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Résumé de l'article

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Challenges and resiliency in Aboriginal adults with Fetal Alcohol Spectrum Disorder

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Abstract

Aboriginal adults with Fetal Alcohol Spectrum Disorder (FASD) face multiple barriers to services that did not exist in their childhood, yet they still cope with the same FASD-related cognitive issues that they experienced in childhood. Considerable effort is directed to research on children with FASD, but little research on adults with FASD. Furthermore, research on the population of Canada that is generalized to Aboriginal people is neither effective nor ethical. This literature review focuses on Aboriginal adults with FASD, specifically looking at criminal recidivism rates, the stigma attached to an FASD diagnosis, lack of support services, and the ongoing effects of intergenerational trauma. Future qualitative research is suggested to focus on adulthood and aging with FASD, and on helpful interventions.

Keywords: fetal alcohol spectrum disorder (FASD), Aboriginal adults, resiliency

Introduction

Fetal Alcohol Spectrum Disorder (FASD) is known in Canada as an affliction that affects significantly more Aboriginal people than non-Aboriginal people (Burnside & Fuchs, 2013; Eni & Senecal, 2009; Milward, 2014; Shankar, 2015; Tait, 2009). Children with FASD and their caregivers who try accessing services for FASD encounter misinformation from police, therapists, and social workers; this creates a barrier to services (Tremblay et al., 2017; Wilson, 2013). Tait (2009) argues that Aboriginal people with mental health afflictions, including FASD, are a manifestation of the “intergenerational effects of colonization” (p. 208). As these children transition to adulthood, these impacts often manifest as criminal recidivism (Burnside & Fuchs, 2013; Milward, 2014; Wheeler, Kenney, & Temple, 2013), victims and perpetrators of physical and sexual abuse (Burnside & Fuchs, 2013; Totten & The Native Women’s Association of Canada, 2010; Wheeler et al., 2013), becoming a young parent (Burnside & Fuchs, 2013), and substance abuse (Burnside & Fuchs, 2013; Wheeler et al., 2013). Despite the cognitive setbacks and secondary characteristics (disabilities that develop because of a lack in supportive services that have not been acquired at appropriate times [Wheeler et al., 2013]), Aboriginal adults with FASD are resilient and find ways to cope with these setbacks. Resiliency is a factor in how well Aboriginal adults with FASD cope with cognitive and behavioural challenges in their lives. This literature review covers topics related to Aboriginal adults with FASD and points out the gaps in existing research.

Purpose

In Alberta, approximately 360 people are born with FASD every year (Shankar, 2015). FASD is the most common cause of mental health problems in Canada (Totten & The Native Women's Association of Canada, 2010). Approximately 10% of women consume alcohol during pregnancy in Canada, but about four times more Aboriginal women drink during pregnancy (Popova, Lange, Probst, Parunashvili, & Rehm, 2017). Specifically researching Aboriginal populations is important because when research done on a broader population is generalized to Aboriginal populations, it is more harmful than helpful (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada, 2014; Wilson, 2013). The Tri-Council Policy Statement (Canadian Institutes of Health Research et al., 2014) notes that previous research conducted by non-Aboriginal researchers has been harmful and has not reflected the worldviews of Aboriginal people. This literature review looks at research about the challenges that Aboriginal adults with FASD encounter and what may contribute to their resiliency in the face of these challenges.

Method

Due to variations in policy and governance between countries regarding FASD, this literature review is focused on Canadian-based publications, with a few exceptions. These exceptions were considered because they added support to the existing Canadian literature.

Definitions

Fetal Alcohol Spectrum Disorder (FASD): An umbrella term that describes "...a lifelong disability that results from prenatal alcohol exposure (PAE)..." (Pei, Leung, Jampolsky, & Alsbury, 2016, p. 57) and includes "1) Fetal Alcohol Syndrome (FAS); 2) partial FAS (pFAS); 3) Alcohol-related Neurodevelopmental Disorder (ARND); and 4) Alcohol-Related Birth Defects (ARBD)" (Pei et al., 2016, p. 61).

Primary characteristics of FASD: "refers to the direct impact of damage incurred to the brain as a result of prenatal exposure to substances and include difficulty with executive functioning tasks, memory problems, impaired judgement and decision making, difficulty with change and transitions, and impulsivity" (Burnside & Fuchs, 2013, p. 43).

Secondary characteristics of FASD: "behaviours that develop in reaction to, and as a way of coping with, the primary disability, including fear and anxiety, poor self-concept, pseudo-sophistication, school behaviour problems, depression, frustration, aggression, and trouble with the law" (Burnside & Fuchs, 2013, p. 43).

Misinformation about FASD

Misinformation about FASD prevents Aboriginal adults with FASD from getting the support they need from professionals such as therapists, police officers, and social workers. FASD is considered an invisible disorder because it is not usually obvious by looking at someone, so their behaviours can be misinterpreted (Brown, Mitchell, Wartnick, & Russell, 2015). It is difficult for adults with FASD to receive an appropriate diagnosis due to the lack of appropriate training for medical professionals (Wheeler et al., 2013). Without a proper diagnosis, Aboriginal adults with FASD will likely continue to turn to crime,

inappropriate sexual behaviours, and substance abuse because the proper supports are not available (Wheeler et al., 2013). Professionals should educate themselves on FASD so that they can better serve this population (Knorr & McIntyre, 2016; Masotti, Longstaffe, Gammon, Isbister, Maxwell, & Hanlon-Dearman, 2015; Nash & Davies, 2017). It is important for support and information to continue for the lifespan of someone with FASD because it empowers their success (Wheeler et al., 2013).

Masotti et al. (2015) interviewed multiple interest groups related to the health and wellness of people with FASD and found a lack of training, education, and awareness for medical and non-medical providers. Education for professionals is effective; Knorr and McIntyre (2016) found that the school experience of an FASD child improved when their teachers attended a conference on FASD. An evaluation of existing interventions by Pei, Baugh, Andrew, and Rasmussen (2017) found that school interventions for children with FASD were the most common intervention to be recommended and that adherence to that recommendation was quite high, thus, teachers should be properly educated on FASD. Pei et al. (2017) posit that adherence to the recommendation of school interventions could be because it is easy to access or because it is perceived to be the most effective, meaning that there is potential for early intervention for people with FASD.

Although all of the provinces and territories have FASD awareness and prevention programs, gaps exist for pre-screening at-risk young women, pregnant women, and for postpartum care (Poole, Schmidt, Green, & Hemsing, 2016). These gaps are unfortunate given that Poole et al. (2016) found that when these programs are available at all levels they are successful at reducing the rate of FASD and improving the education and communication between healthcare providers. Masotti et al. (2015) also suggested that integrating care would improve communication and treatment for people with FASD. Medical and non-medical providers want to see more research on the impact of FASD on an individual, specifically periods when intervention would be most useful (Masotti et al., 2015). This lack of consistency of care grows as Aboriginal children with FASD move into adulthood. It is also important that information is available for parents and children with FASD so that strategies and coping skills can be developed (Nash & Davies, 2017). Tremblay et al. (2017) conducted community-based research so they could make informed suggestions to improve psychologists' understanding of FASD. They suggest that continuous collaboration between psychologists and staff, in the case that people with FASD live at an agency, would allow for a better understanding of FASD in general and help individuals with FASD in particular. A multilevel approach to understanding individuals with FASD would include improved communication "1) among clinicians; 2) between clinicians and other service providers; and 3) between clinicians, supervisory staff, and an FASD consultant" (Tremblay et al., 2017, p. 95). These steps exclude the person with FASD as part of the information process. Although information flow is improved, in this study, people with FASD do not receive information about themselves or participate in the process. Adding this component would allow for a model that includes people with FASD in the process, improving treatment for that particular individual.

Consistent evaluation methods do not currently exist in Canada or even across programs, making it difficult to know which programs and methods make positive contributions for people with FASD (Rutman, Hubberstey, Poole, Hume, & Van Bibber, 2016). Rutman et al. (2016) designed three circular maps to depict the levels of support necessary for Aboriginal people with FASD. The circular structure of the maps aligns with Aboriginal worldviews of community focus and interconnectedness in nature. The

evaluation map for support programs puts the person with FASD in the centre, with family and community support as the first circle to surround it, speaking to the importance and centrality of family and community support to someone with FASD (Rutman et al., 2016). Not only is it important for family supports to have proper information about FASD, but family is the first source of learning resiliency for the person with FASD. The Participant Outcomes ring is modeled after the medicine wheel, a symbol of great importance to some Aboriginal people (Rutman et al., 2016). These maps provide a useful guide for professionals, staff, and families working with Aboriginal people with FASD. With the right tools and information, early diagnosis of FASD can occur, contributing to a more resilient adult (Burnside & Fuchs, 2013).

The effects of stigma on people with FASD

Due to maternal consumption of alcohol, a baby born with FASD must often contend with significant cognitive developmental deficits, often leading to mental health issues, and possible physical deformity that lasts throughout their life (Bell et al., 2016). Although diagnosis of FASD is important so that appropriate programming can be put into place, the diagnosis additionally creates a negative stigma against the person with FASD and their mother (Totten & The Native Women's Association of Canada, 2010).

Stigmatization of mothers

Aboriginal mothers with alcohol addictions are often blamed for their babies' cognitive impairment, so they fear seeking help for their addiction. This challenge adds to the cycle of FASD, rather than preventing it. When mothers find out that their drinking directly caused the cognitive impairments and possible physical deformities to their child, they may feel guilt (Nash & Davies, 2017), which leads to a reluctance to ask for help (Tait, 2009). Yet, Aboriginal mothers with substance abuse issues do need help to deal with the past personal trauma they have experienced and the intergenerational trauma that their community has experienced, and continues to experience.

FASD prevention programs stigmatize mothers who have been drinking during pregnancy, instead of recognizing it as a possible symptom of a larger problem. Prevention programs based on public marketing information has led some women to develop anxiety and shame from the blame they receive when they have been drinking while pregnant. This leads them to fear seeking professional help for their pregnancy or for their drinking problem (Bell et al., 2016). Bell et al. (2016) point out that there is a lack of information on how these awareness campaigns contribute to this stigma and how this stigma prevents mothers from seeking medical care. Prevention strategies that disseminate information to the public are prevalent in all Canadian provinces (Poole et al., 2016), yet women still make the decision to drink during their pregnancy (Nash & Davies, 2017). The decision-making capability is diminished when an Aboriginal woman is dealing with trauma or has FASD herself, increasing the likelihood that she will drink during pregnancy and have a child with FASD (Totten & The Native Women's Association of Canada, 2010).

There are environmental risk factors that make it more likely for a woman to partake in alcohol consumption during pregnancy, including "child custody, lower socioeconomic status, paternal drinking, binge drinking during pregnancy, reduced access to perinatal care . . . , inadequate nutrition, and a poor developmental environment" (Eni & Senecal, 2009, pp. 88-89). Many Aboriginal women are afraid of

seeking help because they fear that their children will be removed and placed in foster care. This is a rational fear, considering the high rates of Aboriginal children in the child welfare system, including children whose mothers have FASD (Eni & Senecal, 2009; Totten & The Native Women's Association of Canada, 2010).

There are government programs to help mothers with alcohol related problems and children with FASD, such as Maternal Child Health and Aboriginal Head Start (Eni & Senecal, 2009), but the programs and the funding available in small communities is negligible. This lack of support for mothers with alcohol related problems directly correlates to children with FASD being at higher risk of suicide and who are significantly more likely to die from homicide than people without FASD (Totten & The Native Women's Association of Canada, 2010). People with FASD experience high rates of physical and sexual abuse in childhood, which is related to having the highest rates of involvement with the sex trade and sex trafficking (Totten & The Native Women's Association of Canada, 2010).

Stigmatization of people with FASD

Children with FASD are often labelled as behaviourally difficult, which continues into adulthood. Aboriginal adults with FASD continue to be stigmatized by professionals and society, making it difficult to obtain work, housing, or to even seek initial help. Children with FASD are considered the product of a breakdown in society, so are sometimes referred to as "society's children" (Tait, 2009, p. 198), yet this does not translate to interventions or assistance as 'society's adults' as they grow older (Bell et al., 2016; Burnside & Fuchs, 2013; Lynch, Kable, & Coles, 2015). The support that is available to children with FASD is no longer available once they reach adulthood (Lynch et al., 2015). The cognitive impairments seen in childhood translate to "academic failure, substance abuse, mental health problems, contact with law enforcement, and an inability to live independently and obtain/maintain employment" (Popova et al., 2017, p. 33). These issues, including becoming a young parent, are compounded if a child with FASD has been in the child welfare system (Burnside & Fuchs, 2013). Aboriginal children are far more likely than the general Canadian population to be in the child welfare system (Burnside & Fuchs, 2013). Burnside and Fuchs (2013) point out the nonsensical notion that children with FASD in the child welfare system are suddenly expected to make life decisions well once emancipated at adulthood. As Bell et al. (2016) point out, it is important that we research the long-term effects of negative public attitudes toward people with FASD and their mothers. Gaps in research exist, specific to how the long-term negative public attitude affects Aboriginal people with FASD.

Colonization and intergenerational trauma

Colonization and intergenerational trauma is the root of the challenges that Aboriginal adults with FASD must contend; to understand FASD in Aboriginal people, we must understand the effects of colonialism. It has not been adequately recognized that colonization has contributed to intergenerational trauma, which is the negative impact of systemic oppression over many generations (Eni & Senecal, 2009; Totten & The Native Women's Association of Canada, 2010). Although there is research that looks at the medical phenomenon of FASD, there is little research that looks at the social impact of colonization and intergenerational trauma (Wilson, 2013). Aboriginal youth experience higher rates of care in the child welfare system (Burnside & Fuchs, 2013; Eni & Senecal, 2009) which can cause intergenerational trauma and disconnect them from their community and families, contributing to the inability to form and integrate

their identity as Aboriginal (Burnside & Fuchs, 2013). Colonization was, and still is, a harmful process:

... which included military conquest, the acquisition of Aboriginal land bases through treaties, and policies of assimilation that attempted to force Aboriginal peoples to abandon their own cultures in favour of Euro-Canadian lifestyles by criminalizing cultural activities. An especially harmful part of the history of colonization was forcing Aboriginal children to attend residential schools. Many were physically and sexually abused, and thus would themselves pass intergenerational trauma on to their descendants. Many were forced to abandon their languages and culture . . . (Milward, 2014, p. 1029).

Interestingly, the secondary effects of FASD are similar to the secondary effects of intergenerational trauma; Eni and Senecal (2009) further posit that the trauma caused by the residential school system, including physical and sexual abuse, perpetuated a culture that consumed alcohol, leading to an increase in Aboriginal children born with FASD. Removing Aboriginal children from their homes to place elsewhere, either in residential schools or in adoptive homes, to be raised in a non-Aboriginal environment continues to this day in the form of the child welfare system (Eni & Senecal, 2009; Tait, 2009).

It is difficult to treat the root causes of FASD in Aboriginal people because it is so intrinsically linked to the practices of colonization (Totten & The Native Women's Association of Canada, 2010). Aboriginal children are disproportionately represented in care homes and programs for FASD (Eni & Senecal, 2009; Shankar, 2015); one possible reason is the over-surveillance of FASD in Aboriginal communities by government agencies (Shankar, 2015; Tait, 2009). According to Eni and Senecal (2009), past colonial practices of the Canadian government have a direct impact on the "physical and psychological illnesses among Aboriginal people" (p. 89) and suggest that support and programming for people with FASD should be developed with these factors in mind. These programs need to be specific to Aboriginal people in order to address the past and current trauma that is specific to their experiences.

The Truth and Reconciliation Commission of Canada (2015) supports Tait's (2009) claim that the effects of colonization have deeply affected Aboriginal communities in negative ways that contribute to poor mental health. Due to the ongoing intergenerational trauma to Aboriginal communities, we need to continue to research meaningful solutions for the communities that do not contribute to reinforcing colonial practices.

Criminal recidivism

Aboriginal adults with FASD have high criminal recidivism rates because deterrence does not often work with people who have memory and cognitive impairments, a common effect of FASD. To reduce these rates, the court system is slowly introducing educational programs specific to adults with FASD. Misinformation about FASD permeates the criminal justice system, making criminal recidivism a common theme among Aboriginal adults with FASD (Bracken, 2008; Brown et al., 2015; Milward, 2014). Training for professional staff in the criminal justice system should include education about FASD so that adults with FASD are not misunderstood or misrepresented (Brown et al., 2015). Informed sentencing that makes sense for an individual with FASD is essential.

Despite being only 3% of the population in Canada, “Aboriginal persons have consistently comprised 17-19% of all adult admissions to Canadian federal penitentiaries” (Milward, 2014, p. 1028). The percentage of the convicted that have FASD are underestimated due to under diagnosis (Pei et al., 2016). Awareness and change are slowly coming to the courts; some judges will make decisions regarding an Aboriginal adult’s behaviour by acknowledging the cognitive deficits associated with FASD and intergenerational trauma (Bracken, 2008; Milward, 2014). Milward (2014) suggests that FASD reflects the social damage caused by colonialism, and is also a contributor to over-incarceration of Aboriginal adults. Lack of funding, required for alternatives to incarceration, from the Canadian government is slowing down the positive change of a justice system that recognizes that Aboriginal adults with FASD must be treated with awareness of their cognitive issues (Milward, 2014; Pei et al., 2016).

Milward (2014) looks closely at three objectives of sentencing: “deterrence, retribution, and rehabilitation” (p. 1034) as it pertains to Aboriginal adults with FASD and whether these objectives meet their goals. These objectives are formed with the idea that normally, a person willingly and knowingly commits a crime and is able to learn from their behaviour through a punitive system (Pei et al., 2016).

Deterrence is ineffective because it works on the assumption that people can understand the consequences of their actions. Someone with cognitive impairments due to FASD may not understand the consequences of their actions (Milward, 2014). Also, if incarcerated, an individual with FASD is exposed to more criminals and criminal behaviour; this makes their situation worse because their condition makes them more susceptible to negative influences. Alternatively, if they are asked to complete community service, there is little subsequent support for the individual, thus increasing the likelihood that they would repeat the same criminal behaviour (Bracken, 2008). However, Milward (2014) points out that deterrence can be used for those who have not yet committed a crime, which is why some judges choose to sentence an Aboriginal adult with FASD when they know that deterrence does not work for the individual.

The objective of retribution is to punish the offender equal to the amount of harm they caused by their crime; this does not consider the offender’s background, moral agency, or whether the sentence is effective (Milward, 2014). Milward (2014) rightly points out that when deterrence and retribution are the primary objectives for sentencing, more harm than good is caused to Aboriginal adults with FASD and their community. However, Milward also notes that rehabilitation moves in the right direction to help Aboriginal people with FASD because it considers the cognitive damage and the intergenerational trauma experienced from colonization. A successful program in Lethbridge, Alberta, helps teens with FASD by having a constable advocate for the adolescents in court; they inform the lawyers and judges about FASD and the sentences are focused on rehabilitation rather than deterrence (Canadian Broadcasting Corporation, 2009). A program like this can be modified for Aboriginal adults with FASD. Ideally, the results of the Lethbridge program for teens would translate to adults, reducing criminal recidivism and incarceration rates overall.

Despite Milward’s (2014) positive outlook, change in the criminal justice system is slow. Aboriginal offenders are sentenced more often now than ten years ago, with twice as many men incarcerated and triple the number of women (Macdonald & Campbell, 2017). Therefore, it is imperative that research continues regarding Aboriginal adults with FASD in the criminal system. This research will show the importance of recognizing the long-term effects of colonization, intergenerational trauma, and the cognitive deficits that must be taken into consideration when sentencing.

Brown et al. (2015) note that going through the judicial system can escalate conditions for adults with FASD because they often find it difficult to understand abstract concepts and the severity of their situation. The Canadian Bar Association is attempting to address the issue of adults with FASD in the criminal justice system by proposing some changes (Pei et al., 2016), including:

1) establishing a legal definition of FASD; 2) allowing judges to order assessments for individuals who are suspected of having FASD; 3) identifying FASD as a mitigating factor in sentencing; 4) setting up an external support plan, and 5) providing accommodations within correctional services for inmates with an FASD (Pei et al., 2016, p. 59-60).

Bracken (2008) suggests that a screening process for identifying people with FASD, rather than relying on previous identification, will help increase the likelihood that the criminal justice system will use the FASD diagnosis to inform judgement. Popova, Lange, Burd, and Rehm (2015) agree that individuals in the criminal justice system should be screened for FASD, since FASD is so prevalent in correctional facilities. Research supports that the justice system would be assisted in making better decisions if a person is diagnosed with FASD; for Aboriginal people with FASD the justice system would also benefit from knowing about the specific intergenerational trauma the individual may have suffered (Brown et al., 2015; Milward, 2014; Pei et al., 2016).

Resiliency

Resiliency, which is the ability to endure adversity and have a better chance of successfully overcoming adversity (Burnside & Fuchs, 2013), is a factor that contributes to Aboriginal adults with FASD overcoming their cognitive and behaviour challenges. But more research is needed to understand how Aboriginal adults with FASD can learn or improve their resiliency. Young adults with FASD are a vulnerable population because they are transitioning from having many available supports to few available supports. This often directs them to participation in negative actions, such as crime, substance use, and inappropriate sexual behaviour (Lynch et al., 2015). Lynch et al. (2015) show that “60% [of young adults with FASD] had disrupted school experiences . . . and 79% . . . had problems with employment” (p. 53). The secondary characteristics of FASD continue into adulthood, affecting an adult’s ability to obtain and keep employment, obtain housing, stay in school, avoid criminal behaviour, and avoid substance abuse (Popova et al., 2017). Aboriginal adults with FASD have at best been able to overcome all of these challenges, and at the worst, survive despite them (Lynch et al., 2015). Resiliency has both internal and external components; external components are the supports that a person receives to help them persevere. These external components include interventions at appropriate points in an Aboriginal person with FASD’s life that are shown to have positive outcomes (Burnside & Fuchs, 2013; Wheeler et al., 2013). Some of these external factors include “early diagnosis of FASD . . . , a steady caregiver who understands the disability, a stable and nurturing home environment, and adjustments to the environment that meet the needs of the child” (Burnside & Fuchs, 2013, p. 44). An example of the outcome of external factors is a large percentage of adults with FASD were able to find and keep employment (Lynch et al., 2015), but this is not necessarily generalizable to Aboriginal adults with FASD because this subgroup encounters additional challenges, such as intergenerational trauma. Knorr and McIntyre (2016) interviewed four adults with FASD about their home and school experiences. Themes emerged of extra help at school, teachers with knowledge of FASD, and how supportive parents contributed to the resiliency of the

students. Although these students did not have a stable home environment, Knorr and McIntyre (2016) pointed out that this is another contributing factor for children with FASD to persevere into adulthood. Milward (2014) points out that we have two opportunities for intervention: before an Aboriginal child is born by reducing “maternal alcohol consumption” (p. 1027), and the second is before an Aboriginal child born with FASD becomes involved in criminal behaviour.

The Bissell Centre in Edmonton, Alberta has a program that has incorporated elements of Aboriginal cultural practices (Miller, 2013). This program refers Aboriginal adults with FASD to cultural activities to receive additional help from members of their culture (Miller, 2013). Consideration of Aboriginal cultures is an important part of helping Aboriginal adults with FASD in a holistic way and to build internal resilience that acknowledges the trauma they have experienced and continue to experience.

Many Aboriginal youth and adults are able to build their resiliency in negative ways that serve a positive outcome. One example of this is joining a gang to replace a family that is not providing a stable home environment. Youth find supportive relationships within the gang, but are still mired in substance abuse, crime, and inappropriate sexual behaviours (Totten & The Native Women’s Association of Canada, 2010). Resiliency that is built from these negative choices could be termed ‘dysfunctional resiliency.’ Dysfunctional resiliency occurs when a person adopts a coping mechanism that gives the support they are lacking, but is not a positive change and can lead to more negative actions.

Totten and The Native Women’s Association of Canada (2010) suggest that the diagnosis of FASD can create a focus on the negative behaviours and effects of the alcohol, yet focusing on a person with FASD’s strengths and building resiliency is more helpful throughout the course of their lives. Wheeler et al. (2013) reviewed research on interventions for adults with FASD, finding that there is a need for more research and evaluation on current interventions for adults with FASD so that necessary modifications and development can occur. Wheeler et al. (2013) argue that well-developed interventions for adults with FASD that target effects like criminal activity and substance abuse support positive actions and successful life experiences.

Discussion and conclusion

Aboriginal adults with FASD encounter many challenges throughout their lives, yet many develop resiliency to cope with those challenges. The effects of colonization on Aboriginal people are traumatic, causing intergenerational trauma. This trauma is compounded by the stigma toward mothers who drink during their pregnancy and the stigma toward the person with FASD, discouraging them from seeking help. Rates of FASD are high in the incarcerated Aboriginal adult population, prompting a review of the criminal justice system and its response to Aboriginal adults with FASD. The misinformation that permeates the criminal justice system is also a problem within the education system, the medical system, and with psychologists. This lack of information means that professionals are unsure how to help someone with FASD properly. Despite all of these setbacks, Aboriginal people with FASD develop resiliency through the various support networks in their life, allowing them to cope, even in a dysfunctional way. More research is needed to understand how Aboriginal adults with FASD develop resiliency to cope with the challenges in their lives. Understanding resiliency will improve existing programs that help people with FASD and create policy that considers their strengths rather than the detriments that the disorder can cause.

Most research about Aboriginal people with FASD focuses on prevention and the effects on children diagnosed with FASD, but few studies exist on Aboriginal adults with FASD (Lynch et al., 2015). However, FASD is a lifelong disorder (Poole et al., 2016). It is imperative that research is conducted on the impact of FASD on adulthood and aging, and helpful and detrimental interventions.

For future research about Aboriginal adults with FASD, a qualitative approach would align with the predominance of storytelling in Aboriginal cultures (Blue, Darou, & Ruano, 2010; Wilson, 2013). Wilson (2013) suggests using narrative inquiry or participatory action research when researching in Aboriginal communities because these methods would align with Aboriginal worldviews.

References

- Bell, E., Andrew, G., Di Pietro, N., Chudley, A. E., Reynolds, J. N., & Racine, E. (2016). It's a shame! Stigma against fetal alcohol spectrum disorder: Examining the ethical implications for public health practices and policies. *Public Health Ethics*, 9(1), 65-77. <http://dx.doi.org/10.1093/phe/phv012>
- Blue, A., Darou, W., Ruano, C. (2010). Engaging the elder within: Bridging and honouring the cultural spaces in counselling with First Nations. In N. Arthur & S. Collins (Eds.), *Culture-Infused Counselling (2nd Ed.)*. (pp. 259-284). Calgary, AB: Counselling Concepts.
- Bracken, D. C. (2008). Canada's Aboriginal people, fetal alcohol syndrome and the criminal justice system. *British Journal of Community Justice*, 6(3), 21-33. Retrieved from <http://www.cjp.org.uk>
- Brown, J., Mitchell, M., Wartnik, A., & Russell, A. (2015). FASD and the courts: A reference for legal professionals. *Bench & Bar of Minnesota*, 24-28. Retrieved from <http://mnbenchbar.com/>
- Burnside, L. & Fuchs, D. (2013). Bound by the clock: The experiences of youth with FASD transitioning to adulthood from child welfare care. *First Peoples Child & Family Review*, 8(1), 41-62. Retrieved from <http://journals.sfu.ca/fpcfr/index.php/FPCFR/article/view/200>
- Canadian Broadcasting Corporation. (2009). *Unique project helps keep FASD teens out of jail*. Retrieved from www.cbc.ca/news/canada/edmonton/unique-project-helps-keep-fasd-teens-out-of-jail-1.827083
- Canadian Institutes of Health Research., Natural Sciences and Engineering Research Council of Canada., Social Sciences and Humanities Research Council of Canada. (2014). *Tri-council policy statement: Ethical conduct for research involving humans*. Ottawa: Secretariat on Responsible Conduct of Research.
- Eni, R. & Senecal, S. (2009). Pathways to fetal alcohol spectrum disorder in Aboriginal communities. *Canadian Diversity*, 7(3), 85-92. Retrieved from <http://www.acs-aec.ca/>
- Knorr, L. & McIntyre, L. J. (2016). Resilience in the face of adversity: Stories from adults with fetal alcohol spectrum disorders. *Exceptionality Education International*, 26(1), 53-75. Retrieved from <http://ir.lib.uwo.ca/eei/vol26/iss1/4>

- Lynch, M. E., Kable, J. A., & Coles, C. D. (2015). Prenatal alcohol exposure, adaptive function, and entry into adult roles in a prospective study of young adults. *Neurotoxicology and Teratology, 51*, 52-60. <http://dx.doi.org/10.1016/j.ntt.2015.07.008>
- Macdonald, N. & Campbell, M. (2017). Lost and broken. *MacLean's, 130*(9), 24-29.
- Masotti, P., Longstaffe, S., Gammon, H., Isbister, J., Maxwell, B., & Hanlon-Dearman, A. (2015). Integrating care for individuals with FASD: Results from a multi-stakeholder symposium. *BMC Health Services Research, 15*, 457-469. <http://dx.doi.org/10.1186/s12913-015-1113-8>
- Miller, H. A. (2013). Two-way impact with FASD treatment. *Alberta Sweetgrass, 20*(5), 12. Retrieved from <http://www.ammsa.com/sweetgrass/index.asp>
- Milward, D. (2014). The sentencing of Aboriginal accused with FASD: A search for different pathways. *UBC Law Review, 47*(3), 1025-1056. Retrieved from <http://ubclawreview.ca/issues/volume-473/>
- Nash, A., & Davies, L. (2017). Fetal alcohol spectrum disorders: What pediatric providers need to know. *Journal of Pediatric Health Care, 31*(5), 594-606. <http://dx.doi.org/10.1016/j.pedhc.2017.04.002>
- Pei, J., Baugh, L., Andrew, G., & Rasmussen, C. (2017). Intervention recommendations and subsequent access to services following clinical assessment for fetal alcohol spectrum disorders. *Research in Developmental Disabilities, 60*, 176-186. <http://dx.doi.org/10.1016/j.ridd.2016.11.007>
- Pei, J., Leung, W. S. W., Jampolsky, F., & Alsbury, B. (2016). Experiences in the Canadian criminal justice system for individuals with fetal alcohol spectrum disorders: Double jeopardy? *Canadian Journal of Criminology & Criminal Justice, 58*(1), 56-86. <http://dx.doi.org/10.3138/cjccj.2014.E25>
- Poole, N., Schmidt, R. A., Green, C., & Hemsing, N. (2016). Prevention of fetal alcohol spectrum disorder: Current Canadian efforts and analysis of gaps. *Substance Abuse: Research and Treatment, 10*(S1), 1-11. <http://dx.doi.org/10.4137/SART.S34545>
- Popova, S., Lange, S., Burd, L., & Rehm, J. (2015). Cost attributable to fetal alcohol spectrum disorder in the Canadian correctional system. *International Journal of Law and Psychiatry, 41*, 76-81. <http://dx.doi.org/10.1016/j.ijlp.2015.03.010>
- Popova, S., Lange, S., Probst, C., Parunashvili, N., & Rehm, J. (2017). Prevalence of alcohol consumption during pregnancy and fetal alcohol spectrum disorders among the general and Aboriginal populations in Canada and the United States. *European Journal of Medical Genetics, 60*, 32-48. <http://dx.doi.org/10.1016/j.ejmg.2016.09.010>
- Rutman, D., Hubberstey, C., Poole, N., Hume, S., & Van Bibber, M. (2016). Developing and using a common framework to evaluate FASD programs: Results of a three-year Canadian project. *International Journal of Mental Health Addiction, 14*, 472-482. <http://dx.doi.org/10.1007/s11469-015-9597-3>
- Shankar, I. (2015). The making of a medical disorder: Tracing the emergence of fetal alcohol spectrum disorder in Alberta. *Social Work in Public Health, 30*, 38-50. <http://dx.doi.org/10.1080/19371918.2014.938930>

- Tait, C. (2009). Disruptions in nature, disruptions in society: Aboriginal Peoples of Canada and the “making” of fetal alcohol syndrome. In L. J. Kirmayer & G. G. Valaskakis (Eds.), *Healing traditions: The mental health of Aboriginal People in Canada* (pp. 196-220). Vancouver, Canada: UBC Press.
- Totten, M. & The Native Women’s Association of Canada. (2010). Investigating the linkages between FASD, gangs, sexual exploitation and woman abuse in the Canadian Aboriginal population: A preliminary study. *First Peoples Child & Family Review*, 5(2), 9-22. Retrieved from <http://journals.sfu.ca/fpcfr/index.php/FPCFR/article/view/89>
- Tremblay, M., Pei, J., Plesuk, D., Muchortow, A., Mihai, P., & Jordao, R. (2017). Development of a clinical practice model for serving clients with fetal alcohol spectrum disorder. *International Journal of Advanced Counselling*, 39, 82-97. <http://dx.doi.org/10.1007/s10447-017-9284-0>
- Truth and Reconciliation Commission of Canada. (2015). Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada. Winnipeg, MB: Truth and Reconciliation Commission of Canada.
- Wheeler, J. A., Kenney, K. A., & Temple, V. (2013). Fetal alcohol spectrum disorder: Exploratory investigation of services and interventions for adults. *Journal on Developmental Disabilities*, 19(3), 62-75. Retrieved from <http://www.oadd.org>
- Wilson, A. (2013). A social work student’s developing understanding of fetal alcohol spectrum disorder from medical and social perspectives and implications for practice. *First Peoples Child & Family Review*, 8(1), 26-40. Retrieved from <http://journals.sfu.ca/fpcfr/index.php/FPCFR/article/view/199>