

Agronursing Approaches in Supporting the Mental Health of Agricultural Workers

Nabila Puspita Dewi¹, Adisyah Maulidina Safi'i¹, Dynta Eka Anggraeni¹, Enggal Hadi Kurniawan¹, Dicky Endrian Kurniawan¹, Kholid Rosyidi Muhammad Nur¹, Alfid Tri Afandi¹

¹ Faculty of Nursing, Universitas Jember, Indonesia

Correspondence should be addressed to:
Enggal Hadi Kurniawan
enggalhadi.psik@unej.ac.id

Abstract:

Agricultural workers face complex work pressures such as social isolation, weather dependency, and limited access to health services, which impact their mental health. Agronursing is emerging as a nursing approach that is responsive to the specific needs of agrarian communities in a holistic and culturally based manner. This article explores the role of agronursing in supporting farmworkers' mental health through contextualized and sustainable interventions. This literature review employed a systematic search in ScienceDirect, PubMed, and MDPI databases for articles published between 2020 and 2025. From 4,371 identified articles, a multi-stage screening and eligibility process was conducted, resulting in 10 articles that met all inclusion criteria for final analysis. Burnout and mental health problems are prevalent among agricultural workers due to various internal and external stressors. Various approaches, such as increasing psychological and social capital, self-coping strategies, and multimodal interventions, have proven effective in maintaining farmers' mental well-being. An agronursing perspective and community support are important in sustainably building farmers' psychological resilience. Farmers' mental health is adversely affected by economic stress, overwork, and social isolation, with stigma and mistrust hindering access to support. Effective interventions must be context-sensitive and involve farmers to ensure psychological impact and community acceptance.

Article info:

Submitted:
15-09-2025
Revised:
29-09-2025
Accepted:
01-10-2025

Keywords:

community health nursing, farmers, mental health, agronursing

DOI: <https://doi.org/10.53713/htechj.v3i5.497>

This work is licensed under CC BY-SA License.



INTRODUCTION

Burnout among agricultural workers has increasingly become a critical mental health issue worldwide. These workers face a combination of occupational stressors, including long working hours, dependency on weather conditions, social isolation, and economic instability, which often lead to emotional exhaustion, depression, and even an increased risk of suicide (Søvold et al., 2021; El Khayat et al., 2022). In addressing these challenges, agronursing has emerged as an interdisciplinary approach that connects the health needs of farmers with culturally sensitive nursing care tailored to the specific needs of agricultural communities (Alamsyah & Merdeka, 2023).

Burnout is defined by the World Health Organization as a syndrome resulting from chronic workplace stress that has not been successfully managed, characterized by emotional exhaustion, mental detachment from work, and reduced personal efficacy (Søvold et al., 2021). Among agricultural workers, these symptoms are exacerbated by limited access to healthcare in rural areas, stigma surrounding mental illness, and geographical isolation (El Khayat et al., 2022). Meta-synthesis studies have revealed that the masculine culture in farming and societal expectations of

“toughness” are significant psychological barriers preventing farmers from seeking help (Purc-Stephenson et al., 2023).

The COVID-19 pandemic has further exacerbated these conditions, disrupting supply chains, intensifying health anxieties, and imposing economic burdens on farmers, particularly those with low incomes, young individuals, and women (Zhu et al., 2023; Søvold et al., 2021). Agricultural workers experienced pressures similar to those faced by frontline healthcare workers, including moral fatigue and prolonged psychological stress (Søvold et al., 2021). This highlights the need for interventions that address the unique stressors faced by agricultural communities.

In addition to these direct pressures, systemic challenges such as food security and agricultural sustainability have worsened the mental health vulnerabilities of agricultural workers (Pawlak & Kołodziejczak, 2020). Economic inequality, climate change, and declining agricultural productivity are key factors exacerbating the situation in many regions (Pawlak & Kołodziejczak, 2020). Strategies integrating mental health support with agricultural policy, such as investments in rural health infrastructure and community-based approaches, are essential to mitigate these impacts (Ferrari et al., 2022).

Despite the urgency, interventions designed to reduce burnout among agricultural workers remain scarce and rarely systematically evaluated (Yunker & Radunovich, 2022). Agronursing offers an innovative solution by integrating nursing expertise within the agricultural context, enabling early detection of burnout symptoms and providing psychosocial support tailored to local community values (Alamsyah & Merdeka, 2023).

As an approach focused on the unique needs of rural communities, agronursing can be integrated into broader health frameworks to improve access and effectiveness of mental health services in remote areas (Alamsyah & Merdeka, 2023). This approach aligns with the global recognition of mental health as a cornerstone of sustainable development (Ferrari et al., 2022). By prioritizing individual well-being while strengthening community resilience, agronursing enables agricultural workers to face the socio-economic and environmental challenges inherent in their profession (Purc-Stephenson et al., 2023).

This literature review aims to explore the role of agronursing in addressing burnout among agricultural workers through a holistic approach. By considering cultural, social, and structural contexts, this review emphasizes the importance of evidence-based interventions in safeguarding the long-term mental health and productivity of agricultural communities (Pawlak & Kołodziejczak, 2020).

METHOD

This systematic review was conducted in accordance with the PRISMA 2020 guidelines. A literature search was conducted in three electronic databases: Science Direct (n=2890), MDPI (n=605), and PubMed (n=876), resulting in a total of 4371 records. Before screening, 1323 records were removed, consisting of 1076 duplicate records, 169 records flagged as ineligible by automation tools, and 78 records removed for other reasons. After this initial screening, 3048 records remained for screening.

During the screening stage, 2765 reports were excluded because their titles did not match the research questions. As a result, 283 reports were sought for retrieval, of which 156 could not be retrieved as the abstracts did not focus on farmers' mental health. Subsequently, 127 complete reports were assessed for eligibility. However, 117 articles were excluded as they did not explicitly describe the perspective of agronursing in maintaining farmers' mental health. Finally, 10 studies met all inclusion criteria and were included in the systematic review.

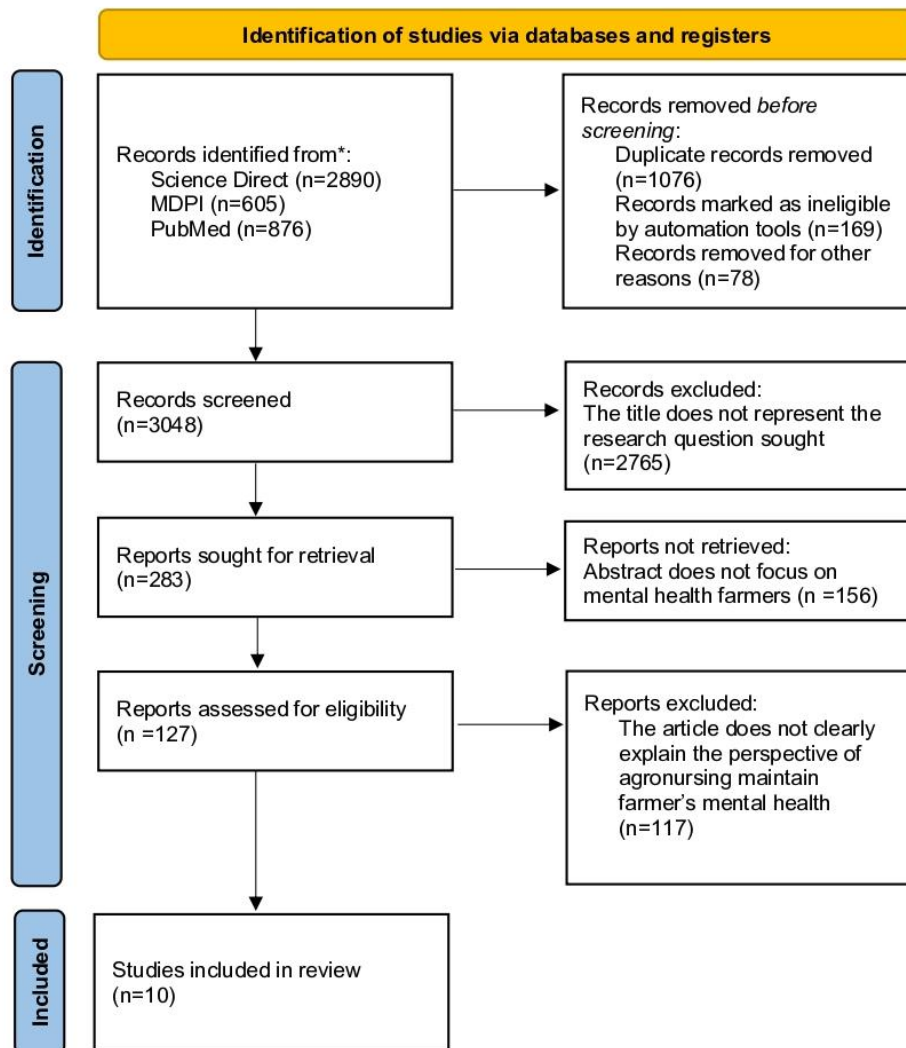


Figure 1. PRISMA 2020 Flow Diagram

RESULT

Based on a review of various studies and articles, it was identified that 10 studies highlighted the issue of burnout in agricultural workers and emphasized the importance of the agronursing perspective in maintaining and improving farmers' mental health. Several research articles made it clear that burnout and mental health problems are widespread among agricultural workers due to various internal and external stressors.

The article by Cassidy et al. revealed that male farmers experienced significantly higher stress levels (mean score: 6.49) compared to the normative mean (5.56) and higher levels of loneliness. Furthermore, a large proportion of farmers, especially males, were reluctant to seek help for mental health issues. This study confirms that psychological capital, social capital, and self-compassion are critical protective factors against stress among farmers. Meanwhile, the article by Brennan et al. reported that 57% of farmers, particularly dairy farmers (74%), experienced work-related stress, with older age and farm debt being significant contributors. This study confirms that external factors (e.g., weather, financial instability) and internal factors (e.g., farm type, workload) affect farmers' mental well-being. In a study by Folorunsho et al., it was noted that rural farmers, often acting as their own managers, are particularly vulnerable to stress, with farming occupations recording among the

highest suicide rates globally (85 per 100,000 people per year). This study confirms that effective stress management strategies, including problem-focused coping, emotion-based coping, and adaptive behaviors, are crucial for farmers' mental resilience. The study by Stier-Jarmer et al. demonstrated that stress-reduction interventions significantly improved burnout symptoms, sleep quality, and overall well-being, with benefits sustained over a nine-month period. This study confirms that structured and multimodal interventions can effectively reduce perceived stress, though additional support, such as coaching, may not always yield extra benefits. Finally, the article by Riethmuller et al. explored the pressures farmers in Western Australia face due to technological advancements and economic demands. This study confirms that rapid changes in agricultural practices, social isolation, and long working hours can have a severe impact on farmers' mental health, underscoring the importance of connection, rest, and community engagement.

Then, in a study by Pure-Stephenson et al., it was revealed that mental health services in farming communities can be delivered by ensuring better access to services, building attachment to build trust, addressing stigma that inhibits help-seeking, highlighting the challenges of health workers' roles, and understanding community trauma for effective interventions. A study conducted by Abunyewah et al. (2024) also highlighted that efforts to address mental health in farmers can be enhanced with high personal social capital, meaning that individuals with a strong social support network tend to be more mentally resilient in the face of challenges in the agricultural sector. There is also research that highlights mental health management carried out by the farmers themselves, namely in a study entitled by Woolford D et al. revealed that there are seven self-management strategies to maintain psychological well-being, including interacting with supportive networks, involvement in groups and teams, physical activity, proactively educating oneself, prioritizing oneself and maintaining a balance between work and personal life, gratitude, and focusing on the controllable aspects of farming. Then, in a study conducted by Kate et al. (2023), it was revealed that helping farmers to reduce levels of distress and improve mental well-being can be done with the 'lfarmwell Intervention', namely by increasing their psychological flexibility, ability to focus and accept things beyond their control, and by reducing the extent to which they believe unhelpful thoughts. Finally, a study by Riethmüller et al. revealed that supporting farmers' psychological well-being can be achieved through a comprehensive approach that involves families, social networks, community initiatives, and policies.

Table 1. Result of Literature Review

No	Author and Journal Identify	Journal Title	Objective	Population and Sample	Method	Result
1.	Author: Cassidy et al. Journal Identify: <i>Journal of Clinical & Medical Images Case Reports</i> , Volume 4(1), 2024	Stress and Well-being in Farmers: The Role of Social and Psychological Capital and Self-Compassion	This study explores stress and well-being among farmers, focusing on mediating factors such as psychological capital, social capital, and self-compassion. Additionally, it examines how these factors	The study involved 274 farmers in Northern Ireland, including 199 males and 75 females, aged between 18 and 69 years, with an average age of 40.	The study employed a cross-sectional survey design using a quantitative approach with structured questionnaires completed by all participants.	The results showed that male farmers experienced significantly higher stress levels (mean score: 6.49) than the normative mean (5.56). Farmers also reported higher levels of loneliness (mean: 23.43) than the general population (19.00). Additionally, 73% of male farmers and 27% of female

No	Author and Journal Identify	Journal Title	Objective	Population and Sample	Method	Result
			influence help-seeking behaviors.			farmers stated they would not seek help for mental health issues. Psychological capital, social capital, and self-compassion were identified as key factors influencing stress and well-being, with strong social support buffering stress effects.
2.	Author: Brennan et al. Journal Identify: Journal of Agromedicine , 2022	Weather, Workload, and Money: Determining and Evaluating Sources of Stress for Farmers in Ireland	This study aimed to identify the prevalence of stress among farmers in Ireland and analyze the demographic, farm-related, and social factors contributing to stress.	The study involved 736 farmers in Ireland, including operators from various farming enterprises such as dairy, beef, sheep, and tillage farms. The Teagasc National Farm Survey (NFS) selected the participants in 2018. The sample consisted of a diverse group of farm operators, representing different age groups and farm systems, ensuring a nationally representative dataset for analyzing the prevalence and sources of stress among farmers.	The study employed a cross-sectional survey design using a quantitative approach, with data collected through the Teagasc National Farm Survey (NFS) in 2018. Seven hundred thirty-six farm operators completed structured questionnaires to identify the prevalence of stress and assess the factors influencing stress levels among farmers in Ireland.	The results showed that 57% of farmers reported experiencing stress related to their farm work, with dairy farmers experiencing the highest stress levels (74%). The primary sources of stress included poor health, which found that older farmers were more likely to experience stress, although at a declining rate. Farm debt significantly increased the likelihood of stress, while having off-farm employment was associated with lower stress levels. The findings highlighted the impact of external stressors, weather and financial instability, and internal factors, including farm type and workload, on farmers' well-being.
3.	Author: Folorunsho et al. Journal Identify: Journal of Humanities & Social Sciences ISN 2690-0688, 2024	Sociological Analysis of Stress Management among Farmers and Rural Development in Selected Communities in Kwara State	This study aims to determine if there is a relationship between stress management among farmers and rural development.	The study involved 360 respondents from selected communities in local government areas (LGAs) in Kwara State, Nigeria.	This research uses a multi-stage sampling approach in selecting respondents and uses Robert Karasek's stress theory to analyze the problem.	Rural farmers often act as their managers and face problems beyond their control. Data shows farmers, forestry workers, and fishermen have the highest suicide rate, with 85 cases per 100,000 people per year. Stress

No	Author and Journal Identify	Journal Title	Objective	Population and Sample	Method	Result
						management can be done through problem-focused coping, emotion-based coping (physical exercise and relaxation), or strategies of avoiding, changing, adapting, and accepting stressors.
4.	Author : Stier-Jarmer et al. Journal Identify : International Journal of Environmental Research and Public Health	A multimodal Stress-Prevention Program Supplemented by Telephone-Coaching Sessions to Reduce Perceived Stress among German Farmers: Results from a Randomized Controlled Trial	To evaluate the effectiveness of a 12-day stress prevention program, supplemented by telephone coaching, in reducing perceived stress among German farmers	The study involved 103 adult participants (51 in the telephone-coaching group, 52 in the control group), primarily full-time farmers, with an average age of 55.3 years (49.1% female)	A randomized controlled trial (RCT) with a 9-month follow-up. Participants completed a 12-day stress-prevention program, including stress management, relaxation, physical exercise, and balneotherapy. They were then randomized into two groups: one receiving four structured telephone-coaching sessions over six months, and the other receiving no additional coaching. Assessments were conducted at baseline, after 12 days, and at 1, 3, 6, and 9 months.	Both groups showed significant immediate improvements in perceived stress, burnout symptoms, well-being, sleep, and general health. These effects remained stable over nine months, but no statistically significant difference existed between the telephone-coaching and non-coaching groups. Thus, the telephone coaching sessions did not provide additional benefits beyond the 12-day program.
5.	Author: Riethmuller et al. Journal Identify: Journal of Rural Studies	Change, connection, and community: A qualitative exploration of farmers' mental health	This study explores the key and protective factors for farmers in the Western Australia region to determine how health service providers can	The study involved 29 participants who ranged in age from 28 years to 64 years and had experience working in the agricultural sector ranging from 2 to 50 years.	This study utilized exploratory qualitative methods consisting of semi-structured interviews with farmers and service providers in the Western Australia region.	Agriculture is changing in Western Australia, and so are farming communities. Farmers are under pressure beyond their control, including greater economies of scale, commodity prices, weather, and input costs, impacting their mental health and well-being. For

No	Author and Journal Identify	Journal Title	Objective	Population and Sample	Method	Result
			support farming communities.			farmers in Western Australia, racing to keep up with technological change, expanding production, and increasing large-scale production puts farmers' mental health at risk. Farmers need to share their experiences with others, taking adequate breaks helps protect their mental health, depending on long working hours and controlled change.
6.	Author : Purc-Stephenson et al. Journal Identify : Environmental and Public Health Journal /2024/ 21, 791.	An Evidence-Based Guide for Delivering Mental Healthcare Services in Farming Communities: A Qualitative Study of Providers' Perspectives	The study aims to understand health workers' perspectives on delivering mental health services to farming communities in rural areas.	The study was conducted in Canada with 21 participants who were mental health service providers to rural farming communities. Participants were selected through a mental health services database and invited via email to participate in semi-structured interviews.	The study employed a descriptive phenomenologic al research design approach: interviews were conducted virtually through Zoom.	The analysis identified five key themes in farming community mental health services. Ensuring Accessibility stresses the need for better access, while Establishing Relatability focuses on building trust. Addressing Stoicism and Stigma tackles resilience and stigma that hinder help-seeking. Navigating Dual Roles highlights health workers' role challenges, and Understanding Community Trauma underscores the need to address collective trauma for effective interventions.
7.	Author: Abunyewah et al. Journal Identify: Academic journal, Environmental Development	Drought impact on peri-urban farmers' mental health in semi-arid Ghana: The moderating role of personal social capital	Investigates the impact of drought on farmers' mental health in Talensi district, Ghana, and examines how personal social capital moderates the relationship between	507 farmers from the Talensi district, Ghana	Quantitative survey using Structural Equation Modeling (SEM).	The study found that drought has a significant positive relationship with depression ($B = 0.51$, $p < 0.001$), anxiety ($B = 0.24$, $p < 0.05$), and stress ($B = 0.36$, $p < 0.001$), meaning that prolonged drought and increased severity negatively affect farmers' mental health.

No	Author and Journal Identify	Journal Title	Objective	Population and Sample	Method	Result
			drought and three mental health conditions: depression, anxiety, and stress			Personal social capital was also identified as a moderator, highlighting its role as an essential resource in coping with drought-related mental health challenges.
8.	Author : Woolford D. D., Smout M. F., Turnbull D., & Gunn K. M. Journal Identify International Journal of <i>Environmental Research and Public Health</i> 2022, 19, 12247. https://doi.org/10.3390/ijerph191912247	Male Farmers' Perspectives on Psychological Well-being: Self-Management Strategies That Work for Them and How Barriers to Seeking Professional Mental Health Assistance Could Be Overcome	This study explores male farmers' self-management strategies to improve or maintain their well-being and their proposed solutions to overcoming barriers to seeking professional mental health assistance.	The sample of this study was male farmers in Australia who were actively working in farming. The sample consisted of 15 male farmers aged between 23 and 74 years with an average of 20 years of farming experience.	This study used a qualitative research method with thematic analysis to examine self-management strategies and barriers to mental health assistance among male farmers in Australia.	This study identified seven self-management strategies that male farmers use to maintain their psychological well-being and five key barriers to seeking professional mental health assistance. This study also found that barriers to seeking professional help could be reduced by implementing solutions suggested by farmers. Seven self-management strategies suggested by farmers are interacting with a supportive network, involvement in groups and teams, physical activity, proactively educating themselves, self-prioritizing and maintaining work-life balance, being grateful, and focusing on controllable aspects of farming.
9.	Author: Kate M Gunn et al. Journal Identify: JOURNAL OF AGROMEDICINE 2023, VOL. 28, NO. 3, 378–392 https://doi.org/10.1080/1059924X.2022.2156642	A Self-Help Online Intervention Is Associated with Reduced Distress and Improved Mental Well-being in Australian Farmers: The Evaluation and Key Mechanisms of	Farmers face multiple stressors, along with barriers to accessing traditional forms of mental health support. The ifarmwell online intervention was co-designed with farmers and informed by	Sixty-five farmers completed a sample form.	Questionnaire: Pre- to post-intervention	lifarmwell is a practical and usable intervention that is likely to help farmers reduce their levels of distress and improve their mental well-being, by improving their psychological flexibility, ability to focus on the present and accept things beyond their control, as well as by reducing the extent to which

No	Author and Journal Identify	Journal Title	Objective	Population and Sample	Method	Result
		www.ifarmwell.com.au	Acceptance and Commitment Therapy to equip farmers with transferable coping strategies. This study evaluated the impact of ifarmwell on farmers' short- and long-term stress and mental well-being.			they believe unhelpful thoughts.
10.	Author: Riethmuller et al. Journal Identify: Journal of Social Science & Medicine 361 (2024) 117381	Supporting Mental Health in Farming Communities Where and When it is Needed Most: A Longitudinal Analysis of Risk and Protective Factors	This longitudinal study aimed to examine mental health trajectories for Western Australian farmers over 12 months and determine associations with key risk and protective factors.	A total sample of 125 participants completed the surveys, with 124, 50, and 51 completing the first, second, and third surveys, respectively.	Demographics, Generalised Anxiety Disorder-7 (GAD-7), Patient Health Questionnaire (PHQ-9), Perceived Stress Scale (PSS), Farming Family Stress Scale (FFSS), Hazards, Brief-COPE Scale, The Lubben Social Network Scale – 6 (LSNS-6), Sense of Belonging.	The findings show that financial and external pressures and strained family dynamics affect farmers' psychological well-being, especially during seeding and harvest. Social support from family and friends and a strong sense of belonging is crucial in protecting mental health. Targeted interventions are needed to address these risks through a comprehensive approach involving families, social networks, community initiatives, and policies.

DISCUSSION

Agronursing is an emerging interdisciplinary approach that combines agricultural science with nursing practices to address the unique health challenges faced by agricultural workers. One of its key focuses is supporting the mental health of farmers, farm laborers, and rural communities who often experience high levels of stress due to financial instability, isolation, climate uncertainty, and physically demanding work. Agronurses are trained to understand both the agricultural environment and healthcare needs, enabling them to provide culturally sensitive mental health support, conduct wellness assessments, and promote preventive care directly in farming settings (Kurniyawan et al., 2022; Maharani et al., 2025).

By integrating mental health education, early intervention strategies, and community outreach into agricultural operations, agronursing helps reduce the stigma around mental health issues in rural areas. Agronurses collaborate with farmers, families, and local health systems to develop accessible support networks, crisis response plans, and stress management programs tailored to the unique needs of the agricultural lifestyle. This holistic approach not only improves psychological well-being but also enhances overall productivity and sustainability in the agricultural sector, demonstrating how healthcare can be effectively adapted to meet the needs of underserved rural populations (Erlando et al., 2025; Harishoh et al, 2024; Kurniyawan et al., 2024).

Stress and psychological distress are significant challenges faced by farmers in many countries, as recent studies have shown. Various factors affect their mental well-being, ranging from high work pressure and social isolation to cultural expectations discouraging help-seeking. For example, studies by Cassidy et al. (2024) and Riethmuller et al. (2023) highlighted that loneliness, traditional masculinity, and lack of community connections are primary triggers of stress and ill-being, especially in male farmers. In addition, gender differences in coping styles exacerbate the situation, where men tend to avoid problems and are reluctant to seek help.

Systemic external factors, such as climate change, unstable market prices, and economic pressure due to debt, exacerbate farmers' mental burden. Brennan et al. (2022) found that dairy farmers experienced the most stress after the removal of EU milk quotas, which increased their workload. Similarly, Folorunsho et al. (2024) stated that long working hours, family challenges, and limitations of modern tools were the primary sources of stress. In the context of Australia and Canada, technological change and the expansion of large-scale farming have also increased the pressure on smallholder farmers and increased the risk of mental disorders.

Efforts to address this pressure are implemented through various strategies, both individually and collectively. In some studies, such as those conducted by Riethmüller et al. (2023) and the eighth journal, coping is achieved through social interaction, physical activity, and a personal search for meaning. However, alcohol consumption also emerged as a risky coping mechanism. On the other hand, a community approach that fosters solidarity and social empowerment has been shown to improve farmers' mental resilience. Substantial social capital is a crucial protective factor that mitigates the negative effects of chronic stress.

However, barriers to seeking professional help are still very high. Many farmers feel that mental health services do not understand the context of their lives. Cultural factors, such as stoicism and stigma, as well as the multiple roles of service providers in small communities, reinforce these barriers. Purc-Stephenson et al. (2024) emphasize the importance of culturally based and flexible approaches, such as telephone counseling, involvement in local activities, and providers who understand "peasant language". Such approaches not only lower barriers but also increase acceptance of psychological services.

Several studies have also evaluated the effectiveness of specific interventions in reducing farmers' stress. The 12-day program developed by Stier-Jarmer et al. (2020) showed significant improvements in psychological well-being, although the additional effect of telephone coaching was inconsistent. In contrast, online interventions such as ifarmwell (Gunn et al., 2023) are effective in increasing psychological flexibility and reducing distress, with the approach deliberately avoiding the term "mental health" to minimize stigma. These two interventions confirm that duration, flexibility, and cultural context greatly influence program success.

In addition to mental health, strengthening farmers' capacity through education and mentoring is also an important strategy, especially in facing the challenges of sustainable agriculture. The seventh study highlighted that field training on environmentally friendly practices, such as making organic fertilizers and plant-based pesticides, significantly improved farmers' knowledge and skills.

The use of demonstration methods proved more effective than one-way counseling. Although not specifically focused on mental health issues, this education can support farmers' psychosocial well-being by empowering them and increasing their sense of control over their farms.

All the studies reviewed underscore the need for a multidimensional approach to address stress and improve farmers' welfare. Effective interventions must consider farmers' socio-economic, cultural, and geographical conditions. This includes strengthening social support, improving mental health literacy, and developing community-based and culturally relevant programs. Collaboration between the government, agricultural extension workers, health workers, and farming communities is necessary to create a sustainable support ecosystem.

Finally, it is essential to acknowledge that farmer well-being is not merely an individual issue, but a reflection of the prevailing social, economic, and agricultural policy structures. Further research is needed to explore the role of family, particularly women in farming households, and the integration of mental support with economic solutions. Farmers' mental well-being can be improved sustainably through a holistic and collaborative approach, which supports agricultural resilience and enhances the quality of life in rural communities.

CONCLUSION

Based on the analysis of ten journals, it is evident that farmers' mental health is significantly affected by a combination of economic pressures, excessive workload, and social isolation. These factors contribute to chronic stress, which is further compounded by barriers to help-seeking, such as stigma and mistrust toward mental health services that lack contextual relevance. While male farmers, in particular, tend to experience heightened levels of stress and loneliness, they often demonstrate a reluctance to engage with professional support. The literature indicates that both community-based and structured psychological interventions have shown effectiveness in addressing mental health concerns. Community-based strategies, such as informal support groups and culturally attuned outreach, help reduce stigma and foster social connection. Meanwhile, structured interventions, including online platforms and wellness programs, provide scalable and practical tools for psychological support.

However, the success of any intervention depends mainly on its relevance to farmers' lifestyles, values, and local context. The most effective solutions are comprehensive and integrative, addressing core stressors while combining community involvement with evidence-based psychological strategies. Future efforts should prioritize collaborative models that involve farmers in designing and implementing mental health services to ensure both clinical efficacy and community acceptance.

ACKNOWLEDGMENT

To the aforementioned author as well as the co-authors Vanessa Feby, Lorenza, Nadia Fatiqha Retnokusuma, Alfun Khusniya Mubin, Dea Zikri Amalia, Cherly Ardiansari, Elsa Widya Lestari, Inayah Anivanti, Katarina Nilam Hapsari, Venic Lyana Hidayati, and Romizatur Rifda, who have collaboratively contributed to the writing of this article. The authors also express their deepest gratitude to all parties who have supported the completion of this work. As a literature review, this article would not have been possible without the extensive insights provided by previous scholarly works and the contributions of researchers who have explored topics related to mental health, community nursing, and the lived experiences of agricultural workers.

Special appreciation is extended to the academic institutions and libraries that provided access to journals, books, and scientific publications, serving as the primary foundation for this review. Gratitude is also extended to farmers and agricultural communities, who, although not directly involved, have contributed significantly through the documented experiences and challenges presented in the literature. Their perspectives have enriched the analysis and deepened the understanding of the importance of agronursing approaches. The authors also thank colleagues and academic supervisors for their valuable feedback and guidance throughout the writing, data organization, and refinement process. Through the literature review approach, this article is expected to offer both theoretical and practical contributions to developing nursing strategies that are more responsive to the psychosocial needs of agricultural communities and to encourage further applied research in the future.

REFERENCES

- Abunyewah, M., Okyere, S. A., Mensah, S. O., Erdiaw-Kwasie, M., Gajendran, T., & Byrne, M. K. (2024). Drought impact on peri-urban farmers' mental health in semi-arid Ghana: The moderating role of personal social capital. *Environmental Development*, 49, 100960. <https://doi.org/10.1016/j.envdev.2023.100960>
- Alamsyah, D., & Merdeka, P. H. (2023). Mental Health as Common Lifestyle. *Journal of Literature Language and Academic Studies*, 2(02), 51-56. <https://doi.org/10.56855/jllans.v2i2.669>
- Andersson, M. J., Rahim, Y. A., Kenttä, G., Håkansson, A., & Claesdotter-Knutsson, E. (2025). Mental health challenges in elite sports, barriers to treatment, and quality of psychiatric care at an elite sports-centered mental health clinic—a mixed-methods study. *Psychology of Sport and Exercise*, 102859. <https://doi.org/10.1016/j.psychsport.2025.102859>
- Brennan, M., Hennessy, T., Meredith, D., & Dillon, E. (2021). Weather, Workload and Money: Determining and Evaluating Sources of Stress for Farmers in Ireland. *Journal of Agromedicine*, 27(2), 132–142. <https://doi.org/10.1080/1059924X.2021.1988020>
- Cassidy, T., & Carswell, E. (2024). Stress and well-being in farmers: The role of social and psychological capital. *Journal of Clinical & Medical Images Case Reports*, 4(1), 1-7. <https://doi.org/10.55920/2771-019X/1663>
- Dewi, E. I., Kurniyawan, E. H., & Deviantony, F. (2025). Farmers' Mental Health and the Need for Agronursing-Based Nursing Interventions in the Agricultural Area of Jember District. *Indonesian Journal of Global Health Research*, 7(3), 619–628. <https://doi.org/10.37287/ijghr.v7i3.5224>
- Edú-Valsania, S., Laguía, A., & Moriano, J. A. (2022). Burnout: A review of theory and measurement. *International journal of environmental research and public health*, 19(3), 1780. <https://doi.org/10.3390/ijerph19031780>
- El Khayat, M., Halwani, D. A., Hneiny, L., Alameddine, I., Haidar, M. A., & Habib, R. R. (2022). Impacts of climate change and heat stress on farmworkers' health: A scoping review. *Frontiers in public health*, 10, 782811. <https://doi.org/10.3389/fpubh.2022.782811>
- Erlando, Wahyuni Murti Faiza, Wuryaningsih, E. W., & Hadi Kurniyawan, E. (2025). Farmers' Coping Strategies in Facing Flood Disasters. *Health and Technology Journal (HTechJ)*, 3(2), 198–206. <https://doi.org/10.53713/htechj.v3i2.346>
- Folorunsho, S. (2024). Sociological Analysis of Stress Management among Farmers and Rural Development in Selected Communities in Kwara State. *J Huma Soci Scie*, 87(1), 2024. <https://doi.org/10.33140/jhss.07.01.04>
- GBD 2019 Mental Disorders Collaborators. (2022). Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Psychiatry*, 9(2), 137-150. [https://doi.org/10.1016/S2215-0366\(21\)00395-3](https://doi.org/10.1016/S2215-0366(21)00395-3)

- Harishoh, L., Modest, B., Liandini, S., Kurniawan, E., Nur, K., Afandi, A., & Kurniawan, D. (2024). Family Social Support Can Reduce Work Stress In Farmers. *Health Access Journal*, 1(3), 78-90. <https://doi.org/10.31290/haj.v1i3.4888>
- King, E., Lamont, K., Wendelboe-Nelson, C., Williams, C., Stark, C., van Woerden, H. C., & Maxwell, M. (2023). Engaging the agricultural community in the development of mental health interventions: a qualitative research study. *BMC Psychiatry*, 23(1), 1–16. <https://doi.org/10.1186/s12888-023-04806-9>
- Kurniawan, E. H., Dewi, E. I., Wuryaningsih, E. W., Deviantony, F., & Fitria, Y. (2022). Strengthening the Mental Health of Elderly Farmers After the COVID-19 Pandemic: Penguatan Kesehatan Mental Petani Lansia Pasca Pandemi COVID-19. *DEDIKASI SAINTEK Jurnal Pengabdian Masyarakat*, 1(1), 20–27. <https://doi.org/10.58545/djpm.v1i1.27>
- Kurniawan, E. H., Nurfatekha, E. D., Aisyah, R. D., Putri, C. A., Nur, K. R. M., Kurniawan, D. E., & Afandi, A. T. (2024). Stress Coping Strategies In Farmers As An Effort To Overcome Psychosocial Problems. *International Journal of Midwifery and Health Sciences*, 2(2), 176–186. <https://doi.org/10.61777/ijmhs.v2i2.74>
- Maharani, Nadirotul Umami, Ulfi Yuliyani, Kurniawan, E. H., Rosyidi Muhammad Nur, K., Endrian Kurniawan, D., & Tri Afandi, A. (2025). Psychosocial Problems among Farmers in Agricultural Areas. *Health and Technology Journal (HTechJ)*, 3(1), 120–130. <https://doi.org/10.53713/htechj.v3i1.318>
- Maisyaroh, A., Widiyanto, E. P., Kurnianto, S., & Fibriansari, R. D. (2024). Nurses' experiences regarding nursing competence in the isolation wards during COVID-19 pandemic. *Healthcare in Low-resource Settings*, 12(1). <https://doi.org/10.4081/hls.2024.11777>
- Micaela L. Riethmuller, Peta L. Dzidic, Peter M. McEvoy, Elizabeth A. Newnham, Change, connection and community: A qualitative exploration of farmers' mental health. *Journal of Rural Studies*, 97, 2023. 591-600. <https://doi.org/10.1016/j.jrurstud.2023.01.018>
- Pawlak, K., & Kołodziejczak, M. (2020). The role of agriculture in ensuring food security in developing countries: Considerations in the context of the problem of sustainable food production. *Sustainability*, 12(13), 5488. <https://doi.org/10.3390/su12135488>
- Purc-Stephenson, R., Doctor, J., & Keehn, J. E. (2023). Understanding the factors contributing to farmer suicide: A meta-synthesis of qualitative research. *Rural and Remote Health*, 23(3). <https://doi.org/10.22605/RRH818>
- Purc-Stephenson, R., Roy, N., Chimaobi, A., & Hood, D. (2024). An Evidence-Based Guide for Delivering Mental Healthcare Services in Farming Communities: A Qualitative Study of Providers' Perspectives. *International Journal of Environmental Research and Public Health*, 21(6). <https://doi.org/10.3390/ijerph21060791>
- Riethmuller, M. L., Newnham, E. A., & McEvoy, P. M. (2024). Supporting Mental Health in Farming Communities Where and When it is Needed Most: A Longitudinal Analysis of Risk and Protective Factors. *Social Science and Medicine*, 361(October), 117381. <https://doi.org/10.1016/j.socscimed.2024.117381>
- Shawar, Y. R., Neill, R., Kunnuji, M., Manoj, M., & Shiffman, J. (2023). Understanding resilience, self-reliance and increasing country voice: a clash of ideologies in global health. *BMJ Global Health*, 8(1), e010895. <http://doi.org/10.1136/bmjgh-2022-010895>
- Søvold, L. E., Naslund, J. A., Kousoulis, A. A., Saxena, S., Qoronfleh, M. W., Grobler, C., & Münter, L. (2021). Prioritizing the mental health and well-being of healthcare workers: an urgent global public health priority. *Frontiers in public health*, 9, 679397. <https://doi.org/10.3389/fpubh.2021.679397>
- Stier-Jarmer, M., Oberhauser, C., Frisch, D., Berberich, G., Loew, T., Schels-Klemens, C., Braun, B., & Schuh, A. (2020). A Multimodal Stress-Prevention Program Supplemented by Telephone-Coaching Sessions to Reduce Perceived Stress among German Farmers: Results from a Randomized Controlled Trial. *International Journal of Environmental Research and Public Health*, 17(24), 9227. <https://doi.org/10.3390/ijerph17249227>

- Ventriglio, A., Torales, J., Castaldelli-Maia, J. M., De Berardis, D., & Bhugra, D. (2021). Urbanization and emerging mental health issues. *CNS spectrums*, 26(1), 43-50. <https://doi.org/10.1017/S1092852920001236>
- Woolford, D. D., Smout, M. F., Turnbull, D., & Gunn, K. M. (2022). Male Farmers' Perspectives on Psychological Well-being Self-Management Strategies That Work for Them and How Barriers to Seeking Professional Mental Health Assistance Could Be Overcome. *International Journal of Environmental Research and Public Health*, 19(19), 12247. <https://doi.org/10.3390/ijerph191912247>
- Younker, T., & Radunovich, H. L. (2021). Farmer mental health interventions: a systematic review. *International journal of environmental research and public health*, 19(1), 244. <https://doi.org/10.3390/ijerph19010244>
- Zhu, C., Zhang, T., Li, Q., Chen, X., & Wang, K. (2023). Depression and anxiety during the COVID-19 pandemic: epidemiology, mechanism, and treatment. *Neuroscience Bulletin*, 39(4), 675-684. <https://doi.org/10.1007/s12264-022-00970-2>