mobility. However, there are some limitations, as they cannot move around as freely, and without consequence as those that have class, status and economic means. Massey’s concept of power geometry of time-space compression shows how movement, access and communication are a means of control, or power enabling individual and groups to be able to initiate or not initiate actions. This is an important tool, and is applicable in the context of Ontario’s opioid epidemic.

Power geometry of time space compression affects society's social fabric in time and space. Massey's concept explores how power is exercised or not exercised amongst different social groups within society. In the case of the opioid epidemic, different groups (government, non-government, stakeholder, lay people) exercise control differently due to unique identifiers pertinent to each individual or group. The individuals and group with the most mobility, access and communication can initiate and maintain control in regards to whether or not policies addressing the opioid epidemic are more robust, whether the epidemic will be declared an emergency, or if more funding will be provided for the development and implementation of more mitigation measures and harm reduction. The individuals involved and responsible for the tasks directly above are people who are positioned at the top of the social hierarchy; these individuals are the policy makers, and the individuals within the different levels of government who put forth legally binding laws and are able to initiate reform. Some lay people find themselves at the receiving end of the opioid epidemic, and these individuals/groups find themselves having to sell illicit forms of opioid to meet their own/family economic needs. There are also people in society who find themselves imprisoned, as they are immobile due to opioid misuse and overdose; these are people who might be directly affected from opioid misuse and overdose. Then, there are people who maintain control (NGOs) and assist people with opioid misuse, overdose and addiction, but there are others who suppress the power of others, and thereby have the ability exercise power and make the important decisions (people who have the ability to create reform or not).

### 3.5 Risk

Different individuals and groups perceive and accept risk differently. Risk is ubiquitous, and according to Paul Slovic and Ellen Peters article, “Risk perception and affect” risk is stratified into two types: 1) risk as a feeling 2) risk as analysis (Slovic and Peters, 2006, p.322).

Risk as a feeling is described as:

“instinctive [,] and intuitive reactions to danger”

-- (Slovic and Peters, 2006, p.322)

They referred to this as the affect heuristic, because studies proved that the feeling of dread towards a hazard contributed to how the public perceived and accepted risk (Slovic and Peters, 2006, p. 322-23). Risk as analysis:

“is logical, reason oriented, and scientifically deliberated to tolerate risk assessment and decision making”

-- (Slovic and Peters, 2006, p.322)

Besides this, it is important to note that risk perception and acceptance is dependent on not only the hazard classification (natural, technological, human induced), but also the person(s) that would encounter the risk.

Risk is not only determined by empirical or qualitative evidence such as hazard classification, but quantitative data also helps shape risk perception. Quantitative measures are used to formulate and analyze the level of risk for current and future hazards, and aids in looking to determine prevention or regulatory measures for specific hazards. Practitioners and scholars in emergency management and related fields have formed a risk index in order to categorize and appropriately assess the risks associated with each hazard. There are variations amongst the risk

indexes, as there is no universal standard adopted by either Ontario or other organizations. However, there are models outlined by the province that are considered useful. Most municipalities and or organizations in Ontario recognize and voluntarily adopt the one offered by EMO when attempting to assess risk and determine perceived risk for a pertinent hazard. A risk assessment is performed using two variables (often using consequence and frequency), followed by plotting results in a model called a risk matrix (Ministry of Community Safety & Correctional Services, n.d. a, n.p.). According to Slovic et al., the assessment or what he refers to as an index can expand with additional properties that are determined based on hazard characteristics. Ultimately, this will account for risk perception and attitudes (Slovic et al., 1987, p.281). Slovic et al., goes on to reveal that the risk index can include a combination of qualitative and quantitative data. Examples include but are not limited to annual number of deaths caused by hazards each year, social/environment/economic/political consequences. EMO divided the consequence variable into six categories (social impacts, property damage, critical infrastructure service disruption/ impact, environmental damage, business/financial impact, and psychosocial impact (Ministry of Community Safety & Correctional Services, n.d. a, n.p.)

Risk perception at different stages (linear model, cyclic loop model) of a disaster or a pending emergency like the opioid epidemic is unique to the individual or group. This notion of perception being dependent on the person or group has been iterated many times within the disasters field; including in the, “what is a disaster ?” section of this paper. How a disaster or emergency is perceived and what it means at the individual or group level is also dependent on the audience. Dennis S. Mileti and Paul W. O’Brien outline in their article “Warnings during disaster: Normalizing communicated risk” (1992) the different characteristics that influence

perception ultimately resulting in how individual(s) frame risk: 1) network characteristics 2) resource characteristics 3) demographic characteristics. Network characteristics involve whether or not familial ties exist, if the individual maintains friends or relatives nearby (Mileti and O'Brien, 1992, p.42). Resource characteristics refer to whether a person has access to a mode of transportation or the economic means to relocate in a potential disaster scenario (Mileti and O'Brien, 1992, p.42). Lastly, demographic characteristics, such as sex, age, ethnicity, and social class, are essential and attribute to the way a person perceives risk (Mileti and O'Brien, 1992, p. 42). These characteristic groupings are key to understanding how individuals and/or groups will react, or whether they will accept a hazard and its associated risks.

Risk analysts, emergency management, and related fields determine risk utilizing different variables and methods. There is some slight variation on the method used depending on the discipline or organization. EMO utilizes this risk formula,  $R \text{ (Risk)} = C \text{ (Consequence)} \times F \text{ (Frequency)}$  (Ministry of Community Safety & Correctional Services, n.d. a, n.p.). However, it is noteworthy to understand that the standard risk formula has undergone significant changes. Risk is also in constant flux (risk can be prevented/ mitigated, transferred, avoided, eliminated), and there are debates on whether or not the changing risk (encompasses changes in frequency and vulnerability) can be accurately accounted for, or if changing risk should be used at all when calculating risk (Ministry of Community Safety & Correctional Services, n.d.a, n.p.).

### **3.6 Risk and the Opioid Epidemic**

Media and the literature available to the public regarding the opioid epidemic influence how the opioid epidemic is perceived in Ontario. There is ambiguity surrounding whether this epidemic will be denoted as an emergency, or a disaster. The Minister of Health has made

addressing the opioid epidemic a top priority (CBC news, 2017, n.p.). The epidemic has been alluded to in some instances as a crisis that requires interagency coordination and cooperation. However, perspectives regarding the epidemic are not homogenous. Neither has EMO or the Federal branch of the government of Canada referred to the opioid epidemic as an emergency. Risk is evaluated based on social characteristics of the person or group. As said by Mileti and O'Brien (1992) network characteristics, resource characteristics and demographic characteristics will ultimately shape the views of all members of society. Perceptions of epidemic pertaining to individuals and groups with more mobility, access and the ability to communicate will take precedence over other who do not, or those who have or exercise less control or power.

### **3.7 Vulnerability**

Susan Cutter et al. (2003) discusses the role of vulnerability within the context of emergencies and disasters, paying close attention to vulnerability in connection to environmental hazards and the associated risks. Vulnerability is commonly discussed in the literature alongside risk, but the literature also discusses the explicit relationship between vulnerability and various hazards. In addition, Cutter et al. puts an emphasis on the importance of social vulnerability in the article "Social vulnerability to environmental hazards", and defines it as the:

"potential for loss . . . [, and indicates that loss varies] amongst different social groups, [while] vulnerability also varies over time and space"

-- (Cutter, 2003, p.242)

Two concepts are introduced; what Cutter et al. refers to as social factors and place inequalities that are said to create socially vulnerable populations. Cutter et al. explains that social vulnerability is perceived as a byproduct of social inequality, which is an outcome of social

factors that shape the susceptibility of various groups to harm, but also helps to govern people's ability to respond to emergencies or disasters (Cutter, 2003, p. 243). Social inequality coexists with place inequality, as it too is a form of inequality, attributed by unique characteristics (urbanization, growth, and economic vitality) that impact the community, and creates social vulnerabilities.

In the US, social vulnerability had been and continues to be visible in areas affected by natural disasters like hurricane Katrina in 2005. Vulnerable communities were visible pre-Katrina, during Katrina, and remain visible several years after Katrina had made landfall. It was not unknown to government officials that the areas affected by Katrina could not withstand a category 5 storm. However, the safety of vulnerable communities living near or close to flood plain areas was ignored in order to satisfy another agenda, which would embetter the economy. These areas (Louisiana, Mississippi, New Orleans) maintained a large concentration of vulnerable groups. Not only were these vulnerable populations living on or near hazard prone living quarters, but access to resources and mobility was also limited. During Katrina members of society who were in a position of power and maintained control weakened the power of other individuals; these other individuals are those that reside close to or on floodplains. Here social vulnerability takes consideration of both socioeconomic and demographic factors that affect the resiliency of communities. Though, vulnerability is not just limited to the factors above. Vulnerability takes into account key identifiers of individuals including: class, race, gender, ethnicity, status which all can be telling of why some individuals live in disaster prone areas. These identifiers are also responsible for hindering or weakening the control people have in regards to: being able to move, have access, or being able to communicate. Hierarchization or

prioritization is dependent on who is exercising power (Massey, 1994, n.p.). According to Barry et al. (2011) studies indicate that before, during, and after a disaster; the socially vulnerable, are often affected by negative social implications, and are less likely to recover and most likely to experience death (Barry et al., 2011, n.p.). Since the time infrastructural renovations began towards building levees in order to sustain hurricanes identified as high on the Saffir-Simpson hurricane scale, the number of people in flood-prone areas has increased, with marginalized people in the most hazard-prone areas (along the lower Mississippi River) (Logan and Xu, 2015, n.p.). Communities such as the ones in New Orleans were inevitably vulnerable to a disaster like Katrina.

Niru Nirupama further discusses vulnerability using the PAR (pressure and release) model, which illustrates the progression of vulnerability, while also evaluating risk in the form of a flow chart. The model was adapted from the initial works of Weisner et al. (2004) (as cited by Nirupama, 2012, p. 105). This PAR model looks at the primary causes for vulnerability. Causes including limited access, which reiterates Massey's notion of limited access or no access, which she then equates, to having more power, less power, or no power. Nirupama discusses demographic characteristics like education, and various skills possessed by a person, and all of which can impact the level of control or power an individual or group has.

### **3.8 Vulnerability and Opioid Epidemic**

Vulnerability is visible in Ontario's opioid epidemic. As inferred to by Massey (1994), power is exercised by people in a position to move, maintain access, communicate, and maintain specific intersectional identifiers. Although it should be acknowledged that all these variables do not have to be enacted in order for power to be exercised. However, in the case of the opioid

epidemic, those working in different branches of government hold the power to declare the opioid epidemic as an emergency, they hold the power to put forth a mitigation and harm reduction agenda, and other efforts to remedy the consequences related to opioid misuse and overdose. Without the province setting a precedence in declaring an emergency, other emergency management offices may not choose to include the opioid epidemic as a hazard in their respective HIRA's, or develop preparedness and mitigation plans. The decision to not declare an emergency regarding the opioid epidemic hinders emergency management personnel from building contingency plans or supporting the healthcare community to their fullest capacity. This inaction leads to an increase in opioid abuse within different communities. However, Massey's notion power geometry of time-space compression holds true here, as those who have more control, which can be seen in the example provided above involving the province and civil society, weaken some individuals in society. Others are imprisoned by power and continue to suffer as a result of the lack of decision making from members working at the top of the government hierarchy. When member of government decide not to adopt response initiatives to address the opioid epidemic this can in turn lead to less awareness, less funding, limited resources, while also increasing the number of overdoses and deaths. According to a study that obtained a data set of lives lost within the time from 2006 to 2008 in Ontario, Canada, from toxicity or overdose reveal common characteristic of groups affected by the opioid epidemic. Between 2006 and 2008 58% (n=1359) of deaths were equated as being opioid related deaths (Madadi et al., 2013 p.2). Some groups were more susceptible to abusing opioids due to one or more reasons including not being able to exercise power through different modes of mobility, access, and communication, and due to intersectional identifiers. As iterated by Cutter et al. and

Nirupama, niche groups (with certain intersectional identifiers) are more vulnerable to opioid toxicity. In the case of the opioid epidemic vulnerable groups have characteristics of being: significantly younger, disproportionately male, and the cause of the death were more likely to be accidental (Bonnie et al., 2017, n.p.).

### **3.9 Nonroutine Events**

Gary A. Kreps and Thomas E. Drabek, authors of the article “Disasters are nonroutine social problems” (1996), frame disasters as nonroutine events. The article elaborates on what is considered a nonroutine event(s). Kreps et al. (1996) says some emergencies and disasters are nonroutine events:

“ . . . [which are events] in societies or their larger subsystems [because these events] involve conjunctions of historical conditions and social definitions of physical harm and social disruption. Among the key defining properties of such events are length of forewarning, magnitude of impact, scope of impact, and duration of impacts”

-- (Kreps and Drabek, 1996, p.219)

According to Kreps and Drabek (1996) the concept nonroutine enables individuals to understand disasters on their own terms:

“making them distinct from other types of collective stress situations”

-- (as cited by Drabek, 1989, p. 346-351)

Kreps et al. suggest that in the past sociologists:

“had focused on certain types of historical circumstances and ignored others (slower onset famine, epidemic, mass migrations)”

-- (Kreps and Drabek, 1996, p.132)

Analogous to the historical circumstances that were once ignored, Ontario's emergency management community and other work sectors are confronted by what can be referred to as a social problem/emergency in northern Ontario, and also recognized as the Attawapiskat suicide crisis. This crisis was not initially understood or labeled an emergency or disaster, but later received acknowledgement as an emergency. Though, the Attawapiskat suicide crisis maintains many dimensions, as it can also be interpreted as a nonroutine event.

The antecedents and consequences of the suicide crisis in this niche community is important to understand, as it will reveal the reasons that led the chief of Attawapiskat and the band council to declare an emergency declaration in regards to the suicide crisis, that was recognized by the government of Canada. The suicide crisis became a prominent concern because of the multiple attempted suicides in Attawapiskat, a remote First Nations reserve located in northern Ontario (Spurr, 2016, n.p.). Though the population of Attawapiskat is only about 2000 people; there were not enough health care personnel (doctors, nurses, mental health workers), or resources (beds in hospital, recreation center) to comfortably accommodate or respond to the needs of the community's youth, who were attempting to commit suicide (Spurr, 2016, n.p.). Attawapiskat's chief Bruce Shisheesh states that Attawapiskat experienced 11 suspected attempts of suicide over the course of 24 hours, and following day another five children made attempts (Spurr, 2016, n.p.).

“ . . . [T]he reserve had seen 100 attempts since last September, . . . and almost 30 in March alone. Seven of those involved [were] under [the age of] 14, and 43 of them involved people [were] under 25”

-- (Spurr, 2016, n.p.)

On April 9, 2016, Chief Bruce Shisheesh and the community band council declared a state of emergency when resources had been exhausted by an epidemic of suicide attempts on the reserve (Spurr, 2016, n.p.). Coincidentally, while the declaration was being signed off, the Attawapiskat hospital was overwhelmed with kids being assessed for possibly taking overdoses (Spurr, 2016, n.p.). Canada has a history of oppression and mistreatment of the First Nations, and the Aboriginal peoples of Canada. However, in order to amend the wrongdoings of the past, Prime Minister Justin Trudeau's:

“promise[ed to] rebuild the relationship with [the] [A]boriginal groups [, and] . . . create a new environment that makes it more likely Canadians will heed Attawapiskat's distress call”

-- (Spurr, 2016, n.p.)

At first there was ambivalence as to what Canada, and Ontario's response would be once the Chief signed off on the emergency declaration.

The Attawapiskat community quickly welcomed response efforts, which came in the form of:

“ elicited promises for long-term support from both the provincial and federal governments”. “ . . . The province pledged \$2 million in short-term aid and dispatched 13-member emergency assistance team that includes mental health workers, nurses and security personnel to help provide the reserve with round-the-clock health care”

-- (Spurr, 2016, n.p.)

However, for some residents of the reserve land, the support came a little too late (Spurr, 2016, n.p.). One resident explains how she hoped the response efforts came in September 2016,

because the response initiatives could have prevented her daughter from taking her own life (Spurr, 2016, n.p.). A few years after the declaration was signed, the promises made by the government have not been fully honoured. According to the CBC news, the promise to implement a youth centre has not been fulfilled (Barrera, 2018, n.p.). A youth center would aid in harm reduction and mitigation. A facility of this nature would seek to target the specific needs of the youth in the community. Already, the enclosed space of:

“parish hall is used as a shelter . . .to give the youth an escape—a warm, open and safe space. Here Hookimaw-Witt said she began holding arts nights to meet the gaping need in the community for programming specifically aimed at youth struggling with depression”

-- (Barrera, 2018, n.p.)

A larger youth center would provide an atmosphere to address specific mental health needs amongst the youth, take on more support staff and professionals, and the creation of more programs to aid in implementing suicide prevention and mitigation efforts. In the broader sense, the Attawapiskat crisis:

“involves conjunctions of historical conditions and social definitions of physical harm and social disruption”

-- (Kreps and Drabek, 1996, p. 219)

The Attawapiskat crisis sets the precedence for other atypical social problems and emergencies, or events that cause disruption to also be recognized as an emergency that needs to be managed by emergency management. The opioid epidemic in Ontario, maintains similar characteristics to the Attawapiskat suicide crisis. Both are characteristically social problems that are not

necessarily recognized as typical emergencies. As a result of the opioid epidemic, there are many negative implications, which only continue to worsen. Unlike the suicide crisis which has been declared an emergency; the opioid epidemic has yet to be declared an emergency. This further begs the questions why some social problems have been declared as emergencies that can be managed by emergency management, while others are still under consideration or entirely ignored. This leads us in to our next trope, regarding what will resiliency look like with respect to agencies managing the opioid epidemic, and moving forward who will be the key players and stakeholders actively involved in building resilience within the communities affected by the this epidemic.

### **3.10 Resilience in Emergency Management**

The Emergency management framework for Canada:

“defines resilience as the capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure”

-- (Government of Canada, 2018 a, n.p.)

Resiliency is seen discussed in Canada’s National Strategy for Critical infrastructure and the Emergency Management Framework for Canada. Resiliency in the context of a recovery program involves the development and implementation of measures to strengthen resilience, including building back better. In essence the recovery aspects include disaster risk reduction. Moreover, societal resilience focuses on adaptability and flexibility that occurs in the prevention and mitigation, preparedness, response and recovery functions (Ministers Responsible for Emergency Management, 2017, p.8).

### 3.11 Resilience in Ontario's Healthcare Sector

Ontario's MOHLTC have developed and established emergency planning and preparedness efforts aiming to:

“both maintain and continue to build capacity to manage and adapt to threats now and in the future”

-- (MOHLTC, 2009-2010, n.p.)

The plan at large aims to build a ready and resilient health system, for hospitals, paramedic services, and primary care organizations and public health units in Ontario's. The plan builds upon the rescinded EVD directives (MOHLTC, 2009-2010, n.p.)

The resilient health system has been sorted into three phases. Phase 1 involves the baseline requirements for maintaining a enhance level of health system resilience for an infectious disease threat (MOHLTC, 2009-2010, n.p.). Phase 2 constitutes strengthening readiness, which focuses on opportunities that will enhance the structures, capacity and skill to reduce risk and strength health care resilience (MOHLTC, 2009-2010, n.p.). Phase 3 targets building resilience, by emphasizing interdependencies between sectors and opportunities for collaborative planning and coordination to address vulnerabilities and reduce risk overall (MOHLTC, 2009-2010, n.p.). This phase will also include capacity building in the long term, in order to secure sustainability.

More specifically the plan administered by the MOHLTC in terms of achieving health system resilience includes awareness, which acknowledges the knowledge in term of strengths, assets, liabilities, vulnerabilities and threats, and making the necessary adjustment in real time (MOHLTC, 2009-2010, n.p.). Diversity and Self-regulation, allows for a higher threshold of

sources and more capabilities to draw upon. In essence, it can deal with situation and disruption without severe malfunction. Integration and Adaptation coordinate function and actions across systems and work collaboratively, with the capacity to adjust to change plan, and taking on new action or modifying behaviours. Lastly, they have a revitalization component to their resilience plan that provides more learning and continuing to adapt and grow based on experience (MOHLTC, 2009-2010, n.p.).

Resiliency is also the ability to reduce effects, and or the duration of the disruptive event. CAMH (Center for Addiction and Mental Health) offer programs to combat addiction. Two primary treatment options for addiction is opioid agonist therapies using methadone or buprenorphine (opioid medication), and addiction treatment counseling (withdrawal management, day treatment, mutual aid groups such as narcotics Anonymous) (CAMH, 2018, n.p.)

### **3.12 Opioid Epidemic–Resilience**

What resilience will look like for the opioid epidemic in Ontario will be dependent on multiple factors. It is important for inter collaboration to occur amongst the healthcare community and the wider emergency management community. Being robust and being able to recover is essential to this epidemic. This means a consensus on what the epidemic means to Ontarians on all platforms should be determined regardless of politics, and regardless of cost. Lastly:

“[r]esilience aims to minimize vulnerability, dependence and susceptibility by creating or strengthening social and physical capacity in the human and built-environment to cope with, adapt, respond to and recover and learn . . . [from problems, epidemic, emergencies]”

-- (Ministers Responsible for Emergency Management, 2017, p.12)

Future resilience for the opioid epidemic include being considerate of both short term and long term solutions, while paying close attention to vulnerable populations and other susceptibilities, and being inclusive of perspectives from different disciplines and schools of thought.

## **Chapter 4: Methodology**

### **4.1 Introduction**

This research study explored perspectives regarding the opioid epidemic in Ontario, while determining if the opioid epidemic could be managed by practices within emergency management. The research questions are as follows: 1) How do emergency management practitioners understand the opioid epidemic? 2) What (if any) emergency management activities have practitioners in southern Ontario been engaged in with respect to the opioid epidemic? 3) What are effective emergency management measures that they feel would address the opioid epidemic? Research in regards to emergency management and their roles with respect to the opioid epidemic in Ontario has been seldom explored. Due to the increase in the number of opioid related misuse, overdoses, severe addiction, and deaths in Ontario there is a demand for research to be performed regarding the opioid epidemic and probable measures that can be used to help remediate the adverse consequences associated with the opioid epidemic. It is important to understand the role of emergency management in relation to the opioid epidemic, and whether practices in emergency management can be used to manage the epidemic. This research will add to the already existing emergency management literature, but will also act as point of reference in other fields of study like social sciences, health studies, and other interdisciplinary studies, or fields of practice.

The primary research method for this study is qualitative. The qualitative approach adopted for my research was a phenomenology. According to John W. Creswell, the:

“ . . . basic purpose of using a phenomenological research approach is to attain a deep understanding of phenomenon as experienced by several individuals”

-- (Creswell, 2013, p.78)

The adaption of this approach for this study, enabled me to study and understand the lived experiences of emergency management practitioners/stakeholders, and their description of the essence of these experiences in relation to southern Ontario’s opioid epidemic (Creswell, 2013, p. 79). More importantly, it was necessary to recruit participants working in the field of emergency management and/or related fields, but to also recruit individuals that were or are presently involved with the opioid epidemic in varying capacities. The underlying intent of the research questions aimed to gain perspective and explore lived experiences of study participants in relation to Ontario’s opioid epidemic. Thus, a phenomenological approach was most appropriate for this study, because the primary research questions sought to determine how emergency management practitioners understand the opioid epidemic.

The interpretative framework employed for this study was social constructivism. The main objective of using this interpretive framework solely relied on gaining ubiquitous, but different perspectives of participants’ in regards to the opioid epidemic. The perceptions the participants’ held were a product of their interaction “with others (hence social construction) and through historical and cultural norms that operate in the individuals’ lives” (Creswell, 2013, p. 39). The social constructivist framework was used to then convey the different philosophical beliefs/assumptions. These philosophical beliefs are also referred to as paradigms, and they are as follows:

“ontology (the nature of reality), epistemology (what counts as knowledge and how knowledge claims are justified), axiology (the role of values in research), and methodology (the process of research)”

-- (Creswell, 2013, p.35)

The philosophical beliefs of the researcher can in fact inform qualitative research. The ontological beliefs of this study reflect a plethora of subjective realities that are co-constructed through the lived experiences of myself as the researcher and interactions with others in the field of emergency management. The epistemological beliefs in the study concur that reality is co-constructed between the researcher and the participants, and shaped by their individual experiences. The axiological stance honours individual values, and the values that are socially constructed. However, it is important to note that the axiology is value laden, as my own biases exist and may have an influence within the parameters of this research. Methodological beliefs include, but are not limited to an inductive approach, where ideas emerge through interviewing, observing, and analysis (Creswell, 2013, p.47).

## **4.2 Data Collection**

The participants involved in this study were emergency management practitioners or secondary informants who are considered stakeholders in the opioid epidemic. All participants are actively employed in the field of emergency management or a related field within Ontario. Participants were primarily employed at organizations or institutions in the government sector, and/or quasi- public sector within the field of emergency management. During each interview the primary researcher (myself), and the respective participant being interviewed were present. A total of six interviews were conducted, and the interviews took place in different cities in

southern Ontario. Before each interview I addressed confidentiality, and both the participant and myself signed two forms: 1) Informed consent for Participation in Study, 2) and Informed Consent for Digital Voice Recording. The interviews lasted between 15 minutes and one hour long in length. Questions were developed to gather basic demographic information, probe perspectives, gauge lived experiences, and discover challenges faced by participants in regards to their interactions with the opioid epidemic. The interview script consisted of six demographic questions, followed by nine open-ended, semi-structured questions. I was fully engaged during observation, taking observational notes during the interview in a notebook. I facilitated the dialogue and asked the questions, and on occasion asked follow up or probing questions. All interviews were audio recorded using a recording device. Participant recruitment began with a convenience sample of practitioners involved in emergency management. Initially, participants were recruited via email and LinkedIn (a professional social media platform) based on their expertise in managing community related disasters or emergencies, and public health emergencies. A snowball sampling method was also utilized to obtain other participants within emergency management and any stakeholders of the opioid epidemic. Eventually, interviews came to halt once saturation was reached. The sample size (n) of the study is six. Despite the small sample size, the interviews were in depth and allowed for a detailed analysis of the questions posed.

Demographic data permitted for the evaluation of credibility of sources and validity of responses. This data provided insight in terms of participants and their highest level of education received and how long they have maintained their current work position. The insight gained from the questions stated above allowed me to understand participants' level of expertise on the

subject matter and the knowledge they encompass within the field of emergency management. This, in turn, helped to determine data validity and reliability. However, biased answers or inaccurate answers are inevitable and could be present in this study.

### **4.3 Bias**

Bias within qualitative research affects the validity or reliability of findings. Bias cannot be completely avoided, however as the researcher and interviewer it is important to acknowledge bias throughout the study. As a researcher in the field of emergency management, I try not to carry my own biases. During this study, as the primary researcher I avoided sharing personal opinions during the interviews.

Interview questions were pre-written and integrated into the interview script. The research questions were reviewed and approved by the research supervisor. In this way introduction of bias through the use of language in the questions could be minimized. Since, the question did take the form of open-ended, semi-structured questions, there was leeway to ask questions not listed in the interview script that were considered relevant to the study.

Sample bias was avoided by recruiting participants that were representative of the research objectives. Though the primary method for recruitment was a convenience sample, a snowball method was also adopted in order to retrieve participants that would maintain intel regarding the subject matter, which ultimately contributed to the validity of the study.

### **4.4 Data analysis**

Data analysis took place through a coding process. Coding is described as a process:

“[f]orcing the researcher to make judgments about the meanings of contiguous blocks of text”

-- (Ryan and Bernard, 2000, p. 780)

Tasks employed in the study for coding data included sampling, identifying themes, creating code names (themes), marking texts, and constructing relationships among codes.

After each interview was completed, within 12 hours of completing the interview, a reflective exercise took place. In those exercises, interviews were carefully listened to and transcribed according to themes with respect to the purpose of the study and research question(s). Similar steps were taken for documenting and transcribing all six interviews. Participant interview data (audio and text) was then saved in a safe place, according to prescribed standards described in the informed consent documentation. Identifiers were assigned to each participant using anonymous gender-neutral pseudonym names.

Each set of interview data provided for a contiguous block of text, from which a list of summarized themes could be developed. Taken together, groupings/codes were developed and used to analyze the data. As a result of this analysis, specific motifs emerged which were redundant. These redundant motifs were then characterized as themes. Those themes were named with respect to addressing aspects of the research question. This data analysis method was then peer-reviewed by the academic supervisor of this study to ensure consistency with the interview data collected.

In closure, the coding allowed for a master list of primary themes to be devised. Each theme was subsequently supported by textual interview data and/or anonymized quotations to support the information presented in the findings and discussion chapters of this study.

## **4.5 Writing the Report**

Prior to reporting findings and writing the discussion chapter of this study in its entirety, reflexivity was utilized to critically examine and explore the research process; study the assumptions, biases and perspectives; and revisit feelings, past experiences, and social, political and professional beliefs.

The outline for the report was dependent on inclusivity of all topics relevant to the opioid epidemic and whether it can be managed by practices within emergency management. Participant quotes were illustrative, and interpreted and incorporated into the different chapters and sub-chapters. Therefore the structure of the study includes an Abstract, Introduction, Literature Review, Methodology/Methods, Findings, Discussion, Conclusion, References.

## **4.6 Limitations**

As iterated in an earlier section of this paper, the sample size of the study is relatively small, but the interviews conducted were in depth and provided both relevant and necessary insight. In the end, the sample size was  $n=6$ . However, even with that small sample size, as the interviews were approached as a phenomenological, qualitative study, rich data was collected. With the  $n=6$ , data analysis allowed for the merging of redundant themes collected from individual interviews. In future works, a study redesign to aim for a larger sample size could be considered.

During the participant recruitment phase, many participants were approached, but denied participation, or chose not to respond to the recruitment email. Reasons for not participating included a lack of time, or potential participants maintained that other responsibilities took precedence. I acknowledge that the opioid epidemic is a controversial public issue, and as a

result researchers can face challenges when attempting to recruit participants to discuss issues that are contentious, of which the opioid misuse and overdose are one of those. This situation could have contributed to the small number of participants willing to participate in the study. Also, it should be noted that a majority of participants made it known that their comments were representative of their own points of view, and informed by their education and professional experience(s), and not in any way reflective of the views of their places of work. It is also important to note that interview participants are primarily public sector stakeholders (emergency management practitioners, and /or health sector emergency management practitioners).

To address this limitation in future works, it can be suggested that one could expand the recruitment to persons representing the first responder sector, however such expansion of the recruitment base would expand what the definition of an emergency management practitioner means. In addition, shifting the study to a more longitudinal basis to attempt to allow for additional time for potential participants to both separate themselves from and reflect upon recent decisions and actions may perhaps lead to greater willingness to speak with researchers. However, such an approach may not necessarily allow for a feasible study to be completed within the time strictures established by the academic processes which govern this paper.

## **Chapter 5: Findings**

### **5.1 Introduction**

This findings chapter will serve to highlight the voices of the interview participants themselves. In the course of this study, it was found that the unique voices of the participants provided key insights for understanding the opioid epidemic. After a brief comment on methodological considerations behind the findings, the direct words and/or ideas of participants will be highlighted. As discussed in the methodology chapter, gender-neutral pseudonyms were used to anonymously identify persons who provided information to this study. Specifically, those persons are anonymously identified as:

- Sam, an emergency management practitioner
- Alex, has expertise in dual fields relevant to opioids, including emergency management.
- Blake, an emergency management practitioner
- Dylan, an emergency management stakeholder involved directly and indirectly with the opioid epidemic
- Charlie, an emergency management practitioner
- Erin, an emergency management practitioner

During the transcription and coding process certain data sets allowed for extraction of direct quotations that worked to summarize main themes gathered from the overall interviews. For Sam, Alex, Blake, and Dylan, relevant direct quotes were extracted – and those quotes are highlighted in this chapter. In the case of Charlie and Erin, representative themes and ideas are provided via paraphrasing.

This findings chapter allows for the voices of the participants to be presented separately in order to build a foundation on which the data gathered can be analyzed and discussed.

## 5.2 Sam Interview

Sam is an emergency management practitioner in southern Ontario. The data presented by Sam is relevant because of their expertise within the field of emergency management, and their ability to relate that expertise to the opioid epidemic.

Sam discussed characteristics relevant to the opioid epidemic, forcing practitioners in emergency management to question their level of involvement in managing the opioid epidemic.

Sam suggested that the:

“... opioid [epidemic] is not a sudden impact [hazard]... [, instead] it something that is slowly getting worse, it is long term, and is not going to get resolved very quickly...”

-- (Sam, personal communication, October 16, 2018)

In addition, Sam discussed the formation of a committee as an approach to manage the opioid epidemic, and states:

“ . . . [emergency management practitioners do] sit on a . . . committee. . . chaired by Public Health. . . which discusse[s] addiction prevention. . . , [and acts as a] harm reduction network. . . deal[ing] with opioid and other addictions as well. [Right now emergency management is in the preliminary stage of attempting to understand the opioid epidemic] . . . [while] performing assessments, gather[ing] statis[tics], trying to understand [the] crisis. . . ,[while determining the ] parameters and what [the] causes [are]. [Also,

determining why [the opioid epidemic is ] more severe ,. . . while looking at what other jurisdictions are doing. . . [,and use this as a] benchmark. . . [to] take action. . .”

-- (Sam, personal communication, October 16, 2018)

### **5.3 Alex Interview**

Alex is a stakeholder in the opioid epidemic in southern Ontario. Their expertise is in dual fields, one of which is in the field of emergency management. Alex discussed what response to the opioid epidemic would constitute, suggesting that:

“the opioid epidemic cannot be solved in isolation”

-- (Alex, personal communication, November 02, 2018)

### **5.4 Blake Interview**

Blake is a participant from southern Ontario, and in the field of emergency management. Blake introduced how certain measures implemented in Ontario have sought to reduce the implications of opioid epidemic. They said:

“the effect[s] of the epidemic in [our locale] might have been mitigated, because [the respective agencies within the healthcare community emulated] what [the health care community] did in British Columbia”

-- (Blake, personal communication, November 28, 2018)

### **5.5 Dylan Interview**

Dylan is another public sector stakeholder in emergency management, who has been involved both directly and indirectly with the opioid epidemic. They stated that they have been:

“involved in responding to three epidemics . . . including the opioid epidemic, saying . . . [we sought to] maintain situational awareness, [and] coordinat[ed] response efforts [in relation to the epidemic]”

-- (Dylan, personal communication, December 4, 2018)

Furthermore, Dylan, said, response to the opioid epidemic by emergency management acts as a transition.

They also expand on this by saying, “ [For instance], . . . an immediate issue [is brought to our attention,] that needs to be rectified by [the] [appropriate agencies] . . . long term. . . , [but] emergency management. . . serves as [a] short term [measure], [aiming to] . . . bridg[e] that gap . . . directing attention to gaps in policy. [If we were to] think about flooding. . . we have floods all the time . . . and through emergency management. . . [we respond] to floods . . . [which] indicate[s] to [elected officials, and other agencies that] . . . we need to invest time and money into [ mitigation . . . ]”

-- (Dylan, personal communication, December 4, 2018)

### **5.6 Charlie Interview**

Charlie is an emergency management practitioner, and informed the study by providing insight in regards to how participation in field of emergency management should be dependent on whether a municipality in Ontario is a upper-tier municipality, local municipality, lower-tier municipality, or single-tier (personal communication, December 17, 2018).

### **5.7 Erin Interview**

Erin is in the field of emergency management, and shares relevant insight regarding limits to emergency management practitioners and their involvement in the opioid epidemic.

They say, some municipalities do not have a robust emergency management team, or are not able to meet the legislative requirements for their emergency management program (compliance) demanded by the province (Erin, personal communication, December 18, 2018).

Following the findings chapter is the discussion chapter. The discussion chapter will utilize the information presented from the six interviews to further interpret and analyze the comments made in relation to the seven primary themes developed from the interviews.

## **Chapter 6: Discussion**

### **6.1 Introduction**

The overarching purpose of this study aims to understand the perspectives of Ontario's opioid epidemic, and whether emergency management practitioners, and stakeholders believe the epidemic can be managed by practices within emergency management.

This chapter will focus on the data collected from the six interviews and relate the information gathered to the following themes: 1) Understanding what is the opioid epidemic in the context of Emergency Management? 2) Opioid epidemic reform: Emergency management taking action 3) Collaboration and Communication 4) Politics Matters 5) Evolving field 6) Best practices in relation to the opioid epidemic 7) Focusing events. These themes were reflective of redundant comments that were present across the set of participant interviews.

### **6.2 Understanding what is the Opioid Epidemic in the Context of Emergency Management**

The perception and/or interpretation of the opioid epidemic, as a problem, crisis, emergency, and disaster and whether it should be managed by responsible agencies (emergency management) are dependent on specific population characteristics. Some groups are more vulnerable to the opioid epidemic than others. There are intersectional identifiers that are pertinent to an individual or community, such as: class, ethnicity, race, age, socioeconomic status to name a few. These intersectional identifiers are relevant to emergency management practitioners and the layperson. These identifiers also contribute to how interview participants perceive and interpret the opioid epidemic, and whether they believe the opioid epidemic can be managed by practices within emergency management. Mileti refers to these intersectional identifiers as demographic characteristics, and believes that these characteristics are essential to

how an individual or community perceives risk. Whether emergency management practitioners are part of the decision making process or not, or are involved in managing the opioid epidemic or not is influenced or shaped by intersectional identifiers. Demographic characteristics also determine whether a person or group is considered more or less vulnerable to the opioid epidemic. In an earlier section of this paper it was reported that vulnerable groups of the opioid epidemic include a significantly younger and disproportionately male population. For example, different branches of the government of Canada and other partners attended to vulnerable groups like the homeless community in parts of Toronto. Accommodations were made for the homeless communities by respective organizations by opening armouries in areas within close proximity of Toronto's safe injection sites (Dylan, personal communication, December 04, 2018). Dylan does not directly insinuate that the request to accommodate members of the homeless community near safe injection sites was due to individuals of the homeless community being prone to misuse or overdose. However, it can be presumed from Dylan's statement that there is an underlying reason that the request was made to locate members of the homeless community near the safe injection sites, as this would reduce anyone from the homeless population from potential misuse or overdose scenario. According to a Globe and Mail article "The crisis is not abating': Opioids killing more than 11 Canadians daily"(2018), poverty and homelessness are among the chief causes of the opioid crisis (Weeks, 2018, n.p.) The article asks its readers to shift the focus to issues of homelessness, which is also receiving staggering media attention, as advocacy groups in Toronto request for a declaration of an emergency for the homelessness crisis in Toronto (Weeks, 2018, n.p.).

Whether participants believe emergency management practitioners can manage the opioid epidemic is dependent on how participants perceive Ontario's population with respect to the notion of network characteristics. The notion of network characteristics is relevant to both emergency management practitioners and lay people. Network characteristics are suggestive of whether or not support is available, including access to friends and relatives nearby during a critical incident or disaster (Mileti and O'Brien, 1992, p.42). In the context of the opioid epidemic, it is important for users to maintain and have support because:

“[i]n many parts of the country, patients who use opioids cannot get treatment or counseling, even though they often have anxiety disorders, depression or other mental-health issues. . .”

-- (Weeks, 2018, n.p.)

“The number of individuals enrolled in OAT (Opioid Agonist Treatment) in Ontario, Canada, has increased from 6,000 patients to over 40,000 patients from the year 2000 to 2016”

-- (Morin et al., 2017, n.p.)

Patients enrolled in OAT are either encountering or could become vulnerable to further addiction and mental health challenges, or subject to death. Ultimately, network characteristics are beneficial for response and recovery purposes involving people who misuse and overdose as a result of opioids. Thus, it is important for both government and NGOs to maintain robust levels of support from other neighbouring municipalities, jurisdictions, and cross-organizational support. This means emergency management offices in the various municipalities should maintain pre-designated plans to manage a mass number of opioid related misuse and overdose

incidents, or ensure their cities maintain alternate modes of transportation for when a mass number of individuals are affected by the opioid epidemic and require immediate assistance to relocate to a hospital or injection site. Although first responders respond to opioid overdose related emergency calls; when a mass number of overdose incidents occur, and first responders are overwhelmed, the emergency management community should be prepared to help respond. It is vital for emergency management practitioners to maintain the necessary training/knowledge, and formulate their professional relationships ahead of an emergency or disaster scenario, so that when faced with the consequences of the opioid epidemic the city, municipality or township is resilient and can experience a smoother transition than they would have expected. If this level of support is not present the epidemic can quickly escalate causing an increase in the number of deaths.

It is important to understand and maintain a situational awareness of how the opioid epidemic in Ontario is understood. Individually each participant maintains unique understandings of the opioid epidemic. What Ontario's opioid epidemic means to these participants is dependent on or shaped by multiple factors. For example, participants of the study refer to the opioid epidemic differently in their responses (recognize and refer to opioid epidemic using different labels such as: a problem, a crisis, a emergency, or a disaster). This brings attention to the uncertainty and lack of homogeneity involved in labeling the opioid epidemic by emergency management practitioners or stakeholders. Participants allude to the various reasons for using different labels and/or verbiage to address the opioid epidemic. Dylan explains that the opioid epidemic is associated with a negative stigma associated to mental health. Dylan says:

“... there's obviously a lot of stigma around ... [the opioid epidemic, and people say,] oh you are an opioid user ... you have made bad decisions ... then you need to pick yourself by the bootstraps and do better ... , [and] there is still a stigma around mental health ... and [mental health] not being the same as physical health [ailments]. [People think] ... health is not ... an emergency management job, even though. ... [emergency management responds] to pandemics and epidemics all the time ... ”

-- (Dylan, personal communication, December 04, 2018)

This excerpt reveals how there are stigmas associated with people who use abuse opioids, while also suggesting that these stigmas influence or determine how individuals and groups view the epidemic. To the families and friends of opioid abusers, this epidemic may instead be an opioid emergency, but to someone who has no direct involvement, and believes they are not affected by this epidemic, it may not even be considered a concern. Dylan's excerpt above also suggests that some people in the field of emergency management believe that emergency management practitioners should address and/or manage the opioid epidemic. The excerpt also reveals that opioid misuse and overdose is a result of an individual's choice, and ultimately is the responsibility of the user to revert back, and discontinue use. Besides self-help, the primary domain responsible for individuals misusing opioids would be Ontario' healthcare agencies. However, the opioid epidemic is a multidimensional problem, and has many facets: it can be viewed as an addiction problem that is connected to mental health. It can also be considered a social problem that should be addressed not only by the healthcare community but the emergency management community. As noted in the findings chapter, for Charlie the participation or involvement of emergency management practitioners should be dependent on

whether a municipality in Ontario is an upper-tier municipality, local municipality, lower-tier municipality, or single-tier (personal communication, December 17, 2018). Charlie says, that each tier maintains its own resources and capabilities, suggesting that the involvement of emergency management practitioners is primarily dependent on their:

“ . . . resources. [Some municipalities or organizations have] . . .EMS [(Emergency Medical Services)] embedded [within their locale] . . . and . . . have a public health team . . . [, but] for another municipality . . . say a single -tier [municipality the opioid epidemic]. . . could be an emergency for them. . . just because they don't have the appropriate [resources or networks]. For example, [if we] take a remote community . . .with a higher incident rate . . . few resources . . .or fewer support, [that municipality] can very easily overwhelm their capabilities”

-- (Charlie, personal communication, December 17, 2018)

Charlie's introduction to the different tiers and their capabilities reiterates Mileti and O'Brien's notion of resource characteristics, which is reflective of whether a person has access to modes of transportation or the economic means to relocate in a potential disaster scenario, and the notion of network characteristics alluding to support that is available, including access to friends and relatives nearby during an incident or disaster (Mileti and O'Brien, 1992, p.42). Resource characteristics and network characteristics influence how individuals and groups frame risk, or perceive a hazard. How the opioid epidemic is perceived by emergency management practitioners at large, and what their level of involvement will be is determined by resources including how much human power they have at their disposal and the different networks they maintain. This is not to say that some locales do not already have resources, support networks,

and inter collaborative relationships within their emergency management offices and externally with their respective municipality, city, or township. Though, this cannot be said for all neighbouring municipalities, cities and townships in Ontario, as inter collaborative efforts are not always practiced, and not all locales have the appropriate resources or networks to manage or co-manage the opioid epidemic.

Sam describes their own understanding of the opioid epidemic, and the differentiation between their understanding of this epidemic versus other more traditional problems or emergencies that have been managed using practices within emergency management, such as tornadoes, floods, and hurricanes. Sam noted that the:

“... opioid [epidemic] is not a sudden impact [hazard] . . .[, instead] it something that is slowly getting worse, it is long term, and is not going to get resolved very quickly”

-- (Sam, personal communication, October 16, 2018)

These characteristics alluded to by Sam, is reinforced by Nixon’s concept of slow violence. Nixon describes slow violence as being visible during cataclysmic events, and uses descriptors such as: incremental, exponential, while causing severe, undesirable, long-term effects. There is a dichotomy between a natural hazard, like a hurricane that lasts a few days, and is a sudden impact event, and the opioid epidemic where the impact is not so sudden, and the implications have no end date (Sam, personal communication, October 16, 2018). The opioid epidemic is complex, because it is not linear (beginning, middle, and end), but cyclical in nature. For this reason emergency management as a practice is faced with a conundrum in terms of how to respond to a hazard of this type. Despite, not having all the solutions this does not eliminate their involvement and participation in combating the opioid epidemic.

Other participants also share their insight regarding the opioid epidemic, and why they do not recognize emergency management practitioners as being key players in the opioid epidemic. There is a common belief that has been formed amongst the emergency management community suggesting that the role of emergency management practitioners does not take priority in the opioid epidemic, because this particular epidemic is primarily within the domain of Ontario's healthcare community. The healthcare community does maintain their own emergency management health branch:

“with measures in place to help people get off their addictions . . .”

-- (Blake, personal communication, November 28, 2018)

, and this is because combating the opioid epidemic is seen as a priority issue for the health care community. A stakeholder of the epidemic within the healthcare community discusses the epidemic as not being a priority hazard on their respective HIRA, and how Ontario's healthcare community has already implemented certain measures in order to reduce the severity of the epidemic. As seen in the findings chapter Blake said, as a result of these measures:

“the effect[s] of the epidemic in [our locale] might have been mitigated, because [the respective agencies within the healthcare community emulated] what [the health care community] did in British Columbia”

-- (personal communication, November 28, 2018)

In retrospect, BC has set the precedence in declaring a public health emergency in response to increases in opioid misuse and overdoses, and an increase in drug use overall, and have developed robust mitigation and harm reduction plans, that have also been influential in the development of various strategies and policies by Ontario's respective agencies.

### **6.3 Opioid Epidemic Reform: Emergency Management Taking Action**

While there are beliefs supporting the notion that emergency management practitioners should not be responsible for managing the opioid epidemic, the counter argument proposes that emergency management practitioners should maintain a role in managing the opioid epidemic. The reform in emergency management involves taking action. These beliefs are not only reflected within the emergency management community, but other related fields including Ontario's healthcare community. As alluded to in the background section of the paper, Ontario has experienced an increase in the number of opioid related deaths. Deaths are a result of either prescription or illicit opioid misuse and overdose.

“The coroner's office revealed during the inquest that three to four Ontarians die of opioid overdoses daily, and that the number of deaths increased by 16 per cent in 2018 over 2017”

-- (Boisvert, 2018, n.p.)

Some participants believe there has not yet been a drastic increase in misuse or overdoses of opioids, indicating no major cause for concern, but this statistic provided by Boisvert indicates otherwise. In fact, the increase in lives lost due to opioid misuse and overdose was initially acknowledged by Janet Philpott, the former Federal Health Minister who formed a summit, which was held in response to the drastic increase in opioid related deaths (Driedger and Wiercigroch, n.d., n. p.). The creation of this summit forced a response from the appropriate agencies to prioritize, develop, and implement contingency and mitigation plans, while also establishing harm reduction efforts. Despite these efforts, there is still a demand for the active participation of other stakeholders of the opioid epidemic and Ontario's emergency management

practitioners in the different stages (preparedness, prevention, mitigation, response and recovery) of managing this epidemic. Emergency management practitioners have been previously involved in health emergencies where they have collaborated and maintained individual and unique roles and responsibilities in relation to the different phases of the emergency management cycle alongside the MOHLTC, Public Health Ontario, Health System Emergency Management Branch under the MOHLTC. According to Sam, emergency management practitioners:

“did a lot of pandemic planning [in response to the 2003 SARS [outbreak] . . . , [and also] . . . responded to H1N1”

-- (Sam, personal communication, October 16, 2018)

The health emergencies described immediately above are scenarios in which emergency management practitioners have maintained direct involvement while working alongside the MOHLTC, the emergency management health branch, and Public Health Ontario. Emergency management practitioners are not expected to respond and provide patient care for misuse or overdose per se, unless an emergency management practitioner is certified, and able to do so. Instead, emergency management practitioners can play a supporting role as in the case of previous health emergencies, or act as point of contact before, and during the opioid epidemic. Practitioners are expected to formulate relationships with different agencies and partners, and connect all respective and relevant agencies/key personnel to help manage this epidemic. Additionally, emergency management promotes:

“ongoing cooperation and communication between all levels of government”

-- (Government of Canada, 2018b, n.p.)

Emergency management in Ontario often uses IMS (Incident Management Systems), which is an effective model to practice cooperation, inter and intra collaboration and effective communication.

“IMS provides a standardized organizational structure, functions, processes and terminology for use at all levels of emergency response in Ontario, and promotes coordinated responses to all types of incidents . . .”

-- (Ministry of Community Safety & Correctional Services, n.d., n.p.)

As stated by the Ministry of Community Safety & Correctional Services, IMS can be used to respond to all incidents, which mean it can also be used to manage and respond to the opioid epidemic. Dylan speaks to what future developments and integration of mitigation measures will look like for practitioners in the field of emergency management in regards to the opioid epidemic. Dylan says:

“I don’t think that it's the responsibility of emergency management to handle the whole problem . . . in everything we respond to as Emergency Managers . . . we kind of offer a transition. [For instance], . . . an immediate issue [is brought to our attention,] that needs to be rectified by [the] [appropriate agencies]. . . long term . . ., [but] emergency management . . . serves as [a] short term [measure], [aiming to] . . .bridg[e] that gap . . . directing attention to gaps in policy. [If we were to] think about flooding. . . we have floods all the time . . .and through emergency management . . . [we respond] to floods . . . [which] indicate[s] to [elected officials, and other agencies that] . . . we need to invest time and money into [ mitigation] . . .”

-- (personal communication, December 04, 2018)

Similar to the way emergency management practitioners have responded to natural hazards like floods, managing the epidemic will require constant acknowledgement and indicating the impetus behind responding to this epidemic by practitioners in emergency management. There is no expectation that emergency management practitioners will fix and eliminate the associated risks relating to the opioid epidemic, as this may not be feasible given the characteristics of the opioid epidemic, and its similarity to other disastrous phenomena like climate change. As a result, government and NGOs will recognize that the epidemic is in fact a problem that requires proactive response. An appropriate response to the epidemic will involve more time, money, and resources. These will be the incentives that help to establish a platform for awareness, training and exercise, and planning to address the epidemic short term. Acknowledging the epidemic is not the only strategy that leads to awareness and enacting action, as consultation amongst emergency management practitioners and stakeholders is also seen as both necessary for bringing awareness and taking action. There are subliminal references to how participants foresee practitioners and their involvement and participation in managing the epidemic.

Erin suggests that:

“ . . . [there is] a benefit in consulting with emergency managers or the [designated] CAO (Chief Administrative Officer) . . . ”

-- (personal communication, December 18, 2018)

These conversations provide more insight and new knowledge to assess the epidemic, and determine the necessary steps required to become a more resilient society. Sam adds to this by saying:

“ . . . [emergency management practitioners do] sit on a . . . committee . . . chaired by Public Health . . . which discusse[s] addiction prevention . . . , [and acts as a] harm reduction network . . . deal[ing] with opioid and other addictions as well. [Right now emergency management is in the preliminary stage of [attempting to understand the opioid epidemic]. . . [while] performing assessments, gather[ing] statis[tics], trying to understand [the] crisis . . . , [while determining the ] parameters and what [the] causes [are]. [Also, determining why [the opioid epidemic is] more severe , . . . while looking at what other jurisdictions are doing. . . [,and use this as a] benchmark . . . [to] take action”

-- (personal communication, October 16, 2018)

The establishment of committees helps to bridge the gap between views and /or perceptions regarding the role of emergency management practitioners in relation to Ontario’s opioid epidemic between the healthcare community and the emergency management community.

#### **6.4 Collaboration and Communication**

Both collaboration and communication have been vital to the field of emergency management since the very beginning. According to Gilja Havard, collaboration occurs when two or more actors work to achieve shared aims and objectives (Havard, 2013, p.6). The incorporation of two or more agencies working together reinforces collaboration, which is essential to resiliency. Resilience in the context of the opioid epidemic means:

“ . . . [minimization of] vulnerability, dependence and susceptibility by creating or strengthening social and physical capacity in the human and built-environment to cope with, adapt, respond to and recover and learn . . . [from the opioid epidemic]”

-- (Ministers Responsible for Emergency Management, 2017, p.12)

Communication is equally important in managing the epidemic, and is described by Havard (2013) as:

“ . . . the exchange of information between two or more individuals irrespective of the medium”

-- (as cited by Salas, Sims and Burke, 2005, p. 567)

In order to meet the demands of an organized response to the opioid epidemic both collaboration and communication are necessary. Collaborative efforts amongst the healthcare community and the emergency management community have been apparent in previous planning, mitigation, and response efforts to health emergencies. In past health emergency scenarios, Ontario maintained coordinated responses involving both the healthcare community and emergency management community, and from these responses individuals and groups have taken away lessons learned. These lessons learned provide insight, and have enabled individuals to improve their response and different aspects of their involvement (decision making, information sharing, procedures, routines, communication technology, resource allocation, collaboration, leadership, teamwork, knowledge, trust, information gather, outsourcing information, redundancy plans etc.) in future emergency or disaster scenarios. An example of a coordinated and collaborative response was during the SARS outbreak, which was primarily managed by Ontario’s health care community, but had also initiated the support of multiple other agencies (including the emergency management community). This health emergency set the precedence for emergency management practitioners to be actively involved in health related problems/ emergencies, and acted as one of the first instances where emergency management practitioners played an active supporting role. During the SARS response emergency management practitioners:

“helped out people being quarantined. [One could notice symptoms for SARS before a person] became contagious. [There] was voluntary quarantine [routine in effect] . . . , and [citizens were informed to call the respective health agency to notify the agency that they were in quarantine . . . , and in response to the call emergency management would help out in any way they could by working with Red Cross and city officials in providing supplies]. We worked with Red Cross, [brought supplies to each home, left it on the porches or door steps of resident homes, followed by a phone call to let residents know the supplies have been dropped off]”

-- (Sam, personal communication, October 16, 2018)

Similarly, during H1N1, emergency management practitioners worked with nearby hospitals and the broader healthcare community within the area to respond to the community and their needs. The city utilized a community center as a flu assessment clinic. This had not only contained the spread of disease, but also mitigated the workload on the community hospital(s) (Sam, personal communication, October 16, 2018). Despite the fact that Ontario’s healthcare community is mandated to maintain an emergency management program which came out of the outbreak of SARS (Erin, personal communication, December 18, 2018); the level of preparedness and collaborative response efforts during SARS and H1N1 indicate that emergency management practitioners in Ontario did hold primary roles in those particular health emergencies.

Unlike the outbreak of SARS, and H1N1, emergency management practitioners are not regarded as being key personnel as far as being involved in response efforts to Ontario’s opioid epidemic. Currently, some practitioners find themselves immersed in the preliminary stages of

preparing, planning, and determining the roles and responsibilities of emergency management practitioners. Regardless of which phase of the emergency management cycle is under analysis; there will always be a demand for inter-collaboration and effective communication in any response emergency management has done, and will do. Emergency management practitioners have been exercising these concepts in other emergency and disasters scenarios, and are willing to emulate what was done in other response efforts to respond to Ontario's Opioid epidemic. According to Alex, the opioid epidemic cannot be solved in isolation (Alex, personal communication, November 02, 2018). Thus, there is a need for inter-collaboration, and starting conversations that merge different thought processes, and perspectives, ultimately enabling people to find common ground and discover probable short term and long terms solutions.

According to Havard (2013) notions of collaboration and communication are especially critical for ERS (Emergency Response System) to be well functioning both internally in an organization and with individuals and teams from other organizations (inter-organizational) (as cited by Schaafstal et al., 2001, n.p.; Chen et al., 2007, n.p.). According to Sam, when SARS was ongoing, it was important for municipalities to create a BCP to maintain a robust internal emergency management team (Sam, personal communication, October 16, 2018). If members of the emergency management team were infected, plans were made to have alternates for each position (Sam, personal communication, October 16, 2018). The BCP aimed to determine critical functions, determine facilities to relocate staff if needed, amongst others objectives. An agency must be organized for intra- and inter-collaboration to occur and effective communication to take place. Organization within emergency management agencies was visible when assessment clinics were established during H1N1. This delayed and weakened the spread of the virus, and

mitigated the stressors and workload experienced by the hospital setting. Though, in the scenarios above a level of robustness was maintained, this is not seen in response efforts related to the opioid epidemic by emergency management practitioners. In the case of the opioid epidemic there are limitations that hinder a collaborative response from occurring. Members of the healthcare community and emergency management community do maintain different views of what the roles and responsibilities of practitioners should be in regards to the opioid epidemic. Response to the opioid epidemic could be feasible through the adoption of IMS and specific skill sets possessed by emergency management practitioners. However, these have not been directly stated by participant, or expressed by the emergency management community in Ontario. One stakeholder suggests that if the epidemic in Ontario were to:

“ . . . spike [like in the case in BC] emergency management response [may be necessary] . . . to help coordinate those different agencies . . . ”

-- (Blake, personal communication, November 28, 2018)

Also, there are different views on whether emergency management should manage the epidemic due to other limitations, such as people and their inability to be willing to collaborate. Without collaboration, issues regarding lack of access to information and lack of resources become prominent followed by ineffective communication required for decision-making and allocation of resources and delegation of roles.

Perspectives on whether emergency management should manage the epidemic differ, because on an operations level the healthcare community and emergency management community vary. The healthcare emergency management branch under the MOHLTC does not maintain best practices, and the implementation of best practices is in fact necessary. Best

practices involve mandating the use of standardized response approaches. Similarly the emergency management does not maintain universal best practices that can be implemented when performing coordinated responses with Ontario's healthcare agencies. There are differences between both the healthcare community and the emergency management community in terms of organizational structure and the approaches adopted to respond to an emergency more generally. The healthcare community may maintain slightly different objectives than emergency management practitioners. Though, surely there is a resemblance in objectives and use of IMS. This was iterated by Charlie, when they said, Public health would request the help of emergency management, and utilize IMS to respond to emergencies in the past (Charlie, personal communication, December 17, 2018). Havard further explains organizational structure in Norway in relation to ERS. He explains the different types of organizations: established organizations, expanding organizations, extending organizations, and emergency groups (Havard, 2013, p.7).

“Expanding organizations are characterized by having routine tasks in emergencies, but the limited everyday organization needs to be scaled up by mobilizing personnel”

-- (Havard, 2013, p.7)

Expanding organizations are those that do not maintain routine tasks, but maintain their basic organizations during emergencies. The last category, emergent groups have no formal structure or tasks but represent groups of varying sizes that collectively respond to an emergency or crisis (Havard, 2013, p.7). Although, Havard explains this within the context of ERS in Norway, these types of organizations are also apparent in the field of emergency management and healthcare in Ontario. Within healthcare we have MOHLTC and Public Health as being established

organizations. Similarly, the emergency management community also have established organizations like Public Safety Canada, Emergency Management Ontario, 13 ministries, and 444 municipalities that maintain an emergency management office that respond to emergencies and disaster within their own parameters, and assist in cross jurisdictional affairs as well. Even though these organization may be established organizations, there are factors related to an organization such as money, time, and resources, ability to exercise control, that can either embetter the organization's preparedness, prevention, mitigation, response and recovery, or make it feeble.

### **6.5 Politics Matters**

In Ontario, the political sphere acts as an organizational construct under which various legislation and policies are developed. These can either help to remediate the opioid epidemic or be counterintuitive for the opioid epidemic. The actions taken or not taken in terms of policy development regarding the opioid epidemic changes depending on the agenda of the elected party in power. Another consideration is declaring an emergency regarding the opioid epidemic in Ontario. According to Erin, declaring an emergency does not guarantee the allocation of funds, although it does add more pressure to the responsible agencies to act, while bringing forth more awareness to the opioid epidemic (Erin, personal communication, December 18, 2018). However, it will be useful in increasing opioid awareness and amplifies pressure on the healthcare community to do more regarding response. A declaration will however eliminate ongoing disputes amongst or between the various agencies and stakeholders of whether emergency management practitioners should manage the opioid epidemic. A declaration will also reduce any disputes surrounding the various perceptions of the opioid epidemic as a crisis, a

hazard, an epidemic, an emergency, or all. A declaration of an emergency could solve this dispute. Moreover, a declaration will relieve any misconception about the epidemic only affecting opioid users, as opioid misuse and overdose affect the community at large. Misuse and overdose can affect the economy, family bonds, as well as people's mental health (Dylan, personal communication, December 04, 2018). There is chance that other nonroutine events, social problems, or emergencies would stem from the opioid epidemic. Thus, a declaration of an emergency will bring awareness to potential problem arising from the opioid epidemic to Ontarians, but also make valid the urgency in addressing the epidemic.

In Ontario, elected officials within municipalities are key to the decision-making and allocation of resources and human power available to emergency management practitioners. According to Erin, some municipalities do not have a robust emergency management team, or are not able to meet the legislative requirements for their emergency management program (compliance) demanded by the province (personal communication, December 18, 2018). Thus, a lack of human power and resources can hinder emergency management practitioners from building the emergency management programs further by including the opioid epidemic as a hazard while developing mitigation plan(s) in response to the opioid epidemic. Adding to the portfolio may require more personnel, which would include an increase in the annual budget allocated for an emergency management office. This would mean the budget would require a reassessment. The potential for a budget increase would be dependent on elected officials and whether they support the opioid epidemic as a priority issue, that should be integrated into the respective municipalities HIRA and a responsibility for emergency management practitioner's. Elected official analyze how much time and money would be required to address the hazard, and

whether it benefits the larger agenda, or would it be a liability. Both time and money go hand in hand as these factors can either move a motion forward helping to address the opioid epidemic, or not.

In the political sphere policies, legislation, and motions for reform is supported by mobility, access (money, resources, and time), and communication (decision-making), and are also notably important to emergency management practitioners in terms of managing the opioid epidemic. As alluded to by Massey (1994), power is exercised through mobility, access, and communication. For instance, government officials are required to provide money, and resources to have the safe injection sites in Toronto available to users, so they may administer opioids in a safe way. However, with the change of an election cycle, newly elected officials may make the decision to:

“shutdown safe injection sites if elected officials are not in agreement with the site(s) acting as a safe place to administer opioids. Thus, there is a “need for better legislation . . . to keep the injection sites available . . . [as] safe injection sites do not promote drug use. . . they. . . creat[e] a safe environment for people who are addicted to use in a safe manner”  
-- (Erin, personal communication, December 18, 2018)

Access to resources, mobility, and communication is limited if the appropriate government authorities do not provide access, or a platform for active communication, or the ability to create change. Sam speaks to the role of elected officials, and how important their decisions are in impacting the actions of emergency management practitioners'. Without access to money and resources there is no guarantee that the emergency management program initiatives developed the year prior will be sustained into the next year (Sam, personal communication, October 16,

2018). The power exercised through mobility, access, and communications are essential for reform.

## **6.6 Evolving Field**

Although, in Ontario there are the respective health agencies that have developed and established harm reduction and mitigation efforts to remediate the opioid epidemic; there is a need to take steps to involve or permit the emergency management community to take action within the parameters of their own scope of work. Some participants reveal that their respective organization's HIRA do not include the opioid epidemic as a current hazard facing their community. According to Sam, their current HIRA does not give precedence to the opioid epidemic, as their respective locale does not currently show signs of concern regarding opioid misuse or overdose (Sam, personal communication, October 16, 2018). However, Sam believes if new projections on opioid misuse, overdose, and death become evident and continue to increase, this would lead their respective agency to enlist the opioid epidemic as a hazard in their HIRA (Sam, personal communication, October 16, 2018). Similarly, Charlie also reveals that the opioid epidemic is not currently an area of concern for their locale, but they do stratify the opioid epidemic as a hazard under the grouping health emergencies in their HIRA (personal communication, December 17, 2018). Charlie alludes to their fantastic EMS and Public Health team, who are able to manage the consequences of the epidemic because it is within their capacity to do so (Charlie, personal communication, December 17, 2018). Charlie says:

“[the] Public Health team has been able to manage it . . . we are occasionally brought to the table . . . , [as] we have skill sets that will be of use to them, [and in the case of this epidemic] . . . they would take lead and we would support them. However if

consequences of the opioid were to drastically increase, there would be an activation of the EOC and inter collaboration amongst EMS, Public Health and [emergency management] would occur”

-- (Charlie, personal communication, December 17, 2018)

On a provincial level, the last risk assessment process was performed in 2012, based on emergencies experienced in Ontario up to 2009 (Office of the Auditor General of Ontario, n.d., p.243). Since then, the provincial emergency management program has not yet assessed the emergencies that have occurred in the past eight years (Office of the Auditor General of Ontario, n.d., p.243). As iterated before, common types of hazards include natural, technological, and human made hazards, but this does not negate the fact that the field of emergency management in Ontario has encountered and continues to encounter social problems/emergencies. The opioid epidemic has been attributed to as a social problem, or even a nonroutine event, but is still managed by the various health agencies and the Health System Emergency Management Branch under the MOHLTC due to the nature of the problem and its health related characteristics. However, there is an impetus for skills possessed by emergency management practitioners to be enacted. Emergency management practitioners maintain the necessary knowledge and skills to perform tasks in mitigation and harm reduction that are applicable when managing the opioid epidemic. Charlie notes:

“ we have assisted Public Health in pandemic planning”

-- (personal communication, December 17, 2018).

Emergency management practitioners are key players as they are able to perform collaborative efforts, develop plans and take action in areas of preparedness, prevention, mitigation, response,

and recovery. However, the current approach utilized by EMO, the ministries, and municipalities can be seen as problematic because it involves undertaking risk assessment processes independently of each other (Office of the Auditor General of Ontario, n.d., p.225-26). In this same way, the level of collaboration between and amongst both the emergency management community, and healthcare community regarding the opioid epidemic is seldom. Sam notes that there are some active steps being taken to be inclusive of the emergency management community by the healthcare community. Healthcare agencies are moving towards having emergency management practitioners sit in on various committees seeking to promote and bring awareness to addiction prevention and dealing with opioids and other addictions (Sam, personal communication, October 16, 2018). Though the creation of this committee is fairly new, and the committee itself is also in a preliminary and assessment phase. Nonetheless, these committees are essential as they act as a platform to not only promote inter collaboration between the healthcare community and emergency management community in Ontario, but slowly move individuals away from working in silos. In emergency management best practices involves mandating the use of standardized response approaches, including standard organizational structure, functions, processes and terminology for use at all levels of the response (Office of the Auditor General of Ontario, n.d., p. 243). Best practices in emergency management have identified that the risk assessment processes should be performed collaboratively to enhance discussion and understanding of the hazard—in this case the opioid epidemic, its associated risks and vulnerabilities and the affects on the different communities, and its preparedness and mitigation priorities (Office of the Auditor General of Ontario, n.d., p. 243).

“A collaborative approach will enable [both the emergency management community and healthcare community] to fully understand the risk on a local and provincial level”

-- (Office of the Auditor General of Ontario, n.d., p. 226/243).

The goal of emergency management is to keep Ontarians safe and decrease the overall impact of any emergency or disaster. Thus the province, respective ministries, municipalities, and other stakeholders should be prepared and able to respond to any emergency including the opioid epidemic. A declaration of an emergency regarding the opioid epidemic will permit the emergency management community to be collaborative with the health care community, and play proactive roles across the province. In emergency management there are no universal best practices per se, but the maintenance of a baseline standard for emergency management programs will eventually be beneficial during a collaborative response to the opioid epidemic. Consultation of what best practices look like universally in the healthcare sector and emergency management sector will make for easier response when performing collaborative response in the future.

The incorporation of leaders in emergency management who can facilitate emergencies and disasters that intersect a variety of classifications (natural, technological, human induced, social) is vital. Maintaining leaders that encompass qualities belonging to a variety of niches would allow for improved synergy. In the case of the SARS outbreak, it was on the initiative of Dr. Jim Young, then the Commissioner of Public Safety and Security, that Ontario declared the emergency (Campbell, 2006, p. 355). Dr. Young was well respected in the medical and hospital community, and maintained the credibility that was necessary for a public health emergency manager. His credibility was derived from his experiences during a number of emergencies

including the 1998 ice storm, and his ability to work with coroners, forensic labs, and police services (Campbell, 2006, p.357). Though, there cannot be any wishful thinking that we can rely on the person in charge to have the credentials of Dr. Young when managing the opioid epidemic. However, it is vital that the CEMC or the CEMC alternate, maintain the necessary skills, and hold the necessary credentials to manage a disaster or emergency scenario of different classifications. In order for emergency management practitioners to actively participate, it is not only about having the right person(s) involved but the right support systems and resource. It is important that in a medical emergency the chief medical officer of health should be in charge. The director of emergency management and/or CEMC, and other emergency management practitioners should be involved in public health emergencies, but their level of control should be deferred in the case of a health related emergency.

Policies and legal frameworks need to cater to the opioid epidemic in its fullest capacity, not be amended to suit the shift in political ideologies with every election. As alluded to by Morin et al., policy development cannot be reactive, as it must be framed in such a way that avoids existing stigmas associated with the epidemic (Morin et al., 2017, n.p.).

Although the province has some measures in place to prepare for and respond to emergencies there are weaknesses in the emergency management programs across the province and in EMO's oversight and coordination of emergency management programs, potentially making Ontario vulnerable if a large scale emergency were to occur (Office of the Auditor General of Ontario, n.d., p.225).

## **6.7 A Need for Best Practices in Relation to the Opioid Epidemic**

There is no implementation of best practices or universal standards within the Health System Emergency Management Branch. However, according to Blake, there are future plans in place for Ontario to eventually maintain universal best practices in this part of the health sector (personal communication, November 28, 2018). Blake also makes note that collaboration is difficult when there are a lack of best practices, or these existing standards are not implemented and used accordingly (personal communication, November 28, 2018). In terms of best practices within emergency management, work is still underway, as both lessons learned and best practices are being derived from training and exercises as well as from response and recovery experiences (Government of Canada, 2006, n.p.). If in the future best practices are formed in relation to collaborative responses, then all personnel should maintain the necessary training to administer naloxone, similar to the plans formed to build a standardized provincial training program by Ontario's MOHLTC. Besides the skill sets and certifications emergency management already possess such as first aid and CPR (Cardiopulmonary Resuscitation), new skill sets and certification can be adopted.

Moreover, there is a demand for a document reflecting best practices in response to the opioid epidemic because identifying these best practices will initiate collaboration with other stakeholders; but also will lead to the implementation of changes in how future preparedness and response to the opioid epidemic will take place. According to Blake, when there are no robust best practices within an organization, this does in turn inhibit effective response (personal communication, November 28, 2018). Blake's reference to lack of best practices is significant because emergency response plans have not been updated to reflect current events, operations, or

to include current information, best practices or lessons learned from past emergencies (Office of the Auditor General of Ontario, n.d., p.226). In recent times, the province has been viewing best practices from other jurisdictions in order to consult with stakeholders on steps to transform emergency management governance (Office of the Auditor General of Ontario, n.d., p.228). Traditionally, decision making in emergency management governance and the healthcare sector have emulated a top-bottom approach. Both emergency management and the healthcare community do however maintain a rapport with other agencies in the form of working groups, and focus groups which have allowed for the adoption of a bottom-up approach for decision making. Ontario is also known to use a bottom up approach for emergency response: as municipalities manage and are mainly involved with local emergencies, but they can request provincial assistance resources if needed (Office of the Auditor General of Ontario, n.d., p.225).

Since the last Auditor General's report, there have been steps taken forward to identify areas of improvement in emergency management and best practices (including response plans being updated regularly to incorporate program changes and current best practices such as the effective use of social media) (Office of the Auditor General of Ontario, n.d., p.248). Adopting a bottom up approach to building best practices would make for better overall response and better synchronization amongst organizations in terms of their internal /external coordination, communication, and cooperation efforts. However, contrasting views regarding the role of emergency management practitioners in managing the opioid epidemic still exist. Erin suggests, that emergency management should not manage the opioid epidemic per se, but perhaps emergency management can play a supporting role instead (Erin, personal communication, December 18, 2018).

“Emergency management could have designated staff attending to and addressing concerns regarding the opioid epidemic, because emergency management practitioners do already oversee all types of hazards, and maintain multiple other roles responsibilities . . . it may become overwhelming”

-- (Erin, personal communication, December 18, 2018)

Emergency management practitioners in government sector do maintain their own limitations in meeting their own emergency management program requirements, and other factors including lack of budgetary needs, short of staff, and other reasons (Erin, personal communication, December 18, 2018).

Changes to remediate the opioid epidemic could be prompted by a larger budget, and more resources (humans, more injection sites, social programs). For instance, there are:

“smoking cessation clinics, and alcohol specialists who perform policies and recommendations . . .”

-- (Erin, personal communication, December 18, 2018)

Similar programs should be developed in order to combat the opioid epidemic. In Ontario every four years newly elected officials come into power in different parts of Ontario, thus the political agenda also experiences reform. This means changes to existing opioid policies and changes regarding opportunities for emergency management to exercise control in the opioid epidemic and collaborate with Ontario’s healthcare community may be revoked.

## 6.8 Focusing Event

Focusing events like the opioid epidemic can be used as a point of reference to transform existing policies or create new policies. Thomas Birkland explains what is meant by a focusing event in his article titled, “Focusing events, mobilization, and agenda”. Birkland describes a focusing event as:

“. . . an event that is sudden; relatively uncommon; can be reasonably defined as harmful or revealing the possibility of potentially greater future harms; has harms that are concentrated in a particular geographical area or community of interest; and that is known to policy makers and the public simultaneously”

-- (Birkland, 1998, p.54)

The characteristics of the opioid epidemic include: being uncommon to the emergency management community, the opioid epidemic is encountered within Ontario, and is harmful in nature. All these characteristics are analogous to characteristics pertinent to a focusing event as described by Birkland.

“The number of opioid related deaths is increasing, and in Ontario from January to October 2017, there were over 1000 opioid-related deaths, and this was considered a significant rise from 2016”

-- (Ontario College of Pharmacists, 2018, n.p.)

Moreover, this focusing event has been responsible in the establishment of various strategies initiated in Ontario including the establishment of quality standard by HQO (Health Quality Ontario), which sought to address opioid prescribing for both acute and chronic pain management, and opioid disorder treatment to provide instruction for prescribing practices

(Ontario College of Pharmacists, 2018, n.p.). The development of the policy was initialized once the corresponding agencies concerned with the focusing event:

“interest groups, government and NGO [sought to identify concerns brought forward by the opioid epidemic] . . .”, and as a result instigated policy reform

-- (Ontario College of Pharmacists, 2018, n.p.)

The older policies are replaced with new more innovative policies as the epidemic continues to change on the basis of population and locale. Earlier there was the Ontario Narcotic Safety and Awareness Act (2011), which promoted appropriate prescribing and dispensing practices for narcotics more generally, identifying and reducing the abuse of these drugs, and reducing addiction and death from the abuse or misuse of these drugs (Ontario College of Pharmacists, 2018, n.p.). This was later replaced by the Ontario College of Pharmacists when they implemented the opioid strategy as result of the overdoses and deaths. The Opioid strategy focuses on advancing opioid related education, harm reduction initiatives, strategies to prevent opioid use disorder, and promoting quality assurance specific to opioid security and dispensing (Ontario College of Pharmacists, 2018, n.p.). Strategies and policies serve as areas that help to alleviate the consequences of the opioid epidemic. More specifically, there is an emphasis on forming strategies and policies during the early phases of the epidemic including preparedness, prevention and mitigation. Most focusing events change the dominant issues on the agenda in a policy domain, they can lead to interest group mobilization, and agenda setting. Strategies and policies are imperative, but policies must be true to fidelity, as there is a need to know policies are effective and address current trends regarding opioid misuse, overdose, addiction and death per population relating to prescription and illicit opioid misuse for each locale within Ontario.

Emergency management can contribute to define the focusing event and play a role in developing strategies that will be effective in addressing the associated problems with opioid misuse, overdose, addiction and death within each locale and, vulnerable communities across the province.

## **Chapter 7: Conclusion**

### **7.1 Introduction**

This last chapter will summarize my study findings, by answering the following research questions: 1) How do Emergency Management Practitioners understand the opioid epidemic? 2) What (if any) emergency management activities have practitioners in southern Ontario been engaged in with respect to the opioid epidemic? 3) What are effective emergency management measures that they feel would address the opioid epidemic?

### **7.2 Diversity in Perceptions and Interpretations**

Perceptions and interpretations of how emergency management practitioners understand the opioid epidemic remain diverse. On the one hand, some participants reveal that the opioid epidemic is a relevant concern within their respective locale in Ontario, but they do not make remarks suggesting that the opioid epidemic is a hazard or emergency that has prompted the direct involvement of emergency management practitioners. The research participants maintained an overarching perception that the management of the opioid epidemic fell under the domain of Ontario's healthcare community. Also, participants reveal that despite the fact that their respective locales within Ontario are not necessarily showing signs for concern regarding the opioid epidemic, they do perceive the opioid epidemic to be a nonroutine, social problem. Participants share their willingness to include the opioid epidemic in their respective HIRA if the number of opioid misuse, overdose, and deaths were to drastically increase. Although participants did not clearly define the parameters of how they would determine what a drastic increase would look like in order to base their decision on whether to use practices within the

field of emergency management to take action, and manage Ontario's opioid epidemic. The incorporation of the opioid epidemic into a community's HIRA would mean that emergency management practitioners would be held accountable to build mitigation plans, form preparedness initiatives to inform the public of the opioid epidemic, provide public education about the opioid epidemic in schools across Ontario, and ultimately look to devising strategic measures to reduce the serious harm and high death toll related to the opioid epidemic.

Moreover, perceptions of the epidemic are influenced and determined by many factors including time and space. Time is a key component in determining whether emergency management practitioners manage this epidemic or not, because the opioid epidemic may not have been a prevalent concern for the emergency management community before. Instead, the opioid epidemic may have only become a pressing issue in recent times, as the important conversations regarding the opioid epidemic are now taking place in the field of emergency management.

Geographic location is also a large determinant as to whether or not the opioid epidemic is a prevalent issue that requires management by emergency management practitioners. If a locale in Ontario has no indication via statistical evidence of its population being affected by opioid related misuse, overdoses, or deaths, then the emergency management community specific to that area has no cause to take further action. It would be presumed that the community is not facing an epidemic at the current time, and if signs do become slightly visible; Ontario's healthcare sector will play a primary role in managing the consequences of the opioid epidemic.

Mileti's notions of network characteristics, resources characteristics, and demographic characteristics determine whether an individual or agency within emergency management is able to manage or not manage the opioid epidemic. Whereas, Massey's concept of power geometry of

time space compression affects how power is exercised through various modes (mobility, access, and communication) in the decision making process of emergency management practitioners and whether they maintain direct involvement in management of the opioid epidemic via preparedness, prevention, mitigation, response and recovery. Whether or not emergency management practitioners can manage the opioid epidemic is circumstantial, as there will always be factors to either promote or limit their ability to act. Ultimately, it is dependent on individual and organizational perception of the epidemic from the perspective of the emergency management practitioner(s), and their willingness to want to address the opioid epidemic.

### **7.3 Effective Measures**

The activities emergency management practitioners have been engaged in regarding the opioid epidemic varies upon location and is specific to the emergency management practitioner. Some participants state their own interests and willingness to be involved in the management of the opioid epidemic in some capacity. These participants have made claims regarding their involvement. For example, it is revealed by Sam that a new committee founded by Public Health has been formed consisting of emergency management practitioners and healthcare community personnel in the hopes of addressing opioid misuse and overdose (personal communication, October 16, 2018) . The initial start up of the committee and participation of emergency management practitioners demonstrates the willingness of both communities to collaborate and discuss strategies in relation to mitigation and harm reduction to address the opioid epidemic. The committee is also able to assess and determine the role of emergency management practitioners in a mutual manner. The committee is in its early stages, and is currently focused on assessing the opioid epidemic. However, there is a need for more initiatives similar to the

committee to be formed. Additionally, it has been iterated that a universal best practice is under development involving the healthcare community and emergency management community, which can be used to respond to multi stakeholder responses. This can be beneficial for future response to the opioid epidemic, or similar nonroutine social problems.

#### **7.4 Future Actions**

Future proposals of what measures would be most appropriate or probable to rectify the effects of the opioid epidemic include ongoing discussions amongst emergency management practitioners to determine what their roles should be going forward, and whether practitioners should play a supporting role, or maintain their own platform to help manage the opioid epidemic more holistically. Additionally, decisions regarding a declaration of an emergency for the opioid epidemic should be determine, as this will bring more awareness publicly to the opioid epidemic. Furthermore, there is need for the development of training and exercises (related to the opioid epidemic) that are collaboratively built by all stakeholders of the opioid epidemic and offered to not only members of the healthcare community, and first responders, but also made available to emergency management practitioners. It is not unlikely for emergency management practitioners to be working within the healthcare sector, or organizations affiliated with health. Individuals working in these health spheres receive certifications and training specific to pandemic and epidemic planning, and this same training should be made available to emergency management practitioners outside of healthcare. This enables individuals to adopt the necessary skill sets and knowledge to play robust roles in responding to the opioid epidemic. The development and implementation of training (administering naloxone, knowing appropriate PPE,

counseling) and exercises (mock disaster exercise) are techniques that can fall under emergency planning and preparedness practices.

This research also presents new insight in regards to limitations encountered by emergency management practitioners and their ability to appropriately manage the epidemic. Data is available to both healthcare professionals and emergency management practitioners in terms of the number of misuses, overdoses, addiction, and deaths, related to the opioid epidemic in the different areas of Ontario. However, organizations in emergency management must be privy to information that reflects up to date trends and current statistics related to the opioid epidemic. Being aware of recent and accurate data will provide emergency management practitioners with the appropriate knowledge with respect to direct implications the opioid epidemic has on a community, and whether emergency management practitioners should take action to participate in managing the opioid epidemic. In this way there is no speculation of whether the opioid epidemic is affecting a specific community or not.

### **7.5 Conclusion – Emerging Perspectives**

For emergency management practitioners the opioid epidemic is a nonroutine, social problem that is also a form of slow violence given its unique characteristics. The opioid epidemic is not a sudden impact event, and maintains severe long-term consequences. Emergency management practitioners have been familiar with managing emergencies and disasters that are sudden in nature like specific natural hazards, and technological hazards, or human made hazards. However, as the field of emergency management evolves problems and emergencies that are considered unconventional will only continue to increase in occurrence. According to Mileti, the:

“ world is . . . increasingly complex and interconnected . . .and [a]ttempts to manage the hazardous nature of the world have followed a traditional planning model: study the problem, develop alternatives, choose one, and move on to the next problem. This model views hazards as relatively static and sees mitigation as an upward, positive, and linear trend . . . that will decrease the grand total of losses in the future. However,. . . mitigation must become a process fed by the continuous acquisition of . . . new knowledge from different fields”

-- (Mileti, 1999, p.27)

Thus, there is an impetus for emergency management practitioners to be proactive by contributing to the field through collaboration amongst different disciplines that ultimately help in managing the opioid epidemic.

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