Promising Approaches to Preventing FASD with women who are alcohol dependent, women who have previously given birth to a child with FASD and Aboriginal and Torres Strait Islander communities – identified in the 2020 National Campaign contract

A Literature Review

Executive Summary

This literature review discusses promising practices relevant to women identified as members of priority groups in the national campaign to prevent FASD.

Underrepresented issues are explored, including:

- Interventions which have been found effective with the population group.
- Content/messages which are effective with this population.
- Best formats for sharing prevention messages with this population.
- Methods which are effective for disseminating prevention messages.
- What not to do – practices which have been found potentially harmful for this population.

This literature review has demonstrated that it is imperative to eliminate the misconception that women who are alcohol dependent during pregnancy are selfish or uncaring. There is a need for a woman-centred approach that meets this population group's unique needs in a holistic manner. Alcohol use disorders must not be located as problems within the individual, they must be understood as a manifestation of larger societal issues. Reinforcing the importance of a specialised and holistic women-centred approach which targets the social and environmental factors that may impinge on women's overall wellbeing.

Moreover, it is in the best interest of preventing FASD that at-risk women be identified promptly through screening, then receive appropriate supports. These supports may include brief interventions, motivational interviewing and contraception resources, all of which have shown efficacy in FASD prevention. The current literature reports a lack of adequate support for women who are deemed at-risk.

The role of health care professionals has also been highlighted and the literature has demonstrated a need to build their capacities to support women who are at higher risk of having an alcohol exposed pregnancy. Health care professionals within maternity settings play a pivotal role in preventing FASD with women, hence, must be equipped with adequate tools and skills to enable them to provide adequate care.

This literature review explored effective ways to reach women, placing emphasis on the need to produce prevention messages that do not perpetuate narratives of shame and blame. Prevention messages need to aim to reduce the stigma associated with the issue. To effectively reach this population, promising strategies and campaigns are encouraged to recognise the pressure on women to drink, incorporating FASD in service areas such as substance abuse, making resources available for health professionals to increase capacity in discussing alcohol use and creating non-stigmatising campaigns.

This literature review also identified barriers that women may face, including stigma, structural and systemic challenges, and issues with the health care sector. The

influence of others was also highlighted as an important yet under researched factor in preventing FASD with women who are alcohol dependent.

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1. Introduction

About FASD

Fetal Alcohol Spectrum Disorder (FASD) is a serious and complex worldwide health and social concern which is currently under-recognised and, subsequently, underdiagnosed (Reid, 2018). As stated by Reid (2018), within Australia there remains no accurate measure of FASD prevalence, however as Montag (2016) asserts it is estimated that 5% of the general population is affected by FASD. FASD is the term used to encompass the various lifelong conditions and diagnoses that are a result of prenatal alcohol exposure (PAE) (Rutman, 2013). Individuals with FASD are impacted at varying degrees and its manifestations differ (Rutman, 2013).

In Australia, a diagnosis of FASD needs evidence of prenatal alcohol exposure and impairment in three or more domains of central nervous system structure or function (Bower & Elliott, 2020). A FASD diagnosis is separated into two categories: a) FASD with three sentinel facial features and b) FASD with less than three sentinel facial features (Bower & Elliott, 2020). FASD with three sentinel facial features substitutes a diagnosis of Fetal Alcohol Syndrome and does not require growth impairment and FASD with less than three sentinel features includes Partial Fetal Alcohol Syndrome and Neurodevelopmental Disorder-Alcohol Exposed (Bower & Elliott, 2020).

FASD is a complex disability with both primary and secondary effects which requires a multidisciplinary team of clinicians to evaluate (Bower & Elliot, 2020). Primary effects include poor executive functioning, impairments in memory, challenges with conceptualisation and understanding of abstract concepts, issues in language and comprehension skills, and difficulties with affect regulation (Rutman, 2013). As a result of these primary effects individuals with FASD are vulnerable to secondary effects such as mental health issues, involvement with the justice system, risky sexual behaviours and troubles with schooling. These primary and secondary effects are interrelated, and directly impact the individual's daily life and ability to thrive

(Rutman, 2013). Individuals with FASD often experience age dysmaturity. This means they may have communication skills that present as that of a chronological 20-year-old, however their comprehension skills may be at the developmental age of 6 (Rutman, 2013).

The complexity of FASD is sorely misunderstood within society. Many common behaviours can be perceived as problems with the individuals or reluctance to comply, rather than implications of the disability (Rutman, 2013). Additionally, the prevalence of FASD exceeds that of other developmental disabilities, yet is less visible and further stigmatised (Dunbar Winsor, 2020). FASD is often referred to as an invisible disability, a factor which contributes greatly to the barriers and systemic challenges faced by individuals with FASD in accessing supports and resources (Dunbar Winsor, 2020). However, a vast majority of research is concerned with the challenges and impairments associated with FASD. Thus, it would be a disservice to begin this literature review without acknowledging the strengths – which are abundant – of individuals with FASD. It has been reported that individuals impacted by FASD are often musical, artistic, sociable, non-judgmental, athletic and persistent, to name a few (Flannigan et al., 2018.). These strengths should be emphasised and highlighted to ensure focus is not exclusive to the challenges and impairments of the disability.

Alcohol, Women and Society

To understand issues surrounding women and alcohol dependence, it is imperative that a broader lens is applied to understand the influence of alcohol on wider society. Alcohol is engrained and tightly woven into the fabric of society and is used in many cultures. Many individuals associate alcohol with social connection, leisure, relaxation, celebration, mateship and use alcohol in times of sorrow (Dejong et al., 2019). Within Australia, alcohol consumption has seen a dramatic increase; facilitators of this increase include increased availability, shifting perceptions and evolving roles of women in society (Stanesby et al., 2018).

Women are having children later in life, having fewer children and with progression of society it has become more socially acceptable for women to drink (Roche &

Deehan, 2002). A study by Jones & Telenta (2012), in which semi-structured interviews were conducted with women, found that participants within Australia felt that drinking was the societal norm and to not drink was viewed as anti-social behaviour. The Australian Institute of Health and Welfare found that one in eleven women exceed the lifetime risk guideline for consuming alcohol (Australian Institute of Health and Welfare, n.d.). Lifetime risk is defined as the accumulated risk as a result of drinking on many occasions or on a regular/daily basis (Australian Institute of Health and Welfare, n.d.)

In Australia, there has been a link found between higher educational attainment and hazardous drinking. As stated by Devaux & Sassi (2015), educational attainment has added to the gap between men's and women's alcohol consumption/habits narrowing. Devaux & Sassi (2015), also assert that some studies have found that women with lower socioeconomic status drink more, however other studies have found the opposite to be true. Ultimately, alcohol is a substance that has the power to surpass the barriers of class, socioeconomic status and education. With a wide cohort of women influenced by it, understanding the reasons and trends regarding alcohol use is complex and must take into consideration the distinct subgroups of women that may emerge and their various reasons for use (Burns & Breen, 2013).

FASD is the leading cause of non-genetic birth defects and neurological impairments (Crawford-Williams, Fielder, et al., 2015). It is well known that alcohol can cross the placenta and adversely impact the fetus yet, despite the risks associated with PAE, maternal alcohol consumption still remains a health and social problem (Inoue et al., 2017).

This health and social problem becomes increasingly complicated when women who are alcohol dependent are considered. Alcohol dependence is defined as heavy drinking habits associated with negative outcomes on a woman's overall health, interaction with the environment and behaviours (Aly, 2015). Alcohol dependence is often a chronic and re-lapsing disorder and as approximately half of all pregnancies are unplanned it should be treated as a public health imperative due to the high risk of PAE (Burns et al., 2016). Additionally, women who are alcohol dependent may be confronted with a myriad of social, psychological and physical challenges. These could include psychological problems like feeling guilt or fear regarding the

implications of their alcohol use on the fetus or fear of judgment from society (Metz et al., 2012). Problematic alcohol use is commonly found in women who are marginalised and/or disadvantaged and demonstrate comorbid mental and physical health problems (Burns et al., 2016). A recent Australian study substantiated these claims, with a significant number of participants with substance use problems reported being involved in domestic violence, homeless, having a criminal history or were sexually abused (Burns et al., 2016).

As society debates how alcohol dependence should be handled, less attention is paid to increasing knowledge on promising practices for preventing FASD within this population. Most literature focuses on abstinence and neglects to see the trials, tribulations and needs of women affected by alcohol disorders (Burns et al., 2016). Thus, it is in the best interest of society to develop a thorough understanding of effective ways to aid women who are alcohol dependent. Ultimately, a salient component in preventing FASD is to find effective ways to support women with alcohol dependence issues.

2. Literature Review Aims and Search Strategy

Aims and Objectives

The central aims of this literature review are to discuss promising practices pertaining to preventing FASD with women who are alcohol dependent. This literature review seeks to add to the knowledge base by exploring underrepresented issues including:

- Interventions which have been found effective with the population group.
- Content/messages which are effective with this population.
- Best formats for sharing prevention messages with this population.
- Methods which are effective for disseminating prevention messages.
- What not to do – anything which has been found potentially harmful for this population.

Literature Review Search Strategy

This literature review was conducted using two databases: Google Scholar and the La Trobe University Library. Literature was explored in order to attain a holistic range of perspectives on promising approaches to preventing FASD in women who are alcohol dependent. Literature was also searched to identify perspectives on effective ways to disseminate prevention messages to women who are alcohol dependent along with what works effectively with health care professionals when helping this population. Literature identified through this search strategy was screened by title and abstracts. Additional literature was collected by identifying relevant articles within reference lists of all relevant literature and reviewing national population databank reports.

The databases were searched with a combination of the following terms found in the concept grid below.

Concept 1	**Concept 2**	**Concept 3**	**Concept 4**	**Concept 5**	**Concept 6**	**Concept 7**	**Concept 8**
Pregnant Women	Alcohol dependent	Fetal Alcohol Spectrum Disorder	Interventions	Prevention	Shame	Health care professionals	Campaigns
Female	Alcoholism	FASD	Programs	Preventative measures	Stigma	Health care providers	Effective messages
Childbearing	Substance dependence		Practices	Prevent	Blame	General practitioner	Prevention messages
Expectant women	Substance related disorders		Management		Barriers	Nurse	
Women	Alcohol exposure		Approaches			Midwives	

Inclusion Criteria

Literature was included if the study referred to promising approaches with women who are alcohol dependent and prevention of FASD. Articles were included when they used pregnant women, women of child-bearing age or women who are alcohol dependent and had clear prevention approaches identified. Articles were also included when they discussed health care professionals and effective ways to work with the population, effective ways to disseminate prevention messages and discussed barriers for women who are alcohol dependent.

Exclusion Criteria

Studies were excluded if they were not published within the last decade or not published in English. Additionally, all articles which were not peer reviewed were excluded. This ensured that literature used in this review is of a high quality.

Results Yielded

From searching the La Trobe University database with the key terms listed in the concept grid, 857 results were yielded using the simple search function. Few sources met the inclusion criteria; hence, an advanced search was conducted yielding 357 sources. Using the key phrases in conjunction with the advanced search produced relevant literature which considered the aims and objectives of this literature review. Google Scholar was also searched using a range of words and phrases from the concept grid. 17,500 results were produced; therefore, Google Scholar was searched up to the hundredth page for relevant literature. From these database searches, 61 pieces of literature were selected as pieces which will comprehensively embody the aims and objectives of the literature review. The full text of these were assessed to ensure that they had relevant information pertaining to preventing FASD with women who are alcohol dependent. This literature was carefully reviewed in order to consolidate, expand and highlight best practice approaches to the prevention of FASD in women who are alcohol dependent.

3. Discussion of Themes

Women-Centred Approaches

A woman-centred approach places emphasis on the overall health of women during pre-conception through to pregnancy and postpartum. Women who drink alcohol during pregnancy are often scrutinised and the subjects of shame and blame (Holland et al., 2015). Thus, this approach demands a shift away from perceiving substance dependent women as unfit or unworthy of support, rather this approach calls for supporting these women and their capacity for change.

As stated by Riley et al., (2010), effective approaches with women who are alcohol dependent should go further than the problem drinking behaviour. This includes understanding the determinants of women's alcohol use, barriers to prenatal care and alcohol dependence treatments (Riley et al., 2010). This means moving away from focusing on women's alcohol use alone to include understanding of what influences drinking behaviours and how to access adequate care (Riley et al., 2010). This is reiterated by Jonsson et al. (2009), who state that prevention of FASD should incorporate a woman's health perspective and requires responses that are nonjudgmental, effective, compassionate and recognise the root of women's substance use. Factors such as poverty, access to prenatal care, nutrition, violence, overall health, age and other determinants must be considered when working with women who are alcohol dependent (Riley et al., 2010). Barry et al. (2010) substantiate these claims by asserting that specialised care, services and programs specifically designed with women at the centre have the power to improve treatment outcomes. Poole et al. (2016) reinforce the importance of a specialised and holistic women centred approach by stating that approaches which target the social and environmental factors that may impinge on the women's overall wellbeing have demonstrated improved outcomes. Poole et al. (2016) elaborate further by asserting that within their study there was a general consensus among participants that there are insufficient resources and programs which centre around the unique needs of women who are alcohol dependent. These points are echoed by Metz et al. (2012), who assert that women with substance disorders should have their needs comprehensively addressed in a non-judgmental and respectful environment to ensure optimal treatment outcomes. The importance of women centred practice is again highlighted by Niccols et al. (2010), stating that historically many treatment programs have been tailored to the needs of men and thus, men's cultural norms have dominated. This can result in adverse outcomes for women including dropping out from programs/services. With a gender orientated perspective, substance abuse can be understood within the context of women's relationships and influence of wider societal structures. The need to consider gender is reiterated by Straussner & Fewell (2011), who assert that effective treatment should incorporate the experiences and needs of women for long term changes. Hence, focusing preventative measures on the alcohol use alone will limit the effectiveness, particularly among more vulnerable

populations of women, by overshadowing other factors that may influence alcohol use that are beyond the population's control (Clarren & Salmon, 2010). Thus, it is essential for women who are alcohol dependent to be met with therapeutic, women focused, welcoming and safe environments for the facilitation of any change to occur (Niccols et al., 2010). Ultimately, treatments for women who are alcohol dependent should align with their unique needs for optimal outcomes (Barry et al., 2010).

The Need to Screen and Identify Women At-Risk

The importance of screening to identify women who are alcohol dependent was emphasised by a substantial number of sources. Many pregnant women who are alcohol dependent continue to go undetected, which in many cases leads to children born with FASD (Aly, 2015; Barry et al., 2010). Montag (2016) highlights the importance of identifying mothers at-risk of having a child with FASD in order to reach them with prevention and intervention measures promptly. An effective and simple approach is to ask the women about their alcohol habits and past pregnancies while incorporating routine screening (Howlett, 2010; Montag, 2016). Howlett et al. (2017) found that the majority of women within their study had positive responses towards screening for alcohol to ensure the safety of their fetus and pregnancy. This is substantiated by research completed by the Foundation for Alcohol Research and Education (FARE), who state that women who are alcohol dependent must be routinely screened in a non-judgmental environment (Burns & Breen, 2013).

Oni et al. (2019) state that the current literature reports a lack of adequate support for women who are deemed at risk and that alcohol use should be detected to provide interventions and specialist supports. Moreover, Burns et al. (2016) reported that only a small portion of pregnant women who are alcohol dependent are adequately identified and treated. Screening allows health care providers to identify women with alcohol related problems and involves eliciting information on the individuals drinking habits and level of alcohol related risks (Hammock, 2020). Screening aids in facilitating disclosure and should be conducted without judgment to explore drinking habits and foster a trusting relationship between health professional and service user (Schölin & Fitzgerald, 2019). This is substantiated by Finlay-Jones (2018), who states that routine alcohol screening is shown to increase women's

awareness of alcohol use, provides an opportunity for health professionals to educate and discuss reduction strategies and is fundamental to referral for appropriate services. Straussner & Fewell (2011) state there are a number of valid screening tools to aid in identifying and intervening with at-risk women.

Screening can be conducted by physicians or professionals across health settings and simple screening tools have been found to be effective with both pregnant and nonpregnant women (Floyd et al., 2006). This targeted prevention strategy is necessary in identifying at-risk women, to subsequently help reduce their alcohol consumption and address underlying issues (Gifford et al., 2010). Additionally, screening allows substance misuse to be identified and decisions to be made about further assessments and appropriate intervention plans (Taplin et al., 2014). Screening is essential for the prevention of long and short-term consequences associated with excessive alcohol use, as it allows health professionals to categorise the severity of use and employ appropriate interventions (Bell, 2017). Symons et al. (2018) assert that strategies for the prevention of FASD need to target women of childbearing age who have consumed alcohol at risky levels previously, have a child with FASD or are alcohol dependent. Efforts for preventing FASD should include the use of effective screening tools, which when used routinely, allow a dialogue about women's alcohol consumption to begin (Aly, 2015; Barry et al., 2010). Once this dialogue begins, health care professionals are able to ascertain if there is risky alcohol use and thus, initiate the proper care needed (Aly, 2015). Early identification, assessment and engagement with women at-risk has the power to improve maternal and fetus outcomes, making this a fundamental process in preventing FASD with women who are alcohol dependent (Burns et al., 2016).

The Need to Build Competency of Health Care Professionals

The provision of adequate treatment remains a challenge for healthcare professionals when working with this population (Metz et al., 2012). The FARE final report on the treatment needs of women who are alcohol dependent describes the lack of trained professionals with specialist alcohol training as "pressing" (Burns & Breen, 2013, p. 29). A key theme that emerged from the literature was that health care professionals within maternity settings play a pivotal role in preventing FASD

with women who are alcohol dependent. Therefore, to be able to adequately screen and assess at-risk women, health professionals' skills need to be strengthened in this area. Health care professionals are at the forefront of screening, counselling and referring women who are alcohol dependent to adequate services. However, Oni et al. (2019) states that many professionals do not make this a part of their consultation process. Oni et al. (2019) found that this was due to lack of skills and clear procedures for working with women who use alcohol while pregnant. Aly (2015) highlights this, stating that the majority of health professionals lack adequate skills and confidence to screen women or even talk to them about alcohol use. Many health care professionals in prenatal settings fail to prioritise alcohol assessments during prenatal visits (Aly, 2015). Moreover, a survey of health professionals in Western Australia found that health care professionals also had limited knowledge about the effects of alcohol use in pregnancy and did not feel well equipped to deal with the subject (France et al., 2010). McBride (2014) states that women overwhelmingly want health care providers to inform them of the risks of drinking during pregnancy and FASD, however there is a hesitation to do so due to the perceived sensitivity of the subject. Supporting women who are alcohol dependent must begin with health care professionals acknowledging and understanding the problem. Furthermore, health professionals must be equipped with adequate tools and skills to enable them to give women who are alcohol dependent proper care (Aly, 2015).

An Australian study by Payne et al. (2011) distributed educational resources about prevention of PAE to 3348 health professionals, to assess changes in their perceptions, practices and knowledge regarding FASD and alcohol use in pregnancy. These resources included a booklet on the consequences of alcohol use in pregnancy, a fact sheet, a wallet card to give to women that had tips on saying no to alcohol during pregnancy and a calendar with a preventative message (Payne et al., 2011). The study found an increase in health professionals' knowledge and a positive change in perception of FASD and the practices/advice they gave to pregnant women about alcohol consumption (Payne et al., 2011). Another study by Payne et al. (2014) found that midwives did not always inform women of the risks of alcohol during pregnancy, did not always use screening tools to assess alcohol consumption and did not always conduct brief interventions where necessary. The

midwives within the study stated that they felt they could better support these women if they were provided with educational resources, written resources for pregnant women, greater opportunities for screening/intervention and pathways for referring women identified at-risk (Payne et al., 2014). A study by Crawford-Williams et al. (2015), which involved focus groups with pregnant women/mothers, found that several participants had received no information on alcohol use and pregnancy or no follow up consultations. This indicates a need for ongoing capacity building within the health care sector to improve and support professionals' abilities to educate and disseminate knowledge (Finlay-Jones, 2018). This is supported by France et al. (2010) who highlighted the need to provide health care professionals with educational resources.

Within Australia, little attention has been paid to how health professionals can provide comprehensive care to at-risk women (Pedruzzi et al., 2020). Participants within a study conducted by Pedruzzi et al. (2020) stated that they recognised the importance of engaging with these women and developing a better understanding of substance use issues and implications. Initiatives set out at this level play a crucial role in preventing FASD with alcohol dependent women and the capacity of professionals within the alcohol and other drug sector needs to be strengthened (Pedruzzi et al., 2020). Thus, it is essential to embed FASD prevention into broader services to strengthen the capabilities of the health care sector to utilise effective prevention measures (Clarren & Salmon, 2010). This is especially important for women with substance dependence issues seeking help, whereby their unique needs can be met by integrating skills from extensive training and education of the health care professionals involved in these settings (Aly, 2015).

Promising Approaches, Programs and Interventions

The growing concern about FASD has led to a desire for a strategic approach to evaluating and implementing prevention strategies, however there remains little evidence on effective strategies, particularly within the Australian context (McLean & McDougall, 2014). Crawford-Williams et al. (2015) state clinical interventions can be used to support women at risk of alcohol-exposed pregnancies, such as those who are alcohol dependent. The key approaches, programs and interventions that emerged from the literature are discussed below.

Brief interventions have demonstrated effectiveness in the treatment of alcohol abuse and misuse in the population (Howlett, 2010). Women who are alcohol dependent have been motivated to change their behaviours through the use of brief interventions (Barry et al., 2010). Brief interventions are evidence based and concise conversations with women who have been found to be alcohol dependent during screening (Hammock, 2020). The effectiveness of brief interventions has been demonstrated by a systematic review which found that participants who had brief interventions significantly reduced their alcohol consumption compared to those who did not receive brief interventions (Taplin et al., 2014). As stated by Hammock (2020), the overall goal of brief intervention is to raise awareness of the risks of their alcohol use and facilitate change. Dejong et al. (2019) state that three components of successful brief interventions in reducing or eliminating alcohol use in women include a) assessment and feedback, b) advice regarding strategies at reducing/eliminating problematic use and c), involve the woman in goal setting, creating strategies for change, referrals to support services and providing pamphlets or handouts for reinforcement and self-help. Brief interventions can be conducted by a range of health professionals and can take place over the phone or face to face, the mail or computer (Hammock, 2020). Finlay-Jones (2018) states that brief interventions should communicate the specific risks of PAE and educate women on the guidelines for alcohol intake. Osterman, (2011), reports that a significant reduction was found in the use of alcohol with women with the highest rate of consumption after brief intervention. For women who screen positive, brief interventions are a cost-effective strategy to promote reduction in alcohol use. In the case of women who are alcohol dependent it has been shown to have the ability to facilitate their referral to specialised treatments and supports (Floyd et al., 2006).

Motivational interviewing has been found effective in engaging women in the process of change, increasing their self-efficacy while minimising resistance to change (Sarkar et al., 2009). This is substantiated by Osterman et al. (2014), who assert that motivational interviewing decreases prenatal alcohol use by establishing empathy, developing discrepancy, minimising resistance, and supporting self-efficacy. Taplin et al. (2014) state that motivational interviewing is ideal for behavioural change surrounding substance abuse, which can then be accompanied by other appropriate treatments/services. Motivational interviewing has also been found to be more

effective with people less ready for change and thus has been found effective in its ability to decrease PAE in heavier drinking women (Osterman, 2011). Burns et al. (2016) explain that screening only assesses the amount of substance used and problems associated with usage, thus for treatment to be successful it must also assess the readiness for change in women who are alcohol dependent. Motivational interviewing does this by engaging participants in discussion and change and exploring feelings surrounding substance use within an empathetic and safe environment (Burns et al., 2016). In a scoping review by Adebiyi et al. (2019), motivational interviewing was found to empower participants to change drinking behaviours within addiction settings. In a report from FARE, it was concluded that motivational interviewing for women at risk of alcohol-exposed pregnancies showed effectiveness in behaviour change (Burns & Breen, 2013).

Brief intervention and motivational interviewing have been found to have success in reducing alcohol exposed pregnancies within the population group (Clarren & Salmon, 2010). Bell (2017) confirms this by asserting that these methods can identify hazardous alcohol use and provide appropriate intervention. Multiple articles indicated that these interventions have shown promise in preventing PAE in alcohol dependent women. These approaches have demonstrated their effectiveness by changing alcohol health related behaviours in at-risk women (Straussner & Fewell, 2011). These approaches encourage and reduce the harms related to hazardous alcohol consumption, simultaneously these approaches have been used to change behaviours such as ineffective use of contraception, creating a double-edged sword in the endeavour to prevent FASD with women who are alcohol dependent (Clarren & Salmon, 2010). These approaches encourage the discussion of alcohol consumption as well as contraception use to by both health care providers and service users; research has shown that these approaches can reduce alcohol consumption in pregnancy by 30% (Halton, 2019).

Addressing the use of contraception was found as another promising approach to preventing FASD. Women do not always intend to become pregnant and alcohol use is associated with increased sexual risk taking, creating a greater risk of unplanned pregnancies (Schölin, 2016). Schölin, (2016) conducted a rapid review which found that pre-conception prevention efforts showed promise in reducing risky drinking and encouraging use of contraception. In the review, studies demonstrated the

effectiveness of pre-conception strategies in reducing alcohol exposed pregnancies as they target increasing the use of contraception or reducing alcohol consumption (Schölin, 2016).

For women at risk of having alcohol exposed pregnancies, contraception may be a complex area for behavioural change due to women's widely varied attitudes and beliefs around contraception. Thus, interventions must aim to explore and understand women's beliefs (Fabbri et al., 2009). Black & Day (2016) assert that preconception interventions are necessary for reducing the risk of alcohol exposed pregnancies. Less attention has been paid to preventing unintended pregnancies in substance-using women. Thus, there is a need to improve access to contraception with this population, as they face a myriad of barriers which may include shame, fear of losing their children, fear of judgement and domestic violence (Black & Day, 2016) who also highlight the benefits of integrating contraception services into drug treatment services. This is reiterated by Reid et al. (2019) who state that prevention of unintended alcohol exposed pregnancy is an area that needs serious attention in the endeavour to prevent FASD, particularly within Australia which has high rates of unplanned pregnancies and a heavy drinking culture. Reid et al. (2019) also state that there is a link between knowledge and behaviour, with increased knowledge of the effects of PAE increasing an individuals' likelihood of using contraception effectively. Women with substance use disorders have an unmet need for contraception, thus Terplan et al., (2015) state that offering contraception services in conjunction with interventions for substance use could help meet this need. Ingersoll et al. (2013) found that motivational interviewing around contraception use demonstrated efficacy and was feasible in health care settings. This is reiterated by Schölin, (2016) who state that the risk of an alcohol exposed pregnancy was reduced through motivational interviewing for alcohol and contraception use.

The efficacy of these approaches has been tested in the Project for Changing High-Risk Alcohol use and Improving Contraception Effectiveness (CHOICES) and the Parent Child Assistance Program (PCAP). The Project CHOICES was created to enhance the ability of health care providers to identify and intervene with at-risk women prior to conception (Johnson et al., 2015). CHOICES dually targets women with problematic drinking and ineffective contraception use. CHOICES uses brief interventions and motivational interviewing to identify the woman's level of readiness

for change the level of drinking and contraception use. Practitioners then create a tailored treatment plan for change, build skills, and help women to access resources and supports (Johnson et al., 2015). CHOICES has been found to successfully translate and is feasible in health care settings (Johnson et al., 2015).

PCAP is a program developed to work with women at the highest risk of having a child with FASD. PCAP uses home visitation utilising case management interventions and motivational interviewing to provide tailored support to improve the competency of participants to change alcohol and drug related behaviours. PCAP uses motivational interviewing to meet participants where they are at, set goals and foster independence in participants to manage a healthier life (Riley et al., 2010). PCAP tailors the program to each woman's individual needs and promotes competency in the individual by making incremental changes (Jonsson et al., 2009). Evaluations of PCAP have indicated success in reduction of alcohol exposed births among high risk populations (Walker, 2014).

Barriers for Women who are Alcohol Dependent

A study by Stone (2015), found that 66.7% of participants sought treatment for their substance misuse but faced barriers in finding, accessing and affording these treatments. This was substantiated throughout the literature as a number of barriers for women who are alcohol dependent were identified including stigma, structural and systemic challenges and issues with the health care sector (Norton, 2018; Stone, 2015; Stringer & Baker, 2018).

Maternal substance use remains highly stigmatised, which makes women reluctant to disclose their substance use when attempting to use services (Dejong et al., 2019). Social stigma was reported as a significant barrier for women who are alcohol dependent in accessing care (Choate et al., 2019; Corrigan et al., 2018; Norton, 2018; Poole et al., 2016; Stringer & Baker, 2018).Women using substances while pregnant have been vilified and portrayed as 'undeserving' in public discourse (Norton, 2018). A study by Corrigan et al. (2018) found that public stigma of women who consume alcohol during pregnancy was greater than that of biological mothers with children of FASD. It was also found that what distinguishes treatment

experiences of men and women is the high levels of stigma that women with substance dependence face (Stringer & Baker, 2018). This stigmatisation may be rooted in societies' construction of what it means to be a woman, which includes being a 'good' mother. This makes women who are alcohol dependent vulnerable to stigmatisation as they are perceived as transgressing against this societal norm (Stringer & Baker, 2018). This stigmatisation leads to women fearing accessing care due to repercussions in other areas of their lives, pushing this population to avoid treatment and negative labels (Stringer & Baker, 2018). It is well established that those in the health care setting can be a major form of support and information for women who are alcohol dependent, however, Choate et al. (2019) found that stigma was a major concern with women's experience with professionals and support services. Thus, as supported by Poole et al. (2016) overcoming stigma and addressing social and environmental factors such as housing, transport and childcare for women is critical to their ability to attend treatments.

There are structural and systematic hardships that women face when trying to access care and simultaneously challenges the health care sector has in responding (Pedruzzi et al., 2020). Barriers to accessing treatment include the inability of treatment services to accommodate women who have parenting responsibilities, experience violence and a social services system that punishes those most in need (Pedruzzi et al., 2020). Burns and Breen (2013) found that the most common barriers cited by women for not seeking treatment include being afraid of losing their children, being afraid there would be no-one available to look after their children if they went into treatment and their partner not wanting them to go into treatment. Services are also not accessed due to lack of treatment readiness, coexisting mental illness, guilt, denial or embarrassment regarding their substance use (Niccols et al., 2010). Straussner and Fewell (2011) found that a significant barrier to treating women with alcohol dependence is that they are more likely than men to be the primary caretakers of their children. Hence, lack of childcare provisions in most treatment programs often deters women from seeking help (Straussner & Fewell, 2011). Women also reported a lack of awareness of the range of treatment options, and fears over the time and costs of treatments (Taplin et al., 2014).

Barriers in the health care sector manifest in a number of ways. These include constraints on time and resources, lack of clear screening protocol and inadequate

skills or resources to support women who are alcohol dependent (Oni et al., 2019). Additionally, health care providers noted the importance of trust and rapport building to engage women who are alcohol dependent. Some health care providers felt that the rapport between them and their pregnant patients was insufficient to establish a trusting relationship, leading to perceived inability to address alcohol use (Oni et al., 2019). Open discussions on alcohol use are impeded by the topic's sensitive nature and a lack of an established relationship between health providers and women (Schölin & Fitzgerald, 2019). Oni et al. (2019) state that a common perception among health care professionals is that asking about alcohol consumption would appear judgmental. Moreover, some healthcare providers lack the skills and confidence to address alcohol misuse, believing that if they asked women about their alcohol consumption, they lack solutions or any effective methods and resources to address the issue (France et al., 2010).

Effective Ways to Reach Women who are Alcohol Dependent

Media campaigns and educational interventions focus on raising awareness and increasing knowledge among individuals. These interventions are beneficial to prevention as they increase the knowledge of the population group and general public on the harms of alcohol In pregnancy (Crawford-Williams, Fielder, et al., 2015). While there have been some FASD prevention campaigns, there are few examples that target subgroups of individuals at higher risk (Driscoll et al., 2018). Norton (2018) found that in order to effectively reach women who are alcohol dependent, prevention messages should avoid a) having a child-centred, rather than woman-centred approach, b) a focus on alcohol consumption and disregard of other factors such as stress, socioeconomic status or violence and, c) judgmental or shaming messaging. In Norton's (2018) discourse analysis of documents regarding FASD prevention, it was found that many FASD prevention strategies have been criticised for their tendency to shame and blame women for their substance use in pregnancy. This is substantiated by Holland et al. (2015), who assert that women distance themselves from messages that are too extremist, alarming or place blame on them. Norton (2018) calls for future FASD prevention messages to consider substance use as an issue inherently linked to social determinants of health and

structural inequalities. This resistance of pushing the narrative of shame and blame on women with women who are alcohol dependent was also highlighted by Poole et al. (2016), who states that prevention messages need to aim to reduce the stigma associated with the issue. Furthermore, to effectively reach this population, promising strategies and campaigns are encouraged to include recognising the pressure on women to drink, incorporating FASD in service areas such as substance abuse, making resources available for health professionals to increase capacity in discussing alcohol use and creating non-stigmatising campaigns (Poole et al., 2016).

A study by Elek et al. (2013) used focus groups to ascertain how to improve health messages regarding alcohol use and pregnancy and found that the internet, doctors, magazines, books, social media, television and advertisements on transport were the population's main and preferred sources of health information. However, participants reported receiving inconsistent information, leading researchers to recommend that health information be provided in a clear, consistent and tailored way (Elek et al., 2013).

Clarren et al. (2011) state that preventative measures often involve partners, friends, and families, yet neglect to provide information or suggestions on how they can help women with their alcohol use. Prevention messages often depict a lone woman with a focus on her pregnancy, however such imagery may reinforce the notion that FASD prevention is a responsibility of women solely (Clarren et al., 2011). Norton (2018) states that emphasising individual responsibility in health messaging creates greater barriers for women in accessing care as it exacerbates fears of stigma and blame. These messages negate the role of social, environmental, political and economic factors which influence alcohol consumption and, consequently, FASD prevention (Clarren et al., 2011). Additionally, it is often said that FASD is "one hundred percent preventable", however this does not take into account the complexities of women's lives, further stigmatising them in this discourse (Choate & Badry, 2018).

The literature indicates that in order to communicate health messages effectively, evidence-based messages should be produced and tailored to subgroups like high-risk women (Driscoll et al., 2018) and should consider the role of close contacts. This

will aid in enhancing the agency of women and effectively reaching them with prevention messages.

The influence of others

Women are not the only ones responsible for preventing FASD; their partners, support networks and society at large also share in this responsibility (Clarren et al., 2011). Holland et al. (2015) found that peer groups, families and partners play a significant role in informing women's views on alcohol use during pregnancy; these groups can expose and reinforce women to healthier behaviours during pregnancy. Elek et al. (2013) reported similar findings, stating that the people in women's lives can act as strong supports to not drink or can pressure them into drinking. This goes beyond social pressure and can be perceived as influencing women's drinking habits by exposure and modelling behaviours (Elek et al., 2013). A study by Balachova et al., (2014), found that, after health professionals, husbands and partners were rated the most important people in helping women make decisions about their drinking habits. Partners play a significant role in influencing and modifying drinking behaviours, making them an important part of prevention with FASD (Bakhireva et al., 2011; McBride et al., 2012). The importance of understanding the influence of others is directly related to the importance of women's environments and their access to informal forms of support and knowledge (Holland et al., 2015). Peer, partner and family attitudes towards alcohol can influence a woman's desire to receive treatment for alcohol use (McLean & McDougall, 2014). The influence of others is also an important factor to address because women completing treatment may return to an environment that is not supportive (Straussner & Fewell, 2011). Peers, families and partners can support women by offering non-alcoholic alternatives, going to events not centred around alcohol and can also help them or encourage them to find supports to reduce their drinking (Halton, 2019). In a study by Peadon et al., (2011) one third of women reported they would be less likely to drink during pregnancy if their partners encouraged them to stop or if their partner abstained from drinking alcohol during their pregnancy.

Additionally, framing alcohol use in pregnancy as an individual issue can result in discourses focused on shaming and blaming women, rather than exploring the

important positions of peers, families and partners in prevention (Finlay-Jones, 2018). Aspler et al., (2019), state that it would be more effective if alcohol use and parenthood were understood in a more community centred way, rather than as an individual responsibility of women. This would allow a shift of focus from shame and blame to the importance of social supports (Aspler et al., 2019). A review by McBride & Johnson (2016) established that paternal alcohol use has a direct impact on maternal alcohol use, therefore it is vital to consider this and recognise that decisions about alcohol use are not the sole responsibility of women. Rather, the influence of partners and other influences in the broader social environment must be considered (McBride & Johnson, 2016).

Ultimately, this area is very underdeveloped and needs further research to build understanding. However, the literature has demonstrated that the people around women have the ability to influence their use through reinforcing and promoting positive or negative behaviours (Taplin et al., 2014).

4. Discussion and Conclusion

Summary

In an attempt to consolidate, expand and highlight knowledge on the prevention of FASD in women who are alcohol dependent, literature was sourced from two databases. This literature review focused on promising approaches in preventing FASD with women who are alcohol dependent. Seven themes emerged from the literature:

1. The need for women-centred approaches.
2. The need to screen assess and identify at-risk women.
3. The need to build competency with health professionals.
4. Promising approaches, programs and interventions.
5. Barriers for women who are alcohol dependent.
6. Effective ways to reach women who are alcohol dependent.
7. The influence of others.

This literature review has demonstrated that it is imperative to eliminate the misconception of women who are alcohol dependent as selfish or uncaring (Riley et

al., 2010). Rather, the literature has highlighted the need for a woman-centred approach that meets this population group's unique needs in a holistic manner. Alcohol use disorders must not be located as problems within the individual, they must be understood as a manifestation of larger societal issues (Norton, 2018). It is in the best interest of preventing FASD that at-risk women be identified promptly through screening, then receive appropriate supports (Oni et al., 2019). These supports may include brief interventions, motivational interviewing and contraception resources, all of which have shown efficacy in FASD prevention. The role of health care professionals has also been highlighted, and the literature has demonstrated a need to build their capacities to support women who are alcohol dependent. This literature review explored effective ways to reach women who are alcohol dependent, placing emphasis on the need to produce prevention messages that do not perpetuate the narrative of shame and blame upon women. This literature review also identified barriers that women who are alcohol dependent may face and how the influence of others is an important yet under researched factor in preventing FASD with women who are alcohol dependent.

Need for further research

From examining, evaluating and summarising the literature, promising approaches with women who are alcohol dependent have been identified. However, there still remains a large amount of research and evaluation that needs to be conducted with women who are alcohol dependent to produce effective ways to support and aid them in an endeavour to prevent FASD. Such research should include how to effectively build competency within the health care sector and how to address the barriers that these women may face when accessing support. Additionally, research should be conducted to examine how to incorporate effective routine screening, the need to produce non-stigmatising preventative messages as well as strive to understand the influence of others on women and their drinking habits.

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