WHAT ARE THE IMPACTS WHEN PRIMARY CARE PROVIDERS DIMINISH STIGMA FOR PATIENTS WITH OPIOID USE DISORDER IN BRITISH COLUMBIA?

by

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Abstract

Stigma is a complex phenomenon with a myriad of detrimental health and social impacts that are not fully studied or understood. Persistent stigma exists towards individuals who have opioid use disorder (OUD) in British Columbia. OUD is a chronic, relapsing, clinical condition that has been identified as one of the most challenging substance use disorders. For those affected, they must also endure the consequences of stigma that promote barriers to health care, health and social inequalities, diminished quality of life as well as increased morbidity and mortality. The current unremitting opioid overdose crisis in British Columbia further emphasizes the importance of eradicating stigma towards individuals who use opioids and/or suffer from OUD, as untreated OUD is fueling this multifaceted public health emergency. For these reasons, an integrative literature review has been conducted to identify how primary care providers in British Columbia can address the intersecting stigmas for individuals suffering OUD. The results are discussed within the context of primary health care in British Columbia. Whittemore and Knafl's approach to the integrative literature review was utilized in this study to review eleven pertinent articles. The findings suggest that stigma occurs on varying levels for individuals with OUD that serve to reinforce each other and manifest as discrimination, mistrust, social distancing, minimized advocacy, unequal access to health care and suboptimal health care. Further, the findings indicated that the role of primary care providers may be instrumental in eradicating stigma in a timely manner. Recommendations for primary care providers to dismantle the stigma associated with OUD are discussed, and specific strategies for the primary care setting are presented.

Keywords: Opioid use disorder, stigma, discrimination, primary health care, primary care provider

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Glossary of Terms

- Analogue: a chemical that is similar in structure to another chemical and shares similar effects on the body as the original chemical.
- Analgesia: loss of sensation of pain resulting from an interruption in the nervous system pathway between the sensory system and brain.
- Criminalization: act of making an action criminal by making it illegal. Can also refer to treating an individual or a group of individuals as criminals if they are associated or found to be engaging in an illegal activity.
- Decriminalization: removal of an action or behaviour from the scope of the criminal justice system. In drug policy, refers to a spectrum of approaches that remove criminal sanctions associated with drug possession.
- Discrimination: unjust, unequal, different or prejudicial treatment of an individual or group of individuals based on characteristics such as mental illness, race, sex or age. Withholds or limits access to opportunities, benefits, and advantages available to other members of society.
- Diversion: any non-intended or non-medical use a prescription opioid or use by any individual other than the individual it was prescribed.
- Harm Reduction: policies and programs that aim to minimize immediate health, social and economic harms associated with the use of psychoactive substances, without necessary requiring a goal of abstinence or a decrease in substance use. Examples include reduced transmission of infectious diseases and overdose mortality by needle and syringe exchange programs and supervised injection or consumption services.
- Illegal Opioid: illegally manufactured opioids that are not subjected to regulations or quality control measures and are typically mixed (or 'cut') with potentially harmful substances and contaminants to increase volume and profit in illegal drug market. Common examples are street heroin, fentanyl, carfentanil, morphine, and oxycodone. May also be in the form of counterfeit tablets pressed to look like pharmaceutical grade opioids.
- Marginalization: treatment of individuals or groups as insignificant or peripheralized on the basis of their identities, associations, experiences, and environments.
- Misuse: the use of a medication for nonmedical purposes or for other reasons other than prescribed. Misuse can be willful or unintentional use in a manner not consistent with medical guidelines, such as altering dosing or sharing prescription opioids which may have harmful consequences.

Opiate: compounds naturally derived from juice of opium poppies, for example morphine.

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- Opioid: any substance with the ability to bind to opioid receptors and alter neural signal transmission, suppressing ability to feel pain. At higher doses, opioids cause feelings of euphoria and respiratory depression. Opioids may be prescribed or obtained illegally and can be blocked by opioid receptor antagonists such as naloxone. Opioids can be synthetic (fentanyl), semi-synthetic (hydromorphone) or naturally derived (morphine). Opioids can be consumed via ingestion, inhalation, transdermal delivery, or subcutaneous, intramuscular or intravenous injection.
- Opioid Agonist: any substance that binds to and activates opioid receptors, providing relief from withdrawal symptoms and cravings for individuals with opioid use disorder and pain relief if used for pain management.
- Opioid Agonist Treatment: evidence-based treatment for opioid use disorder, which includes administration of opioid agonists to alleviate withdrawal symptoms. Part of a comprehensive treatment plan for opioid use disorder, which also includes psychological and social support.
- Opioid Antagonist: a substance that binds to opioid receptors and blocks the receptor, preventing the body from responding to opioids. For example, naloxone may be used as an intramuscular injection to rapidly displace opioid agonists from receptors in an opioid overdose situation.
- Opioid Receptor: the site within the central and peripheral nervous systems that opioids bind to producing their effects.
- Opioid Use Disorder: a chronic, relapsing condition characterized by at least two symptoms listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria for opioid use disorder. This includes taking opioids in amounts larger or longer than intended, craving or strong desire to use opioids, and persistent desire or unsuccessful efforts to cut down or control opioid use.
- People First Language: humanizing terminology that acknowledges someone as a person before describing their personal attributes or health conditions. It does not identify people by secondary or incidental qualities or conditions. For example: instead of 'opioid addict' use 'person with opioid use disorder'.
- Primary Care: typically, the initial point of contact between a patient and a health care professional where the majority of non-acute health problems are treated, ideally providing continuity, integration of health care services and/or referral to specialists.
- Primary Care Provider: health care professional, usually a general practitioner physician or nurse practitioner, who provides primary care.
- Primary Health Care: a broader term that includes primary care; refers to a comprehensive, universally accessible spectrum of health care that focus on patient centered care and provides diagnostic, curative, rehabilitative, supportive and palliative services. Population

based approaches are also employed to promote health and prevent illness and injury. All determinants of health are addressed in this model.

- Social Determinant of Health: conditions in the environments in which people are born, live, learn, work, play, and age. Includes factors such as socioeconomic status, education, neighbourhood and physical environment, employment, social supports, healthy behaviours, and access to health care.
- Stereotype: over-generalized belief about a particular category of individuals, an expectation that people might have about every person of a particular group.
- Trauma Informed Care: provision of health care that is sensitive to the effects of trauma and works to avoid re-traumatization. Ensures safety, trust, choice, collaboration and building on strengths and skills

Chapter I: Introduction

The World Health Organization has identified that illegally obtained substance use disorders are the number one stigmatized condition amongst several frequently stigmatized social issues, including criminal activity (Kelly et al., 2016). Canada is reflective of this, with substance use disorders recognized as the most highly stigmatized health condition, with damaging impacts that are understudied and not fully understood (Kelly et al., 2016; Khenti et al., 2019; Kulesza et al., 2017). Traditionally, stigma associated with drug use was thought to serve as a deterrent for use, but it is increasingly apparent that the stigmatization of people who use drugs has ultimately led to poorer health outcomes and is therefore closely related to the determinants of health. The tendency of strong moral and criminal justice views surrounding drug use disorders have overshadowed their legitimacy as a medical illness, creating a unique stigma and divide from other health conditions (Stuart, 2019).

Currently, an escalating opioid crisis exists across Canada, with almost 4000 opioid related deaths in 2017, most involving illegal opioid analogues (Korowynk et al., 2019). In British Columbia, the monthly drug overdose death toll stubbornly persists above historical averages despite a declared public health emergency in 2016, and upscaled harm reduction services (Tyndall, 2018). Untreated opioid use disorder (OUD) is fueling this crisis and both public and professional stigma have been recognized as barriers to delivering optimal care and evidenced based treatment to individuals with OUD (British Columbia, 2016). The associated stigma may contribute to delaying appropriate help-seeking behaviors or the termination of treatment for a treatable problem (Goodyear et al., 2018). Further, the ongoing heightened awareness of opioid use may be fostering an unintended consequence of perpetuating the associated stigma. This stigma persists as OUD is perceived as a 'choice' whereby affected individuals are capable of exercising control over their opioid use (Kelly et al., 2016). This perception has translated into a lack of support from the public for harm reduction activities, as well as the continued use of damaging labels for people who use substances, including 'abuser', 'addict', 'drug seeker', or 'junkie', terms which reinforce existing barriers. Additionally, the medical diagnosis of 'opioid addiction' inflicts an individual with higher responsibility for their disease and supports the perception of their opioid use as voluntary behaviour (Goodyear et al., 2018). For these reasons, this paper will exclude the use of such pejorative terms in efforts to ensure this work does not enhance or add to stigma for those suffering OUD by any means. These negative attitudes are a major source of stress as well as an immense disadvantage for those who are stigmatized, as evidenced by population health inequities across multiple social and physical health domains (Hatzenbuehler et al., 2013; Tsai et al., 2019).

In 2016, the Canadian Medical Association and Canadian Psychiatric Association gave a joint key recommendation to promote equal access to health care, treatment, and recovery for those with mental health and substance use disorders that articulated the identification and elimination of stigma within health care systems (Khenti et al., 2019). Furthermore, the British Columbia Provincial Health Officer has also made it a provincial priority to de-stigmatize people who use drugs in response to the unremitting opioid overdose crisis, as up to four British Columbians per day continue to die from a preventable overdose (Office of the Provincial Health Officer, 2019). In spite of these appeals for change, it has proven difficult to stop stigma altogether and it continues to persist within the British Columbia with OUD is scarce and effective treatment options for OUD, while available, are underutilized (Office of the Provincial Health Officer, 2019; Stuart, 2019). Most often the first point of contact for those seeking help

with a substance use disorder is in primary care and evidence has strongly recommended that patients with OUD are best managed in supportive primary care practices, similarly to other chronic diseases (Korowynk et al., 2019). For this reason, it is vital that primary care providers in British Columbia are well informed of the immense and devastating impacts of stigma, especially when it may be intentionally or inadvertently inhibiting access to services for those struggling with OUD. The purpose of this integrated literature review is to answer the clinical query: *What are the impacts when primary care providers diminish stigma for patients with opioid use disorder in British Columbia*?

In this paper I will provide background on the concept of stigma, its origin, evolving definition, interrelated concepts, how it can be experienced, its relevance to individuals with OUD and primary care providers in British Columbia. I will then review opioids and their use in British Columbia, the diagnosis of OUD, evidence-based OUD treatment and the relevance of this to primary care providers in British Columbia. The paper will also then discuss the local impacts of stigma in the province's primary health care settings and how this is enforcing barriers to optimal care for individuals with OUD. Additionally, the approach to the search for relevant literature to answer the clinical question will be described, followed by a critical analysis of the chosen relevant literature. A discussion of the findings will inform primary care providers to improve treatment access, engagement and retention for individuals with OUD. In conclusion, the limitations of this paper will be addressed and considerations for future research will be recommended.

Chapter II: Background and Context

This chapter of the paper will provide background on the concept of stigma, the context of primary health care in British Columbia, the use of opioids, and the relevance of stigma in primary care for patients with OUD in British Columbia. Thorough descriptions of the variables of interest will provide necessary context to facilitate the subsequent stages of the review. By encompassing these related variables, the problem the integrative literature review aims to address will be clearly identified, while rationalizing the purpose of the review (Whittemore & Knafl, 2005).

History of Stigma

Stigma is a complex phenomenon, as such varying definitions have been described within the literature. The term originated in ancient Greece and referred to bodily signs made using cuts or burns into the body meant to expose something unusual and bad about the moral status of the bearer (Goffman, 1963). Through the use of this visual aid, slaves, criminals, or traitors were then publicised as blemished persons, who were to be avoided, especially in public places (Goffman, 1963). In the 1950s, social psychologists recognized stigma as a situation where an individual is "disqualified from full social acceptance" (Goffman, 1963, p. 5). Alternative and elaborate conceptual definitions are found within the literature since the late sociologist Erving Goffman inspired further research after publishing in 1963 on the nature, sources, and consequences of stigma. He referred to the term as "an attribute that is deeply discrediting" (Goffman, 1963, p. 13), reducing a whole person to a tainted or discounted one. Ongoing research contributions related to stigma have been multidisciplinary in origin since the concept can be applied to a wide array of unique circumstances. This has allowed differing descriptions of its conceptualization; however, large overlap exists across disciplines (Link & Phelan, 2001). It is important to note that despite the ongoing refinements and varying definitions, the negative impacts of stigma are repeatedly demonstrated on the lives of those who are stigmatized.

In Goffman's (1963) work, he recognizes and provides a definition of stigma as it relates to social constructs. He acknowledges that individuals tend to mindlessly create an anticipation of normative expectations of how individuals or strangers should be and, subsequently, their probable expectations of the person's attributes are either fulfilled or not fulfilled (Goffman, 1963). This concept relates heavily to the social identities that are established by society: if the expectations of the anticipated identity are met or if there are attributes that make the individual different from their available categories in a less desirable manner, this person then becomes reduced and has the attribute of stigma (Goffman, 1963). Goffman (1963) suggests those attributes that create stigma should be considered in the way they relate to the manner of relationships between individuals as well as how they are associated with the social settings that establish categories of people likely to be encountered there. A stigmatizing attribute to one person may be a usual, expected feature of another and, for this reason, it is neither creditable nor discreditable to be a stigmatizing attribute (Goffman, 1963). A stigma is then "really a special kind of relationship between attribute and stereotype" (Goffman, 1963, p. 14).

The alternative definitions of stigma after Goffman's publication continue to significantly relate to social interaction. Stafford & Scott (1986) proposed that stigma "is a characteristic of persons that is contrary to a norm of a social unit" (as cited in Link & Phelan, 2001, p. 364). A norm is the "shared belief that a person ought to behave in a certain way at a certain time" (Link & Phelan, 2001, p. 365). Another influential definition that relates to Goffman's work around social structure is that stigma is the relationship between a mark or attribute that links a person to undesirable characteristics or stereotypes (Link & Phelan, 2001). Stigmatization is also said to

occur when a person possesses (or is believed to possess) an "attribute or characteristic that conveys a social identity that is devalued in a particular social context" (Major & O'Brien, 2005). These definitions seem to agree that those who are stigmatized have, or are suspected to have, a feature that indicates them as different or incongruous, which causes them to be devalued from the perspective of others. These evaluations are then widely shared amongst the members of a common group or culture and develop the basis for excluding or avoiding individuals of the stereotyped category (Major & O'Brien, 2005). The stigmatizing attribute can be visible or invisible, controllable or uncontrollable, and may be linked to appearance, behaviours, or a group membership (Major & O'Brien, 2005). Examples include a physical deformity, illegal substance use, or race. These examples reinforce that stigma within a socially constructed definition is relationship- and context-specific and not vested within a person, but that these discrediting attributes are found almost everywhere in society (Major & O'Brien, 2005; Goffman, 1963).

Link and Phelan chose to define stigma as a convergence of interrelated components: "stigma exists when elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them" (2001, p. 377). Through the linking of behaviours and social elements, this definition is lengthier and more complex, but the authors recognize their definition has been derived with specific goals in mind, including its coherence when applied to groups that are referred to as stigmatized groups (Link & Phelan, 2001). The authors argue that for stigmatization to occur, power must be exercised and can occur in social, economic, and political domains (Link & Phelan, 2001).

Stigma is a complex issue and the classic definitions related to social constructs may not be suitable for all individuals, groups, or cultures (Mannarini, & Rossi, 2019; Weiss et al., 2006). Stigma that is based on normalcy and a deviance of this is an inadequate and inappropriate

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definition for current society for several reasons. It is an unacceptable fit for policy making, particularly given the multiculturalism that exists in British Columbia, and especially in situations when powerful and powerless groups negatively evaluate the other; furthermore, because the powerful group controls access to resources, their beliefs are likely to prevail and their version of normal may be in opposition to that of the powerless (Major & O'Brien, 2005).

It is also recognized within the literature that the social process of stigma can be experienced, anticipated, perceived, and internalized differently by individuals (Weiss et al., 2006; Yang et al., 2019). The controllability, concealability, and entitativity characteristics of stigma influence the psychological and behavioural reactions to those stigmas (Major & O'Brien, 2005). Understanding these varying perspectives and their relative subjective nature is necessary when considering the concept of stigma. There is potential that a stigmatized individual is fully aware that their differentness is evident and therefore this individual is experiencing the difficulty of being discredited; or perhaps this individual may have the assumption that the stigmatizing attribute is not known about, or immediately perceivable, causing them to anticipate the potential of being discredited (Goffman, 1963). This is an important difference and is contextual for the individual and their environment, even though a "stigmatized individual is likely to have experience with both situations" (Goffman, 1963, p. 14). These situations relate to stigma that may be occurring at either the public or individual level, or both. Public stigma is the pervasive, negative perceptions and beliefs of the public toward a group or a person (Goodyear et al., 2018). The process of self-stigma or internalized stigma is when a stigmatized individual applies a negative stereotype to themselves that relates to the negative stereotypes of the stigmatized group they are associated with, which may produce feelings of self-devaluation and worthlessness (Kulesza et al., 2017).

Consequences of Stigma

The consequences of a concept are the resulting outcomes after it has occurred (Nuopponen, 2010). It is not possible to assess the full extent of the vast impacts of stigmatization here; however, the literature indicates the consequences are significantly negative to an individual's life. The effects can include social disadvantage, status loss, identity threat, diminished empowerment, loss of self-esteem, unpleasant personal experiences, social isolation, maladaptive coping mechanisms, avoidance of help seeking behaviour, increased psychological and physiological stress, poor health outcomes, discrimination, stereotyping, and victimization (Al-Khouja & Corrigan, 2017; Hatzenbuehler et al., 2013; Link & Phelan, 2001; Major & O'Brien, 2005; Weiss et al., 2006; Stangl et al., 2019). The results of these outcomes likely affect a person's earnings, housing, criminal involvement, health, and life itself (Link & Phelan, 2001). It is also suggested stigma may be a major contributor to morbidity and mortality at a population level (Hatzenbuehler et al., 2013). Subsequently, stigma can be linked closely to the social determinants of health in that it has myriad detrimental impacts on the wellness of those it affects by undermining and impeding social relationships, resource availability, stress, and psychological responses, thereby exacerbating poor health (Stangl et al., 2019).

Associated Concepts and Definition

Stigma is described as a multidimensional construct, a convergence of interrelated components (Link & Phelan, 2001; Major & O'Brien, 2005). Several attributes of stigma that cooccur include: exclusion, rejection, blame, labeling, stereotyping, negative belief, separation, deviance, status loss, social disqualification, social disadvantage, prejudice, discrimination, marginalization, as well as low social status and power (Weiss et al., 2006; Link & Phelan, 2001; Major & O'Brien, 2005; Goodyear et al., 2018; Hatzenbuehler et al., 2013). In more recent conceptualizations of the literature, discrimination is often considered a constitutive feature of stigma. Authors argue that stigma cannot hold the meaning it is commonly assigned when discrimination is not included in the definition (Hatzenbuehler, et al., 2013). Varieties of discrimination can occur; for instance, at the individual and structural level, discrimination can manifest as unequal treatment that arises from membership in a particular group or societal limitations that cause loss of life opportunities, resources, and well-being (Hatzenbuehler, et al., 2013). The overall stigma process incorporates many more elements, and, for this reason, the concept of stigma is applied in a broader sense than discrimination (Hatzenbuehler et al., 2013).

Marginalized is a concept that is widely used within social sciences as a descriptor of people, locations, or events and provides a vague sense of disadvantage and injustice (Vasas, 2005). Marginalization refers to individuals or groups who are peripheralized on the basis of their identities, associations, experiences, and environments (Vasas, 2005). As such, it is easily relatable to the concept of stigma as both marginalized and stigmatized populations are socially excluded and experience inequalities in the distribution of resources and power (Vasas, 2005). The connection between these two concepts likely lies within the interplay of power and how it is used, but marginalization refers more to the process used to explore the factors that create, define, maintain, and enforce the margins that exist (Vasas, 2005). It has also been identified that stigma prevents those who are marginalized from accessing resources and vulnerability to health problems because they are often identified with intersecting stigmas, such as substance use, poverty, ethnicity, and sexual preferences (Stangl et al., 2019).

The definition of stigma that I have derived from the literature to encompass the complexity of impacts affecting individuals with OUD in British Columbia is as follows: Stigma

is a set of negative attitudes such as prejudice or discrimination about an individual or group of individuals due to a certain behaviour (opioid use) and/or life circumstances that promotes marginalization. It can originate from external or internal sources with the influence of a power differential and may manifest on varying levels such as interpersonally (the language used to speak to someone) or sociostructurally (organization of health care services). Within health care, stigma results in barriers accessing care, decreased acceptability, adherence to treatment, resiliency, and advocacy. The organizational outcomes impact the availability and quality of care, laws, policies, media, and social protection. Stigma fuels health and social inequalities by fostering social exclusion, decreased quality of life and increased morbidity and mortality.

Impacts of Stigma in Primary Health Care in British Columbia

Primary care is typically the initial point of contact between a patient and the health care system and refers to health related services that are provided within the community setting. Primary health care is a broader term that is inclusive of primary care but encompasses patient centered care and a spectrum of comprehensive health services while including population-based approaches to address health promotion, community development and acknowledgment of the determinants of health (Hutchison et al., 2011). Another chief aim of primary health care is to improve access to care whilst responding to the needs of the patient and community (Hutchison et al., 2011). Within British Columbia, the majority of primary care is provided by general practitioners including family physicians and nurse practitioners. Nurse practitioners (NPs) are registered nurses with master's level education who "…autonomously diagnose, treat and manage acute and chronic physical and mental illnesses" (The British Columbia College of Nurses and Midwives [BCCNM] 2020, p. 5) within a holistic model of care. NP's scope of practice includes ordering and interpreting tests, prescribing medications, and performing

medical procedures (British Columbia, 2018). It is the expectation of NPs to develop knowledge and skills to effectively address current issues in practice, and the provision of care for patients with substance use disorders has been articulated as an entry level competency (BCCNM, 2017). A large development in their role has occurred over the last two years with the provincial government investing in more education seats and increasing available positions as an action to increase access to care and help shift primary care to a team-based primary health care system (British Columbia, 2018). Additionally, an amendment of the *Controlled Drugs and Substances Act* took place in 2018, enabling NPs to prescribe opioid agonist treatment (OAT), an evidencebased therapy for OUD (S.C. 1996, c. 19). In this paper the term primary care provider will be used as an inclusive term that reflects both family physicians and nurse practitioners.

A core value of Canadian society is appropriate access to medical care, equally available to all patients, including those belonging to vulnerable and marginalized populations such as those suffering with OUD (Martin et al., 2018). Currently, health care services for mild and moderate cases of OUD can be appropriately delivered in primary health care and for those who necessitate a higher level of care, links to specialized services should be implemented (British Columbia Center on Substance Use and British Columbia Ministry of Health [BCCSU & BCMOH], 2017). The British Columbia Ministry of Mental Health and Addictions has further promoted integrating a primary health care model to provide a network of seamless, coordinated services specific to mental health and substance use disorders, inclusive of all citizens (British Columbia, 2020). Interestingly, the provincial government chose the stigmatizing term 'addiction' in the naming of the ministry. Although 'addiction' is indeed a medical diagnosis, it is also a highly stigmatizing term and there are arguments for avoiding its use (Kennedy-Hendricks et al., 2017; Collins et al., 2018).

An increased prevalence of mental health and substance use issues compared to the rest of Canada substantiated the new ministry in 2017, and their first project involved defining the existing problematic areas in the state of health care (British Columbia, 2020). An urgent concern identified was the persistent systematic barriers to health care for individuals with substance use disorders, which included prevalent stigma (British Columbia, 2020). Stigma was reported occurring often in the form of discrimination from health care providers (British Columbia, 2020). This is a substantial barrier that prevents individuals in British Columbia with OUD from seeking help, for fear of what a health care provider may think or say, causing them to avoid getting the care they need until their condition has deteriorated, likely then requiring a higher level of care. Further, for those individuals who suffer longer periods of time, more extensive treatments and extended recovery time are likely (British Columbia, 2020).

Currently, not all primary care providers in British Columbia have received training focused on OUDs in the same way that they have been trained in other areas of medicine, which endorses professional stigma in provision of care for this vulnerable population. This knowledge gap and limited training may diminish OUD as a legitimate, complex, chronic medical condition and prevents primary care providers to optimize their scope of practice to provide treatment for patients with OUD related health problems. Due to the large geographical span of British Columbia, primary care providers in rural and remote areas face increasingly limited substance use specialist support, therefore heightening barriers for patients to obtain evidence-based care, further complicating the situation (British Columbia, 2020). Consequently, the inconsistent inclusion of patients with OUD in primary care settings prevents equality in access to care while diminishing engagement, retention, and collaboration in care efforts. Further, patient centered care as well as recovery and healing processes are inhibited due to fragmented coordination of services.

A recent province wide harm reduction client survey further concluded that individuals who use substances continue to confront structural barriers and stigma, limiting their initiation of evidence-based treatment and retention in treatment (Graham et al., 2019). The main barrier identified to accessing OAT was difficulty locating a prescriber, a finding which verifies the notion that there is limited uptake of OAT and OUD care within the province's primary care settings (Graham et al., 2019). Current federal guidelines recommend patients with OUD have improved outcomes when accessing services from primary care (Korowynk et al., 2019). Improved treatment adherence, avoidance of illegally purchased opioids, and higher patient satisfaction have been reported when care was administered by primary care programs rather than a clinic focusing on OUD (Korowynk et al., 2019). This distinction is pertinent given that the demand for OUD care in British Columbia far exceeds the availability of specialized substance use specialist care. Furthermore, collaborative primary care models have been effective in improving the management of other chronic diseases and therefore the opportunity to implement the same standard of care for OUD would likely not only enhance clinical outcomes, but also decrease the stigma associated with OUD treatment (Alford et al., 2011). In addition, office-based treatment is well suited to best manage OUD in British Columbia due to relative location abundance, geographic dispersion, and the absence of stigma associated with opioid use speciality centers (Livingston et al., 2018).

Professional and Ethical Standards of Primary Care Providers

The British Columbia *Human Rights Code* prohibits discrimination in the provision of health care services to protect individuals who may be actual or perceived members of certain

groups, including those with a physical or mental disability (RSBC 1996, c. 210). Additionally, primary care providers in the province have an obligation to abide by their code of ethics and professional practice standards through their applicable regulatory body; the College of Physicians and Surgeons of British Columbia for family physicians, and The British Columbia College of Nurses and Midwives (BCCNM) as well as the Canadian Nurses Association for NPs. These professional responsibilities delineate that all individuals of society, including those who have complex medical conditions, difficulty complying with recommended medical treatments as a consequence of an active substance use disorder, involvement in the criminal justice system, or social problems are equally deserving of accessing respectful health care, even if this requires necessary extra time (CPSBC, 2019a; Canadian Nurses Association [CNA], 2017). It would be a violation of the primary care provider's ethical principles to refuse to treat a patient in such circumstances (CPSBC, 2019a; CNA, 2017). Providing exemplary ethical care involves compassion and prudency to recognize those who are suffering or vulnerable and seeks to understand their unique circumstances, while advocating to improve their quality of life and overcome barriers to health care (CNA, 2017).

Primary care providers must also identify the impacts of their personal values, beliefs and experiences to recognize potential conflicts in their provision of care to patients with OUD (BCCNM, 2018). In the event that a primary care provider makes a personal choice to not provide a certain treatment or procedure, it is an expectation that they provide an alternate health care provider to meet the individuals' needs or desires, and must not abandon the patient (CNA, 2017). Within the province, patients with OUD should feel welcomed, respected and safe when accessing care from a primary care provider, free of stigma or discrimination.

A Model Case of Stigma Related to Opioid Use Disorder

A model case that represents a real-life example of the concept of stigma that includes its critical attributes will be presented here. This example will be presented in four stages as it relates to OUD: aware, agree, apply, and harm (Al-Khouja & Corrigan, 2017). Individuals with OUD are aware of stereotypes such as "People who are heroin junkies are dangerous" contributing to how the individual perceives this stigma. Those who agree with the stereotype: "Yes, that's right, I think heroin junkies are dangerous" exhibit public stigma. Self-stigma occurs when the individual with OUD applies the stereotype to themselves: "I'm a junkie so I am dangerous." Lastly, people are then harmed by stereotypes due to diminished self-value: "I think I'm a bad person when I realize I'm a heroin user who is dangerous" (Al-Khouja & Corrigan, 2017). This then can lead to a 'why-try?' phenomenon: "Why should I try to get help for my heroin problem; someone like me is only going to fail" due to a devalued identity, rejection, labeling, discrimination, loss of empowerment, and diminished self-esteem (Al-Khouja & Corrigan, 2017; Kulesza et al., 2017).

Mechanism of Opioids

For centuries, the extracts of opium poppies have been used medicinally and socially to produce analgesia, euphoria, sleep, and to prevent diarrhea (Rang et al., 2016). These powerful physiological effects are due to the opiate morphine and other related compounds contained in the juice of the poppy (Rang et al., 2016). Since its chemical structure was determined in 1902, morphine has been subsequently reproduced and modified to form several semisynthetic and fully synthetic products called opioids (Rang et al., 2016). Opioids are any substance with the ability to bind to the body's opioid receptors and alter neural signal transmission, resulting in pain relief and feelings of euphoria (Mistry et al., 2014). The receptors are widely distributed

throughout the central and peripheral nervous systems with variable opioid binding affinities, specificity and efficacy (Mistry et al., 2014). After repeated opioid use over time, an increase in the amount of opioid needed to produce the desired effect may develop and this is known as opioid tolerance (Rang et al., 2016). Opioid tolerance is attributed to desensitization of the opioid receptors and other adaptive changes that occur at the cellular level (Rang et al., 2016). In the event that an opioid is abruptly stopped after repeated use or an opioid receptor antagonist such as naloxone is introduced, physical opioid dependence may become evident by a withdrawal syndrome that is characterized by increased irritability, diarrhea, weight loss, body shakes, writhing, restlessness, shivering, runny nose and goose bumps (Rang et al., 2016).

The elicited euphoria, powerful sense of contentment and well-being associated with opioid use at higher doses is related to a release of dopamine that stimulates the reward pathway of the brain and positively reinforces the pleasurable feelings (Mistry et al., 2014). The dopaminergic surge has been attributed to the mechanism of forming a psychological opioid dependence, as individuals tend to want to repeat this satisfying experience (Mistry et al., 2014). Natural reward pathways serve to perpetuate beneficial actions such as seeking food, but in the case of opioid use, it is hypothesized the repetitive reward sensation motivates adaptive behaviours to transition from voluntary opioid use to habitual use, and eventually compulsive use (Mistry et al., 2014). The dopamine pathways maintain seeking and using opioids and may ultimately lead to a loss of control over behaviour and impair decision making (Mistry et al., 2014). Due to the principle of tolerance, gradually higher opioid doses are necessary to replicate the same euphoria and eventually with continual use, individuals will reach a point where they must use opioids to avoid withdrawal. In spite of this, psychological dependence rarely occurs when an opioid is given to patients for analgesic purposes (Rang et al., 2016). Inter-individual variability how a person may respond to opioids and their adverse side effects can be due to altered metabolism or genetic variants of dopamine and opioid receptor sensitivity (Mistry et al., 2014; Rang et al., 2016). Thus, it is hypothesized genetic susceptibility may contribute to a person's risk for forming OUD; however, there are no clear patterns of inheritance and non-genetic factors are also critical extrinsic variables influencing this complex disorder (Mistry et al., 2014). The extensive study of opioids remains ongoing to better understand their powerful effects and to develop alternative analgesics due to the risk of forming OUD as well as a myriad of adverse reactions: fatal and non-fatal overdose, respiratory depression, nausea, vomiting, constipation, bronchoconstriction, low blood pressure, sedation, dizziness, and slow heart rate (Rang et al., 2016; Canadian Pharmacists Association, 2020).

Prescription Opioids in British Columbia

Currently in British Columbia, prescription opioids can be obtained from a qualified prescriber, such as a primary care provider, or opioids can be illegally purchased from an unregulated drug market (Bruneau et al., 2018). Prescription opioids are pharmaceutical grade medications that are manufactured by licensed and regulated pharmaceutical companies to be dispensed from pharmacies (Canadian Research Initiative in Substance Misuse [CRISM], n.d.). These medications are most often prescribed for their analgesic properties to treat and prevent acute pain, chronic non-cancer pain and cancer pain, but they are generally reserved for pain that does not respond well to other treatment options due to their high-risk profile (Canadian Pharmacists Association, 2020). Other clinical indications for the use of opioids exist such as codeine for treatment of non-productive cough and morphine to help manage dyspnea in cancer patients (Canadian Pharmacists Association, 2020). Prescribing opioids comes with serious warnings and precautions from the Canadian Pharmacists Association and Health Canada, as opioid use can result in non-medical use as well as fatal and nonfatal overdose (2020). Opioid prescribers are recommended to use the lowest effective dose for the shortest duration to avoid adverse side effects and to help control the amount of opioid medications in the community, as excessive prescribing may expose patients to more chronic use and unused opioid medication may be stolen or diverted for non-medical use (CPSBC, 2019b). This is demonstrated by an increase in the prescribing of opioids over the last 20 years within North America that correlates with substantial increases in opioid-related mortality rates and OUD (Kennedy-Hendricks et al., 2016). This increase in prescribing can be attributed to liberal standards of practice for managing pain control with opioids, limited treatment options for chronic pain, the view of these medications as safe for chronic pain management, availability of high potency oral tablet formulations, in addition to pharmaceutical companies' targeted marketing to promote opioid prescribing with minimized risk of forming OUD (Antoniou et al., 2019; Goodyear et al., 2018; Jones et al., 2018).

In 2017, an updated Canadian clinical practice guideline on the use of opioids for the management of chronic noncancer pain encouraged tapering opioid doses in individuals already receiving these drugs, recommended the use of non-opioid alternatives, and suggested restrictions on maximum prescribed doses (Antoniou et al., 2019). These changes were in addition to governing bodies removing long acting formulations of high strength opioids from drug benefit programs (Antoniou et al., 2019). Despite these initiatives and a decrease in the volume of opioids prescribed, opioid related deaths remain elevated in Canada, which may be accounted for by the fact that the illegal alternatives are lethal in the present environment (Antoniou et al., 2019). These elevated figures speak to a substantial unintended

consequence of opioid deprescribing for those individuals who once had a supply of prescribed or diverted pharmaceutical opioids: they must now resort to a purchase from an unregulated drug market that may be fatal (Tyndall, 2018).

Unregulated Drug Supply in British Columbia

Opioids that are purchased illegally in British Columbia can be either diverted prescription opioids for nonmedical use or illegally manufactured opioids (Bruneau et al., 2018). As illegally manufactured opioids are not subjected to any quality control measures, they are often mixed with other substances or contaminants to increase their volume and therefore street value, which is potentially harmful and unbeknownst to the user (CRISM, n.d.). Common examples of these are street heroin, fentanyl, morphine, and oxycodone (CRISM, n.d.). Illegal opioids can also be found in the form of counterfeit tablets forged to look pharmaceutical grade opioids, which again, poses harmful risks to the user (CRISM, n.d.). Within British Columbia, the supply of illegal, unregulated opioids has become displaced with highly potent synthetic opioids, namely fentanyl and carfentanil (Office of the Provincial Health Officer, 2019). Fentanyl is currently prescribed effectively in clinical settings as a medication to treat breaththrough pain related to cancer and for post-operative surgical pain due it is high potency and rapid onset of action (Han et al., 2019). Given the narrow range between therapeutic and lethal doses of fentanyl, it poses high risk of overdose, especially in the unregulated drug market when combined in unknown amounts with other opioids such as heroin (Han et al., 2019). Fentanyl has a potency of action 20 to 40 times higher than heroin and is thought to be imported from overseas to be sold as heroin or opioid tablets (British Columbia Centre for Disease Control [BCCDC], 2016).

The presence of these contaminants in the illegal drug supply became evident in 2016 when British Columbia experienced a rapid spike of unintentional drug overdoses and an estimated 967 overdose deaths (CRISM, n.d.). Fentanyl was detected in approximately 62% of those deaths, a 281% increase in overdose deaths involving fentanyl compared to the prior year (BCCSU & BCMOH, 2017). This necessitated a declared public health emergency, while also exposing gaps within the health care system for adequate care provision for individuals with OUD (Tyndall, 2018). Opioid-related deaths continue to affect urban, suburban and rural populations in the province and remain above historical averages despite targeted services, with 981illegal drug toxicity-related deaths in 2019, and the detection of fentanyl in 85% of those cases (Coroners Service, 2020). The exact prevalence of OUD within the province has not yet been established, but it is estimated to impact approximately 2.1% of the American population (BCCSU & BCMOH, 2017).

The ongoing opioid crisis has held the public's attention and has further exposed the unique stigma associated with OUD. Through data collection completed by Statistics Canada in 2017, the highest level of awareness regarding the opioid crisis in Canada was found to be in the province of British Columbia, with 86% of respondents reporting they were 'very aware' of the issue (2018). Those who reported they were 'very aware' were more likely to agree that if they had an opioid dependency they would feel comfortable seeking help or treatment, versus those who were unaware of the opioid crisis (83% versus 70%) (Statistics Canada, 2018). In this same survey, 36% of Canadians aged 18 years and older responded that they would not want family or friends to know if they were using opioids without a prescription (Statistics Canada, 2018).

Diagnosis of Opioid Use Disorder

Opioid use disorder (OUD) has been identified as one of the most challenging forms of substance use disorders facing health care systems and is a major driver of the recent surge in illegal drug overdoses (BCCSU & BCMOH, 2017). It is chronic, relapsing, and is associated with significant increased rates of morbidity and mortality (Bruneau et al., 2018) This clinical disorder is characterized by at least two of the symptoms listed in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) for diagnosis, which can be established by primary care providers in British Columbia (see Appendix A for DSM-5 criteria). OUD can be categorized as mild, moderate, or severe, and may involve non-medical pharmaceutical opioid use or the use of illegally manufactured opioids such as heroin or fentanyl (American Psychiatric Association, 2013; Kennedy-Hendricks et al., 2016).

The latest DSM edition has progressed from its predecessor by making efforts towards destigmatizing the medical diagnostic language used. This de-stigmatization involved removing the terms 'opioid dependency' and 'opioid abuse' from the criteria (Broyles et al., 2014). This revision was imperative considering that the use of such terms is pejorative, implicitly generates bias, perpetuates stigmatizing attitudes, and influences social and public health policy when addressing OUD as a health concern (Kelly et al., 2016). Further, describing an individual as an 'opioid abuser' conveys willful misconduct and suggests that the person 'is' the problem, whereas 'OUD' conveys that a person 'has' a medical problem, rather than 'is' the problem (Kelly et al., 2016). 'Opioid addict' and 'opioid addiction' are also not included within the new terminology as these terms imply opioid use is a willful choice and that those who are 'addicted' really can control their opioid use (Kelly et al., 2016; Collins et al., 2018). Describing an individual's unregulated drug use as 'illicit' should also be avoided, as it conveys the individual

as unlawful and unacceptable, influencing judgements pertaining to the need for punishment versus treatment (Kelly et al., 2016). Further, the use of stigmatizing language is morally centered and amongst health care providers this can have impacts on attitudes and create barriers to accessing care (Collins et al., 2018). This differentiation in the terms is important to employ 'people first language' which seeks to respect the person's individuality by acknowledging that their illness is not their defining characteristic while maintaining attention on the medical aspects of their disease (Broyles et al., 2014).

Risk Factors and Comorbidities of Opioid Use Disorder

Opioid use occurs on a wide spectrum and understanding why a person may be vulnerable to developing OUD is complex. There are no exact estimates of the epidemiology of OUD in British Columbia, but there are identifiable risk factors that may contribute to this illness which can help guide screening, monitoring and implementation of early intervention. It is estimated individuals between ages 18 and 29 years old have the highest prevalence of developing an OUD, which usually endures for long periods of time with episodes of abstinence and relapse (McCarberg, 2015). Individuals may use opioids for a multitude of reasons including to experiment out of curiosity, impacts of adverse childhood experiences, to self-medicate for physical, mental or emotional pain related to trauma, to cope with anxiety, to reward oneself, or to stimulate creative endeavours (Office of the Provincial Health Officer, 2019; Stein et al., 2017). Factors related to individual, family, peer, social and environmental domains as well as a genetic component may predispose a person to increased opioid use (McCarberg, 2015). Similar to other substances, several extrinsic risk factors increase an individual's likelihood to use opioids including ease of access to opioids, academic failure, physical or sexual abuse, earlier age at first use and socioeconomical disadvantage (Mistry et al., 2014). With regards to

developing a prescription OUD, evidence suggests there is a substantial increase in the likelihood for those individuals with a history of opioid or nonopioid substance use disorder, and/or a mental health diagnosis (Klimas et al., 2019). Further, certain characteristics of opioid prescriptions may influence development of a prescription OUD such as supplying more than 30 days' worth of medication, daily doses exceeding 120 morphine milligram equivalents, and concurrent prescription of atypical antipsychotics (Klimas et al., 2019). Individuals who use prescription opioids beyond medical purposes are more susceptible to using illegal opioids, and an increased rate of unregulated heroin use in recent years has been attributed to the overuse of prescription opioids (Kennedy-Hendricks et al., 2016).

Provincial data regarding the opioid overdose crisis may help indicate sub populations at increased risk for developing OUD. An overrepresentation of First Nations people, including both males and females, is present in the unregulated drug supply overdose death toll, with First Nations people three times more likely to suffer a fatal drug overdose than non-First Nations (Office of the Provincial Health Officer, 2019; First Nations Health Authority, n.d.). Another subpopulation at increased risk are males age 19 to 59, as this group represents the largest proportion of the province's accidental illegal drug fatal overdoses (BCCDC, 2020).

Evidence Based Treatment and Primary Care Context in British Columbia

In order to optimally treat OUD in British Columbia, there needs to be increased access to comprehensive care and appropriate evidenced-based therapy options, such as opioid agonists (BCCSU & BCMOH, 2017). Opioid agonist therapy (OAT), which can also be referred to as opioid substitution treatment, alleviates withdrawal symptoms, encourages sustained abstinence from opioid use, reduces risk behaviours associated with injection drug use, and reduces risk of morbidity and mortality (BCCSU & BCMOH, 2017; Noysk et al., 2013). These medications

induce less euphoria than opioids and oral formulations can be safely prescribed in primary care settings (Livingston et al., 2018). The available options in British Columbia are buprenorphine/naloxone, methadone, and slow release oral morphine (BCCSU & BCMOH, 2017). Ideally, patients receive an induction dose with careful monitoring of treatment response and are subsequently stabilized on a therapeutic dose with the goal of controlled withdrawal symptoms and reduced or eliminated opioid cravings (BCCSU & BCMOH, 2017). Fortunately, there is an increasing trend in the number of OAT prescribers in British Columbia since mid-2016, with a total of n=1487 in January of 2020 (BCCDC, 2020). Despite these numbers, evidence suggests that fewer than 25% of Canadians with OUD are receiving this evidence-based pharmacotherapy treatment, indicating that either more OAT prescribers are needed, or a gap remains between current practice and evidence-based standards (Stuart, 2019).

Primary care providers within British Columbia are well supported to provide safe and comprehensive care for the population struggling with OUD. There are a number of accessible resources, including recent provincial guidelines for the Clinical Management of OUD from the British Columbia Center on Substance Use (BCCSU) and the Ministry of Health, as well as an online training course called the Provincial Opioid Addiction Treatment Support Program (University of British Columbia [UBC], n.d.). These evidence-based guidelines and educational module are pertinent to all health care professionals but are especially relevant to primary care providers to engage with to establish OUD diagnosis, create a patient centered care plan, safely prescribe OAT, integrate harm reduction and practice trauma informed care (UBC, n.d.). The BCCSU supports all primary care providers in British Columbia to become competent oral OAT prescribers through completion of paid training and a preceptorship in a supervised clinical setting with an approved OAT prescriber (BCCSU, 2020a). Once these requirements are met, a

primary care provider is able to initiate and continue prescriptions for oral OAT with further province-wide guidance readily available from a substance use specialist through the Rapid Access to Consultative Expertise (Rapid Access to Consultative Expertise, n.d.).

Cause, Controllability and Criminalization

Research indicates that negative attitudes towards individuals who struggle with a substance use disorder are significantly increased compared to attitudes about mental illness (Barry et al., 2014; Goodyear et al., 2018). This heightened stigma seems to be influenced by two main factors: cause and controllability (Kelly et al., 2016). For example, the perception exists that those with OUD have increased control over their illness, and are therefore more accountable for their behaviour, or that drug users have moral shortcomings; the illegality of using unregulated opioids supports this perspective (Barry et al., 2014; Goodyear et al., 2018). Further, a misconception held by the public and health professionals that OUD is a willful choice and not a disease is also a mediator of this stigma, causing it to be separated from the rest of the medical system (Wakeman & Rich, 2018; Kelly et al., 2016). In cases where the criminal justice approach has been applied, individuals may be channelled into a jail sentence for possession of a small amount of an illegal substance while disregarding what is ultimately a health issue (Kelly et al., 2016). The engagement of an individual with the criminal justice system also exposes a person to a great deal of harm that they may not have otherwise been subjected to (Office of the Provincial Health Officer, 2019). Societal stigma and criminalization of this vulnerable population encourages drug use in private or hidden drug use, thereby increasing the risk of overdose (Office of the Provincial Health Officer, 2019). It has been recognized worldwide that the 'war on drugs' has failed, resulting in an increase in health harms and no reduction in drug

use, yet decriminalization in British Columbia has not been achieved despite the prevalence of a toxic, unregulated, illegal street supply (Office of the Provincial Health Officer, 2019).

This section of this paper has provided pertinent background to ensure the variables, populations and issues of interest are clarified. By providing this context to clearly identify the problem, accuracy and focus will be maintained in the next portion of the integrative review process (Whittemore & Knafl, 2005).

Chapter III: Methods

Integrative Literature Review

An integrative literature review is the broadest approach to a research review, allowing for inclusion of both experimental and non-experimental study designs to encourage a complete appreciation of the clinical phenomenon of concern (Whittemore & Knafl, 2005). The framework to guide this integrative literature review will encompass the methodology of Whittemore & Knafl which includes five stages: problem identification, literature search, data evaluation, data analysis, and presentation (2005). This approach to the review will allow for the inclusion of a combination of research methodologies allowing readers a more comprehensive understanding of the complexity of the clinical concern (Whittemore & Knafl, 2005). This chapter of the paper will outline the literature search, the inclusion and exclusion criteria for the chosen articles, the data evaluation and the data analysis.

Literature Search

A well-defined search strategy is a critical component for an integrative review to ensure thorough and unbiased results (Whittemore & Knafl, 2005). As the focus of the review is related to the ongoing North American opioid crisis, this has sparked the necessity of further research and monitoring to be completed as of recent. The topic's relevance further substantiates the purpose of undertaking a review of this pertinent literature, as updates to evidence are ongoing to support best practices when providing care for this vulnerable population; however, the latest research evidence may be inconsistent with current clinical practice. The literature search was conducted to identify sources that helped to inform understanding the impacts of stigma for adults with OUD in primary care settings of British Columbia. The following section will discuss the search methods utilized for obtaining applicable literature to inform the review.

Search Strategy

First, a comprehensive search for applicable literature was completed through the University of Northern British Columbia Library computerized database system to efficiently maximize eligible peer reviewed sources. Three themes related to the clinical phenomenon of concern were used to guide the terminology for each search: Stigma, OUD, and the primary care setting. After reviewing the initial database results, the reference lists of pertinent articles were reviewed to maximize the number of eligible sources as well as identify related grey literature. During this search process the inclusion and exclusion criteria were considered to ensure elimination of duplicate or irrelevant articles. The following section describes the literature search process in detail.

Preliminary Search

The initial search was completed utilizing the library's databases to maximize the scope of the literature. The five electronic bibliographic databases utilized for the electronic searches were: Cumulative Index of Nursing and Allied Health Literature (CINAHL), MEDLINE, PyscARTICLES, PsycINFO and PubMed. These databases were chosen for their relevance to mental health, behavioural science and health care. A combination of MeSH and non-MeSH keywords or only non-MeSH keywords were used, depending on the database system after a trial and error process. Stigmatizing keywords were included in searches, for example 'addict' and 'opioid abuse' for the reason that these may have been more commonly utilized in previous publications. These types of terms will likely be phased out in peer reviewed literature moving forward due to their harmful impact on the vulnerable population they are attempting to describe; but excluding them may cause an elimination of some of the best relevant literature. Furthermore, including these kinds of terms upholds with the guideline of the simultaneously

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including multiple types of research when conducting an integrative review to more fully understand the phenomenon of interest; especially a clinical concern as complex as stigma's impact on those struggling with OUD (Whittemore & Knafl, 2005). The addition of a geographical context was considered to be included as a keyword to guide the search; however, the inclusion of British Columbia as a subject heading or keyword with the Boolean phrase AND resulted in zero sources and was therefore removed to expand the search results. Each database was individually searched and the detail of each search including the subject headings (MeSH) and keywords (non-MeSH) used can be found in Appendix B.

The combination of these keywords resulted in varying numbers of results for each database, ranging from n=3 to n=132 results for a combined database total of n=276. After duplicates were removed, a total of n=196 results remained. These records were then screened to ensure they were published during or after the year 2010, peer reviewed, and written in English. This screening was done to ensure the most rigorous, up to date data and to remove potential language barriers; the result was n=167 citations. The titles and abstracts were then reviewed to ensure relevancy to the concept of interest. Articles that addressed the impacts of stigma associated with the care of individuals with OUD in primary care settings within a North American context were selected for full text review and this number was n=23.

Secondary Search

Hand searching reference lists was also done to ensure that all relevant sources of research were included. Articles found through this method (n=11) addressed variable relations of stigma and opioid use in a healthcare context or provided a probable background detailing how stigma relates to primary health care delivery to individuals with OUD. Purposive sampling by reviewing the online database of primary source publications from authors belonging to the

British Columbia Centre for Substance Use (BCCSU) was done as an additional strategy in an attempt to seek out sources providing local context and to identify the maximum number of eligible and relevant sources. This step was pertinent as the mission of this provincial network of researchers is to provide leadership in substance use and substance use disorder research and share the knowledge widely (BCCSU, 2020b). Unfortunately, no articles specific to stigma and how it relates to OUD were available in within the list of journal articles. A Prisma flow diagram is attached in Appendix C for a clear depiction of how the final articles were confirmed.

Exclusion and Inclusion Criteria

Peer reviewed sources published between 2010-2020 were reviewed for relevancy as the clinical context and management of OUD in primary care has evolved within this timeframe. Each article's title and abstract were hand reviewed and studies completed in North America and Western Europe were considered for their social and cultural similarities to the British Columbia setting. Study populations including members of the public, primary care providers, or adults (>18 years old) with OUD were chosen for review as these participants' perspectives informed the clinical question's populations of interest and addressed the primary care context. Please see Table 1 below for all inclusion and exclusion criteria listed.

Table 1

Inclusion Criteria	Exclusion Criteria
 -Published 2010-2020 -Published in North America or Western Europe -Studies relevant to stigma associated with opioid use disorder that are applicable to the primary care setting -Adult population (>18 years old) -English language -Peer reviewed 	 -Publication date older than 2010 -Studies from South America, Asia and Eastern Europe -Studies specific to health care professionals that are not primary care providers: Emergency physicians, hospitalist physicians, counsellors, social workers -Comorbid mental health diagnosis -Specific study populations: incarcerated individuals, veterans, pregnant women, postpartum mothers, sex workers, HIV infection, Hepatitis C infection, sickle cell disease, individuals with chronic pain -Studies specific to American health care system- drug monitoring programs, hub and spoke programs, Medicaid coverage -Unpublished manuscripts: dissertations, abstracts -Expert opinion style reviews

Inclusion and Exclusion Criteria for Selection of Articles

To keep the review focused, further specific exclusion criteria were applied to filter results. Studies pertaining to comorbid mental health disorders and other specified substance use disorders, such as alcohol use disorder, were excluded since the purpose of this review is to address stigma unique to OUD and acknowledgement of the complexities of coexisting comorbidities is well beyond the scope of this paper. Similarly, specific subset populations with OUD, such as patients with comorbid blood borne infections, chronic pain, pregnant women, veterans, incarcerated individuals and those involved in sex-related work were chosen to be excluded because the intent of the review is to be generalizable to all adults experiencing OUD. Articles that addressed stigma amongst specific health care professionals such as social workers, counsellors and emergency room physicians were also excluded to maintain the aim of informing primary care providers. Many publications from the United States of America (USA) consistently referred to specific state health care systems in place to manage OUD such as the 'hub and spoke program', which is similar to one large urban hospital in British Columbia that has a hub within its emergency department to support patients with non-specific mental health or substance use challenges (Providence Health Care, n.d.). As this model is non-specific to OUD and not applicable to the context of health care systems in place across the province, these papers were also removed from the analysis.

A total of eleven sources were appraised as eligible to undergo analysis for this integrative literature review, consisting of eight primary research studies, two literature reviews and one policy forum. Prisma flow diagram is attached in Appendix C.

Data Evaluation

As the chosen research to inform this literature review are from a diverse sampling frame, the extraction of specific methodological features is not warranted to evaluate the overall quality of the chosen literature (Whittemore & Knafl, 2005). For this reason, the authenticity, methodological quality, informational value and the representativeness of the included primary sources will be discussed along with the calculated quality scores to optimize the analysis (Whittemore & Knafl, 2005). The variable criteria to exemplify quality of the other research designs will also be applied and presented as a rating within the attached literature matrix (Whittemore & Knafl, 2005). As there is no gold standard for interpretation of quality in research reviews, a combination of recognized analysis tools was used to evaluate the trustworthiness, relevance and results of the literature sample (Whittemore & Knafl, 2005). Each article was assessed using either the applicable Critical Appraisal Skills Programme (CASP) checklist tool, the appropriate Joanna Briggs Institute (JBI) Critical Appraisal Checklist, or, for citations whose methodology did not meet any of the CASP or JBI tools, the John Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool.

Data Analysis

The data analysis of an integrative literature review aims to provide a thorough and unbiased explanation of the research sample through a process of organizing the data in an integrated fashion to form conclusions about the focus of the review (Whittemore & Knafl, 2005). To facilitate thorough analysis, the chosen sources have been divided and organized into subgroups based on study type: primary sources; qualitative, quantitative and mixed method designs, secondary sources; two literature reviews and one policy forum paper. To facilitate data reduction and data display, a literature matrix was utilized to simplify, abstract, focus and organize the findings (see Appendix D). This data display helps to discern the pattern distinction while facilitating a systematic comparison of the sources for certain variables or characteristics (Whittemore & Knafl, 2005). The critical analysis and quality rating of each citation is also presented here. As the chosen literature is of diverse methodologies, the data extraction involved a distinction of themes, variations and relationships with similar data grouped together for comparison (Whittemore & Knafl, 2005). The next step in the process of the analysis is data comparison and is presented in the findings section, found in the following chapter of this paper, where an iterative process will thoroughly examine the patterns identified in the data (Whittemore & Knafl, 2005).

Chapter IV: Findings

Critical Review of the Literature

An array of primary research methodologies with varying participant populations were selected to inform this integrative literature review, allowing for a diverse inquiry into the complex phenomenon of stigma as it relates to OUD. The primary studies included research conducted to understand the attitudes of patients (n=2) (Antoniou et al., 2019; Kulesza et al., 2017), physicians in primary care (n=3) (Livingston et al., 2018; Kennedy-Hendricks et al.; 2016; Deflavio et al., 2015), members of the public (n=2) (Goodyear et al., 2018; Kennedy-Hendricks et al., 2017) and members of a health care team including primary care providers (n=1) (Khenti et al., 2019). These studies encompassed quantitative (n=4) (Goodyear et al., 2018; Kennedy-Hendricks et al., 2016; Kennedy-Hendricks et al., 2017; Kulesza et al., 2017), qualitative (n=2) (Antoniou et al., 2019; Livingston et al., 2018) as well as mixed methods designs (n=2) (Deflavio et al., 2015; Khenti et al., 2017). Of these, five (62%) (Deflavio et al., 2015; Goodyear et al., 2018; Kennedy-Hendricks et al., 2016; Kennedy-Hendricks et al., 2017; Kulesza et al., 2017) were conducted in the USA and three (38%) (Antoniou et al., 2019; Khenti et al., 2017; Livingston et al., 2018) were from Canada. Of the secondary sources, the narrative review comprised only studies published in the USA (Louie et al., 2019), the systematic review encompassed studies from only western countries (van Boekel et al., 2013), and the policy forum paper addressed circumstances specific to the USA (Tsai et al., 2019).

Overall, the CASP appraisal ratings of the qualitative primary research and systematic review were of high quality (n=3) (Antoniou et al., 2019; Livingston et al., 2018; van Boekel et al., 2013). A high JBI rating was applied to one quantitative primary research study and the policy forum paper (n=2) (Kennedy-Hendricks et al., 2017; Tsai et al., 2019) with the remaining

quantitative primary study appraised as 'good' quality (n=1) (Kulesza et al., 2017). The John Hopkins critical appraisals applied to the remaining mixed methods designs and one narrative review revealed two high quality (n=2) (Deflavio et al., 2015; Goodyear et al., 2018) and three good quality (n=3) (Kennedy-Hendricks et al., 2016; Khenti et al., 2017; Louie et al., 2019). Each of these papers are outlined in the literature matrix in Appendix D with information regarding the methodology, sampling, strengths, limitations and the key findings. The critical appraisal quality of each are also encompassed in the matrix.

In this section, the findings of the integrated literature review will be presented by comparing the data and identifying accurate and meaningful themes abstracted from the chosen literature. This iterative process will also recognize relationships between variables within the literature sample (Whittemore & Knafl, 2005). Through critical analysis of the findings from each study, common patterns emerged and will be presented here in the way they relate to the barriers that stigma maintains for patients with OUD in British Columbia. A presentation of these findings will seek to depict the varying levels of stigma related to OUD and identify focal points to inform primary care providers on ways to ameliorate their practices to eliminate stigma in British Columbia. The themes are classified as (a) professional stigma characterized by discrimination of patients, mistrust of patients, stigma related to OAT, and insufficient education; (b) patient stigma expressed as internalized and perceived stigma; (c) stigmatizing language; (d) public stigma; (e) opioid familiarity; (f) stigma and opioid policy. The interpretative efforts of each theme are presented in the following section.

Professional Stigma

Discrimination of Patients

All five studies examining the attitudes of health care professionals conveyed varying forms of discrimination toward patients related to their opioid use or diagnosis of OUD which created apprehension to provide their care or interact with them in social contexts. A survey of a large sample of primary care physicians revealed a high level of desire for social distance from those with a prescription OUD with a large majority of respondents unwilling to have a person with prescription OUD marry into the family (79%) or work closely with them on the job (77%) (Kennedy-Hendricks et al., 2016). Louie et al. (2019) included this data within their narrative review to strengthen their findings to describe the culture of prevalent stigma within the inner settings of health care related to OUD. This in accordance with van Boekel et al. (2013) identification of two studies in their systematic review that health professionals regard for caring for people who use drugs is consistently lower when compared to other patient groups, such as patients with depression, and strong negative attitudes exist towards illegal drug users, with most professionals preferring that substance use specialists exclusively provide care for illegal drug users.

One primary care provider respondent provided an example of the stereotypical nature of how these patients are perceived in primary care settings: "there's a great deal of fear in primary care... around people with addiction... especially opiates" (Livingston et al., 2018, p. 348). This apprehension was verified by Kennedy-Hendricks et al. (2016) as more than half (66%) of primary care physician participants viewed individuals with prescription OUD as more dangerous than the general population. In their policy forum paper, Tsai et al. (2019) recognized the dangerous stereotype of patients who use opioids may reflect why many buprenorphine

waivered physicians in the USA are not prescribing at capacity or express little interest to do so. This was validated further in the Canadian study by Livingston et al. (2018) where fears for safety were explicitly expressed from primary care providers when asked about considering introducing methadone treatment into their practice. One of the non-methadone prescribers from a rural area in this study described distress related to living in a small community as "these patients know where we live" (Livingston et al., 2018, p. 350), which certainly applies to the context of providing primary health care in rural and remote British Columbia. Participants had strong unease due to the possibility of intimidating or aggressive behaviour, verbal threats, or physical violence that would be disruptive to their family practice environment and "might scare away normal patients" (Livingston et al., 2018, p. 349). A current methadone prescriber within this study endorsed feeling the presence of an undertone of the potential for violent behaviour among her patients on methadone that was not present with her other patient populations (Livingston et al., 2018). Within their systematic review, van Boekel et al. (2013) also found results confirming that general practitioners perceive people who use drugs as aggressive.

In Deflavio et al. (2015) survey, 94% of family physicians reported treating patients with OUD as difficult, referring to them as high maintenance, stressful, and challenging. Difficulty and challenging were also descriptors in the results from Louie et al. (2019) and Livingston et al. (2018), with one respondent describing that many patients with OUD "...are not very good people" (Livingston et al., 2018, p. 348). These primary care provider participants also referred to perceptions of associated disarray for patients with OUD and related this to the concurrent poverty, unemployment, crime, poor access to transportation, housing instability, traumatic experiences, poor relationships and comorbidities frequently associated with this patient population (Livingston et al., 2018). These adverse life circumstances were viewed as complex

needs that are problematic to manage within the primary care setting, which is disconcerting given that a main goal of primary health care services is to encompass the social determinants of health (Livingston et al., 2018). Similar observations were found in Louie et al. (2019) narrative review, with other physician respondents bluntly reporting "we don't want these type of patients in our clinics" (Louie et al., 2019, p. 3), and describing providing care related to OUD as "not what we do here in here in primary care" (Louie et al., 2019, p. 3).

Mistrust of Patients

A common theme found within the integrative literature review was the propensity of health professionals that commonly held a lack of trust toward patients with OUD, thereby creating reluctance to provide care for this population. This was evident in Deflavio et al. (2015) study, which collected anonymous quantitative and qualitative survey data, where written responses conveyed high levels of mistrust. One family physician reported they would rather not "deal with addicts who lie" (Deflavio et al., 2015, p. 6) while another noted that they were "not set up... as a police agency" (Deflavio et al., 2015, p. 6). Livingston et al. (2018) also found that primary care provider participants frequently perceived patients as deceptive as well as manipulative and described being "sucked in" (Livingston et al., 2018, p. 348), leading to feelings of frustration. This is in accordance with van Boekel, Brouwers, van Weeghel and Garretsen's systematic review (2013) results that manipulative behaviour is often perceived by general practitioners when encountering patients with a substance use disorder, resulting in feelings of resentment, powerlessness and dissatisfaction. Louie et al. (2019) narrative review findings further conveyed a sense of mistrust, recognizing widespread suspicion of opioid users amongst primary care providers, both personally and professionally. In describing their hesitations towards treating OUD and preferring that a substance use specialist manage this

condition, one primary care provider explained that "this population tends to be squirrelly, they don't tend to be honest with you..." (Louie et al., 2019, p. 5).

Diminished trust was also identified with respect to the nature of patient-provider interactions when providing care for patients who use opioids. For example, surveillance activities associated with some treatment programs for patients receiving methadone maintenance therapy left primary care providers feeling like they were interacting with patients in a way that was distrusting and promoted a paternalistic relationship; for instance, having to watch patients urinate to ensure a valid sample was obtained (Livingston et al., 2018). The study respondents described this type of mandatory practice standard to "do what you should be doing as a good doctor" (Livingston et al., 2018, p. 349), but made patient interactions feel like an interrogation while simultaneously attempting to establish a therapeutic and non-judgemental rapport. Similar evidence was also recognized by Tsai et al. (2019) as they identify the supervision, monitoring and restrictive dispensing policies of methadone delivery can subject individuals to degrading and humiliating experiences.

Mistrust was also palpable in the studies exploring patient perspectives. Antoniou et al. (2019) verified that since opioid deprescribing and opioid policy changes were implemented in Canada in 2017, patients who regularly use opioids perceive manifestations of mistrust and suspicion, as well as experiences of disrespect and paternalism during interactions with their care providers. Regarding patients' perceptions of their own trustworthiness, Kulesza et al. (2017) found that among its primary care patient participants with OUD, they were least likely to report feelings that they cannot be trusted (4%), based on a reliable tool evaluating eight internalized stigma items.

Stigma Related to Opioid Agonist Treatment

Stigma remains a significant barrier towards the adoption and implementation of opioid agonist treatment (OAT) into routine practice, a finding that was widely reported amongst the studies that reviewed attitudes of prescribers as well as potential prescribers. A mistrust of the efficacy of buprenorphine was reported by both Louie et al. (2019) and Deflavio et al. (2015). In their narrative review, Louie et al. (2019) found negative attitudes and skepticism were frequently reported against buprenorphine as a legitimate treatment option amongst primary care providers. Additionally, both of these sources confirmed providers who were non-prescribers were more likely to estimate lower efficacy of buprenorphine than those who did prescribe (Louie et al., 2019; Deflavio et al., 2015). There were no reported uncertainties regarding the efficacy of methadone in Livingston et al. (2018) inquiry of primary care providers; however, a lack of confidence existed in the basis of providing long term OAT. One physician questioned indefinite methadone use as "just substituting one drug for another forever then I wonder what's the point?" (Livingston et al., 2018, p.348), and this was similar to expressed concern from nonprescribers in Deflavio et al. (2015) qualitative data collection. The results from Kennedy-Hendricks et al. (2016) data indicated the majority of primary care provider respondents were supportive of treatment for OUD, with 58% believing effective treatment options are available to help people with OUD, and 69% trusting that most patients with a prescription OUD can get well with treatment. Although these results indicate a majority, it is notable that many respondents did not believe effective treatment is available, despite existing current evidence indicating the clinical effectiveness of OAT.

There was general concern amongst providers that becoming an OAT prescriber would result in attracting an unwanted patient population which overlapped with concerns that the stigma of OUD would rub off on the clinic (Louie et al., 2019; Livingston et al., 2018). Further, anxiety was present amongst providers that OAT prescribing could be a potential threat to their career and professional reputation, as cited in Louie et al. (2019), Livingston et al. (2019), and Deflavio et al. (2015). These concerns were linked to the potential for buprenorphine to be diverted as identified by Deflavio et al. (2015) and Louie et al. (2019). On becoming a methadone prescriber, one respondent reported angst that his licence would become compromised by "addicts" (Livingston et al., 2018, p. 349) due to elevated scrutiny of regulatory bodies and inequality in methadone's regulation. This specific finding should be interpreted bearing in mind that data collection occurred prior to the removal of the previous requirement of having to obtain an exemption to prescribe methadone in Canada under federal policy, which has since been removed in mid 2018 (CPSBC, 2020). Louie et al. (2019) also expressed the rural sample populations included in their analysis conveyed similar apprehensions in prescribing OAT when compared to the urban physicians in their analysis of the literature sample, of which some results may be pertinent to British Columbia's rural primary care providers, with consideration all data originated in the USA.

Insufficient Education

Consistent reports of lack of knowledge and training specific to OUD existed among participants. van Boekel et al., (2013) concluded that generally health professionals tend to have low levels of knowledge about substance use disorders and feel they lack specific understanding and skills to care for this particular patient group. This finding was confirmed by a large majority of family physician respondents reporting inadequate staff training as the number one reason for not providing treatment for OUD patients in their practice (88%) (Deflavio et al., 2015). Livingston et al. (2018) identified a minority of participants had learned or acquired skills to manage substance use disorders in medical school with one physician stating "we didn't get a lot of training in that area of medicine... it's more like a fringe topic" (Livingston et al., 2018, p. 350), fostering the notion that OUD is outside the realm of legitimate medical conditions. Amongst primary care provider respondents in Kennedy-Hendricks et al. (2016) the majority (72%) felt prescription OUD is a very serious problem; however, they ranked its seriousness below other major chronic illness: obesity, heart disease, and tobacco use, which may additionally indicate an unclear understanding of OUD as a complex, chronic medical condition may exist amongst primary care providers.

Khenti et al. (2019) mixed methods evaluation was the only longitudinal study included in the review that implemented an intervention to assess for a reduction in stigma toward patients with OUD. This original research was conducted within community health centre settings that utilized the primary health care model in Ontario, and the intervention included improving awareness and providing education to health care providers (Khenti et al., 2019). The authors' results confirmed a significant reduction in stigmatizing attitudes post intervention, including strong evidence in particular for the measure specifically linked to OUD (p < 0.05) (Khenti et al., 2019). This study is generalizable to the context of primary health care in British Columbia and verifies that persistent professional stigma related to OUD may be associated with insufficient attention to substance use disorders in education and training, in keeping with the conclusions drawn from van Boekel et al. (2013), Deflavio et al. (2015), Livingston et al. (2018), and Kennedy-Hendricks et al. (2016). These findings also closely relate to the stigma towards the efficacy and implementation of OAT, as many providers seem to lack knowledge or fail to recognize the clinical effectiveness of this evidenced-based therapy.

Patient Stigma

Internalized and Perceived Stigma

Self-stigma was reported in both of the primary studies of the review with patient participants as well as in the systematic review. In their primary study to examine a population of primary care patients with opioid or alcohol use disorders in the USA, Kulesza et al. (2017) found internalized stigma was common amongst the participants and was the strongest predictor of substance use related problems. Although the tool employed contained stigmatizing terms that had the potential to generate participant bias, respondents were most likely to report feeling ashamed or that they have permanently screwed up their lives as a result of their OUD (Kulesza et al., 2017). Significantly higher internalized stigma was present amongst participants with OUD and comorbid alcohol use disorder (Kulesza et al., 2017). Tsai et al. (2019) also recognized internalized stigma is commonly experienced by individuals with OUD in their policy forum paper to acknowledge its significant association with psychological distress, poorer quality of life, continued substance use, and reduced engagement with treatment.

Perceived stigma was also evident amongst patients with OUD as described by the primary qualitative study investigating adults who use opioids in Ontario, with participants expressing concern that a diagnosis of OUD would disqualify them from future health care, particularly involving appropriate pain management (for example, if they required surgery) (Antoniou et al., 2019). These participants related health seeking experiences to be occurring in a context where their opioid use was a permanent, discreditable attribute that had become central to their identities, causing some to forego help seeking entirely (Antoniou et al., 2019). One participant described feeling:

Quite ill... but I didn't go because of the stigma... and I thought ... as soon as I go on methadone I am not going to get the medical help I need... because they are going to judge me and I experienced that... I didn't get that medical attention because I was an addict and judged (Antoniou et al., 2019, p. 18)

Another participant in this study addressed the challenges having physicians relate and empathize with their life circumstances alluding to the affirmation of peer integration within the provision of care by describing:

The problem is that... people that are trying to help us can't relate to [our] story where I can relate to their story of eating out of garbage cans, I can relate to being a prostitute... because I did all these things right? But when you... try to put all that out there, their blinders automatically go up and they stop taking you seriously... Hire some people that are still using (Antoniou et al., 2019, p. 19)

van Boekel et al. (2013) systematic review further acknowledged the consequences of negative attitudes on healthcare delivery. Two studies confirmed patient participants who reported greater perceived discrimination from health care professionals were less likely to complete treatment and predicted dropout rates (van Boekel et al., 2013). The population characteristics of these studies were not made available within the review and the authors informed readers that few studies were available to inform the impacts of perceived professional discrimination. For these reasons, these results may indicate that negative attitudes can be perceived by patients with negative outcomes, but there is limited external validity applicable to the primary health care context of British Columbia. A discussion of the anticipated stigma suffered by patients with OUD was also acknowledged by Tsai et al. (2019) and associated with psychological distress and reduced engagement in care. The authors also recognized these

impacts can be pronounced in rural areas and small communities due to heightened concerns about boundary violations or breaches of confidentially (Tsai et al., 2019). This is relevant given the geographical context of rural and remote primary care settings in the province and the extent of the opioid overdose crisis across all areas of British Columbia.

Stigmatizing Language

Stigmatizing language was displayed within qualitative data from the studies investigating health care professionals and I have provided quotes throughout the findings to help portray this. Tsai et al. (2019) identify that everyday language used surrounding the current opioid crisis and individuals with OUD attributes to considerable consequences related to responsibility, increased support for punitive judgements and devalued evidence-based treatments. This includes terms such as substance abuser, and medication assisted treatment (Tsai et al.; 2019). The authors also suggest referring to the current opioid crisis as an 'epidemic' invokes isolation, quarantine and vector control, which are inappropriate in response to the multifactorial opioid overdose crisis (Tsai et al., 2019). They recognize that language has the power to shift public stigma, a conclusion which was also supported in the study by Goodyear et al. (2018) that completed a vignette survey amongst a large random sample of the public in the USA. Their findings concluded that individuals labelled as 'drug addicts' held a higher responsibility and negative affect ratings compared to those labelled with 'OUD' (Goodyear et al., 2018). Further, the authors identified that language may matter for males and females, as the OUD label was rated with higher dangerousness than 'drug addict' in females; 'drug addict' was rated with higher negative affect ratings than disorder, and males had lower positive affect ratings compared to females (Goodyear et al., 2018). The negative impacts of stigmatizing language specific to patients were found within Antoniou et al. (2019) study to investigate

individuals who use opioids, as they discussed that being labelled 'addicts' created problems when seeking health care, including feeling increasingly ostracized from physicians. These findings reinforce the important changes made to the terminology of the DSM-V.

Public Stigma

Public stigma toward OUD remains prevalent, as indicated by multiple studies, and was portrayed by reports including public, physician and patient populations. In a nationally representative sample of the American general public, Kennedy-Hendricks et al. (2017) identified respondents expressed high levels of stigma towards individuals with prescription OUD, a desire for social distance, and felt employers should be allowed to deny employment to persons with prescription OUD. Additionally, large majorities of this sample felt individuals with prescription OUD are to blame for the problem (78%) and lacked self-discipline to use prescription opioids without become 'addicted' (72%) (Kennedy-Hendricks et al., 2017). A public perception that prescription OUD predominantly affects persons with low income was also associated with a greater likelihood of believing persons with prescription OUD are dangerous and to blame for the problem (Kennedy-Hendricks et al., 2017). This study also concluded higher stigma ratings were associated with lower support for public health orientated policies, including to expand coverage of prescription OUD treatment (Kennedy-Hendricks et al., 2017).

Goodyear et al. (2018) employed a vignette survey to better understand public perception of opioid use revealing higher stigmatizing attitudes towards an individual who took opioids from a friend, compared to an individual who received a prescription opioid from a doctor. This may speak to the implications of public stigma as it relates to the opioid crisis, as individuals may tend to hide their opioid use due to these negative attitudes. Physician respondents from Livingston et al. (2018) study expressed concern about methadone prescribing due to a local history of negative media coverage regarding physicians' opioid prescribing practices. Their responses gave a sense of general uneasiness due to publicized and politicized opioid related deaths, with one stating there is a "large public concern... large concern from law enforcement..." (Livingston et al., 2018, p. 350). This was related to contextual factors of community opposition to methadone being provided at primary care clinics, with respondents reporting a "not in my backyard mentality" (Livingston et al., 2018, p. 350). Further, within the USA, Tsai et al. (2019) recognized that news coverage largely frames the opioid crisis as a criminal justice issue, which further promotes public stigma and misunderstanding of OUD as a health issue. Tsai et al. (2019) recognized that the continued use of stigmatizing language is capable to foster further public stigma and promotes lack of public support for public health-oriented policies.

Opioid Use Familiarity

Many of the studies alluded to the contact hypothesis that people who have more contact or experience with a stigmatized condition are therefore more tolerant and have more positive attitudes towards these people (van Boekel et al., 2013). This was evident in Goodyear et al. (2018) vignette study of a large sample of the American public, which found that participants' past or current opioid use may influence their stigmatizing attitudes towards someone with an opioid use condition. Additionally, van Boekel et al.'s (2013) review found that professionals who more frequently work with or who have more contact with patients with substance use disorders expressed more positive attitudes. Two studies from their literature analysis revealed that health professionals who were more frequently in contact with people who use injection drugs expressed more positive explicit attitudes towards these people (van Boekel et al., 2013). These findings were further validated in the study by Livingston et al. (2018) as physician respondents who were methadone prescribers at time of data collection described providing OAT as interesting and enjoyable practice or as fulfillment of their professional duty to reduce suffering (Livingston et al., 2018). Further, in one study identified by van Boekel et al. (2013), physicians with a personal experience or history of a substance use disorder reported more positive attitudes towards patients suffering similar problems.

Conversely, one study employed a public opinion survey which displayed attitudes that were similar among those with and without personal experience of OUD, providing little evidence that personal experience reduces stigma (Kennedy-Hendricks et al., 2017). The authors did note that some respondents who had personal experience with OUD expressed higher levels of stigma on some measures, which they suggested may be due to strained interpersonal relationships for individuals with OUD that heighten stigma among friends and family (Kennedy-Hendricks et al., 2017).

Stigma and Opioid Policy

Stigma plays an important role for support and implementation of policies that relate to opioid use and the opioid crisis. This was evident across study populations involving the public, patients and health care providers. A public opinion survey in the USA indicated higher levels of stigma were independently associated with greater public support for punitive policies and lower support for public health-oriented policies (Kennedy-Hendricks et al., 2017). The authors verified this data should not be interpreted as causal due to a potential policy feedback loop: although punitive drug policies may be a result of stigma, these policies also intensify negative attitudes as they define the affected population as criminals (Kennedy-Hendricks et al., 2017). Nevertheless, these findings promote the notion that reducing stigma towards individuals with prescription OUD may be one way to discourage the adoption of further punitive policies (Kennedy-Hendricks et al., 2017). As the study was completed with participants solely from the USA, these results may not be entirely applicable to the general public of British Columbia; however, the opioid crisis has significant detriments amongst both American and Canadian populations, and for that reason these outcomes may be applicable.

Antoniou et al. (2019) investigated patients in their study to characterize individual impacts of implemented opioid related policies and harm reduction interventions in Ontario that were implemented in response to the rise in opioid related deaths. Patients who used prescription opioids from urban, suburban and rural areas provided qualitative data that allowed the authors to conclude that an experience of deepening of stigma had occurred, particularly during encounters with health care providers; one participant explained "...my doctors... scared because of current policies? You darn well bet... when I go to the ER I get shunned, like they are terrified of me and why?" (Antoniou et al., 2019, p. 18). These changes also indicated a loss of autonomy for patients with a curtailed ability to engage in shared decision making with providers, manifesting as mistrust, suspicion and disrespect in the patient-provider relationship (Antoniou et al., 2019). Patients characterized a sense of powerlessness associated with a perceived unilateral transfer of responsibility for the overprescribing of opioids from clinicians to patients (Antoniou et al., 2019). One participant described this as "...now you have got me hooked on them and you can't give me any" (Antoniou et al., 2019, p. 18) which speaks to the unintended consequences of deprescribing of opioids across Canada and is applicable to the context in British Columbia. Furthermore, impacts of the new opioid policies exacerbated vulnerabilities experienced by patients who take prescribed opioids due to deteriorations of pain control, and mental health that, for some, resulted in unemployment and lack of health insurance

(Antoniou et al., 2019). The authors recognize these experiences exemplify that stigma is closely related to a power differential as those with control over social, economic and political capital are favourably positioned to allow the consequences of stigma and discriminatory processes to unfold (Antoniou et al., 2019). This is also pertinent to the setting of British Columbia as morbidity and mortality related to OUD remain elevated, despite the implementation of these policies in response to the opioid crisis.

Amongst health care providers, some respondents related that punitive measures enhanced complexities associated with caring for patients with OUD as "sometimes they're in and out of jail too, which makes things challenging" (Livingston et al., 2018, p. 349). Additional hesitations from primary care provider respondents were articulated regarding the potential disciplinary actions associated with patients suffering with OUD: "it opens you up having to go to court" (Louie et al., 2019, p. 5). Tsai et al., (2019) related stigma's impacts on policy to health disparity populations, as few incarcerated or recently released individuals receive treatment or are linked to treatment, which is a significant missed public health opportunity. Further, these authors recommend that the judicious use of stigmatizing language influences the norms about OUD among policymakers and constituents, with effects on policy levers that directly impact the government's response to the opioid crisis (Tsai et al., 2019). For example, the pejorative use of 'substance abuser' or devaluing evidence-based treatments has influence on supportive policy development.

Mitigation of Researcher Bias

An effort to maintain transparency of the methods and process of the review has been made throughout this paper to decrease risk of bias; however, all considerations of introducing and mitigating bias must be discussed (Whittemore & Knafl, 2005). As bias and error may occur at any stage of the review, identification of the potential for partiality will be addressed in the following portion of the paper (Whittemore & Knafl, 2005).

Acknowledgement of Researcher Bias

To promote the transparency and quality of the presented findings in this integrated literature review, acknowledging the risk of researcher bias will be presented here. Given that I am this paper's sole author and conducted the interpretation of the data alone, acknowledging my own reporting bias remains necessary. The risk of a bias assessment may impact the credibility of the research; as such, reviewing my personal preconceptions regarding the topic is important so that they are not imposed on the findings and to maintain neutrality.

I am aware of my own privilege as a person who comes from a well-resourced background and no personal history of OUD, nor have I experienced anyone close to me reveal their own struggle with OUD. Within my personal career as a registered nurse for nine years, I have encountered several patients with varying substance use disorders. My most recent work as a registered nurse was in a critical care area in a large, downtown hospital in Vancouver, British Columbia, which has often been referred to as the 'epicenter' of the ongoing opioid crisis. I spent much of my last two years within the post anaesthetic care unit and, for this reason, I am very familiar with administering opioids and have had multiple patient encounters with individuals suffering with OUD and complex pain management. I have witnessed the enduring stigma present in health care settings from colleagues as well as amongst individuals outside health care settings. In the past I have encountered a colleague unable to independently administer opioids due to a history of opioid misuse and varying levels of stigma were evident amongst my peers in response to this situation. My exposure and experiences with opioids and patients with OUD have ultimately impacted my preconceptions about what the research would say and the conclusions I have drawn from the literature.

I pursued this research as I sought to understand the concept of stigma and how it is fundamentally undermining the responses to the opioid crisis in British Columbia. As an entry level primary care provider candidate, I wanted to ensure that upon entering practice I prevented myself from perpetuating further stigma as well as inappropriate opioid prescribing. I was unaware of the vast implications of stigma, how it is experienced by those it affects, and the multifactorial origins. Conducting this literature review has allowed me to examine my own inherent biases regarding providing care for patients with OUD and the opioid crisis in British Columbia. Identification and awareness of these assumptions are essential aspect of a competent inquiry to ensure objective examination of the data (Creswell & Creswell, 2018). Additionally, I employed research reflexivity by reflecting on my role and personal background as they may shape my interpretation of the data (Creswell & Creswell, 2018). Within the entirety of the paper, efforts to use clear, straightforward, unbiased language were made to ensure that my writing does not bestow stigmatizing or insensitive connotations. To enhance validity of the findings and further mitigate a biased assessment, thick, rich descriptions from study participants and disconfirming evidence were also included (Creswell & Creswell, 2018). Additionally, the process of choosing a variety of literature sources for examination enables triangulation of the data, by identifying themes that are established based on converging evidence, which further enhances the validity and objectivity of my research (Creswell & Creswell, 2018). The conclusions I have depicted from the integrative literature review are presented in the following section of the paper.

Chapter V: Discussion

This section of the integrated literature review in the final step of the process and will discuss the conclusions I have drawn from the review. I will provide recommendations for primary care providers to implement in practice and finally the limitations of the literature sample will be presented.

Synthesis of Findings

Findings from this integrative literature review demonstrate the powerful phenomenon of stigma and the extensive effects it can have on its targets. For individuals with OUD, stigma stems from several sources and continues to exist as a complex interplay of how these stigmas intersect, ultimately generating social exclusion and a myriad of negative health consequences. Importantly, the results illustrate several areas that primary care providers are well positioned to diminish the persistent and intertwined stigma toward individuals with OUD that may ultimately improve outcomes at individual as well as population levels.

The prevalent sentiment of professional stigma found within the review toward individuals with OUD is an area of particular concern that can certainly be addressed by primary care providers (Kennedy-Hendricks et al., 2016; Louie et al., 2019; van Boekel et al., 2013; Deflavio et al., 2015; Livingston et al., 2018). Discrimination and mistrust seemed to coalesce amongst participants expressing professional stigma, with views that individuals with OUD differ from other patient populations, as this particular diagnosis gives the impression of being unusual and beyond the skillset of primary care providers (Livingston et al., 2018; Louie et al., 2019; van Boekel et al., 2013). The adverse view shared by providers within the literature sample may be attributed to consistent negative narratives surrounding opioids amongst peers, the public, and regulatory bodies which may foster misjudgement or overstating the challenges of caring for patients with OUD, especially for those with minimal first-hand experience (Livingston et al., 2018; van Boekel et al., 2013). This finding is convergent with the themes of insufficient education and opioid familiarity, as amongst providers who excluded patients with OUD in their practice or who were non-OAT prescribers or were new to practice, and these groups were more likely to refer to patients with OUD as inappropriate for primary care due to their difficult and challenging needs (Deflavio et al.; 2015; Livingston et al., 2018; Louie et al., 2019). The relevant theory that increased contact with stigmatized populations can improve attitudes was upheld by a subgroup of providers who provided care for patients with OUD and were OAT prescribers, as they reported their patient interactions as mostly straightforward and in some cases rewarding (Goodyear et al., 2018; Livingston et al., 2018; Louie et al; 2019). Additionally, this may also be relative to their encounters with patients who are stable on OAT, versus the interactions of non-prescribers are likely with individuals who are not stable on OAT, and therefore a considerable variant of patient presentations occurs. As a result, the patients encountered by non-prescribers may be more likely to be in a state of withdrawal and in need treatment; further validating the necessity of increasing access to appropriate care for patients struggling with OUD.

The skepticism, hesitancy and lack of interest of primary care providers to provide OAT defeats a main component of the comprehensive care plan for patients with OUD in British Columbia. Professional stigma towards OAT portrays it as an unconventional therapy, discredits prescribers' practices as well as substantiates the stigma towards patients who use OAT. This enforces barriers to access care due to lack of OAT prescribers, decreasing engagement and adherence to OAT, while promoting public stigma associated with OAT and support of harm reduction activities to exist within primary care practices (Livingston et al.; 2018; Louie et al.,

2019). Once again, this stigma can be attributed to insufficient knowledge and lack of skills that can be addressed by engaging current and future providers in appropriate avenues of education and mentorship (Deflavio et al., 2015; Louie et al., 2019).

Professional stigma has continued to evolve within an environment where individuals who use opioids or suffer from OUD are essentially characterized as patients who do not belong to primary care, disqualifying their social status, and revealing a dominant attitude of "undeserving addict" (Antoniou et al., 2019, p. 19). The notion of these patients as abnormal and inappropriate to primary care settings is unacceptable within British Columbia, especially given the current climate of an escalating opioid crisis. This can absolved through employing stigma interventions in primary health care settings, increasing knowledge and training of current primary care providers, providing essential education specific to OUD in medical school and nurse practitioner programs, while acknowledging the professional and ethical responsibilities primary care providers are upheld to (Deflavio et al., 2015; Khenti et al., 2019; Livingston et al., 2018; Louie et al., 2019). Utilizing a trauma informed approach and recognizing individuals' unique identities during care provision will destignatize the dominant 'addict' social identity that has taken over for individuals who use opioids, while promoting a therapeutic patientprovider relationship to ensure these vulnerable patients are included within primary health care settings of British Columbia (Antoniou et al., 2019). Further, primary care providers must ensure that their care remains empathetic, compassionate, patient centered and collaborative amongst the population of patients with OUD to promote trust, diminish power imbalances and improve engagement and retention in care (Antoniou et al., 2019; van Boekel et al., 2013).

The perceived and internalized stigma experienced by individuals with OUD is discouraging care seeking behaviours, negatively affecting their treatment outcomes, and is

associated with greater engagement high risk behaviours, including obtaining opioids from untrustworthy sources (Tsai et al., 2019). Patients are indeed capable of perceiving the discriminatory and conflict laden nature of primary care providers, internalizing the negative stereotypes bestowed upon them, which discourages seeking help when they need it most (Antoniou et al., 2019; Kulesza et al., 2017). Further, it seems the mistrust, stereotyping and paternalistic treatment from providers, perpetuates patients' mistrust of the health care system and therefore a lack of therapeutic alliance withstands between this patient population and providers. Shared and informed decision making that incorporates patient preferences and values will improve collaboration, empower patients, promote continuity of care while decreasing stigma for patients to access primary care services for OUD (Antoniou et al., 2019).

Including individuals who have abstained from opioid use or who are stable on OAT for some specified period of time, also known as peers, may help to facilitate engagement and retention in primary care for individuals who use opioids or have OUD and may also provide beneficial support and opioid use familiarity for health professionals within a primary care setting. Successful integration of peers endorses trust, demotes discrimination, values social identities, empowers patients' prospects of recovery, and appreciates lived experiences (Antoniou et al., 2019). This will assist to diminish professional stigma, promote fairness in access to care, while supporting patients to ensure they feel safe and welcomed to seek help for opioid use, and may also conceivably discourage individuals from hiding their opioid use. Incorporating peers within primary health care also encourages their inclusion amongst members of the general public, decreasing the marginalization and stereotyping of people who use opioids. Further, increased peer involvement in health care will foster their meaningful presence in the formulation and implementation of future policies, avoiding further unintended consequences.

As gate keepers within the healthcare system and frequent interactions with people from all walks of life, primary care providers set a precedent for how individuals with OUD are portrayed amongst colleagues, patients, members of the public, constituents and policy makers. Their use of proper terminology will help to reframe the way patients with OUD are thought about and described; a key component to reduce stigma, discrimination, mistrust and the reluctance of these individuals to access the health care system. This involves primary care providers prohibiting the use of stigmatizing language day-to-day in verbal communication, clinical documentation, as well as the use of printed materials that may be distributed from clinical settings. Utilizing the term OUD promotes clinical terminology and can improve public and decision maker perceptions, while the use of other pejorative language is associated with greater individual responsibility, voluntary behaviour, control over behaviour and supports punitive judgements (Goodyear et al., 2018; Kennedy-Hendricks et al., 2017; Tsai et al.; 2019). The use of non-stigmatizing language humanizes this medical condition and supports implementation of unbiased and effective policy (Tsai et al., 2019). Further, appropriate use of language is vital to diminish public stigma, as the public influence the structural elements of transforming laws and policies (Tsai et al., 2019). In addition, public stigma may also impact a primary care provider's decision making regarding the implementation of prescribing OAT, especially in rural and remote settings (Tsai et al., 2019; Livingston et al.; 2018). For these reasons, primary care providers must identify and take action to eradicate the multiple sources of stigma for patients with OUD.

Recommendations

A table was utilized to display the recommendations for primary care providers to

implement in their practice to reduce stigma. Each recommendation is listed beside their

corresponding source of stigma along with specific strategies to implement in the primary health

care setting in Table 2 below.

Table 2

Sources of Stigma and Recommendations for Diminishing Stigma in Practice for Patients with Opioid Use Disorder

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
Professional Stigma: Discrimination and Patients' Mistrust	Provide accessible, welcoming care for patients with OUD as a standard of primary health care practice	 Include and welcome patients with OUD or hx of OUD in primary care clinic setting Ensure empathetic, trauma informed approach utilized for patient care interactions Listen to patients' stories, appreciate their values, preferences and individuality during interactions to promote trusting relationship Empower patients by educating them about treatment options, providing harm reduction resources, include peers with OUD or hx of OUD in primary health care setting Ensure to allot appropriate time for appointments for patients with OUD 	(Antoniou et al., 2019; Goodyear et al., 2018; Kennedy- Hendricks et al., 2016; Khenti et al., 2019; Kulesza et al., 2017; Livingston et al., 2018; Tsai et al., 2019; van Boekel et al., 2013)

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
		 Describe and acknowledge OUD as a chronic, relapsing, complex clinical disorder associated with several risk factors and extrinsic variables Recognize patients accessing primary care as an opportunity to address social determinants of health Use 'people first language' to describe patients in any verbal communication or in clinical documentation Employ education to deconstruct stigma, and improve the attitudes/knowledge of all multidisciplinary team members at primary care setting Screen all patients for opioid use or OUD when appropriate or indicated Provide alternate provider in event unable to provide appropriate care for patient with OUD Identify a professional colleague mentor who provides care for patients with OUD Acknowledge and adhere to professional responsibilities and codes of ethics 	

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
Professional Stigma: Stigma Related to Opioid Agonist Treatment (OAT)	Prescribe OAT as an evidence-based treatment for OUD	 Complete education and training to prescribe OAT through BCCSU Prescribe OAT for mild to moderate cases of OUD Educate patients with OUD about different OAT options Acknowledge OAT as effective, evidence- based treatment for OUD Meet patients where they are at in their journey, when they feel ready to implement OAT or reattempt implementing OAT Seek substance use specialist guidance/support for complex cases of OUD, or refer to substance use specialist if indicated for severe cases Identify a colleague mentor who is OAT prescriber for support 	(Deflavio et al., 2015; Livingston et al., 2018; Louie et al., 2019; Tsai et al., 2019)
Professional Stigma: Insufficient Knowledge and Training	Recognize patients with OUD as having a complex, chronic medical condition	 Complete education and preceptorship regarding OUD and OAT through BCCSU Review DSM V criteria for OUD diagnosis Encourage colleagues belonging to your primary care practice to complete modules from BCCSU 	(Deflavio et al., 2015; Khenti et al., 2019; Livingston et al., 2018; Louie et al., 2019; van Boekel et al., 2013)

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
Patient	Create therapeutic	 Promote education regarding OUD as a necessity in training of future physicians, nurse practitioners and other health professionals Ensure up to date guidelines for OUD accessible and available to all providers at primary care practice 	(Antoniou et al
Patient Stigma: Internalized and Perceived Stigma	Create therapeutic, collaborative and trusting relationships with patients who have OUD	 Welcome patients with OUD to your primary care practice setting wherever they may be in their journey in non- judgemental manner Ensure to practice inclusive, culturally safe, trauma informed and patient centered care Recognize patients' unique identities and cultures rather than allow OUD to define them Employ 'people first language' Encourage patients to have opinions, express their feelings and preferences during care decisions Provide choices for care, review options collaboratively to diminish power imbalances Include peer integration into primary health care for patients with OUD 	(Antoniou et al., 2019; Kulesza et al., 2017; Tsai et al., 2019)

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
		• Draw on approaches from cognitive behavioral therapy for direct intervention as indicated	
<i>Stigmatizing</i> <i>Language</i>	Use 'person first language' to describe patients with OUD or people who use drugs	 Use 'person first language' in day to day life in clinical settings for verbal communication and clinical documentation Use 'person first language' outside clinical setting Review DSM-V change in diagnostic terminology Use the following terminology: Opioid use disorder, opioid use, people who use drugs, opioid agonist treatment, opioid crisis, positive/negative urine toxicology screen, unregulated drug use, unregulated drug use, unregulated drug supply DO NOT use the following terminology: opioid abuser, opioid addict, opioid addiction, drug seeker, junkie, opioid epidemic, medication substitution treatment, medication replacement treatment, dirty/clean urine screen, illicit drug use Politely intervene when confronted with 	(Antoniou et al., 2019; Goodyear et al., 2018; Livingston et al., 2018; Tsai et al., 2019

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
		stigmatizing language and rephrase feedback	
Public Stigma	Address sources of enacted public stigma within primary care setting	 Recognize leadership role of being a primary care provider; include patients with OUD in practice and prohibit personal stigma as this translates to the community and the media Thoughtfully intervene to address others' stigmatizing attitudes and language in and out of primary care setting- "I think there may be a better way to describe the person you are talking about to respect their humanity. Calling them a drug addict may have several negative consequences that you don't actually intend. A better choice in the future is to say the individual is suffering from an OUD" Critically evaluate media coverage of opioid crisis 	(Goodyear et al., 2018; Kennedy- Hendricks et al., 2017; Livingston et al., 2018; Tsai et al., 2019)
Opioid Use Familiarity	Increase exposure to individuals with OUD by including them in primary care practice	 Include patients with OUD in patient panel Review and understand pharmacology of opioids and OAT: mechanism of action, adverse reactions Complete 2-day preceptorship with BCCSU to increase 	(Antoniou et al., 2019; Deflavio et al., 2015; Goodyear et al., 2018; Livingston et al., 2018; Tsai et al., 2019)

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
		 exposure to patients with OUD Acknowledge multifaceted cause of opioid crisis in British Columbia Increase knowledge and awareness of appropriate opioid prescribing and unintended consequences of opioid deprescribing Consider integrating substance use specialist in primary care setting to increase knowledge and confidence of other providers 	
Stigma and Opioid Policy	Ensure awareness of current opioid policies and guidelines. Be mindful of unintended consequences for patients with OUD	 Encourage meaningful inclusion of patients with OUD when formulating or implementing policy that may impact their lives Be aware of 'over- correction' when applying opioid guidelines to individuals who have been receiving opioids for many years Prevent power imbalance between provider and patient through honest communication and collaboration Respect and include patients in all decision making, especially with regards to opioid 	(Antoniou et al., 2019; Kennedy- Hendricks et al., 2017; Livingston et al., 2018; Tsai et al., 2019)

Source of Stigma	Recommendation	Strategies in the Primary Care Setting	References
		tapering or transitioning to OAT	
		 Acknowledge patients 	
		with OUD as needing	
		care for their health-	
		related issue and	
		acknowledge	
		importance of essential	
		public health-oriented	
		policies/programs	
		Maintain awareness of	
		current unregulated	
		drug supply	
		contamination and rates	
		of illegal opioid	
		overdose	
		Recognize	
		opportunities to	
		advocate for patients	
		with OUD and people	
		who use opioids within	
		leadership role as	
		primary care provider	
		during interactions with	
		decision makers	
		• Ensure to use non	
		stigmatizing language	
		during communications	
		with media, policy	
		makers and constituents	

Limitations

Social scientists who study stigma and stigmatized groups are often "from the vantage point of theories that are uninformed by the lived experience of the people they study" (Link & Phelan, 2001, p. 365). This is a relevant limitation applicable to this review, as the researchers of the included studies do not belong to a stigmatized group, nor do I, and for that reason, the outcomes may be a misinterpretation of the experience of those who are stigmatized, further perpetuating unsubstantiated assumptions (Link & Phelan, 2001). Accordingly, the most fitting evidence to inform the findings would likely involve a majority of patient participants and their experiences of stigma; however, the literature search only resulted two applicable primary studies (n=2) (Antoniou et al., 2019; Kulesza et al., 2017) comprising patient respondents. However, it is encouraging many authors were in agreement that future research should focus on individuals who experience stigma to gain an improved understanding of the negative repercussions, making it seem likely a similar literature search in the near future may generate more lived experiences of stigma as it relates to individuals with OUD (Antoniou et al., 2019; Goodyear et al., 2018; Kulesza et al.; 2017; van Boekel et al., 2013).

A specific limitation recognized by Kulesza et al. (2017) in their study of patient participants, was that the research was conducted at a clinic serving an underprivileged community, which may decrease the generalizability of the results to general primary care populations. Conversely, the study may be applicable to the context of primary health care in British Columbia as the authors recognized this population was also racially and ethnically diverse (Kulesza et al., 2017). In regard to the Canadian study involving patient participants, it is unclear if the sample was representative of all individuals who use opioids, as the participants belonged to specialized clinics and community centers, decreasing the external validity within the primary care setting (Antoniou et al., 2019). However, this study was relevant to include as it provided individual, qualitative patient accounts in response to the consequences of the opioid policies implemented across Canada in 2017 (Antoniou et al., 2019).

Another limitation identified within the literature sample was van Boekel, Brouwers, van Weeghel and Garrtesen's (2013) systematic review involved studies of health professionals' attitudes that were non-specific to OUD. The participants in these results included physicians,

nurses and other health care workers; as such these results may not be entirely generalizable to the primary care provider context in British Columbia. Nevertheless, the negative attitudes of these health professionals resulted in a lack of empathy and an avoidant approach, which the authors indicated may have negative impacts on treatment outcomes, patients' self-esteem and ultimately the delivery of suboptimal healthcare (van Boekel et al., 2013). Further, discernment of studies regarding illegal drug use were present, but there were no studies included specific to OUD or primary care providers which may decrease the external validity to the current climate in British Columbia. Nevertheless, the findings did represent the similar conclusions of other included studies, that generally health professionals have negative attitudes towards patients with substance use disorders.

As this integrative literature review was completed to inform primary care providers practicing in British Columbia, another relevant limitation of the literature sample was that only three studies were conducted in Canada and all originated from Eastern provinces, Ontario (n=2) (Antoniou et al., 2019; Khenti et al., 2019) and Nova Scotia (n=1) (Livingston et al., 2018), decreasing the external validity. The other five primary studies and three secondary sources originated in the USA. While the results from these studies can be considered in the context to reduce stigma within primary care practice in British Columbia, the exact accounts of stigma as it is experienced by patients and portrayed by professionals cannot be made exclusively on this research. Further, the explanations of stigma as it relates to primary care providers, the general public, and local policy from this review may not be entirely applicable to the current evolving health, social and political climate of British Columbia.

It has been recognized as a challenge to study stigma by researchers for several reasons. Within the evidence there is a general acknowledgement of a need for more indirect measurement procedures to inform the evidence as well as the need to conceptualize stigma with less of an individualistic focus as this can lead to harmful outcomes (Kulesza et al., 2017; Goodyear et al., 2018; Yang et al., 2019). This is evidenced by past inquiries about living with a disability because the research has been uninformed by the lived experience of the people experiencing the disability, with experts giving priority to the scientific theories and research techniques utilized (Link & Phelan, 2001). Another limitation that may contribute to erroneous data related to stigma investigation is the case when self-report measures are employed to understand opinions or attitudes pertaining to OUD. This may have been the case in the study by Kulesza et al. (2017) that utilized the validated Substance Abuse Stigma Scale tool, as the reporting individuals were likely aware of discriminatory responses and the data collection may have been influenced by their own social desirability concerns. Additionally, the use of stigmatizing terminology within the tool itself may generate an implicit bias, as previously mentioned in the findings. For these reasons the full power and significance of internalized stigma as it relates to patients with OUD and health outcomes remains somewhat obscured.

Future Directions

The study of stigma as it relates to OUD is best conveyed by phenomenology which seeks to know the essence of the phenomenon experienced and what does it mean (Reed & Crawford Shearer, 2018). This investigation involves analysis of the subjective phenomena to understand the truths about reality grounded within individuals who have lived experiences of stigma (Reed & Crawford Shearer, 2018). This work is typically completed with small samples, which is applicable to future studies that are more specific to consider culture and disease separately in an effort to make statements about the essential truths based on the common categories of lived experiences of those who are stigmatized (Reed & Crawford Shearer, 2018).

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Additionally, research on stigma comes from multiple disciplines regarding how stigma operates and induces harm on varying populations, yet progress to tackle stigma and its harmful consequences is lacking. Collaborative efforts are required to move forward across disciplines, standardize measures, and build more effective interventions for clinicians in practice, including how to measure changes for specific outcomes over time (Stangl et al., 2019; Tsai et al., 2019).

Future research to address stigma as it relates to individuals with OUD should seek to determine the experiences stigma related to prescription OUD separately from illegal supply OUD, as a variance in negative attitudes towards these disorders exists and may resultingly cause these populations to suffer unique stigma related health disparities. Additionally, future research on primary care provider attitudes and patient perceptions should be assessed using longitudinal study designs to determine the effects and consequences of stigma over time. This would method would allow for evaluation of the effectiveness of interventions such as education implementation, anti-stigma campaigns, and standardized OAT prescribing in primary health care practices of British Columbia. Evaluations of efficacious stigma interventions would also be valuable to examine patients for greater emotional well-being and higher quality of life (Kulesza et al., 2017). Exploring the manner in which the social determinants of health, policy and stigma intersect may also be beneficial to understand of the vast outcomes policy implementation has amongst individuals with OUD (Goodyear et al., 2018; Antoniou et al., 2019). More explorations are needed to understand the causal pathways through which stigma acts so that targeted interventions can be deployed to enhance the response to care for patients with OUD and improve responses to the opioid overdose crisis.

Chapter VI: Conclusion

The current role of primary care providers in British Columbia is often to provide care for patients who have complex care needs, and this must include individuals who suffer from OUD. The elimination of stigma in primary health care settings of British Columbia is essential to improve equitable access, ensure quality of care and promote healing for individuals with OUD. The sources of stigma particular to this population are complex and intersecting; primary care providers are well positioned to address these intricacies by ensuring primary health care is an inclusive, trusting, collaborative and non-discriminatory environment supportive of evidencebased treatments (Antoniou et al., 2019; Tsai et al., 2019). OUD has significant economic, personal and public health consequences, and primary care providers are also capable of expanding consistent access to timely services across the province that are ready and responsive, promoting effective and safe care while helping to evenly distribute the responsibility of care during the opioid crisis. Further, they must be cognizant of their unique position to be agents for change and exemplars by only using 'people first language' when communicating about individuals with OUD to eliminate persistent stigma amongst the public and decision makers (Kelly et al., 2016; Tsai et al., 2019).

The ongoing opioid overdose crisis in British Columbia substantiates the necessity to destigmatize and expand access to essential care for OUD to improve effective management of this chronic disease. Timely efforts to address this health and social issue are critical as untreated OUD remains one of the major drivers of the present opioid overdose crisis (Tyndall, 2018). Efforts of primary care providers to diminish stigma are instrumental and will positively impact the comprehensive care that patients suffering OUD receive and address the ongoing overdose crisis. Until the stigma of OUD and opioid use is defied, it will continue to hinder implementation of interventions and the responses to the opioid crisis, exacerbating the health inequalities for those who are suffering.

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Appendix A

DSM-5 Criteria for Diagnosis of Opioid Use Disorder

- 1. Opioids are often taken in larger amounts or over a longer period than what was intended
- 2. There is persistent desire or unsuccessful efforts to cut down or control opioid use
- 3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects
- 4. Craving or strong desire to use opioids
- 5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school or home
- 6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids
- 7. Important social, occupational, or recreational activities are given up or reduced because of opioid use
- 8. Recurrent opioid use in situations in which it is physically hazardous
- 9. Continued use despite knowledge of having persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.
- 10. Tolerance*, as defined by either of the following:
 - a. Need for markedly increased amounts of opioids to achieve intoxication or desired effect
 - b. Markedly diminished effect with continuous use of same amount of opioid
- 11. Withdrawal*, as defined by either of the following:
 - a. Characteristic opioid withdrawal syndrome
 - b. Same (or closely related) substance is taken to relieve or avoid withdrawal symptoms

The presence of at least 2 of these symptoms indicates an opioid use disorder (OUD)

The severity is defined as: MILD: The presence of 2 to 3 symptoms MODERATE: The presence of 4 to 5 symptoms SEVERE: The presence of 6 or more symptoms

*patients who are prescribed opioid medications for analgesia may exhibit these two criteria (withdrawal and tolerance) but would not necessarily be considered to have a substance use disorder.

(American Psychiatric Association, 2013)

Appendix B

Individual Database Searches

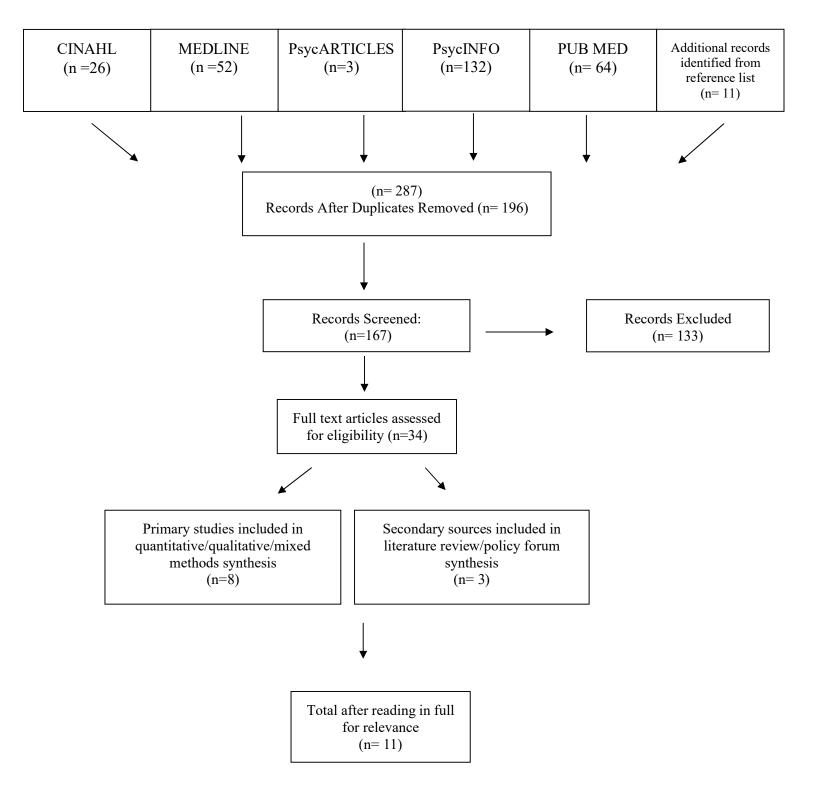
Database	MeSH, non-MeSH Keywords and Boolean Operators	Results
CINAHL	(MH "Substance Use Disorders") AND (MH "Analgesics, Opioid" OR (MH "Substance Abusers") AND (MH" Analgesics, Opioid") OR opioid use disorder OR opioid abuse OR	n= 26
	opioid addiction AND (MH "Stigma") OR (MH "Attitude to Illness") OR (MH "stereotyping") or self-stigma AND (MH "Primary Health Care") OR primary care OR primary care provider	
Medline	(MH "Opioid -Related Disorders) OR (MH "Opioid Epidemic") OR opioid use disorder OR opioid abuse AND (MH "Social Stigma") OR (MH "Prejudice") OR (MH "Perception") OR stigma AND (MH "Primary Health Care") OR (MH "Physicians, Primary Care") OR (MH "Primary Care Nursing")	n= 52
PyscARTICLES	opioid use disorder OR opioid abuse OR opioid addiction AND stigma OR attitudes	n= 3
PsycINFO	opioid use disorder OR opioid abuse OR opioid addiction AND stigma OR attitudes OR perception AND primary care OR primary health care OR primary care OR primary care provider	n= 132
Pub Med	opioid use disorder OR opioid abuse OR opioid	n= 64

Database	MeSH, non-MeSH Keywords and Boolean	Results
	Operators	
	addiction AND stigma AND	
	primary health care OR	
	primary care	

Appendix C

From the original non-duplicate records selected for review (n=196), 11 met the criteria for

inclusion in this integrative review.



Appendix D

			Primary Studies			
Author, Date,	Purpose or Aim	Theoretical	Context and Sampling	Data Analysis	Strengths and	Key Findings/
Title		Framework, Research Methodology			Limitations	Applicability
Antoniou, Ala-	Characterize	Theoretical	Ontario, Canada	-Stigma used to	Strengths:	Three themes
Leppilampi,	impacts of	framework:		conceptualize	-Ethical considerations	describing impacts
Shearer, Parsons,	policies intended	Qualitative, non-	Adults >18 years old	findings	stated	of recent
Tadrous, &	to improve	experimental			-Clear study aim	implemented opioid
Gomes (2019)	opioid		Eight focus groups:	- Constructionist	-Diverse sampling from	related policies and
	prescribing and	Stigma theory to	individuals taking	grounded theory to	urban, suburban and	harm reduction
"Like being put on	prevent opioid	interpret participant	opioids for chronic pain	code, categorize and	rural regions	interventions:
an ice floe and	related overdose	accounts	and individuals taking	conceptualize	-Participant	1) propagation or
shoved away": A	and death on		opioids for other reasons	findings	characteristics clear,	deepening of stigma
qualitative study	individuals who	Semi structured			increasing external	particularly during
of the impacts of	take opioids	focus groups to	N=48	-Transcripts read	validity	encounters with
opioid related	1	stimulate discussion,		and coded then	-Equal amount of focus	health care
policy-changes on		six in person, two		categorized to	groups for individuals	providers
people who take		conducted by		represent participant	with chronic pain and	2) loss of autonomy,
opioids		teleconference		experiences	four focus groups with	ability to engage in
					people taking opioids for	shared decision
				-Text coded in	other reasons	making with
				NVivo	-Allowed participants to	providers was
					steer discussion	curtailed
				-Inductive iterative	therefore appropriate	3) produced and
				process of constant	methodology	reproduced
				comparison using	-Transcripts read several	structural
				theoretical	times	vulnerabilities
				framework	-Evolving analytical	
					framework reviewed	Opioid related
					regularly to ensure	polices have had
					coherence of	unintended
					interpretations	consequences for
					-Study limitations	people who take
					identified and addressed	opioids
					-Conclusions based on	
					results	CASP rating: High
					-Results will help locally	quality

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	Key Findings/ Applicability	-Family physicians are excellent candidates to provide BMT, but barriers remain -94% participants felt treating this patient population is difficult -Three common themes emerged in qualitative data
-Examination of researcher's role for data selection addressed -Identify further research warranted to improve knowledge and attitudes of health professionals Limitations: -Unclear if sample representative of all individuals who use opioids -Multiple settings for sample recruitment, not necessarily similar settings -Data collection methods not clearly outlined -Data saturation not addressed -Spelling error noted	Strengths and Limitations	Strengths: -Ethics approval stated -Researcher identifies how study will address knowledge gaps -Sample demographics made clear and similar to overall American Association of Family Physicians membership increasing external validity
	Data Analysis	-Responses analyzed using statistical software STATA v12.1 & ATLAS v7.0 -Chi square test used to compare BMT prescribers and non BMT prescribers
	Context and Sampling	Rural Vermont and New Hampshire, USA Family physicians Random sampling N= 108
	Theoretical Framework, Research Methodology	Theoretical framework: Mixed methods, triangulation strategy Anonymous online survey of quantitative and qualitative questions focused on BMT and opinions of opioids (Likert scale
	Purpose or Aim	Review barriers to adoption of buprenorphine maintenance therapy (BMT) among family physicians in a primarily rural area in the USA.
	Author, Date, Title	DeFlavio, Rolim, Nordstrom, & Kazal (2015) Analysis of barriers to adoption of buprenorphine maintenance therapy by family physicians

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questions) In table for each Likert item Likert item responses used for written	cn piloted to establish validity -Clear data collection -Clear data collection -Current BMT prescribers responses analyzed independently, minimized positive bias -Anonymous surveys allowed participants to be forthcoming, increasing internal validity ->75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed on results	use/BM1: -Lack of knowledge, time or interest: time most frequently reported barrier in qualitative data -Mistrust: of patients & efficacy of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
-Inductive an used for writt responses	.sis	time or interest: time most frequently reported barrier in qualitative data -Mistrust: of patients & efficacy of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
-Inductive an used for writt responses	sis.	time most frequently reported barrier in qualitative data -Mistrust: of patients & efficacy of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
used for writt responses		reported barrier in qualitative data -Mistrust: of patients & efficacy of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	 anaryzcu macpendenty, Anonymous surveys Anonymous surveys allowed participants to be forthcoming, increasing internal validity >75% response rate of open-ended questions -Gender of respondents equally distributed Limitations addressed Conclusions are based on results 	-Mistrust: of patients & efficacy of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	-Anonymous surveys allowed participants to be forthcoming, increasing internal validity - >75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	patients & efficacy of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	allowed participants to be forthcoming, increasing internal validity - >75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	of BMT; don't want to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	be forthcoming, increasing internal validity - >75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	to 'deal with addicts who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	increasing internal validity - >75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	who lie' -Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	validity - >75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	-Difficulty treating patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	 -75% response rate of open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results 	patients with addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	open-ended questions -Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	addiction: 'high maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	-Gender of respondents equally distributed -Limitations addressed -Conclusions are based on results	maintenance', 'stressful' and 'challenging'. -Common expressed concern from non-
	equally distributed -Limitations addressed -Conclusions are based on results	'stressful' and 'challenging'. -Common expressed concern from non-
	-Limitations addressed -Conclusions are based on results	'challenging'. -Common expressed concern from non-
	-Concutations are based on results	-Common expressed concern from non-
	on results	-Common expressed concern from non-
		concern from non-
	Limitations:	prescribers that
	-Sample size relatively	BMT was simply
	small, rural, decreased	'substituting'
	external validity to	addictions
	urban based physicians	
	-No report of data	-Physicians don't
	saturation	want to be known as
	-American health care	BMT prescriber
	system factors- varying	John Hopkins
	renumeration, varying	Appraisal Tool
	medication cost	Rating: High quality
	coverage/insurance	
	compared to Canadian	
	system	

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Author, Date,	Purpose or Aim	Theoretical	Context and Sampling	Data Analysis	Strengths and	Key Findings/
Title		Framework, Research Methodology			Limitations	Applicability
Goodyear, Haass-	-Discern	Theoretical	USA	-Data analysis	Strengths:	-Higher stigmatizing
Koffler, &	variables	framework:		conducted with	-Ethical approval stated	attitudes towards
Chavanne (2018)	involved with	Quantitative, non-	>18 y.o.	Statistical Package	-Identifies this research	individual who took
	stigmatizing	experimental,		for Social Sciences	will address knowledge	opioids from a
Opioid use and	attitudes towards	randomized vignette	Random sample from	24.0	gap	friend, compared to
stigma: The role	people with	survey	MTurk		-MTurk labor market	an individual who
of gender,	opioid addiction.			-ANOVA to	provides representative,	received a
language and	Focus on the	Nation-wide online	N = 2605	analyze mean score	more geographically and	prescription opioid
precipitating	impact of	survey via		difference of PSAS	demographically diverse	from a doctor
events	language, gender	crowdsourcing		results	sample compared to	-Individuals labelled
	and how the drug	website: Amazon			traditional convenience	"drug addict" higher
	was initially	Mechanical Turk		-Chi square test to	sampling	responsibility and
	obtained (from			look at differences	-Large sample	negative affect
	friend versus	-Assigned one of		across vignettes	-Hypothesis clearly	ratings compared to
	prescription)	eight possible			stated	label "OUD"
		vignettes, then rated		-MANCOVA to	-Sample demographics	-Males had lower
		the individual on		investigate stigma	well described	positive affect
		responsibility,		attitudes based on	-Comprehension	ratings compared to
		dangerousness,		positive/negative	questions used to ensure	females
		positive affect and		affect,	participant understood	-Language matters
		negative affect.		responsibility, and	vignette to ensure	for both males $\&$
				dangerousness	quality of data (those	females: OUD label
		-Affect scale:			who missed were	rated with higher
		concern, sympathy=		-Mann Whitney U	eliminated, n=228)	dangerousness than
		positive affect;		test used to confirm	resulting in a 92%	drug addict in
		disappointment,		robustness of initial	completion rate	females; drug addict
		anger= negative		statistical analysis	-Data collection steps	rated with higher
		affect			well defined to increase	negative affect
				-Participants past	rigour	ratings than disorder
		-After vignette		and current	-PSAS asked after	-Opioid familiarity
		scale completed,		nonmedical	vignette to reduce risk of	might influence
		Perceived Stigma of		prescription opioid	performance bias	stigmatizing
		Addiction Scale		use included as	-PSAS validated tool	attitudes: Higher
		(PSAS) (Higher		covariate	-Private/anonymous data	PSAS scores (higher
		PSAS score =			collection minimized	perceived
		Inguer perception of				perceptions of

		public stigma), opioid familiarity and demographics taken			-Thorough data analysis -Results clearly presented in tables and consistent narrative -Conclusions based on results -Future areas of research acknowledged Limitations: -PSAS phrases in the measure pertain to	public stigma) had lower positive affect ratings John Hopkins Appraisal Tool Rating: High quality
					substance use ', not specific to opioid use -Findings may not reflect views of general population as conducted with MTurk users only -Sample predominantly white	
Author, Date, Title	Purpose or Aim	Theoretical Framework.	Context and Sampling	Data Analysis	Strengths and Limitations	Key Findings/ Annlicability
		Research Methodology				and and a sub-
Kennedy- Hendricks Busch	Determine	Theoretical framework:	USA	Responses analyzed	Strengths: _Authors acknowledged	Most physicians
McGinty, Duscu,	physicians'	Quantitative,	Physicians in primary	Stata12	how the study addresses	individual
Bachhuber,	perceptions of	non-experimental	care: family medicine,		knowledge gaps	responsibility for
Niederdeppe,	OUD; the		pediatrics, internal	Likert responses	-Clear purpose of study	problem to
Gollust, Webster, Fiellin, & Barry	seriousness of the problem.	Web based survey to random sample of	medicine	coded and <i>p</i> -values reported for each	-Survey response rate >2.5% (2.9%)	individuals with OUD
(2016)	causes, groups	ians (L	Random sampling from	· · · · · · · · · · · · · · · · · · ·	-Large sample size	
	responsible for	scale)	American Medical	Chi square test used	-Clear data collection	Majority (72%) of
Primary care physicians'	addressing it, attitudes toward		Association Physician Masterfile	to compare physicians who	metnods -Improved external	respondents reit prescription OUD a
perspectives on	individuals with			prescribed higher	validity to general	very serious
the prescription	prescription		N=1010	and lower volumes	primary care providers	problem, however
opioiu cpiuconic	about the			opioids (<20	analysis to exclude	seriousness below
	effectiveness of				pediatrician responses	other major chronic

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illness: obesity,	heart disease,	tobacco use.		High level of desire	for social distance	(stigma): Large	majority unwilling	to have a person	with prescription	OUD marry into the	family (79%) or	work closely with	them on the job	(77%). More than	half (66%) viewed	individuals with	prescription OUD as	more dangerous	than general	population		-Over half (58%)	participants believe	that effective	treatment options	are available to help	people with OUD	despite evidence of	clinical	effectiveness, may	be a factor	contributing to the	negative perceptions	of physicians	-Study specific to	prescription OUD,	and not inclusive of
-Sample characteristics	well described	-Results clear in tables	and narrative	-Study limitations	addressed		Limitations:	-Validity of survey not	discussed	-'Abuse' and 'addiction'	used in survey may	increase measurement	bias to assess stigma	-Panelists opt in and	receive incentives to	participate; may be	source of participation	bias	-American opioid	policies not applicable to	Canadian context																
prescriptions/	month)		Sensitivity analysis	to exclude	pediatricians as less	likely to prescribe	opioids	1																													
addiction	treatments and	support for	various policies.																																		

						which arguably suffers from even greater stigma John Hopkins Appraisal Tool
Author, Date, Title	Purpose or Aim	Theoretical Framework, Research Methodology	Context and Sampling	Data Analysis	Strengths and Limitations	Key Findings/ Applicability
Kennedy- Hendricks, Barry,	Examine social stigma toward	Theoretical framework:	USA	-Stata 12 to conduct all analyses	Strengths: -Clear purpose of study	-Large majorities felt individuals with
Gollust,	individuals with	Quantitative, non-	Nationally representative	-Calculated	-Sociodemographic	prescription OUD
Ensminger, Chisolm, &	prescription opioid use	experimental	sample from online panel of adults	descriptive statistics (95% CI)	characteristics of study sample made clear and	are to blame for the problem (78%) and
McGinty (2017)	disorder and test	Web based survey:		-Estimated linear	reflected broad US	lack of self-
	whether stigma	demographics,	January- February 2014	regression models-	population	discipline to use
Social stigma	is associated	beliefs about social	101	individual stigma	-Households lacking	prescription opioids
lowara persons with prescription	with support for various policy	groups attected by prescription OUD,	I/01 –N	and composue stigma scale	enabled device to ensure	without become addicted (72%)
opioid use	interventions	measure of personal		measures to test if	sample representative	-Majorities
disorder:		experience with		perceptions of	-Completion rate of	expressed desire for
Associations with		opioids (self or		prescription OUD	survey >25% (75%)	social distance, felt
public support for		others), stigma,		as being prevalent	-Excluded responses	employers should be
punitive and		support for policy		among particular	reported to increase	allowed to deny
public health-		interventions.		social groups	rigour: excess or limited	employment to
orienieu policies		Stigma measured on		-Chi samare tests to	uuration on survey (>mean duration of 13	persons with prescription OUD
		7-point Likert scales		assess differences in	minutes, <5 minutes),	-Attitudes similar
		4		proportions of	and those with missing	among those with
		Six policy		stigma among those	data on stigma	and without
		interventions rated		with and without	measurement	personal experience,
		on 7-point Likert		personal experience	-Data collection well	little evidence that
		scales			described; specified	personal experience
				-Separate logistic	order of questions to	reduces stigma
				regression model	increase internal validity	-Respondents
				for each measure of	-Items from prior stigma	expressed high
				policy support- K ²	research used to develop	levels of stigma
					Likert scale	towards individuals

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Autnor, Date, Title	Purpose or Aim	Theoretical Framework, Research Methodology	Context and Sampling	Data Analysis	Strengths and Limitations	Key Findings/ Applicability
Khenti, Bobbili, & Sapag (2019)	-Understand and describe	Theoretical framework:	Community health centers (CHCs) in	Quantitative analysis: changes in	Strengths: -Combined qualitative	-Significant reduction in
	contributors and	Mixed method	Toronto, Ontario	participant	and quantitative design	stigmatizing
Evaluation of a	existing	evaluation	:	responses calculated	to address a complex	attitudes toward
pilot intervention	challenges		Convenience sampling	using chi-square	health care issue	people with
to reduce mental	related to stigma	Executed in three	of CHC employees	test and	-Intervention design well	MHSUP post
health and	among primary	phases over 5 years		independent t-tests.	described	intervention
addition stigma in	health workers		Staff members who had		-Ethical approval clearly	-Bogardus social
primary care settin o s	involved in the care of neonle	-Data collected in two waves: baseline	direct contact with clients invited to	Qualitative analysis: Thematic annroach	reported -Generalizable to	distance for heroin denendence showed
62	with mental	in 2010 and final	barticipate (nurses, nurse	to identify	Drimary care in urban	significant post
	health and	evaluation at end of	practitioners, physicians,	meaningful patterns	BC locations	intervention
	substance use	intervention	social workers,	1	-Questionnaire included	improvement (p <
	problems		counsellors, community		previously validated	0.05) in staff
	(MHSUP)	-Quantitative: Basic	health workers)		tools with reporting of	attitudes
	-Design an	demographics and			good internal reliability	-Overall, qualitative
	intervention that	self report	Participating CHCs N= 5		-Intervention clearly	data confirmed the
	promotes recover	questionnaire			outlined	intervention helped
	and reduced	completed pre and	Individual baseline		-Findings consistent	clarify discourse
	stigma in	post intervention by	survey N= 137		with other studies that	around stigma,
	primary health	staff including the			demonstrate impact anti-	discrimination and
	settings	Bogardus social	Final survey N=110		stigma interventions	recovery
	-Evaluate	distance for heroin			-Confidentiality/	-Confirms a multi
	efficacy and	dependence			anonymity of	component anti-
	impact of				participants to minimize	stigma intervention
	interventions	-Qualitative: Five			bias responses	within a CHC can
		structed interviews			-Tables and narratives	improve knowledge
		with senior			related and clear	and attitudes of
		management			-Statistical significant	multidisciplinary
		simultaneously			results accepted at p	team
		completed for			<0.05	
		organizational			-Area for future research	John Hopkins
		perspective			acknowledged	Uritical Appraisal Tool rating: Good
		-Flexible, innovative			Limitations:	quality
		intervention: contact				

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-High rates of staff turnover at CHC, repeated measure design not logistically feasible -Were the results due to the intervention or improved information access to due relevant topic -Intervention created in collaboration with CHCs therefore risk of bias in intervention of effectiveness by therefore risk of bias in its evaluation of effectiveness by management -High rate of refusal to participate -Questionmaires time consuming, may account for reduced response rate -Demographic information missing in all measures (>10%) -Each CHC has variable patient populations therefore questionnaires could be more specific to each	Strengths and Key Findings/ Limitations Applicability	Strengths:-Internalized stigma-Eligibility for inclusion-Internalized stigmain sample clearcommon among-Sample 393 out of 435the strongesteligible participantspredictor of SUP-Reliable internalpredictor of SUP
-HIgh r turnove repeate not logi -Were t the inte improv collabo collabo therefoi therefoi its eval for redu for redu for redu all mea -Demo for redu for redu for redu for redu therefoi d for redu consum	Data Analysis	Stepwise regressionStrengths:analysis used to determine-Eligibility in samplestatistically-Sample 3significant covariates ($p <$ -Reliable i
	Context and Sampling	Federally qualified health center in Los Angeles, USA Age >18, screened positive for mod- severe
based interventions and recovery- oriented art workshops	Theoretical Framework, Research Methodology	Theoretical framework: Quantitative, cross sectional design Severity of SUP: Short Inventory of
	Purpose or Aim	Examine relationship between internalized stigma and substance use problems (SUP)
	Author, Date, Title	Kulesza, Watkins, Ober, Osilla, & Ewing (2017) Internalized stigma as an independent rick

-Participants most likely to report feeling ashamed or	that they have	permanently	screwed up their	lives as a result of	their opioid or	alcohol use disorder		-Internalized stigma	significantly higher	among participants	with comorbid OUD	and AUD than those	with either disorder	alone		JBI Critical	Appraisal: Good	quality																		
reported- Cronbach alpha >0.70 for each Confounders addressed	-Appropriate statistical	analysis	-Ethical approval stated	-Results consistent with	previous studies	-Area for future research	suggested		Limitations:	-Stigma scale tool	contains term 'abuse';	may impact	validity/participation	bias	-External validity	limited as study	conducted at one	community health	setting, majority of	sample male (79%),	participants all from	clinics serving	underprivileged, racially	diverse population	-No confounding	variable strategies	acknowledged	-Cross sectional design	limits establishing causal	link between	internalized stigma and	SUP	-Research supported by	pharmaceutical company	Alkermes (naltrexone	company); however,
variability of SUP and association with internalized stigma																																				
problem, no marked functional MH problems,	for OAUDs presenting	for medical care who	completed baseline	assessment as a part of a	RCT		N = 397																													
Problems-Alcohol and Drugs	Internalized stigma:	Self-Devaluation	Subscale of the	Substance Abuse	Stigma Scale		Substance use	frequency in last 30	days: Timeline	Follow-back	Method		Psychiatric	comorbidity: Patient	Health	Questionnaire- 4																				
among primary care patients	alcohol use	disorders	(OAUDs)																																	
factor for substance use	primary care	patients:	Rationale and	preliminary	support																															

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					authors report sponsors had no role in study	
Author, Date, Title	Purpose or Aim	Theoretical Framework, Research Methodology	Context and Sampling	Data Analysis	Strengths and Limitations	Key Findings/ Applicability
Livingston, Adams, Jordan, MacMillan, & Hering (2018) <i>Primary care</i> <i>physicians' views</i> <i>about prescribing</i> <i>methadone to</i> <i>treat opioid use</i> <i>disorder</i>	Explore factors that physicians consider important when contemplating prescribing methadone to treat opioid use disorder (OUD) in primary care practice settings	Theoretical framework: Qualitative, Phenomology research, descriptive design In depth, in person, flexible interviews in authors office or participants office. Scripted and non- scripted open ended questions.	2-hour radius of Halifax, Nova Scotia Various sized communities Purposive sampling of primary care physicians N=20	Inductive analysis, thematic analysis, identify predominate themes Data coded, entered into NVivo Transcripts re-read assigned phrases and paragraphs to relevant codes -Codes then reorganized, grouped into set of overarching themes	Strengths: -Clear objective stated -Qualitative method appropriate -Clear and appropriate -Clear and appropriate recruitment strategy -Saturation achieved with sample size -Sample characteristics well described -In person, private, confidential interviews to facilitate open, candid perspectives -Same interviewer for each participant to increase internal validity -Interviews recorded for thorough data analysis -Equal amount of male/female participants -Ethical approval and participant consent stated -Study results consistent with previous similar research Limitations: -Inclusion of unscripted questions may decrease rigour and transferability	Interplay of factors: Patient related: Patient related: Patients with OUD difficult population to manage in primary care; manyulative, deceptive, "riskier", " many are not very good people"; with several complex needs; associated with poverty, crime, unemployment. Physician related: Dissatisfaction with MMT ability to resolve underlying MH and social issues: "you're not going to fix them with methadone"; "Just substituting one drug for another what's the point?" Practice related:
					of study methods	of threat to career $\&$

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reputation as a	MMT prescriber;	licence would be	compromised by	"addicts". Fears	about safety as	patients on MMT	have increased risk	of violent and	volatile behaviours.	Viewed as	disruptive to family	practice, "might	scare aware normal	patients". MMT	prescribing means	relating to patients	in an unsettling	manner: mistrust,	paternalism.	Contacting footom.	Contextual factors:	Lack of skills	regarding SUD	management taught	in medical school,	community	opposition to	methadone clinics.	CACD Dating: High	CADI Nuturg. 11181	Zuuniy
-Themes/coding of data	not presented in table	format with statistical	analysis available for	reader																											

		Se	Secondary Sources: Literature Reviews	re Reviews		
Review Authors ,	Aim	Type of Review,	Study Types, Dates &	Context	Strengths &	Key Findings
Date, & Title		Methods & Quality Assessment	Number		Limitations	
Louie, Assefa, &	Examine the	Narrative review,	Qualitative	PCP attitudes	Strengths:	Attitudes remain
McGovern (2019)	attitudes of	broad,		toward	-Objective of review	significant barrier to
	primary care	comprehensive	Studies that met	buprenorphine and	clear	adoption and
Attitudes of	providers (PCPs)	review to	eligibility for review:	its adoption/	-Literature search clear,	implementation of
primary care	toward	encompass the	N=20	implementation	reproducible with key	buprenorphine into
physicians toward	prescribing	concept of			words, databases and	the routine practice
prescribing	buprenorphine	"attitudes"	2000-2018		inclusion criteria	of PCP
buprenorphine: a					-Thematic analysis with	
narrative review		Databases searched:	Inclusion criteria: peer		operational framework	Strong
		PubMed,	reviewed, English		Consolidated	representation of the
		PsychINFO, Scopus,	language, conducted in		Framework for	following CFIR
		Google Scholar and	the USA, discussed PCP		Implementation	domains:
		Web of Science and	attitudes toward		Research (CFIR) which	Intervention
		hand searching	buprenorphine		is amenable to	Characteristics,
		relevant studies			translation of theory into	Outer Setting, Inner
		reference lists	Exclusion criteria: solely		practice	Setting:
			described attitudes of		-Results similar to	Negative and
		Quality assessment	non-PCPs, or if PCP		previous studies	skeptical attitudes
		by authors: D.L	attitudes were not one of		-Limitations	against
		psychiatrist licensed	the primary outcomes,		acknowledged	buprenorphine itself,
		to prescribe	expert opinion style		-Study beneficial,	against need for
		buprenorphine and	reviews		outweighs cost/risk	buprenorphine and
		M.A. PhD in				against a culture that
		epidemiology			Limitations:	welcomes
					-No flow diagram to	buprenorphine
					SHOW CHIMMANUM OF $-4 - 4$; $-4 - 4$	Τ
					studies at each level of .	Intervention
					review	Characteristics:
					-No methods for	PCPs concerned
					appraising the strength	about types of
					of chosen articles	patients
					-All US studies; all	buprenorphine
					content not generalizable	would attract: "high
					to Canadian context; ie:	maintenance",
					health care coverage in	"difficult",
					USA	"unreasonably

unwanted reputation Inner Setting: PCPs had little or no need legitimate treatment buprenorphine as a suspicion of opioid users both our clinics", "not what we do here in Outer Setting: lack of interest in option; widespread OUD may be more Tool Rating: Good for buprenorphine patient population type of patients in Critical Appraisal demanding", "we persistent anxiety don't want these among providers that prescribing -Stigma toward personally and professionally; buprenorphine primary care" prescribing as may not view John Hopkins would lead to severe among physicians quality -No confidence intervals interpretations made by potential for subjective results due to varying -No meta-analysis of -Conclusions are the reported for results authors therefore nature of studies included nature

Review Authors, Date, & Title	Aim	Type of Review, Methods & Quality Assessment	Study Types, Dates & Number	Context	Strengths & Limitations	Key Findings
van Boekel,	Assess health	Systematic review	Studies that met	Data extracted for	Strengths:	-Generally, health
Brouwers, van	professionals'	of qualitative and	eligibility for review:	each study based	-Clear objective	professionals found
Weeghel, &	attitudes towards	quantitative sources	N=28	on:	-Clear search strategy,	to have negative
Garretsen (2013)	patients with			What attitudes and	flow diagram included	attitude towards
	substance use	Authors searched	2000-2011	beliefs do different	-Clear key words,	patients with SUDs:
Stigma among	disorders (SUDs)	following databases:		health professionals	inclusion and exclusion	unable or unwilling
health	in Western	PubMed, Psycinfo,	English or Dutch	have about patients	criteria	to empathize with
professionals	countries	and Embase and	language	with SUD?	-English and Dutch	patients who use
towards patients		hand searching		What explanations	studies included	illicit drugs, more
with substance use	Secondary aim:	relevant studies	Inclusion:	are provided for	-Quantitative and	stigmatizing
disorders and its	Describe which	reference lists	focused on attitudes of	negative attitudes of	qualitative studies	attitudes towards
consequences for	factors cause		healthcare professionals	health	included to strengthen	patients with active
healthcare	negative attitudes	Thematic analysis	towards patients with	professionals? What	findings	SUD compared to
delivery:	of health	due to herterogenity	SUD (alcohol or illicit	are the	-Quality of literature	other mental
Systematic review	professionals		drug abuse), studies	consequences of	sample reported	illnesses
	towards these	10 quality criteria	focused on stigma,	these attitudes on	increasing rigour	-Professionals who
	patients and	assessed, studies	perception or healthcare	healthcare delivery	-Consistent results study	more frequently
	examine impact	accepted when at	delivery as a	and quality of care	to study	work with or who
	of these negative	least 7 criteria met	consequence of these	for patients with	-Variable results	have more contact
	attitudes on		attitudes, subjects of	SUDs?	addressed	with patients with
	healthcare		study are health		-Bottom line of the	SUD expressed
	delivery		professionals		results is clear and	more positive
					generalizable to primary	attitudes; in line
			Exclusion criteria:		care practice in BC	with hypothesis that
			studies conducted in			more contact
			Asia, South America or		Limitations:	increases positive
			Africa, subgroups of		-All relevant literature	attitude
			substance users; eg;		may not be included as	-Explanation for
			pregnant women, studies		list of databases	negative attitudes:
			focused on		searched not exhaustive,	patients perceived as
			screening/identifying of		no reference list	manipulative,
			substance use problems,		searching reported	aggressive, rude,
			studies focused on SUD		-Potential for selection	poorly motivated
			treatment e.g. 12 step		bias as motivated	and to have
			program, studies focused		healthcare professionals	controllability over
			on medical students		participated in the	drug use
					primary studies	

			Each study examined for quality using 11 indicators		-Self reported data and social desirability in answering questions limits results of the chosen primary studies	-Education/ training has positive influence on attitude and perceived knowledge -Work environments influence professionals' ability to empower patients -Negative attitudes of professionals may negatively impact treatment outcomes and patients' self- esteem. Less empathy, avoidant approach = suboptimal healthcare delivery <i>CASP Rating: High</i>
			Outcome Management Report	keport		quuny
Source & date of publication	Title	Driving Force, Focus, Intent	Measurement Approach	Target Group	Reporting Format	Target Audience, Strengths & Limitations
PLOS Medicine:	Stigma as a	-Current public	-No specified	-Individuals with	-Impacts of multiple	Health care
roncy rorum	Junaamentat hindrance to the	US opioid overdose	measurement approacn reported, evidence of	Who use opioids	well described on	protessionals, nealun care educators,
Tsai, Kiang,	United States	crisis	each typology specified:		hindrance to crisis	media, stakeholders,
Barnett, Beletsky, Keves McGinty	opioid overdose	-Mortality increased	1. Structural stigma: Dolicies analyzed:		response _Table mesentation of	policy makers in
Smith, Strathdee,	2 GUODES 1 GIGI 10	71% per year 2013-	Criminalization-		varying typology of	
Wakeman & Venkataramani		-Enduring stigma	systemic disenfranchisement of		stigma related to opioid use: public, internalized,	Strengths: -Ten authors.
(2019)		attached to opioid	people with past		enacted, courtesy &	affiliations clearly
		use -Stigma is a	convictions strips voting rights, transplant centers		structural -Multilevel prevention	reported, universities across
		fundamental cause	can consider OUD a		strategies necessary for	US with basis in

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public health, health	policy, medical	ethics	-Interest of relevant	population central	focus	-Frequent	referencing to extant	literature	-Extensive reference	list with 200	citations	-Bias limited as no	funding source for	this work	-Logical reasoning	in opinions	expressed	-Externally peer	reviewed		Limitations:	-No analytical	process of literature	stated	-Sustained long-	term impacts of	interventions on	stigma are unknown	-Competing	interests: author	Barnett is retained	as an expert witness	in litigation against	opioid	manufacturers	-American policies	therefore limited	external validity to	BC policies
crisis response: primary,	secondary and tertiary	addressed																																					
											-	f																											
contraindication to	proceed with	transplantation, hx of	IVDU or individuals on	OAT may be routinely	excluded from parenteral	antimicrobial therapy in	outpatient settings,	physicians who identify	as having an OUD	required to adhere to	abstinence only approach	or must discontinue OAT	as condition of	maintaining license.	 Language analyzed: 	influences norms about	OUD, among	policymakers and	constituents, effects	policy levers; ex:	'substance abuser' or	devaluing evidence-	based treatments, news	coverage largely frames	crisis as criminal justice	issue, 'epidemic' invokes	isolation, quarantine.	Shifts public stigma,	promotes lack of public	support for public health-	oriented policies.	2. Internalized and	anticipated stigma:	-Maladaptive	behaviours= poorer	health outcomes	-Internalized stigma	associated with	psychological distress,
of population health	inequities across	multiple social and	physical outcomes	-Typology of the	stigma related to	opioid use to show	how multiple	dimensions of	stigma	fundamentally	hinder response to	the crisis	-Public and enacted	stigma lead to	suboptimal care and	undermine access to	treatment and harm	reduction.	-Individuals with	OUD internalize or	anticipate the public	stigma attached to	their illness and	maladaptive	behaviours leading	to poorer health	outcomes may occur												

	poorer quality of life,		
	continued substance use,		JBI Critical
	reduced engagement		Appraisal: High
	with treatment		quality
	-Anticipated stigma		
	associated with		
	psychological distress		
	and reduced engagement		
	in care which can be		
	pronounced in rural areas		
	and small communities		
	due to heightened		
	concerns about boundary		
	violations or breaches of		
	confidentially		
	3. Health Disparity		
	populations:		
	-Incarcerated or recently		
	released individuals- few		
	receive treatment or are		
	linked to treatment-		
	missed public health		
	opportunity		
	-Enacted stigma- missing		
	news coverage of		
	overdose crisis among		
	blacks and Latinos,		
	despite disproportionate		
	burden of crisis among		
	blacks compared to		
	whites		