**ORIGINAL ARTICLE** 



# "Don't ... Break Down on Tuesday Because the Mental Health Services are Only in Town on Thursday": A Qualitative Study of Service Provision Related Barriers to, and Facilitators of Farmers' Mental Health Help-Seeking

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### Abstract

The suicide rate of farmers is approximately double that of the general Australian population, yet farmers employ fewer help-seeking behaviours (Arnautovska et al. in Soc Psychiatry Psychiatr Epidemiol 49:593–599, 2014; Brew et al. in BMC Public Health 16:1–11, 2016). Therefore, it is crucial to understand if, and how health services and system might influence farmer help-seeking. To shed light on this, the current study employed qualitative semi-structured interviews with 10 farmers, 10 farmers' partners and 8 medical practitioners. Thematic analysis, guided by Braun and Clarke's (Qual Res Psychol 3:77–101, 2006) techniques, was used to analyse the data. Three themes were devised concerning the interaction between farmers and health services, including 'health service interactions', 'services are provided within a complex system' and 'emerging technologies: the users, practitioners, and systems'. The findings underscore the importance of interactions between a farmer and a service provider, with farmers wanting their provider to have an understanding of farming life. Help-seeking was also shaped by access, availability, and practitioner constancy. Lastly, a complex relationship between digital mental health services and farmer help-seeking was reported, with factors related to the farmers, the practitioners and the infra-structure/systems discussed. The outcomes have implications for health service and policy reform, developing and providing interventions for farmers to promote health services interaction as a way of mental health help-seeking.

Keywords Farmers · Service provision · Help-seeking · Primary producers · Mental health

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Farmers are at high risk for mental health difficulties, as evidenced by low scores on wellbeing measures and alarmingly elevated suicide rates compared to the general Australian population (Arnautovska et al. 2014; Schirmer et al. 2015). Research has demonstrated that farmers do not typically seek help for mental health difficulties, however, the reasons for this are currently unclear (Brew et al. 2016; Roy et al. 2014). The factors that delay, prevent, or facilitate mental health help-seeking among farmers are likely broad-reaching and complex, and span individual to system-level influences. The current investigation will focus on healthcare service-related factors that may serve as potential barriers and/or facilitators of mental health help-seeking among Australian farmers. This is an important avenue to explore given the known difficulties of engaging farmers in mental health care (Brumby and Smith 2009).

Mental health help-seeking refers to the intentions and behaviours of a person directed towards

accessing professional support for feelings of distress, mental health issues or suicide-related thoughts and behaviours (hereon referred to as help-seeking; Rickwood and Thomas 2012). Help-seeking from a professional is important because it can prevent further deterioration of mental health and wellbeing, and when help is sought early the response tends to be positive and enduring (de Diego-Adelino et al. 2010; Ogrodniczuk and Oliffe 2010) Professional help encompasses General Practitioners (GPs or family physicians hereon referred to as GPs) and health professionals such as nurses, counsellors, psychologists and psychiatrists, as well as telephone and online services (encompassing all digital mental health services). Invariably, farmer help-seeking requires an interaction between a farmer and some form of mental health service and this nexus represents a critical juncture at which potential barriers and facilitators of farmer help-seeking are likely to operate, and also be amenable to intervention.

While the focus is on help-seeking for mental health, the challenging context within which farmers operate warrants attention. A key challenge farmers face relates to the weather and climate, particularly drought, but also storms, floods and frost, as well as fires (Schirmer et al. 2015). Much of Australia, and in particular Queensland, where this research was completed, has experienced widespread drought since 2011 (Queensland Government Department of the Premier and Cabinet 2017). Weather events have had a large impact on farming businesses due to reduced output and in turn reduced income, which has a range of implications for farmers themselves, specifically their mental health and helpseeking (Queensland Government Department of Agriculture, Fisheries, and Forestry 2014; Vayro et al. 2020). As such, practical help or support related to these challenges is likely to be an important component of broader strategies to improve mental health among farmers. However, while these contextual variables influence farmer mental health, they are beyond the scope of the current investigation, which is farmer help-seeking in response to distress (however this distress arises). Help-seeking is important in its own right as it can lead to complementary support as well as the development of stress management techniques to improve and maintain their wellbeing in the face of practical challenges.

Limited evidence is currently available to understand the context of farmers and their help-seeking. Brew et al. (2016) compared farmers and non-farming rural residents on their endorsement of factors likely to be barriers to help-seeking, although, it does not extend to analyses of the relationships between the measured barriers and help-seeking. Nonetheless, they found that farmers are less likely to visit a GP and that farmers endorsed attitudinal barriers most strongly, followed by structural and time-related barriers. Another study, by Hull et al. (2017), also examined farmer help-seeking compared to rural non-farmers, with a focus on attitudinal

barriers such as stoicism, stigma, and self-reliance. Self-reliance and need for control were found to be slightly elevated in farmers compared to non-farming farm residents and rural residents. Staniford et al. (2009) conducted a qualitative study of drought-stricken citrus farmers that had a secondary aim to understand barriers to help-seeking, which encompassed five themes: self-reliance, social image, lack of knowledge, perceptions of health professionals' efficacy, and restrictive lifestyle. While this highlights that health professionals have a role, the themes were not explored in-depth, limiting the utility. Another qualitative study by Roy et al. (2014) explored help-seeking in male Canadian farmers. It was found that geographic isolation, finances, acceptability, stigma, confidentiality, self-reliance, pride, male gender roles, and a lack of knowledge of services impact Canadian farmers' help-seeking. The above research provides some insight but has paid insufficient attention to the role of health services in farmer mental health help-seeking in Australia. Additionally, Vayro et al.'s (2020) findings shed light on factors that farmers report impact their help-seeking, although the focus is on farming life, not health services. The three themes highlighted by Vayro et al. include the lifestyle and culture of farming that is ingrained in their identity and encourages stoicism and self-reliance in opposition of helpseeking. Second, farming priorities that are time-consuming but can accommodate help-seeking if managed well were highlighted. Third, the challenges of farming life such as weather events, market variability and increasing legislative requirements as well as the potential financial consequences that can increase the need for help, and reduce the ability to obtain it were explored. The above research has contributed to our understanding of farmer help-seeking, but there has yet to be an exploration of how factors relating to health services act to shape farmer help-seeking.

The experience of health service interactions directly influence health outcomes. Multiple meta-analyses on the therapeutic alliance have confirmed that the relationship between a person and their mental health care provider has a small to medium effect on the therapeutic outcome (Fluckiger et al. 2018; Horvath and Symonds 1991; Norcross and Wampold 2011). Specifically for farming populations, Hull et al. (2017) showed that South Australian farmers reported difficulty understanding their doctor/health professional significantly more often than rural residents (24.4% compared to 15.3%). This finding indicates that farmers' interactions with health service providers may be qualitatively different from that of rural populations, and this is likely to influence help-seeking behaviours. Rural cultural knowledge has also been found to be key to successful rural service-delivery, and rural people report a desire for services that are locally conceived to meet their unique needs (Alston 2012; Bischoff et al. 2013; Wilson et al. 2015). Vayro et al. (2020) identified strong and distinct culture associations with farming including the belief that farming is a lifestyle, not merely an occupation. These results suggest that service-delivery considerations may be particularly important to the acceptability of health interventions, and are therefore, likely relevant to farmers' help-seeking. However, no examination of help-seeking barriers and facilitators related to healthcare services, including therapeutic relationships, amongst farmers has yet been conducted.

In the absence of evidence directly from farmers, inferences must be made from research addressing health-service factors impacting help-seeking among rural communities. At the most direct level, the diminution of health services as a function of increasing remoteness and the associated availability and access difficulties are likely to complicate helpseeking among farmers (Australian Government Department of Health and Ageing 2008; Collins et al. 2009; Judd et al. 2006). However, it is unclear how these broader servicedelivery challenges for rural communities manifest and influence help-seeking specifically among farmers. This is especially the case given that farmers are less likely to visit a GP than rural residents (Brew et al. 2016). Compared to non-farming rural residents, farmers report greater structural barriers such as travel cost, travel distance, transport, service cost, and availability. This reinforces the notion that mental health service-provision factors should be considered in their own right to improve our understanding of farmer help-seeking.

Alternative delivery modes, such as digital mental health services, are recommended for rural residents and farmers (Bradford et al. 2015; Griffiths and Christensen 2007), yet little is known about the uptake of such services and whether they successfully overcome traditional service barriers. Given digital mental health services can be accessed remotely, they hold great promise for remote populations such as farmers and those living in rural areas. The available evidence suggests that digital mental health services have many benefits and are clinically and cost-efficacious (Orman et al. 2014; Titov et al. 2017). However, the uptake by the general population is uninspiring, with only 24.1% of individuals who completed an online mental health assessment proceeding to engage with digital mental health services, despite the recommendation being made to 75.9% of the sample after assessment (Titov et al. 2017). There may even be additional barriers constraining farmers from using such services. Research suggests that these may include farmers' attitudes, awareness, or digital literacy regarding digital mental health services (Handley et al. 2014), as well as insufficient internet connectivity, which is a common issue in rural and remote locations (Shealy et al. 2015). Although technology-based services are regularly recommended by researchers to overcome barriers such as remote location and stigma (Bradford et al. 2015; Meurk et al. 2016), there is currently an insufficient understanding of how farmers decide to use (or not use) such services when seeking help for mental health.

# **The Current Research**

This research aims to understand the relationship between health services and farmers' help-seeking, and identify specific service-related barriers and facilitators of help-seeking for this population. Given the scarcity of existing research, an inductive, qualitative exploratory approach is the most appropriate to create an in-depth understanding of farmers' mental health help-seeking (Kavalidou et al. 2015; Palinkas et al. 2011). This investigation will focus specifically on health service variables that serve to facilitate or inhibit help-seeking among this vulnerable population and will be carried out using thematic analysis informed by Braun and Clarke (2006).

To ensure a more complete understanding of these issues, multiple perspectives will be sourced including direct input from farmers but also incorporating the perspectives and insight of spouses/partners, and from GPs. Through triangulation, multiple sources of information furnish a more accurate and complete understanding of the phenomenon (Braun and Clarke 2013). This approach maximises both the depth of understanding obtained as well as the reliability of these findings (Willig 2013). For rural farmers, these additional perspectives are likely to be of particular importance for two reasons. First, health in rural areas has historically been gendered; that is, it is taken as a woman's responsibility to ensure the health of her family, which includes the provision of support (Alston 2012; Alston and Kent 2008; Ide 1986; Kolves et al. 2012; McLaren and Challis 2009). Thus, farmers' spouses/partners (who are typically female in the Australian context; Australian Bureau of Statistics 2012) play a critical role in any health help-seeking decisions and thus, provides additional information beneficial to understanding farmer help-seeking. Second, GPs are essential to the life and health of a rural farmer. Research has shown that rural Australians often choose GPs to provide mental health care (Perkins et al. 2013), and that GPs are invariably the first professional point of contact for farmers seeking health care (Kavalidou et al. 2015). This means that GPs are well-positioned to provide insight into farmer help-seeking, especially with respect to specialist service utilisation.

# Methods

#### Participants

Three participant groups were recruited for individual semistructured interviews: farmers, farmers' partners (hereon partners), and GPs. Purposive sampling was adopted to ensure that participants possessed experiential understandings and could authoritatively report on help-seeking in the farming population. In total, 28 participants were interviewed.

### Farmers

Farmer participants comprised seven male and three female participants. To be included, farmers needed to identify farming as their primary occupation, and as such, hobby farmers were ineligible. The farmers ranged in age from 43 to 70 years (M = 57.00, SD = 9.09), and they all resided in Queensland. The farmers' location remoteness was categorised using the Accessibility/Remoteness Index of Australia (ARIA +; Hugo Centre for Migration and Population Research 2011), and Australian Standard Geographic Classification systems (ASGC; Australian Institute of Health and Welfare 2004). These provide standardised measures of rurality in Australia, where the ARIA + measures road distance to different amenities with scores coinciding with classifications of metropolitan, inner regional, outer regional, remote, or very remote from the ASGC. Expectedly, no farmers resided in metropolitan areas, two resided in inner regional areas, one in outer regional, two in remote, and five in very remote locations.

#### Partners

The 10 partners of farmers recruited were all females who were in a relationship with a farmer who met the study criteria but were not actually related to the farmer participants in the sample. The partners were between 29 and 64 years of age (M=45.10, SD=11.29) and resided in inner regional (n=1), outer regional (n=2), remote (n=2), and very remote areas (n=5), based on the ARIA + and ASGC classifications.

#### GPs

Eight GPs were recruited, five females and three males. GPs were eligible if farmers were represented in their current patient caseload. Based on the ARIA + and ASGC classifications, the GPs represented metropolitan (within an inner regional district; n = 1), inner regional (n = 1), outer regional (n = 3), remote (n = 2), and very remote areas (n = 1).

Every effort was expended to ensure no relationships were present within the participant pool, to prevent duplication of information and the potential influence of relationship dynamics. This was to prevent the disclosure of relationship issues outside the focus of this study and protect the privacy of the individuals within the relationship (DeVito 2009).

### **Data Collection**

This study was approved by the University of Southern **Oueensland Human Research Ethics Committee prior to** commencement. Participants were recruited during 2016 through personal networks, social networking websites (e.g., Twitter), and community/professional associations (e.g., Rural Doctors Association Queensland and Agforce). A short description of the research was shared with an invitation to express interest in participating managed through an online survey link. Participants who expressed interest were provided with an information package, which explained the study in detail. Participants were also informed that they would receive a \$20 prepaid Visa card in recognition of their participation. Participants chose the medium by which they were interviewed, with the majority interviewed by phone (n=26), although participants were also offered a video conference, or face-to-face interview (n = 2 farmers opted for this mode). All interviews were conducted by the first author (then a PhD candidate) to ensure consistency in style. The first author was not known to the participants, and she consciously took the position of a layperson to agriculture and the participants' experiences. Participants were able to choose the time and location for their interviews, which were audio-recorded and transcribed verbatim. Following transcription, participants were emailed their transcript to ensure accuracy and invite corrections or revisions. Only one participant, a farmer, provided a revised transcript, which was used in the analysis instead of the original. Recruitment and interviewing continued until saturation, at which point, no new information was elicited (Marshall et al. 2013). The obtained saturation point exceeded the sample size recommendations by Morse (2000) for six to ten participants in a qualitative sample.

Semi-structured interviews were used to collect data because this method is well-validated for the use of scripted questions while allowing scope to explore participant-raised points (Braun and Clarke 2013; Willig 2013). The interview questions were based on empirical evidence from relevant help-seeking literature in conjunction with recommendations made by Braun and Clarke (2013). Participants were asked a series of demographic questions, such as age, gender, and region of residence at the beginning of the interview to build rapport. This was followed by a specific initial open question "Can you tell me about farming life?" as recommended by Braun and Clarke (2013). This initial question was followed by scripted open questions, including "what would prevent a farmer from seeking help regarding mental health?" Additionally, probes were used if an interesting point was made or for further clarification. The final scripted question based on the recommendations of Braun and Clarke (2013) was a closing question "Are there any other things you think would influence whether a farmer sought help or not?" Throughout the interview encouragers (e.g., "mmm", "yeah", "mhmm") were used liberally, as well as paraphrasing and summarising to check understanding and encourage correction if necessary (Ivey et al. 2010). The interviews varied in length between 29 min 38 s to 170 min 50 s (M = 71 min, 55 s). Overall, there was 33 h and 34 min of interview time.

# Analysis

The analysis followed Braun and Clarke's (2006) method of thematic analysis. Initially, the first and second authors coded the interview transcripts, one manually and one using NVivo (Version 11; QSR International Pty Ltd, 2016). The codes were then manually categorised into themes. The codes and themes were then compared to the original transcripts to ensure they portrayed an accurate representation of the raw data. Next, the data from the three population samples were compared. The themes reported by the three samples demonstrated a considerable degree of convergence. Thus, it was decided that the data from the three response groups would be organised thematically rather than by group. The consequent presentation allows a greater depth of understanding, including a better understanding of within-theme congruent and divergent perspectives across the participant groups. Throughout the analysis, the coders discussed any discrepancies until they were collaboratively resolved. The findings were then shared with participants and they were invited to share any feedback, which none of the participants chose to do. In reporting individual responses, participant-chosen pseudonyms or initials were used.

# Findings

Three key themes were identified by all participant groups and summarised in Table 1. Within the themes, there were several factors that the participants reported as influencing help-seeking, either as barriers or as facilitators.

#### **Theme 1: Health Service Interactions**

The nature of interactions that occur between farmers and GPs appears key to understanding help-seeking. Farmers and GPs each bring their own perspectives and expectations to the relationship, with both playing a role in shaping the success of a given interaction as well as the likelihood of future help-seeking. While certain factors within this theme were identified by all three participants groups, some differences did emerge, particularly in the focus of the farmer and GP perceptions. The differing perceptions of GPs and farmers are highlighted throughout the theme.

Farmers clearly and consistently asserted that GPs needed to display a type of cultural literacy that they referred to as 'bush knowledge' (i.e., an understanding and appreciation of the distinctive lifestyles, experiences, and worldviews of rural people, particularly farmers) in addition to healthcare knowledge in order to understand and service them effectively. For example:

They have to be able to relate to the people and sort of understand their way of life and what puts the pressure on them, and I don't think you can learn that out of a book. (Rudy, Farmer).

The GPs also acknowledged the importance of bush knowledge to their practice, albeit as helpful rather than a necessity.

As the practitioner, you have to be really aware of what is going on seasonally with their busy time. You can't ask someone to come back and try and see for a check-up in the middle of harvest and planting (....). I'm lucky I grew up on a big cattle and cropping place, so I'm, you know, I know what it's like. I know the lingo and that helps a lot, as we already know what questions to ask these fellas. So that gives you a foot in the door already, as such. Chat to them about how the harvest is going, blah, blah, blah, did they get any rain, bit of general chit chat. (Mary, GP).

Furthermore, the sampled GPs indicated that they had an interest in farmer health/mental health and thus, likely

Table 1 Themes developed across the three participant sub-samples

Theme	Summary
Health service interactions	The interaction between a farmer and a GP influences help-seeking. Positive interactions facili- tate care being sought, and negative interactions prevent it
Services are provided within a complex system	The impact of mental health services and systems on help-seeking is complex; some compo- nents are barriers while other components can act as barriers or facilitators, dependent on other additional factors
Emerging Technologies: the users, practition- ers, and systems	The relationship between technology-based services and farmers' help-seeking is also complex. There is the potential for technology-based services to be a facilitator of farmers' help-seek- ing, but there are barriers that prevent this

demonstrate a greater understanding of farming life than GPs without this particular interest, especially those on temporary placements. While Mary (and other interviewed GPs) indicated that she has an understanding of farming life, Kate's report below suggests that this is not the case with all practitioners and those with bush knowledge are likely to achieve better clinical outcomes.

If the person who they are talking to has a really good understanding of the industry that these people are working in, I think they'd be able to relate to them a lot better. And be able to help them with their problem. Yeah, they'd just be able to relate to them a lot better and provide them with, you know, solutions that are friendly to their lifestyle. (Kate, Partner).

Thus, bush knowledge is acknowledged as important to service provision for farmers, echoed by partners who also recognised the impact of bush knowledge on farmers' helpseeking behaviours.

The nature of the practitioner-patient relationship was also identified as a factor that may influence farmers' helpseeking. In particular, some GPs reported difficulty building rapport with farmers, potentially when there was a perceived lack of bush knowledge possessed by the GPs, and the somewhat necessary stoic nature of farming culture (Vayro et al. 2020). Difficulty establishing rapport may leave farmers less willing to return to the health professional or seek help for other issues in the future. This is problematic given the generally late presentation of farmers to GPs/healthcare (Brumby and Smith 2009).

If they come in and they've got something formulated, some people will just tell you. I tend to find just teasing it out is the way to go, and as you build some rapport, they will become a little warmer and just disclose to you a little bit more. It can be a very painful procedure though. It can be very challenging to actually get someone to honestly say that things are not going well and they're not feeling well (...) It is so much about building a rapport with this person so that you can actually assist them. (Vanessa, GP).

The difficulty building rapport with farmers may stem from a number of complex and interwoven issues such as continuity of care, cultural or gender norms, as well as treatment preferences.

They really need to connect with someone that they're going to be able to go back to and develop a rapport with. So, you know, whether it's a big campaign of, you know, 'go and get your man check-up' (....) They've got to try to appeal to their practical side and like, talk about psychology as a like a toolkit for managing your mood, and then you go and see the psychologist. You learn all these tools and you can use them later in life. You can pull them out if you need them later in life. And it has to be something very practical, relatable, which looks at fixing a problem, because that's the way men think about, it's a problem that needs a solution. (Mary, GP).

The GPs' experiences of the importance of rapport-building align with reports from Abigail, a partner who highlighted farmers' hesitance toward seeking and receiving mental health care. Farmers will be more hesitant to seek help as well as adhere to recommended treatment protocols if they do not have a good relationship with their healthcare provider.

There is probably a level of suspicion, maybe; I'm not sure that lots of farmers are totally convinced about what needs to happen in the treatment process. And that, I guess, comes back to their relationship with your health provider. If you've got a doctor that you really trust, and you know well, and you believe what they say, then you're probably going to do what they say. If you're seeing a locum that you've never laid eyes on, there is a whole, you know, it's a lot harder for you as a patient to really put your faith in what they're asking you to do. (Abigail, Partner).

The difficulties in building relationships between farmers and health professionals are also highlighted by the farmers, whose assertions indicate that the care provided is often not in line with their preferences. This may relate to the bush knowledge that farmers want their practitioners to have, which would likely allow health professionals to build a good relationship and appropriately tailor their caregiving for farmers. For example, farmers report a belief that mental health is typically managed using emotion-based options, whereas their preference is for more practical options.

This is what you've got to do; 'this is what happens if you don't do this.' Forget about the 'I feel this way I feel that way'. I don't know how you do it, but if you make it sound like you're fixing up a bulldozer (...) you'll cure it in one week. (Greg, Farmer).

The relationship between a farmer and their healthcare provider is therefore, likely to influence their help-seeking, as well as the way in which healthcare is delivered by professionals. Both of these effects have important implications for treatment success and health outcomes.

A GP's ability to create avenues that facilitate identification of mental health problems via routine screening rather than through active help-seeking also appears crucial. Importantly, this issue was raised solely by GPs, who are most familiar with the benefits of routine screening. Although it was mostly instigated by GPs, the importance of screening did align with farmers' views on monitoring their mental health. Indeed, one GP highlighted the importance of screening for mental health among farmers during routine consultations.

They might come in for [a] skin thing or something unrelated to mental health (....) If the doctor doesn't ask them 'how're you going? How's the farm going?' (...) Then nothing, they won't say anything, they won't think to say 'hey, I'm really down, I'm having trouble sleeping like I'm not, I feel terrible I don't know what's going on'. (Jane, GP).

While this opportunistic screening was highlighted as an important way to identify potential problems (also echoed below by Mary), it can be difficult for GPs to incorporate within the scope of their practice and daily schedule. Importantly, GPs familiar with farming culture identified the importance of integrating such screening into practice ("opportunistic medicine"), despite potential logistical challenges.

That's a problem as well is that depending on what sort of day your doctor is having, you get someone on a flat-out day and someone comes in and goes 'I've got gout in my toe', they might go 'brilliant, it's going to take me 5 min. I'll be able to catch up. I'm already running 15 min late', so you have to have someone who recognises, one they don't come in very often and goes 'right, while you're here' and doing an opportunistic medicine. They've really got to capture them while they're there. (Mary, GP).

Using opportunistic medicine to integrate screening for mental health issues into routine care can help raise awareness of these issues among farmers and reinforce their importance. Further, positive experiences through this process might facilitate intervention and encourage future helpseeking by the farmer. However, screening is only likely to work for those farmers who make contact with their medical professional, and the challenge to activate support channels may remain for some.

In summary, the evidence suggests that farmers will be more likely to seek healthcare when the health professional is able to demonstrate good bush knowledge and the ability to personalise care through trusting patient relationships. Healthcare delivered by unfamiliar professionals, with poor bush knowledge and an inability to personalise the delivery of services presents a barrier to help-seeking. With respect to screening, the interaction between farmers and health professionals and the relationships that are developed will likely play a more crucial role in encouraging farmers to seek help when issues arise, though GPs can also instigate this through opportunistic screening. Nevertheless, a range of system-level determinants will also play a role in shaping the extent that professionals such as GPs are able to invest the appropriate amount of time in relationship-building or perform opportunistic screening.

# Theme 2: Services are Provided Within a Complex System

The services and encompassing systems that provide mental health care play an important role in farmers' help-seeking. Three rather intuitive and fundamental service- and systemrelated factors were reasserted as influencing farmers' helpseeking: expectations of care outcomes, access and availability, and continuity of care.

Firstly, expected outcomes of help-seeking was identified as a key determinant of whether or not farmers seek help. Perceived or expected benefits however, were often linked to personal experience or experiential knowledge rather than any formal evidence. For example:

I witnessed a chap that was very sick [and sought help], and as far as I know, he's fine. The other chap that didn't seek mental health and sadly his family didn't push him to; he's no longer with us. (Rudy, Farmer).

Other farmer participants were unable to identify the potential benefits of help-seeking. "It's got less relevance verbalising it if you don't think someone can be of any assistance to you." (Steve, Farmer). Thus, farmers reported that the perception or expectation of potential service outcomes are influential in whether or not help-seeking occurs. While the GPs did not provide commentary on this topic, partners tended to concur with farmers' perspectives. That is, the farmers who have positive outcome expectations are more likely to seek help, however, positive expectations may be low overall in this population.

I think farmers probably don't place a lot of faith in the medical community. But I think that if they trust their doctor, that's going to be the person (....) My boyfriend, on the one hand, will go with the doctor, but on the other hand, he wouldn't. 'Cause he'd be worried they'd just write out a prescription for antidepressants and not really listen to what was going on (....) So, on the one hand, he's a bit dubious of them, but he would also know (...) that, you know, if you get a good doctor, you can trust them (JA, Partner).

Farmers, therefore, consider the potential outcomes of an interaction when deciding whether to engage in help-seeking and these considerations appear to influence help-seeking heavily.

Second, access to and availability of services were confirmed as essential to help-seeking. The three participant groups all agreed that the availability (i.e., do the services exist?) and accessibility (i.e., can farmers actually access them?) of health professionals may not be suitable for farmers and may limit help-seeking.

The availability of GP consults [appointments] can be an issue. Farmers tend to work during daylight hours (....) A lot of them are reluctant to take time off to go to doctors during the day, but there are not as many medical services available during the night. (Jacob, GP).

This issue of accessible appointments and availability is more pronounced if specialised care such as from mental health professionals is needed. Abigail, a partner, shared that "We have visiting specialists, but you know, they might come every six weeks or less" (Abigail, Partner). Limited availability and accessibility act as a key barrier to timely help-seeking. Additionally, accessibility is likely to be further constrained by the 'small-town' context in which anonymity and privacy are perceived to be diminished. That is, farmers think "confidentiality would be a big issue (....) You wouldn't want everyone else knowing you've got problems" (Michael, Farmer).

[Farmers] don't go unless it's an emergency; it's life and death because it's not confidential (...). I've had older people say to me, there would be a young girl walk out of the doctor's surgery and she'd had a blood test, and they'd go 'Oh she's pregnant'. (Albert, Partner).

In contrast, issues of anonymity and privacy were not raised by GPs as factors reducing accessibility. Only two GPs (Melissa and Mary) mentioned the importance of privacy and anonymity, specifically for small communities, but did not cite these as barriers to care. However, the perception or expectation of limited confidentiality was a central issue for farmers, and this influences their help-seeking.

Third, continuity of care was highlighted for its impact on farmers' help-seeking. This is particularly problematic for farming communities in light of the large locum workforce that service rural areas. Farmers and partners shared convergent views that continuity of care and the ability to develop an ongoing relationship with their GP is essential to facilitate help-seeking among farmers. This is especially important when the presenting issue is related to mental health.

There is no continual medical health provision, so every time you go to the doctor, you see someone different. So, they're not seeing how you were 2 months ago or 3 months ago or 6 months ago they're not going 'oh this person is in trouble I saw them 6 months ago, they were a lot happier then' if there were differences. There is no safety net in the health system. (Albert, Partner). The locum workforce can be problematic to achieving continuity of care and trusting patient-doctor relationships. For example, participants cited the hassle that "next time, there is another person that you have to tell your story all over again to." (Abigail, Partner). Consistent with the desire for an ongoing relationship discussed earlier concerning rapport and 'bush knowledge', locum GPs were often considered unfamiliar to the farmers.

You get a lot of (...) doctors that fly in and out and in and out (...), and you don't know them personally; as in a doctor in a rural hospital or medical centre, and they've been there, and they know you. (Madge, Farmer).

From the perspective of GPs, issues with workforce retention and the resulting use of locum GPs were also noted as problematic in facilitating help-seeking and delivery of appropriate services.

People don't want to go and see a 'fly-in' doctor (...) there are lots of parts of Queensland are still served by locum workforce where they've got people who come for a week or 2 at a time then go; (...) treating mental illness is at least a medium-term proposition. (...) Imagine trying to go and see a locum about being depressed, if you know they're not going to be there next week. (Anthony, GP).

In summary, all participant groups highlighted issues with continuity of care and the transient locum workforce that negatively influences help-seeking. In addition, farmers are faced with barriers of limited availability of specialist mental health services and limited accessibility to core GP services. Finally, expectations that seeking help will not result in beneficial outcomes are often based on personal experience and can influence help-seeking.

# Theme 3: Emerging Technologies: The Users, Practitioners, and Systems

The final theme explored technology-based services, which, similarly to the previous themes, revealed aspects relating to the users, practitioners, and the services and systems. First, from the user perspective, some farmers reported they were simply not interested in making use of technology-based services because they prefer face-to-face contact and/or have low ICT literacy, which was also consistent with the views of partners and GPs.

I wouldn't want to go that way just I'm very oldfashioned in terms of that I know I shouldn't be, (...) but I just much prefer to talk to someone, you know. I don't search the web well, the internet quickly and efficiently. Perhaps I'm just that wrong generation. I think. I wouldn't be interested in that. (Rudy, Farmer).

I think regarding the whole e-stuff, like, I reckon there is a lot of male farmers that don't use the computer very much. (Abigail, Partner).

Additionally, farmers expressed other concerns about technology-based services "because you don't know who's on the other end. You don't know what you're getting there." (Michael, Farmer). Farmers reported that their capabilities to engage with, and attitudes towards technology-based services were poor. While there is the potential for technology-based services to facilitate, or at least reduce some barriers to service availability and accessibility, there appear to be additional barriers from the user perspective that may limit their uptake and effectiveness.

Second, whether GPs support and refer farmers to technology-based services may influence the use of these mediums. GP responses diverged on their support for technology-based mental health care. Some GPs reported that navigating the technology-based mental healthcare landscape can be arduous and demonstrated hesitance in recommending these technology-based services to farmers, while other GPs were comfortable making referrals to technology-based services. In making referral decisions however, the GPs were careful to ensure they understood the service before they would be willing to provide a referral.

The Black Dog Institute was a little bit difficult to find their link for all those, all those different programs for a while there. They've improved their website, now it's a bit easier to find. But certainly, I think there, it's also not clear how long they are, you know, how simple they are. Sometimes I want to actually try them out myself just to get a feel for what I'm sending people too. But you have to actually fully register before you can actually be allowed to look at them so, so they're specific to what they've covered in the program are not entirely clear (...) I think that's part of it. The referring practitioners know exactly the specifics each of them offers. (Anthony, GP).

Further, there were additional concerns from GPs that might prevent referral to technology-based solutions, such as a belief that these programs would fail to provide adequate tailoring to ensure relevance farmers.

I have recommended to go and do, if they're reluctant to go to a psychologist, to try and do some online CBT, (...) there is new stuff popping up all the time. But whether the new resources are just sort of more 'farmy' directed; I know there is certainly some phone lines for rural crisis stuff. But I don't know if there is any online services that match up with that. (Mary, GP). Overall, GPs presented differing views pertaining to the use of technology-based services in supporting farmers. Only GPs with positive perceptions were likely to present such services as a viable alternative for help-seeking.

Third, from the system perspective, the communications infrastructure in non-metropolitan areas was identified as a barrier to seeking help from technology-based services by all three participant groups. Specifically, poor connectivity, both with internet and mobile/cellular phones, was identified as having implications for the use of technologybased care options.

The phones and the internet is probably our biggest issue really 'cause (...) that's just basic services that you expect to be able to have and you just don't have it. And that's where you can get a lot of help for things like mental [health]. You know, online you can get a lot of help and find all the resources to help you, and it's when you can access it, in your own time when it suits you. So, if he comes home, it's late at night and he wants to read up about something or look at strategies for something to do with mental health, or whatever, he can do it in his own time. You know, a normal person can do it in their own time and their own leisure'cause they can access the internet all the time but we can't. (JA, Partner).

One GP summarised several issues relating to technology-based mental health care and support.

I don't think [farmers] realise the extent of the resources that are there. So, I suppose there's that part of it. But the other component really is to actually have good internet access and, you know. It's basically that, you know, IT literacy and that feeling of connectedness because a lot of farmers, you know, wouldn't necessarily have the will or, you know, to get online. Or that actually may not even know how to search the internet or type in, you know, a page address or anything like that. (Ben, GP).

Overall, technology-based mental health care is emerging as an option that holds great promise for rural and remote areas. However, several barriers appear to be preventing adoption by patients and health practitioners. Farmers are hesitant to use technology-based services due to familiarity and digital literacy issues. Generally, GPs understood the benefits of technology-based options, however, many were reluctant to make referrals. Moreover, system issues, such as lack of infrastructure and poor connectivity compound barriers to the use of technologybased services in help-seeking.

### Discussion

The aim of the current study was to develop an in-depth understanding of the service-related factors that influence help-seeking in farmers. Help-seeking behaviours are complex and multi-determined, and a wide range of processes have been implicated. Previous research has shed light on many factors, however little is known about how aspects of the health services themselves influence helpseeking. This study provides the necessary first step in understanding how such processes might help explain the low rates of help-seeking among farmers. The current findings might aid in improving rates of help-seeking among farmers, which in turn can assist in reducing the elevated rate of suicide in this population. While help-seeking is a broader issue, early engagement with appropriate support can stall the progression of distress and reduce suicidality (de Diego-Adelino et al. 2010; Ogrodniczuk and Oliffe 2010), which is among the most urgent concerns for this population. Three key themes emerged from the three respondent groups: (1) The interactions between health service providers and farmers, (2) the systems that encompass the health services, and (3) the engagement with digital mental health services. The findings from the current research identified (interacting) factors that are likely to intersect micro, meso and macro levels of influence and that could be included in a broader theoretical account of help-seeking, as well as informing the planning of potential interventions and reforms for service delivery to increase farmers' help-seeking.

The first theme focuses at a more micro-level (relative to themes two and three) and on the actual service interaction itself. All participant groups underscored how the nature of the interaction between a practitioner and farmer influences help-seeking efforts. In order to be trusted (and thus utilised) by farmers, GPs need to demonstrate bush knowledge, or an understanding of farming culture within regional and remote areas. However, this cultural literacy was believed to be uncommon, based on reports from farmers and partners, and this diminishes help-seeking. While the GPs noted that bush knowledge is helpful to them professionally, they did not hold it to the same level of importance as the other participant groups. These findings align with previous evidence from studies with rural populations that shows that GPs with rural cultural knowledge were judged as more successful in practice by their peers (Bischoff et al. 2013). The current study provides further support for this notion from the perspective of the farmer/patient, along with an indication that a lack of bush knowledge may act as a barrier to seeking help in the first place.

The therapeutic relationship that was developed between a farmer and their GP during service delivery was also identified as a key determinant of help-seeking. A general mistrust and wariness by farmers was noted by all participant groups, which reduces the likelihood of helpseeking, as well as potentially diminishing adherence to treatment protocols and the ability to build rapport. It was acknowledged by GPs that with a large locum workforce servicing farming areas, GPs might not have the career longevity or personal knowledge of the patients necessary to build rapport and trusting relationships with farmers. This aligns with previous findings that demonstrate a general wariness from rural people toward health care services that are not locally conceived and delivered (Wilson et al. 2015), and suggest that similar issues are likely to be detrimental to help-seeking among farmers. The current findings also indicate that the commonly-noted difficulties engaging farmers in mental health care (Alston 2012; Brumby and Smith 2009) may, in part, be due to incongruences between services offered and preferences of farmers.

Finally, the GPs identified a need to proactively initiate screening and opportunistic medicine, which may assist them to overcome some of the issues related to the lack of direct help-seeking for mental health concerns. Integrating mental health screening into routine healthcare appointments holds particular value given research that demonstrates that 48% of farmers who died by suicide saw their GP for a physical health issue in the three months prior (Kavalidou et al. 2015). Although such screening could result in early detection, it may create an additional burden to the doctor, is only possible when the farmer attends the GP, and is unlikely to be successful when implemented by GPs with whom the farmers are not familiar and comfortable. This theme demonstrates that bush knowledge is fundamental to successful practice as a health professional in farming communities because it allows the development of rapport, which in turn is necessary for adequate tailoring of care and might also increase the likelihood of regular contact, which is necessary for screening to occur.

The second theme focused at a more macro-level (relative to theme one) and at the actual system or context in which service interactions take place. Farmers' decisionmaking for seeking help was reportedly guided by a number of services- and systems-related considerations. First, seeking help was guided by perceptions or expectations of the potential outcomes of such help-seeking, known as outcome expectancies. Outcome expectancies, the beliefs held about the consequences of an action, have been found to impact on intentions and in turn, behaviour (Hamilton et al. 2015; Luszczynska and Schwarzer 2015). In line with this, farmers that were able to perceive benefits associated with help-seeking were more open to engaging in mental health care. Alternatively, those farmers who were unable to see any potential benefits of seeking help were less inclined to seek care. Further, the farmers' outcome expectancies seem heavily dependent on access and availability of services, as well as continuity of care (discussed below), in addition to the micro-level factors discussed in theme one. The outcome expectancies or perceptions, however, were based largely on biases and anecdotes (e.g., of a friend or family member) or based on previous interactions with GPs. Importantly, these perceptions and expectations did not seem to be based on reliable evidence concerning the efficacy of the treatments.

The findings of the current study extend previous research with rural and remote residents demonstrating poor health service accessibility for remote areas, even when services are available (Bishop et al. 2017; Hossain et al. 2008; Judd et al. 2006; Tonna et al. 2009). The findings also demonstrate how farmers perceive these access and availability issues and identify the associated consequences of delayed or absent help-seeking. Additionally, concerns over continuity of care previously raised in research with GPs (e.g. Fuller et al. 2004) are here corroborated and extended by farmers and their partners. It seems that there is a complex interaction of factors such that poor access and availability as well as continuity of care contribute to poorer outcome expectancies farmers hold toward help-seeking. While outcome expectations are important for several behaviours and populations (e.g., parents providing fruit and vegetables, university students' physical activity; Baranowski et al. 2007; Farren et al. 2017), farmers face this unique combination of factors that further reduces the likelihood of positive expectations related to seeking help. Overall, theme two emphasises the challenges of providing and receiving care in farming contexts.

Help-seeking in the context of emerging technologies was explored in the third theme. Emerging technologies provide opportunities for healthcare to be delivered in new ways; however, several barriers were noted specifically to their use by farmers. Farmers explained their reluctance in using technology-based care options as due to low digital literacy and a general preference to speak with someone to face-to-face. Hesitance was also noted on the part of some GPs with concerns regarding an inability to keep up with the number of technology-based options, a lack of information and inability to properly appraise the quality of these options as well as dissatisfaction with the lack of farmer-specific options. Without buy-in and referrals from GPs, technology-based services are unlikely to make much difference to help-seeking by farmers. Whilst there have been some efforts to improve GP knowledge and referral systems through programs like e-mental health in practice (eMHprac; eMHprac.org.au), GP knowledge and attitudes appear to still be problematic in rural areas. Additionally, poor connectivity emerged as a continuing barrier to farmers seeking assistance via technology-based care, which is consistent with previous findings that poor connectivity prevents technology-mediated therapies such as video

conferencing (Shealy et al. 2015). To realise the promise of these technologies, improvements are required in ICT literacy among farmers, the ease of use and user experience of the platforms, telecommunications connectivity, and to professional attitudes towards such services. In summary, digital mental health services hold great promise and could help to address several of the system-related issues highlighted in theme two. However, this is unlikely to address the need to tailor the services to ensure they are culturally appropriate for farmers, as per their preferences reported in theme one.

The factors discussed above should be considered when developing a model of farmer help-seeking. Farmer helpseeking is complex and is likely to need multi-faceted intervention, and this research indicates that there are several implications for the role of health services and systems. To address the issues raised by the farmers, farmers' partners and GPs, rural mental health training for all health professionals who practice in rural and remote locations could be incentivised or made mandatory. This could enhance rural competence, including bush knowledge, as well as increase the possibility of mental health issues being detected and treated through opportunistic screening. Health professionals could also use this knowledge to tailor how they deliver their services to better align with farmers preferences. Further, specific system-level policies and planning to reduce the reliance on a locum workforce could be implemented (especially while the strategic work to increase the workforce is being undertaken through University Departments of Rural Health; Australian Government Department of Health 2008). Alternatively, policies for workforce stability, encouraging the same locum practitioners to provide services over time, may help to improve continuity of care, farmers' outcome expectancies, and in turn, their help-seeking.

The promise of digital mental health services for addressing several of the barriers to farmer help-seeking has been highlighted above, although there are also many policy and practical issues that must be addressed. These include ongoing funding for GPs to provide digital mental health services, health professionals' lack of familiarity with external digital mental health services, farmers' reservations about these forms of care, and farmers' preferences. Strategies are in place to address poor internet connectivity through the National Broadband Network, as well as knowledge of digital mental health services in Australian GPs through the e-mental health in practice program (eMHprac; eMHprac.org.au). This means addressing funding, and farmers concerns about digital mental health should be prioritised. One avenue that could address farmers concerns it to train agricultural and health service professionals (e.g., rural financial counsellors or agronomists) to provide farmers with exposure to brief or less intense e-mental health programs to increase familiarity because prior use

greatly increases the likelihood of intending to use these programs in the future (March et al. 2018).

# Strengths, Limitations, and Future Directions

The two key strengths of this research are the inclusion of farmers' partners and GPs as informants due to their critical roles and complementary perspectives on farmer help-seeking, and the adoption of a gold-standard qualitative research design. The triangulation of data from multiple perspectives provides a variety of valuable insights and allows for a comparison of varying perspectives that contributes to a greater understanding of help-seeking among farmers. Further, distinct participant groups were recruited to avoid relationships between participants and misinformation associated with such relationship dynamics. Therefore, triangulation and a firm grounding in Braun and Clarke's (2006) methodology provide rigour to this research. The dearth of research on the barriers and facilitators of farmers' help-seeking means that qualitative research is critical to creating an in-depth understanding. Thus, this research used a bottom-up qualitative approach to understanding the barriers and facilitators of help-seeking, related to health service provision, among farmers.

This research also has limitations which need to be considered, such as those related to sampling. Participants were recruited through advertising and relied on interested participants contacting the research team; thus, there may be a possibility of selection bias. That is, those that chose to participate in the study may differ from those who did not, and this may result in important perspectives being neglected from the current findings.

Although this research does have limitations, it has made significant strides in understanding the complex issue that serve as barriers and facilitators to help-seeking in farmers. This research provides preliminary findings that can be corroborated in larger, more varied farming samples across different rural regions (creating a mixed-methods QUAL  $\rightarrow$  quan project; Palinkas et al. 2011). Further, quantitative research could also be used to determine the relative importance of these service-related factors in predicting help-seeking in farmers and identify any individual variability. Based on these investigations, tailored intervention approaches could be developed to improve farmers' help-seeking behaviour.

# Conclusion

Farmers experience poor wellbeing and demonstrate elevated rates of suicide, yet they seldom seek help for their mental health. This research contributes to the body of literature for farmer mental health broadly by providing an understanding of how service-related factors may influence mental health help-seeking. Findings from this study show that service-related factors can act as both barriers to and facilitators of mental health help-seeking in farmers.

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#### **Compliance with Ethical Standards**

**Conflict of interest** The authors declare they have no conflict of interest.

**Ethical Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Consent to Participate** Informed consent was obtained from all individual participants included in the study.

**Consent to Publish** The participants consented to the submission of their de-identified data to academic audiences.

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