The social support systems of mothers with problematic substance use in their infant's first year

Author

Tsantefski, Menka, Briggs, Lynne, Griffiths, Jessica

Published

2023

Journal Title

Child & Family Social Work

Version

Version of Record (VoR)

DOI

10.1111/cfs.13063

Received: 28 February 2023 | Revised: 7 May 2023 | Accepted: 13 June 2023

DOI: 10.1111/cfs.13063

ORIGINAL ARTICLE

CHILD & FAMILY SOCIAL WORK WILEY

The social support systems of mothers with problematic substance use in their infant's first year

Menka Tsantefski, Associate Professor[1] | Lynne Briggs, Associate Professor[2] | Dr. Jessica Griffiths[3]

[1]Centre for Children & Young People, Southern Cross University, Coolangatta, Queensland, Australia

[2]Menzies Health Institute, Griffith University, Southport, Queensland, Australia

[3]New South Wales Department of Communities and Justice and Child Protection, Parramatta, New South Wales, Australia

Correspondence
Menka Tsantefski, Centre for Children & Young People, Southern Cross University, Locked Bag 4, Coolangatta, QD 4225, Australia.
Email: menka.tsantefski@scu.edu.au

Abstract

The infants of women with histories of problematic alcohol and other drug use are among the most vulnerable children known to statutory child protection services, which they enter at a younger age, and in which they remain longer. The net results include overwhelmed child protection systems and the birth of subsequent children conceived to ease women's grief at the loss their infants. Without adequate and appropriate support to the mother and her family, the pattern repeats. Obstetric services have an important role to play in the assessment of risk and protective factors in the perinatal period and in determining pathways to service provision. A comprehensive assessment considers the availability and quality of informal support prior to activation of formal systems of support, both statutory, where engagement is mandated, and non-statutory, where support is offered on a voluntary basis. This paper uses quantitative methods to explore the social networks of women with problematic substance use in the transition to motherhood and the relationship between formal and informal support systems and infant outcomes. Surveys were held with two counsellors from the Women's Alcohol and Drug Service (WADS), a specialist obstetric clinic in Melbourne, Australia, and with 18 child protection workers. In addition, the Norbeck Social Support Questionnaire (Norbeck, 1984; Norbeck et al., 1983) was administered with 20 participating mothers to measure levels of formal and informal support, as well as the type and quality of support available to mothers over a 12-month period, and to consider the provision of social support against known outcomes for infants. The findings demonstrate that WADS counsellors made several referrals for most women but that there was little in the way of long-term follow-up by non-statutory service providers, with most women experiencing a dramatic drop in support over the 12-month period. Women whose main informal support was from a domestically violent partner, and those who had been in out-of-home care in their own childhood, were particularly vulnerable to losing the care of their infant. The role of child protection varied markedly across the 12-month period, particularly in relation to the extent that a relationship between formal and informal systems of support for mothers and their infants could be established. Overall, the study findings

demonstrate that mothers experienced diminishing formal and informal support over time and that the quality of social support available to the mother was more important in terms of outcomes for women and their infants than the quantity.

KEYWORDS
child protection, maternal substance use, risk assessment, social support

1 | INTRODUCTION

Women with problematic alcohol and other drug (AOD) use and their infants are considered a high-risk population (Madora et al., 2022). Infants who have been exposed to maternal substance use during pregnancy are among the most vulnerable children known to statutory child protection (CP) services, which they enter at a younger age, and in which they remain longer (Prindle et al., 2018). Australia, along with many other jurisdictions, has introduced prenatal reporting with the aim of preventing unnecessary removal of infants from maternal care through early intervention; yet, research demonstrates that many women provided with early support nevertheless lose the care of their infant, particularly when domestic and family violence (DFV) and problematic AOD use are present (Taplin, 2017; Tsantefski et al., 2014). This contributes to overwhelmed CP systems and the birth of subsequent children conceived to ease women's grief at the loss their infants. Without adequate and appropriate support to the mother and her family, the pattern repeats, drawing more children into statutory CP investigatory procedures and potentially into out-of-home care, as seen across international jurisdictions (Broadhurst & Mason, 2017; Broadhurst & Mason, 2020; Grant et al., 2014).

Removal of infants can have dire consequences for their mothers (Boddy et al., 2020). Mental health diagnoses and treatments are significantly higher among women whose children have been taken into care compared with those whose child has died (Wall-Wieler et al., 2018). Custody loss also results in other poor psychosocial outcomes for women including financial and housing strain and social isolation (Mason et al., 2019). While outcomes for mothers can be poor, the negative consequences of custody loss need to be balanced with concern for the infant (Mason et al., 2019; Tsantefski et al., 2015). Infants born to women with problematic AOD use during pregnancy are at increased risk of health complications including premature birth, low birthweight, being small for gestational age, low Apgar scores at birth and admission to neonatal intensive care. Infant health outcomes are further compromised by maternal substance use and mental health issues, socio-economic conditions (Oni et al., 2019) and exposure to DFV prior to and after birth (Moore et al., 2017; West et al., 2021). Infant mortality is higher compared with non-exposed infants (Oni et al., 2019). Additionally, the children of mothers with problematic substance use are overrepresented among the deaths of children known to CP services (Frederico et al., 2014).

Intervention in the first 1000 days of life, the period from conception to 2 years of age, can help to address the social determinants of infant health and promote attachment (Moore et al., 2017). Assessment of maternal and infant needs and activation of referral pathways are essential in promoting infant well-being and assisting women to retain infants safely in their care. However, early intervention services are embedded in fragmented social service systems that are complex to navigate (dondolopartners, 2022). Using a rapid evidence assessment, Canfield et al. (2017) identified a range of maternal and psychosocial risk factors that increase the risk of infant removal by CP from women who use substances. The most frequently reported risk was socio-economic adversity. Other maternal factors included low educational attainment; unemployment; unplanned pregnancies; greater numbers of prior births; unstable housing; homelessness; involvement with the criminal justice system; prostitution; poly-drug use; younger maternal age; and a history of loss of children. Risk was also noted among women who experienced early childhood adversity, DFV and comorbid mental health issues and among those who report low levels of social support and social isolation.

As Canfield et al. (2017) point out, low socio-economic status is likely to lead to parenting stress and increase the risk of child maltreatment. Socio-economic difficulties are amenable to intervention through the provision of practical supports to the mother, such as housing support. Home visiting services also have the potential to improve outcomes for women and children (Canfield et al., 2017; West et al., 2021). However, the criminalization of illicit substance use, a risk-averse service system and the stigma associated with AOD use in pregnancy form barriers to treatment and other service use among pregnant women and women caring for infants (Sánchez-Sauco et al., 2019).

During the perinatal period, many women with problematic substance use become visible to service providers, making it an opportune time to provide them with the support they need to safely care for their infants. Before this can happen, a comprehensive assessment of what changes families need to make, how services can best support that change and how parents can be better engaged in services needs to occur. The level of seriousness and/or intensity of presenting issues identified in this assessment determines whether a CP/investigative response, or a family support response that emphasizes assessment of a family's needs, family engagement and service linkage, is the more appropriate (Fluke et al., 2019; Mason et al., 2019). For many women with problematic substance use in pregnancy, this assessment is made by obstetric providers.

As the above studies indicate, problematic AOD use is embedded within a sociocultural context where micro and macro factors combine to influence outcomes for individual women and their infants (Sánchez-Sauco et al., 2019). Women's recovery is influenced by both

formal and informal support (Barringer et al., 2017). Formal support is provided by services, whereas informal support comes from family, friends, neighbours or other members of the personal social network. Social support is a multifaceted concept that is difficult to define as concepts vary and definitions are inconsistent. While there are differences in how social support is defined and measured (Hochstatter et al., 2022; Hupcey, 1998), most definitions include informational support (advice, suggestions and information), emotional support (expressions of empathy, love, trust and care), instrumental support (tangible aid and service) and appraisal support (being listened to) (Campbell et al., 2011 cited in Hochstatter et al., 2022).

Informal social support mediates risk factors. Supportive social networks increase engagement with health services among people with problematic AOD use (Hochstatter et al., 2022), facilitate recovery from substance abuse and reduce child maltreatment among mothers involved with CP through the provision of emotional support and tangible resources (Urgelles et al., 2017). Mothers with higher levels of support from significant others have lower rates of substance use and child neglect following treatment (Urgelles et al., 2017). Informal support provided by family, friends and peers, reduces drug use and risky sexual behaviours, and increases health service utilization among women involved with corrections services (Hochstatter et al., 2022).

The complexities inherent in the care of the mother/infant dyad during pregnancy require multiple social and healthcare services for mothers, their unborn babies and infants (Nichols et al., 2023; Prindle et al., 2018). This is challenging for child welfare, obstetric, paediatric and substance use treatment providers due in large part to fragmentation within health care systems (Madora et al., 2022). While services often form partnerships involving CP, AOD treatment, mental health and family support, primary health, obstetric care and legal services are less likely to be included in the service constellation (Urbanoski et al., 2018). This is a serious problem as families within these services might require a statutory response but not be brought to the attention of CP. Alternatively, CP can become over-involved in cases in which they may not be required, as has been noted in relation to DFV (Alaggia et al., 2015). There is also evidence to suggest that family support programmes do not always effectively reduce risks to women with problematic AOD use, their infants and children (West et al., 2021).

Understanding how best to intervene requires knowledge of what aspects of formal and informal support are beneficial, or detrimental, in enabling women to safely care for their infants. As both formal and informal supports are key to women's recovery (Barringer et al., 2017), there is a pressing need for studies looking at how support is provided within and across complex systems of care (Nichols et al., 2023) and how the quality of social support can be meaningfully included in CP intervention (Urgelles et al., 2017). There is limited literature on pre-birth assessment (Mason et al., 2019). There is also minimal research on the role of formal and informal support for mothers with problematic AOD use retaining or losing the care of their infants (Canfield et al., 2017).

This paper reports the quantitative findings from a study undertaken at the Women's Alcohol and Drug Service (WADS), an obstetric clinic located at The Royal Women's Hospital in the state of Victoria, Australia. Approximately 75 women attend WADS each year. In the absence of other concerns, Victorian legislation does not mandate reporting of infants exposed to substances in utero. However, there is a policy directing services to notify women who have had previous children removed from their care or who were themselves removed from parental care as children. WADS is therefore able to use discretionary powers to activate the service system through referral to community-based agencies, notification to CP or a combination of the two. Approximately half of the women accessing WADS are notified to CP in the pre or postnatal period on a case-by-case basis. The overall aims of the study were to:

1. Consider professional decision-making and the activation of referral pathways to either the statutory CP service and/or to community-based agencies (e.g. family services, mental health and AOD treatment) by specialist AOD obstetric counsellors; and
2. Examine the provision of formal and informal support in relation to the safe retention of the infant in the mother's care from the perinatal period to the end of the infant's first year.

2 | METHODS

The study utilized quantitative methodology and a prospective study design (Creswell, 2014) to answer the overarching research question: 'What support do women accessing WADS receive from the formal and informal network in the first year of their infants' lives?' Data were collected across three study phases: at infant age 6 weeks, 6 months and 1 year. There were two units of analysis:

1. Communication and collaboration between WADS and CP; and
2. Individual women accessing WADS.

For the purpose of the study, service provider perceptions focused on assessment and referral pathways as an indicator of the need for support. While the study examined service providers' and mothers' perspectives, only maternal perceptions of support were measured. Provider perceptions are reported in the form of number and reason(s) for referrals on behalf of each mother/infant dyad. Data collection methods included:

- Clinical data-mining (Epstein, 2014) of the WADS database for demographic details on participating mothers and their infants;
- Surveys with WADS counsellors to ascertain assessment of risk in the perinatal period and corresponding referral pathways for each mother/infant dyad;

- Surveys with CP workers to establish referrals for each family known to the service and for data on infant outcomes; and
- Administration of the Norbeck Social Support Questionnaire (NSSQ) (Norbeck, 1984; Norbeck et al., 1983) with mothers.

2.1 | Measures

2.1.1 | Clinical data mining

Clinical data mining (Epstein, 2014) is the accessing of data collected for reasons other than research, that is, clinical purposes. Clinical data retrieved from the WADS database provided demographic details and descriptive variables for all participating women including case management details; pregnancy issues; medical issues; AOD history; current attitudes towards substance use; social support; DFV; previous children; housing; emotional well-being; mental health; suicide risk assessment; legal status; individual treatment plan; partner's substance use and legal history; and partner's children, including CP involvement.

2.1.2 | Surveys with WADS and CP staff

Face-to-face surveys were administered with WADS staff on-site during study phase 1 when each infant was approximately 6 weeks old, as this is typically the end of the service's engagement with women in relation to psychosocial issues. While a 6-month follow-up is scheduled for each infant, this is a medical check-up. Surveys with CP were completed by telephone with one exception where the participant requested a face-to-face office-based meeting. Surveys with CP were undertaken across each phase of the study (infant age 6 weeks, 6 months and 12 months). Surveys with staff from WADS and CP were based on open-ended questions, which allowed respondents to outline decision-making and resultant referral pathways for each participating mother (Babbie, 2013, p. 119).

2.1.3 | The NSSQ

The NSSQ (Norbeck, 1984; Norbeck et al., 1983) provided a quantitative measure of perceptions of social support at each phase of the study for each participating mother and for the women as a cohort. The NSSQ is a nine-item self-report measure designed to gauge multiple components of social support including functional properties (emotional and tangible support), network properties (stability of relationships and frequency of contact) and losses of supportive relationships. Network members are listed and rated according to perceived supportiveness on a 5-point rating scale (0 = *not at all* to 4 = *very supportive*). Total functional support can be separated into emotional and tangible support scores. The composition of the network is grouped into categories by definition of relationship to the respondent. The instrument can be used to distinguish spouses or partners, family/relatives, friends, work or school associates, neighbours, healthcare providers, counsellors or therapists, ministers/priests or rabbis or others (e.g. God, pets). The NSSQ measures multiple dimensions of social support: structural properties of the network (total number of supporters per woman) and 'total functional support', which comprises emotional and tangible/practical support. Loss of support is also measured. It is possible to discern the informal network (friendship, family, neighbours) from the formal (service providers). The NSSQ discriminates between quantity and quality of support. Higher numbers of network numbers who are less supportive equal smaller numbers of more supportive individuals. The instrument can be used to calculate person totals and individual contacts for each source category, for example, family and/or friends vs. formal support services, including frequency of contact. This function is particularly useful for comparative purposes in longitudinal study designs.

The NSSQ was administered to participating mothers, at each study phase, at a time and place convenient to the participant, mostly in women's homes. Meetings with mothers were also held at WADS, in residential parenting assessment centres, in cafes and, in one case, a women's correctional facility. Quantitative data were analysed using IBM SPSS Statistics (Version 26) predictive analytics software.

2.1.4 | Participant recruitment

All participating mothers were recruited from WADS and were informed about the study by WADS counsellors who asked for permission to introduce them to the researcher. The researcher explained the purpose of the study, the voluntary nature of participation, the right to withdraw and the limits to confidentiality. The researcher also asked women for consent to interview their WADS counsellor and, where applicable, their CP worker/s. Literacy was not assumed; the researcher read the plain language statement to each woman and reiterated the details prior to each interview.

2.1.5 | Ethics

The following Human Research Ethics Committees Ethics approved the study: the Royal Women's Hospital, the University of Melbourne, the Department of Justice and the Department of Health and Human Services Victoria. All participants provided informed consent to contribute to the research. Prior to interview, each participating mother's signed consent form was shown to WADS counsellors, and emailed or faxed to CP workers, to indicate each woman's consent for release of information.

3 | RESULTS

Two WADS staff, a social worker and a psychologist providing psychosocial services to pregnant and parenting women, participated in this study, along with 18 CP staff members whose professional

backgrounds included social work, psychology, welfare or behavioural studies. Twenty-two pregnant women agreed to take part in the research, two of whom were lost to the study prior to the first interview. Among the 20 women who took part in the research, 19 contributed to phase 1 (a delay in ethics approval from the Department of Justice meant one woman could not take part in the first interview), 18 in phase 2 and 16 in phase 3. Inclusion of data from CP resulted in known outcomes for 19 of the 20 infants.

The results of this study are reported in three sections. Firstly, the WADS database provides demographic data and outlines the psychosocial issues faced by participating mothers during pregnancy and the perinatal period. This is followed by the results of the surveys with WADS counsellors and CP workers to outline identified needs and referral pathways. Finally, the results from the NSSQ demonstrate informal and formal support to the women as a cohort and the trend in support over time.

3.1 | WADS database

Data on the WADS database is inconsistently collected and reliant on women's disclosure to staff; questions therefore arise about the quality and reliability of data. Clinical data mining nevertheless revealed a broad range of psychosocial and health issues faced by the women and their infants. The mean age of the women participating in this study was 30 years. Fifteen of the women were non-Indigenous Australian, one woman was Aboriginal, three were European, and one was Asian. Twelve women were living with a partner, and eight were single at the commencement of the study. According to file notes, 10 women reported past physical, sexual and emotional abuse, and eight reported current domestic violence (a further two came to light during the research process). Poly-drug use during pregnancy, in addition to pharmacotherapy for opioid dependence or other prescribed medication, was reported by all but one woman who reported heroin use exclusively. Half of the women reported their partner's drug use was a problem for them. Five women had CP involvement in their own childhoods. Educational attainment was low, and all but one woman relied on social security payments as their sole source of income. Housing instability and transience were high. Approximately half of the women faced legal charges. A third of the women had been incarcerated, three during the pregnancy with the infant who was the subject of the present study. It is important to note that all the women in the study were considered 'at risk' as this is a precondition for WADS accepting women into the service.

3.2 | Surveys with WADS counsellors

Referral patterns were critical in understanding the response by WADS in the perinatal period. In total, 10 women were referred to CP (a further two had pre-existing notifications). All notifications were accepted and led to protective investigation and intervention. The remaining eight women were referred to community-based services such as family support, mental health and AOD treatment. The characteristics of the women in relation to referral pathways from WADS are important in understanding the study focus on the role of risk assessment in activation of formal support. The most common risk factor for women notified to CP was continuing maternal substance use. However, consistent with CP policy, no infant was notified on the grounds of substance use alone. Rather, a distinct cluster of risk factors was evident: continuing maternal substance use ($n = 10$); DFV ($n = 8$); unstable accommodation associated DFV ($n = 9$); and, in compliance with CP policy guidelines, older children out of maternal care ($n = 6$), and the mother having been a child client of CP ($n = 5$). Among the eight women referred to community services, six were first-time mothers, and two had an older child or children no longer in their care: Both of these women had histories of DFV. While they shared many of the vulnerabilities of those referred to CP, the reason for referral to community-based agencies, without recourse to notification to CP, was that both mothers were considered well engaged with support services. Despite the high number of notifications to CP, all women left the hospital with their infants; albeit, for three women, the formal (legal) care of the infant was held by their own or their partner's mother (the child's grandmother) with whom they were living upon discharge from hospital.

In addition to notification to CP, WADS made 96 referrals for 18 women. No referrals were made for two women due to pre-existing service use. One referral only was made to a service within the hospital for the mother at the correctional facility. A comparatively small number of referrals ($n = 11$) were for services within the hospital, which tend to be accessed by women while they are patients at WADS, for example, psychiatry. Most referrals ($n = 85$) were to community agencies or services. In some instances, several referrals were made to different agencies for the same type of service provision, for example, housing. Community referrals related to the following problems, issues or needs: generalist counselling; monitoring of infant/maternal mental health and wellbeing; family support; material aid/financial assistance; housing; DFV; AOD counselling and/or pharmacotherapy; and general support. In addition, one referral was made to the patient advocate at the hospital and one for adoption counselling.

3.3 | Surveys with CP workers

There was almost unanimous agreement among CP staff that timely referrals and service links resulted from collaboration between WADS and CP (the only exception was a case still in the initial investigatory stage). Case conferences or planning meetings were held, Children's Court action was taken, or planned, and referrals were made to parenting assessment and skills development and other services including, but not limited to, specialist mental health assessment, family support and AOD treatment. Involvement with CP varied across the study phases as some infant cases were closed and others either remained open or were subsequently opened following notification by police.

At the end of the 12-month period, 14 of the 20 women experienced involvement with CP, and 10 cases were active. Across all phases of the study, CP workers reported referrals made for each woman, her infant and/or her partner, the presenting concerns and whether the mother retained the physical and/or legal care of the infant. In total, CP made eight referrals for AOD counselling, seven to parenting assessment and skill development services, five to family support, three to DFV counselling and one to a mental health service. While CP initiated activity largely focused on mothers, a small number of referrals to DFV services were made for fathers. It is noteworthy that none of the men engaged with these services. At the conclusion of the study, just over half of the 14 women (eight) with CP involvement had lost the legal care of their infant. Three of these mothers retained daily care by residing with the infant's grandparents. Data mining of the WADS database indicates that four of the five mothers who lost both legal and physical care of their infant experienced child sexual assault and were removed from parental care as adolescents. Each of these women also had a domestically violent partner. The next section reports the results from the NSSQ.

3.3.1 | NSSQ

The NSSQ provides a picture of informal and formal support and the trend in support over time (Figure 1). Total functional support (emotional plus practical or tangible support) was measured across each phase of the study.

A number of issues are of note. Total functional support was maintained between phases 1 and 2, but fell off considerably by phase 3. When the issue of emotional support and tangible (practical) support was separated out from each other, the pattern remained the same. That is, both emotional and tangible support were sustained for the first 6 months of the infants' life (phase 2) and then fell away.

There was a significant difference in perceived total functional support (total functional support) across phases 1, 2 and 3, $\chi^2(2) = 8.745$, $p = 0.013$. Post hoc analysis with Wilcoxon signed-rank test was conducted with a Bonferroni correction applied, resulting in a significance level set at $p < 0.017$. Median (IQR) perceived total functional support scores for phase 1, 2 and 3 were 126 (75.50–141.50), 115 (67.50–137.50) and 82.00 (43.50–102.00), respectively. There was a significant difference in perceived total functional support between phases 1 and 3 ($Z = -2.480$, $p = 0.013$) and between phases 2 and 3 ($Z = -2.605$, $p = 0.009$), yet the difference between phases 1 and 2 was non-significant ($Z = -.568$, $p = 0.570$).

With perceived emotional support, there was a significant difference across phases 1, 2 and 3, $\chi^2(2) = 9.686$, $p = 0.008$. Post hoc analysis with Wilcoxon signed-rank test was conducted with a Bonferroni correction applied. Median (IQR) perceived emotional support scores for phases 1, 2 and 3 were 86 (49.50–100.00), 76 (46.00–100.00) and 56.00 (26.00–70.50), respectively. There was a significant difference in perceived emotional support between phases 1 and 3 ($Z = -2.443$, $p = 0.015$) and between phases 2 and 3 ($Z = -2.607$, $p = 0.009$), yet the difference between phases 1 and 2 was non-significant ($Z = -.905$, $p = 0.365$).

Looking at perceived tangible support, a significant difference was observed across Phases 1, 2 and 3, $\chi^2(2) = 7.878$, $p = 0.019$. Post hoc analysis with Wilcoxon signed-rank test was conducted with a Bonferroni correction applied. Median (IQR) perceived tangible support scores for phases 1, 2 and 3 were 31 (16.00–39.00), 31 (15.00–39.25) and 22.50 (9.25–27.75), respectively. There was a significant difference in perceived tangible support between phases 1 and 3 ($Z = -2.447$, $p = 0.014$) and between phases 2 and 3 ($Z = -2.484$, $p = 0.013$), yet the difference between phases 1 and 2 was non-significant ($Z = -0.057$, $p = 0.955$).

There was a significant difference in perceived informal support across phases 1, 2 and 3, $\chi^2(2) = 8.982$, $p = 0.011$. Post hoc analysis with Wilcoxon signed-rank test was conducted with a Bonferroni correction applied. Median (IQR) perceived informal support scores for phases 1, 2 and 3 were 92.50 (58.25–124.50), 100.50 (40.00–125.50) and 56.00 (37.50–91.75), respectively. There was a significant difference in perceived informal support between phases 1 and 3 ($Z = -2.358$, $p = 0.018$) and between phases 2 and 3 ($Z = -2.954$, $p = 0.003$), yet the difference between phases 1 and 2 was non-significant ($Z = -0.047$, $p = 0.962$).

Interestingly, with formal support, an overall non-significant difference was observed across phases 1, 2 and 3, $\chi^2(2) = 3.931$, $p = 0.140$.

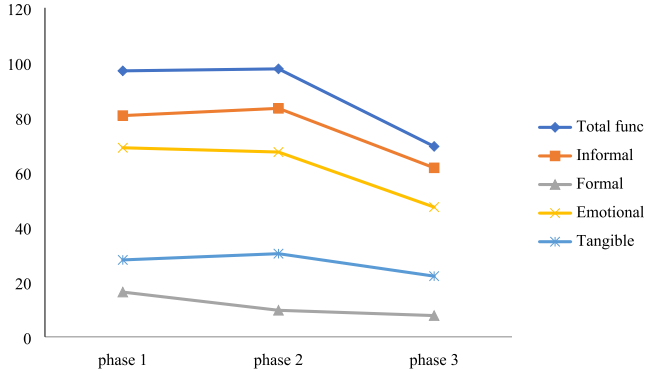

FIGURE 1 Functional support and loss.

4 | DISCUSSION

Identifying risk to infants of mothers with problematic AOD use is complex. There is a critical need to understand the strengths and weaknesses of the formal and informal network as a core component in comprehensive assessment. The aim of the present study was to:

1. Consider professional decision-making and the activation of referral pathways to either CP and/or to community-based agencies (e.g. family support, mental health and AOD treatment) by specialist AOD obstetric counsellors; and

2. Examine the provision of formal and informal support in relation to the safe retention of the infant in the mother's care from the perinatal period to the end of the infant's first year.

4.1 | Understanding decision-making and the activation of referral pathways in the perinatal period

Overall, the findings from the present study indicate that assessment conducted by WADS counsellors in the perinatal period was accurate. Mother/infant dyads considered at higher risk were referred to the statutory CP service, while those considered at lower risk were referred directly to community-based services. CP accepted and acted upon all referrals, which demonstrates capacity by a community agency to play a pivotal role in determining pathways to service provision. While WADS was able to identify which women and infants needed more intense support, the present study demonstrates that the post-discharge referral pathway following notification to CP in the perinatal period largely resulted in assessment of parenting capacity. Also evident is that, despite confirmation from community-based agencies that referrals were received, engagement often did not occur. When it did, engagement with services tended to be superficial and not well sustained. After 96 referrals by WADS in the perinatal period, and an additional 24 by CP at different study phases, resulting in a total of 120 referrals, the support women received from formal service providers was minimal. The overall pattern of service involvement, beyond assessment of parenting capacity in the perinatal period, was characterized by some use of housing and crisis support services to address immediate needs for safety and accommodation, minimal engagement in AOD treatment, and some engagement with universal, medically oriented services—the Maternal and Child Health Service and general practitioners. Referrals to men's behaviour change programmes for fathers went nowhere—men did not attend. By phase 3, only two healthcare providers, five counsellors or therapists and two priests were listed among the providers of formal support. These findings confirm West et al.'s (2021) statement that 'referrals are complex and may not in and of themselves result in service receipt' (p. 639).

The evaporation of support from community sector organizations was a disturbing finding, which raises questions about the capacity of community-based agencies to manage risk and the role of CP in ensuring continued monitoring of engagement and outcomes for infants and children. Service use was higher among women known to CP, either through the infant who was the subject of the study or through prior involvement with an older sibling. However, relying on notification to CP as a means of ensuring continuous engagement with services was an individualized and stigmatized response that did not result in long-term or meaningful support for the most at-risk women. Stigma and lack of trust in professionals is a significant barrier to service use among women with histories of infant or child removal and among those who were, themselves, removed from parental care (Boddy et al., 2020; Mason et al., 2019). In the present study, reduction in service use was most evident after removal of the infant, which was much more likely for women who experienced out-of-home care in their own childhood. Motivation to address substance use and/or other concerns reduces among women without infants or children in their care. In addition, mothers may no longer fit the criteria for service provision, and there can be lack of support for reunification (Tsantefski et al., 2014). A service such as PAUSE, a UK programme that supports women who have lost the care of their child(ren) could assist women overcome the challenges they face following removal of their infants (Boddy et al., 2020).

4.2 | The NSSQ: Measuring support in the first year of the infant's life

The results of the NSSQ identified that most support was provided by the informal network composed of partners, family members and friends (Table 1), rather than by professional service providers. Partners were the most frequent support followed by mothers. Of note was the total absence of support from work associates or neighbours, which clearly indicates little connection to the wider community. The NSSQ illustrated that support fell dramatically over the 12-month period for the women as a cohort. There were minimal differences reported in the perceived support women received from their mothers across phases 1 and 2, although this support decreased across phases 2 and 3. The initial maintenance of support between phases 1 and 2 is likely due to several factors: families rallying around the newborn infant, women's involvement with a specialist obstetric service offering higher levels of psychosocial support than mainstream healthcare and the shorter timeframe in which change was measured. The statutory CP service, listed on the NSSQ among support person category 7, counsellor or therapist, was a pathway to service provision for the most at-risk mother/infant dyads. However, even with CP exercising a central coordinating and monitoring role, service use was not sustained by most women.

4.3 | Infant outcomes in relation to social support

While important in illustrating levels of support over time, a 'total' of support, as measured by the NSSQ, does not give an indication of the quality of that support. Triangulation of data from the WADS database with results from the NSSQ strongly suggests the relationship between type, quality and quantity of support. By far, the variable most closely associated with loss of the infant was the mother having experienced out-of-home care in her own childhood. Four of the five women who lost daily care of their infant by the conclusion of the study experienced child sexual assault and were removed from parental care as adolescents. These women experienced childhood trauma and are likely to have had fractured attachments. Each of them experienced DFV before and during the study timeframe and included a domestically violent partner on the NSSQ at one or more phases of

TABLE 1 Change in the number of supporters available to women over the 12-month period.

	Study phase		
Support person	**1 (*N* = 19)**	**2 (*N* = 18)**	**3 (*N* = 16)**
1. Spouse/partner	14	12	11
2. Family or relatives	49	45	27
3. Friends	28	30	19
4. Work or school associates	0	0	0
5. Neighbours	0	0	0
6. Health care providers	10	1	2
7. Counsellor or therapist	15	12	5
8. Priest	2	3	2
9. Other	1	0	0

the study. During adversity, women who had been in out-of-home care did not have sufficient familial or other informal support to buffer them from circumstances leading to loss of the infant. Current practice intervention was also insufficient in helping them overcome barriers to effective and safe parenting. By contrast, women who retained care of their infant were more likely to be first-time mothers. They tended to have socially dense networks with larger numbers of enduring, reciprocal informal relationship or to have low levels of familial support due to distance rather than disturbances among relations, and by the decision to disassociate from individuals who use illicit substances. Retention of the infant in the mother's care was more likely among women who maintained support beyond phase 1 of the study or were able to increase the level of support available to them between the second and third phases of the study, most notably by engaging with a family support programme. Women who retained the care of the infant throughout the study also tended to not have CP involvement or had their cases closed prior to the study conclusion.

4.4 | Improving responses: Bridging formal and informal sources of support

Measurement of formal and informal support could be a valuable practice tool in facilitating critical conversations with women (and their partners) about the quality of support available to them. Questions to consider could include the following: Is the network naturally occurring; is support mutual; is support occurring within a context of abuse; does it promote positive parenting; and does it meet the self-identified needs of the mother? While the answers to such questions could be instrumental in determining which families receive a statutory intervention, and which would be better served through community-based agencies, care needs to be taken to ensure that already disadvantaged women are not further victimized by services and systems that aim to support them. An effective response requires involvement of the extended family (where safe) but also collaboration between professional groups and between services and families; this is a practice development social work needs to engage with. The study findings strongly suggest that the presence of a supportive mother is highly influential in continued maternal (or familial) care; alternative support therefore needs to be identified for vulnerable women unable to draw upon their own mothers and extended families.

It would be reasonable to target scarce resources to those most in need. Ideally, this would include addressing the socio-economic stressors that exacerbate substance use and mental health problems among women with problematic substance use (Canfield et al., 2017). Early detection facilitates referral pathways to healthcare and other services (Sánchez-Sauco et al., 2019); however, as the present study illustrates, engagement is unlikely to endure. Once the most vulnerable women are referred to statutory authorities in the perinatal period, their risk profile is raised, and their trajectory is more likely to be one of losing the care of their infant. This is particularly the case for women who have had previous children removed as the birth of the new infant is likely to raise professional anxiety and lead to reliance on previous assessment and notification to statutory services (Broadhurst & Mason, 2017). The question becomes how to support women so that professional intervention results in a web of safety rather than a loose thread that unravels and fails to hold women and their infants beyond the perinatal period.

One way forward would be to assign a case manager able to bridge the formal and informal network. To facilitate continuous intervention in the post-discharge caregiving environment, a trusting relationship with a case manager would need to be established during pregnancy when motivation for change is high (Tsantefski et al., 2014) and to continue until women are safely integrated into their families and communities. CP responds to infants and children at imminent risk of harm. As the present study indicates, CP was not able to provide the most vulnerable women with the support they required to safely parent. This supports Alaggia et al.'s (2015) assertion that systemic change is needed to improve CP systems, particularly in cases involving DFV, as was the case among the most at-risk mother/infant dyads in the present study. A number of interventions for increasing and improving the provision of informal support to women with

problematic AOD use could be implemented by a case manager, other than a CP worker, including group interventions with family members and partners to improve relationships. Peer group interventions, such as self-help groups, could facilitate the giving and receiving of support. Individual interventions could include a focus on changing behaviour and improving social skills and pairing women with a peer (Hochstatter et al., 2022). Women could also be assisted to reconnect with members of the extended family who are supportive of parenting and recovery and to build new social connections (Tsantefski et al., 2022).

Problematic AOD use in the perinatal period is a complex issue. To manage health and psychosocial implications for women and their infants, practice by interdisciplinary professional teams is recommended (Prindle et al., 2018); but, as the present study demonstrates, professional communication and collaboration does not necessarily result in adequate, appropriate or long-term support (Mason et al., 2019). A case manager able to provide long-term follow up could ensure linkages with the broader family network (Broadhurst & Mason, 2017) and the wider community (Tsantefski et al., 2022), a glaring gap in the social networks of the women in the present study. The provision of case management has been demonstrated to be an effective strategy for preventing the birth of subsequent substance-exposed infants among women with problematic AOD use who have infants and children removed from their care (Grant et al., 2014). Alternatively, the task of assisting women access complex service systems could be undertaken by Linkers (also known as Navigators or Mentors). Linkers are employed by Australian not-for-profit organizations and offer relational, client-centred and long-term support to families in areas such as early childhood, education and justice by linking them with services and supports. The flexibility of the Linker role potentially enables the bridging of formal and informal sources of support (dandolopartners, 2022). The PAUSE program in the United Kingdom, which provides intensive woman-centred support to birth mothers following removal of their children, is also an important initiative for increasing women's access to healthcare and other services (Broadhurst & Mason, 2017). Building a trusting relationship with women is important for helping them overcome fear of infant removal, which is a major disincentive in the uptake of professional help in pregnancy, the perinatal period and beyond (Mason et al., 2019; West et al., 2021).

The need for improved collaboration and coordination between substance use treatment and child welfare services is noted in the literature (Canfield et al., 2017; Prindle et al., 2018). If mothers at high risk of losing the care of their infants are to avoid referral to CP authorities and still receive the services they need, more than formal protocols between community services and organizations such as WADS are needed. The study findings suggest services working in partnership should create a priority route to service provision. Ideally, this should be done without compromising women's engagement in services by threatening that non-engagement will lead to infant removal and it should include clear expectations of service providers, not just mothers. Effective case management or support by Linkers (dandolopartners, 2022) or a programme such as PAUSE (Boddy et al., 2020), with a warm referral (West et al., 2021) could help to improve the poor professional communication and lack of collaboration repeatedly identified in the deaths of infants and children known to statutory CP services (Frederico et al., 2014).

4.5 | Study strengths and limitations

The present study provides a rare example of professional decision-making in the perinatal period in relation to the social support needs of women with problematic AOD use and their infants. It is also one of few longitudinal studies to examine changes in the social network over time. Use of quantitative methods to consider the extent and frequency of support to women, together with infant outcomes, is a significant strength of the study. While the numbers are small, use of a validated questionnaire provided descriptive statistics on tangible, emotional and total functional support from informal networks and service providers. A number of limitations need to be acknowledged. The study was based on a small sample size of 20 women and their associated workers. A larger cohort of mothers would allow statistical comparison to be meaningful and would strengthen the study findings. The NSSQ measured the perception of support without inclusion of actual provision or provider perspective. Given that the perception of support has been shown to be a critical variable in women's ability to cope with childcare (Hupcey, 1998), this limitation may not detract from the overall findings.

5 | CONCLUSION

Supporting women with histories of problematic AOD use to safely parent requires comprehensive assessment of risk and protective factors and intervention tailored to the presenting, and often changing, circumstances in which infants and children are reared. Simultaneous attention needs to be directed towards formal systems of support, both statutory and non-statutory, and to informal networks. The disengagement from formal systems of support and the durability of informal support evident in the present study strongly suggests social work interventions need to focus on bridging formal and informal support. Greater attention to the strengths and weakness of women's informal networks could help to refine perinatal assessment by services such as WADS, which is important in determining referral pathways to statutory services or to community-based agencies. Women also need assistance to build informal social networks to help them deal with DFV, reduce or cease the use of substances and provide them with the support they need to keep themselves, and their infants, safe and well in the long term.

ACKNOWLEDGEMENTS

Open access publishing facilitated by Southern Cross University, as part of the Wiley - Southern Cross University agreement via the Council of Australian University Librarians.

CONFLICT OF INTEREST STATEMENT

There is no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Menka Tsantefski https://orcid.org/0000-0003-4811-8369
Lynne Briggs https://orcid.org/0000-0002-0219-3323

REFERENCES

Alaggia, R., Gadalla, T. M., Shlonsky, A., Jenney, A., & Daciuk, J. (2015). Does differential response make a difference: Examining domestic violence cases in child protection services. *Child and Family Social Work*, *20*, 83–95. https://doi.org/10.1111/cfs.12058

Babbie, E. (2013). *Social research counts*. Wadsworth, Cengage Learning.

Barringer, A., Hunter, B. A., Salina, D., & Jason, L. A. (2017). Empowerment and social support: Implications for practice and programming among minority women with substance abuse and criminal justice histories. *Journal of Behavioral Health Services & Research*, *44*(1), 75–88. https://doi.org/10.1007/s11414-016-9499-6

Boddy, J., Bowyer, S., Godar, R., Hale, C., Kearney, J., Preston, O., Wheeler, B., & Wilkinson, J. (2020). Evaluation of pause: Evaluation report. United Kingdom Government, Department of Education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932816/Pause_-_Sussex.pdf

Broadhurst, K., & Mason, C. (2017). Birth parents and the collateral consequences of court-ordered child removal: Towards a comprehensive framework. *International Journal of Law, Policy and the Family*, *31*, 41–59. https://doi.org/10.1093/lawfam/ebw013

Broadhurst, K., & Mason, C. (2020). Child removal as the gateway to further adversity: Birth mother accounts of the immediate and enduring collateral consequences of child removal. *Qualitative Social Work*, *19*(1), 15–37. https://doi.org/10.1177/1473325019893412

Campbell, P., Wynne-Jones, G., & Dunn, K. M. (2011). The influence of informal social support on risk and prognosis in spinal pain: A systematic review. *European Journal of Pain*, *15*(5), 444.e1–444.e14. https://doi.org/10.1016/j.ejpain.2010.09.011

Canfield, M., Radcliffe, P., Marlow, S., Boreham, M., & Gilchrist, G. (2017). Maternal substance use and child protection: A rapid evidence assessment of factors associated with loss of child care. *Child Abuse & Neglect*, *70*, 11–27. https://doi.org/10.1016/j.chiabu.2017.05.005

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches*. Sage.

dandolopartners. (2022). Understanding linkers. Paul Ramsay Foundation. https://assets.websitefiles.com/62b998c0c9af9f65bba26051/63226c71ff22770ad22f3fc0_PR-Dandolo-Linkers-Final.pdf

Epstein, I. (2014). Building a bridge or digging a pipeline? Clinical data mining in evidence-informed knowledge building. *Research on Social Work Practice*, *25*, 499–506. https://doi.org/10.1177/1049731514536475

Fluke, J. D., Harlaar, N., Brown, B., Heisler, K., Merkel-Holguin, L., & Darnell, A. (2019). Differential response and children re-reported to child protective services: County data from the National Child Abuse and Neglect Data System (NCANDS). *Child Maltreatment*, *24*(2), 127–136. https://doi-org.ezproxy.scu.edu.au/10.1177/1077559518816381

Frederico, M., Jackson, A., & Dwyer, J. (2014). Child protection and cross-sector practice: An analysis of child death reviews to inform practice when multiple parental risk factors are present. *Child Abuse Review*, *23*, 104–115. https://doi.org/10.1002/car.2321

Grant, T., Graham, J. C., Ernst, C. C., Peavy, K. M., & Novick Brown, N. (2014). Improving pregnancy outcomes among high-risk mothers who abuse alcohol and drugs: Factors associated with subsequent exposed births. *Children and Youth Services Review*, *46*, 11–18. https://doi.org/10.1016/j.childyouth.2014.07.014

Hochstatter, K. R., Slavin, M. N., Gilbert, L., Goddard-Eckrich, D., & El-Bassel, N. (2022). Availability of informal social support and the impact on health services utilization among women in community corrections who engage in substance use and risky sexual behavior: New York City, 2009–2012. *Health and Justice*, *10*(1), 6. https://doi.org/10.1186/s40352-022-00170-0

Hupcey, J. E. (1998). Clarifying the social support theory-research linkage. *Journal of Advanced Nursing*, *27*, 1231–1241. https://doi.org/10.1046/j.1365-2648.1998.01231.x

Madora, M., Wetzler, S., Jose, A., & Bernstein, P. S. (2022). Pregnant and postpartum people with substance use disorders: Understanding the obstetrical care provider's roles and responsibilities. *Maternal and Child Health Journal*, *26*, 1409–1414. https://doi.org/10.1007/s10995-022-03446-x

Mason, C., Robertson, L., & Broadhurst, K. (2019). Pre-birth assessment and infant removal at birth, experiences and challenges: A literature review. The Nuffield Foundation. https://www.nuffieldfoundation.org/wp-content/uploads/2019/12/Literature-review_Born-into-Care_Dec-2019.pdf

Moore, T., Arefadib, N., Deery, A., Keyes, M., & West, S. (2017). The first thousand days: An evidence paper. Parkville, Victoria: Centre for Community Child Health, Murdoch Children's Research Institute. https://www.rch.org.au/uploadedFiles/Main/Content/ccchdev/CCCH-The-First-Thousand-Days-An-Evidence-Paper-September-2017.pdf

Nichols, T. R., Gringle, M. R., Welborn, A., & Lee, A. (2023). "We have to keep advocating and helping and doing what we can": Examining perinatal substance use services in the absence of integrated treatment programs. *Journal of Drug Issues*, *53*(1), 18–36. https://doi.org/10.1177/00220426221092771

Norbeck, J. S. (1984). The Norbeck social support questionnaire. *Birth Defects*, *20*(5), 45–57.

Norbeck, J. S., Lindsey, A. M., & Carrieri, V. L. (1983). Further development of the Norbeck social support questionnaire: Normative data and validity testing. *Nursing Research*, *32*, 4–9. https://doi.org/10.1097/00006199-198301000-00002

Oni, H. T., Khan, M. N., Abdel-Latif, M., Buultjens, M., & Islam, M. M. (2019). Short term health outcomes of newborn infants of substance-using mothers in Australia and New Zealand: A systematic review. *Journal of Obstetrics and Gynaecology Research*, *45*(9), 1783–1795. https://doi.org/10.1111/jog.14051

Prindle, J. J., Hammond, I., & Putnam-Hornstein, E. (2018). Prenatal substance exposure diagnosed at birth and infant involvement with child protection services. *Child Abuse & Neglect*, *76*, 75–83. https://doi.org/10.1016/j.chiabu.2017.10.002

Sánchez-Sauco, M. F., Villalona, S., & Ortega-García, J. C. (2019). Sociocultural aspects of drug dependency during early pregnancy and considerations for screening: Case studies of social networks and structural violence. *Midwifery*, *78*, 123–130. https://doi.org/10.1016/j.midw.2019.07.017

Taplin, S. (2017). Prenatal reporting to child protection: Characteristics and service responses in one Australian jurisdiction. *Child Abuse & Neglect*, *65*, 68–76. https://doi.org/10.1016/j.chiabu.2017.01.007

Tsantefski, M., Humphreys, C., & Jackson, A. C. (2014). Infant risk and safety in the context of maternal substance use. *Children and Youth Services Review*, *47*, 10–17. https://doi.org/10.1016/j.childyouth.2013.10.021

Tsantefski, M., Jackson, A. C., & Humphreys, C. (2015). A delicate balance: Intervention with mothers with dual diagnosis and their infants. *Advances in Dual Diagnosis*, *8*(2), 78–89. https://doi.org/10.1108/ADD-09-2014-0027

Tsantefski, M., Tidyman, A., Rose, J., & Wilde, T. (2022). Sustainable social networks for mothers in recovery: The Mirror families model. *Journal of Social Work Practice in the Addictions*, 1–15. https://doi.org/10.1080/1533256X.2022.2137990

Urbanoski, K., Joordens, C., Kolla, G., & Milligan, K. (2018). Community networks of services for pregnant and parenting women with problematic substance use. *PLoS ONE*, *13*(11), e0206671. https://doi.org/10.1371/journal.pone.0206671

Urgelles, J., Donohue, B., Holland, J., Denby, R., Chow, G., Plant, C. P., & Allen, D. N. (2017). Examination of the relationship between social support and treatment outcomes in mothers referred by child protective services utilizing the significant other support scale. *Journal of Family Social Work*, *20*(3), 213–232. https://doi.org/10.1080/10522158.2016.1276991

Wall-Wieler, E., Roos, L. L., Bolton, J., Brownell, M., Nickel, N., & Chateau, D. (2018). Maternal mental health after custody loss and death of a child: A retrospective cohort study using linkable administrative data. *The Canadian Journal of Psychiatry*, *63*(5), 322–328. https://doi.org/10.1177/0706743717738494

West, A., Duggan, A., Gruss, K., & Minkovitz, C. (2021). Service coordination to address maternal mental health, partner violence, and substance use: Findings from a national survey of home visiting programs. *Prevention Science*, *22*, 633–644. https://doi.org/10.1007/s11121-021-01232-9

How to cite this article: Tsantefski, M., Briggs, L., & Griffiths, J. (2023). The social support systems of mothers with problematic substance use in their infant's first year. *Child & Family Social Work*, 1–11. https://doi.org/10.1111/cfs.13063