Delphi study to develop maternal depression training materials for cadres

Endang Retno Surjaningrum, Tino Leonardi, Fitri Andriani, Tiara Diah Sosialita, Bani Bacan Hacantya Yudanagara, Husnul Mujahadah
Department of Psychology, Faculty of Psychology, Universitas Airlangga, Surabaya, Indonesia

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ABSTRACT

This study aimed to obtain themes and constructs to develop modules and training curricula for cadres for the detection of depression in pregnant and breastfeeding mothers in Surabaya, Indonesia. The Delphi method through three stages was applied: i) searching for academic and non-academic references; ii) compiling themes and constructs based on the findings of the first phase and distributing them to expert panel; and iii) concluding a consensus according to the guidelines. The panel approved two training objectives, five training materials, six training methods, two training time, two training duration, two training evaluation method, and six trainer qualifications. The findings can be the basis for developing modules and curricula to detect maternal depression in pregnant and breastfeeding women for cadres in Indonesia.

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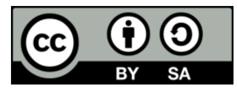

Corresponding Author:

Endang Retno Surjaningrum
Department of Psychology, Faculty of Psychology, Universitas Airlangga
Airlangga Street No. 4-6, Surabaya, Indonesia
Email: endang.surjaningrum@psikologi.unair.ac.id

1. INTRODUCTION

Mental health disorders in pregnant/breastfeeding women are common problems experienced by women globally. The disorders are generally in the form of depression and anxiety related to pregnancy and birth [1]. The depression includes depression before birth (antenatal depression) and after birth (postnatal or postpartum depression) [2]. Pregnancy or birth anxiety is generally experienced during pregnancy and peaks before delivery [3]. Depression and anxiety can trigger the stimulation of uterine contractions that are at risk of increasing blood pressure which may cause pre-eclampsia and miscarriage [4], low birth weight (LBW), and premature babies [5], [6]. Several studies have stated that depressed mothers pay less attention to their own health, do not pay attention to infant immunization, and correlate with the incidence of diarrhea in infants [7] and stunting [6], [8].

Antenatal services in Indonesia reveal that mental disorders in mothers need initial examination, including by posyandu cadres or community health workers [9], community members who are willing, able, and have the time to provide posyandu services voluntarily [10]. According to Basic Health Survey 2018, 10% of pregnant and breastfeeding mothers had got posyandu (integrated services for pregnant and breastfeeding mothers provided by cadres) services, and were likely to be served by cadres [11]. Besides physical health services, cadres are advised to be able to identify which mothers exhibit symptoms of mental disorders [9]. In Aceh, Indonesia, posyandu cadres had received training to identify women with mental disorders [12]; however, there is no data showing that posyandu cadres have ever received training to detect maternal depression. Research in other countries demonstrates that cadres improve their ability to recognize mothers with mental health problems after completing related training [13], [14].

Although posyandu cadres have a significant role in detecting maternal depression, there has been no guideline to do it. Posyandu cadres in Indonesia are community members who do not receive special education on mental health. They even have diverse educational backgrounds; most are with primary, secondary education and only a few have a university educational background. In addition, previous research stated that posyandu cadres in Surabaya, Indonesia, have the opportunity to carry out this role [15].

This condition indicates the need to provide training for posyandu cadres on how to detect maternal depression. Research shows that cadres who have received training on mental health have a better understanding and attitude towards mental disorders [16]. Training materials and curricula must be adapted to their educational and socio-cultural backgrounds [17], [18]. Therefore, it is necessary to develop appropriate training materials and curricula for posyandu cadres in Surabaya to detect mental disorders in mothers [19]. Based on the background, this current research aims to obtain themes and constructs that need to be incorporated into the training module and curriculum for cadres in detecting mental health disorders in pregnant and breastfeeding mothers.

2. RESEARCH METHOD

This current research is exploratory research using the Delphi technique carried out in three stages, namely i) reference search, ii) survey from a panel of experts, and iii) consensus determination. The first stage aims to compile the themes and constructs of the training for detecting mental disorders in pregnant and breastfeeding women from academic and non-academic references. The academic references were obtained from Indonesian and international journals, using the keywords "training to detect postpartum depression", "training to detect mental disorders in postpartum mothers", and "training to assess mental health problems in postpartum". Non-academic references were obtained through the Google data search engine, with the following criteria: i) information presented by mental health experts and maternal-child health experts, ii) presented by the institutional websites, not individuals. The google searches were conducted using the same keywords as academic searches. The research team extracted the data from references to find a list of themes and constructs of training. The list was then compiled into a survey to be submitted to an expert panel to obtain consensus (agreement).

The second stage assessed the themes and constructs recorded, which were then compiled into a Likert Scale questionnaire and given to an expert panel for assessment. The experts were also allowed to provide recommendations for statements in each group of themes. The expert panel involved at this stage consists of 3 groups of experts: i) academicians, ii) practitioners, and iii) the public, with the following criteria: i) a group of academic experts: a) experts in mental health and/or maternal and child health with a minimum educational background of master level, b) living in Surabaya, and c) willing to fill out a survey; ii) The group of practitioners: a) having practical experience in mental health and/or maternal and child health, b) having been/is currently practicing in primary health care called puskesmas in Surabaya; and iii) public groups: a) having been/is currently a posyandu cadre, b) being able to read and write, and c) living in Surabaya.

The expert panel agreement is based on a percentage of the voter turnout, with three categories of determination: "accepted", "considered", and "rejected". Statements that are "accepted" are those that get "Strongly Agree" and "Agree" by at least 75% of the participants. Statements that are "rejected" are those that get "Disagree" and "Strongly Disagree" by at least 75% of the participants. Statements outside these criteria are classified as "considered" and are revised according to the experts' recommendations. The revised statements, along with those "rejected", are given back to the panel for Stage 3. The third stage assessed the "rejected" and "considered" themes and constructs which have been revised in accordance with the experts' suggestions. The agreement is based on the assessment carried out in Stage 2. This research has received a research ethics certificate issued by the Research Ethics Commission of the Faculty of Nursing, Universitas Airlangga No: 2085-KEPK.

3. RESULTS AND DISCUSSION

3.1. Stage 1 reference search

Stage 1 obtained ten academic references and ten non-academic references related to training to detect mental disorders in mothers after childbirth. After elimination, four academic references [20]–[23] and eight non-academic references [24]–[31] that met the criteria were selected. Several sources were eliminated because they did not meet the criteria (e.g., not discussing the training in detail, there was no clear explanation of the training because it was only intended as an experimental treatment, and mental disorders detected were not in accordance with the research objectives). The results of the extraction of the references include the following themes: i) training time, ii) training materials, iii) training delivery methods, iv) training objectives, v) evaluation methods, vi) training duration, and vii) trainer qualification. The seven

themes (referred to as 'aspects') were then compiled into a 31-item Likert scale questionnaire to be assessed by a panel of experts. Extraction themes of postpartum depression training for cadres as shown in Table 1.

Table 1. Extraction themes of postpartum depression training for cadres

Aspect	Item	References
Training objectives	– Providing basic knowledge about postpartum depression – Improving the basic ability of cadres to detect mental disorders in postpartum mothers.	[20], [24]
Training materials	– Definition, causes, criteria, and incidence of mental disorders in postpartum mothers – Early symptoms of depression in postpartum mothers and postpartum depression screening tools. – Early intervention for postpartum depression (psychological first aid)	[20], [21], [24], [29]
Training method	– Roleplay among participants – Lecturing followed by group discussion – Using the training module – Using educational websites that contain videos, materials, and quizzes – Online training (workshop or webinars) – Using interactive videos	[20], [21], [24]–[29]
Training time	– 3 times a week – 3 weeks (once a week) – A day – 2 days	[20], [25], [28]
Training duration	– 1.5 hours for each training session – 2 hours for each training session – 1 hours for each training session – 3 hours for each training session – 4 hours for each training session	[31]
Training evaluation method	– Pre-test and post-test – Interactive quiz – Practice roleplay – Discussion and Q&A	[20], [22], [28], [30]
Trainer qualification	– Psychologist – Psychiatrist – General practitioner – Midwife – Nurse – Cadre – Survivors	[23], [31]

3.2. Stage 2 expert agreement

In Stage 2, the questionnaire was given to a panel of experts to get a consensus. The expert agreement process was carried out in 2 rounds. The first round obtained answers from 36 participants with the following details: cadres (n=3), Family Welfare Movement's (called PKK an abbreviation of *Pembinaan Kesejahteraan Keluarga*, a social development movement that operates at all civil administration level including village) administrators (n=2), psychologists (n=12), Midwives (n=16), Doctors/General Practitioners (n=1), and 2 participants in other professions. The first round tested 31 items from 7 aspects. In this round, the expert panel agreed on 21 items of the six aspects, including training objectives, training materials, training delivery methods, evaluation methods, and trainer qualifications. Two other aspects had not received consensus (i.e., the duration and time of the training) and were retested in the second round along with two items from the trainer qualification aspect based on the panel's feedback.

In the second round, only 14 of the 36-panel members (n=14) gave their assessment, consisting of midwives, psychologists, and posyandu cadres. The second round tested ten items with the following results: five items were accepted and the other five items were rejected. The expert panel agreed that the cadres are not qualified to become trainers, the duration of the training should be 1.5-2 hours and the training time should be three times a week or once a week for three weeks. The Stage 2 process is presented in Figure 1.

3.3. Stage 3 Summarizing the panel experts' consensus

The results reveal the appropriate themes and constructs of training for improving the cadres' knowledge of maternal depression and increasing their ability to identify maternal depression. However, the

panel suggested using more neutral terminology such as "postpartum depression" [32], [33] to replace the phrase "mental disorder." The panel also provided additional recommendations on the training objectives, namely to reduce the likelihood of the baby blues symptoms occurring in mothers. Table 2 presents the items agreed upon by the expert panel.

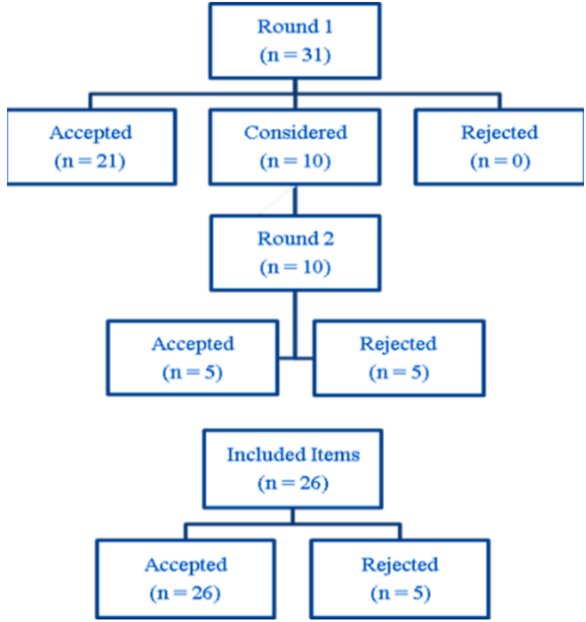

Figure 1. The Delphi processes

Table 2. Expert consensus of postpartum depression training program for cadres

Aspect	Item
Training objectives	– Providing basic knowledge about postpartum depression
	– Improving the basic ability of cadres to detect mental disorders in postpartum mothers
Training materials	– Definition, causes, criteria, and incidence of mental disorders in postpartum mothers
	– Sharing session from those who have experienced postpartum depression
	– Early symptoms of depression in postpartum mothers and postpartum depression screening tools
	– Early intervention for postpartum depression (psychological first aid)
Training method	– Roleplay among participants
	– Lecturing followed by group discussion
	– Using the training module
	– Using educational websites that contain videos, materials, and quizzes
	– Online training (workshop or webinars)
	– Using interactive videos
Training time	– 3 times a week
	– 3 weeks (once a week)
Training duration	– 1.5 hours for each training session
	– 2 hours for each training session
Training evaluation method	– Pre-test and post-test
	– Interactive quiz
	– Practice roleplay
	– Discussion and Q&A
Trainer qualification	– Psychologist
	– Psychiatrist
	– General practitioner
	– Midwife
	– Nurse
	– Survivors

3.4. Discussion

Regarding the training materials, the panel approved the following materials: i) definitions, causes, criteria, Regarding the training materials, the panel approved the following materials: i) definitions, causes, criteria, and prevalence of maternal depression in postpartum mothers; ii) sharing sessions from people who have experienced postpartum depression; iii) early symptoms and postpartum depression screening tool; iv) knowledge about early intervention for postpartum depression (psychological first aid (PFA)) and practice; and v) prevention of postpartum depression. Various studies stated that the definition and scope became imperative in mental health training because it was the first way to recognize symptoms, especially related to detection [34]–[38]. Activities such as the PFA and mental health first aid (MHFA) are presented at the beginning [37], [39]–[41]. Sharing sessions is also essential to build knowledge about a topic or problem [17], [42]–[44].

The agreed training methods are lecturing followed by group discussion, role play, and utilization of interactive video media, quizzes, modules, and websites. These methods have been widely applied to train the community [17], [43], including to train the health cadres in India, similar to those in Indonesia [45]. Giving structured tasks is another option with solid, precise, clear, and interesting material delivery. The online training method has not yet received agreement from most experts because of technological challenges such as connectivity, low internet speed, lack of knowledge in using smartphones, and limited internet data [46].

For training time and duration, the expert panel agreed that the training duration should be 1.5-2 hours per session, three times a week or once a week for three weeks, and should be held from 10 to 12 a.m. [47]. The training time is not carried out all day long but is repeated sequentially, for example, on two consecutive days with assignments between breaks. The time and duration of activities are a concern in various training for lay health workers [17], [45]. Evaluation needs to do to help participants remember the material [37]. Evaluation can be pretest-posttest, interactive quizzes, role-play practices, discussion, and question-and-answer activities. The panel also suggested that the evaluation results should be submitted immediately after the assessment to increase the motivation of the training participants to follow the next stage. As for trainer qualifications, consensus states that trainers should be psychologists, psychiatrists, survivors, nurses, general practitioners, or midwives. Posyandu cadres, however, are not recommended to become trainers. The panel emphasized the need to pay attention to the capacity and experience of trainers based on the appropriate profession and, more importantly, those of practitioners and academicians [19], [31]. The results of this study reinforce the need to carefully develop a curriculum for volunteers in the community so that it is right on target [19]. Although participatory methods are not applied, the Delphi Technique gives an opportunity to gather available knowledge and practical experience. The technique provides benefits in gathering information widely from people who may be hesitant to speak out in front of others such as in focus group or other traditional forums [48], and the case which could also happen to women [49].

3.5. Limitations

This study has limitations on the equivalence of the number of expert panel participants in each category. Although the number of panels and variations are representative enough, the composition in each type of expertise is not equal. The non-academic references were gathered from Indonesia context to ensure the similarity with the research objective. Nevertheless, the number of those were quite small, may be due to programs of maternal mental health in this country is also limited.

4. CONCLUSION

The result of this current research provides indispensable information about the themes and technical preparations needed to develop materials and curricula for detecting maternal mental health problems. The panel of experts agreed on the objectives of the activity, the material to be delivered, the method of implementation, the duration of the activity, the evaluation of the activity, and the trainers. The findings of this study can be the basis for developing modules and curricula to detect postpartum depression in pregnant and breastfeeding women for cadres in Surabaya in particular and Indonesia in general.

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REFERENCES

[1] A. Waqas *et al.*, "Screening programs for common maternal mental health disorders among perinatal women: report of the systematic review of evidence," *BMC Psychiatry*, vol. 22, no. 1, pp. 1–18, 2022, doi: 10.1186/s12888-022-03694-9.

[2] American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disordes Fourth Edition*, Fourth Edi., vol. 1. Arlington, 2000. doi: 10.1002/9780470515167.ch51.

[3] E. Paschetta *et al.*, "Perinatal psychiatric disorders: An overview," *American Journal of Obstetrics and Gynecology*, vol. 210, no. 6, pp. 501--509.e6, 2014, doi: 10.1016/j.ajog.2013.10.009.

[4] B. A. Dachew, J. G. Scott, A. Mamun, D. M. Fetene, and R. Alati, "Maternal hypertensive disorders during pregnancy and the trajectories of offspring emotional and behavioral problems: the ALSPAC birth cohort study," *Annals of Epidemiology*, vol. 53, pp. 63–68, 2021, doi: 10.1016/j.annepidem.2020.08.015.

[5] A. George, R. F. Luz, C. De Tychey, N. Thilly, and E. Spitz, "Anxiety symptoms and coping strategies in the perinatal period," *BMC Pregnancy and Childbirth*, vol. 13, no. 1, p. 233, 2013, doi: 10.1186/1471-2393-13-233.

[6] A. Wemakor and K. A. Mensah, "Association between maternal depression and child stunting in Northern Ghana: A cross-sectional study," *BMC Public Health*, vol. 16, no. 1, p. 869, 2016, doi: 10.1186/s12889-016-3558-z.

[7] V. Patel and B. Kirkwood, "Perinatal depression treated by community health workers," *The Lancet*, vol. 372, no. 9642, pp. 868–869, 2008, doi: 10.1016/S0140-6736(08)61374-4.

[8] A. Anato, K. Baye, Z. Tafese, and B. J. Stoecker, "Maternal depression is associated with child undernutrition: A cross-sectional study in Ethiopia," *Maternal and Child Nutrition*, vol. 16, no. 3, 2020, doi: 10.1111/mcn.12934.

[9] Ministry of Health Republic Indonesia, *Manual book for cadres of posyandu*. Jakarta, 2012.

[10] Ministry of Health Republic Indonesia, *Training Modules and Curriculum for Cadres (Kurikulum dan Modul Pelatihan Kader Posyandu)*. Jakarta, 2014.

[11] Ministry of Health Republic Indonesia, "Basic Health Research 2018," Jakarta, 2018. [Online]. Available: https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf

[12] N. Boothby, M. Veatch, and M. Pentes, "Evaluating treatment of Axis I mental health disorders in Aceh, Indonesia," *Psychiatrist*, vol. 35, no. 7, pp. 248–255, 2011, doi: 10.1192/pb.bp.110.030205.

[13] A. Rahman, A. Malik, S. Sikander, C. Roberts, and F. Creed, "Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial," *The Lancet*, vol. 372, no. 9642, pp. 902–909, 2008, doi: 10.1016/S0140-6736(08)61400-2.

[14] S. Honikman, T. van Heyningen, S. Field, E. Baron, and M. Tomlinson, "Stepped care for maternal mental health: A case study of the perinatal mental health project in South Africa," *PLoS Medicine*, vol. 9, no. 5, p. e1001222, 2012, doi: 10.1371/journal.pmed.1001222.

[15] E. R. Surjaningrum, H. Minas, A. F. Jorm, and R. Kakuma, "The feasibility of a role for community health workers in integrated mental health care for perinatal depression: A qualitative study from Surabaya, Indonesia," *International Journal of Mental Health Systems*, vol. 12, no. 1, pp. 1–16, 2018, doi: 10.1186/s13033-018-0208-0.

[16] N. A. Istiani, A. H. Sutomo, and M. Agusno, "The Effect of Mental Health Training on Attitudes and Knowledge of Cadres in Early Detection of Mental Disorders in Tanjungsari Sub-district, Gunungkidul Regency," *Review of Primary Care Practice and Education (Kajian Praktik dan Pendidikan Layanan Primer)*, vol. 1, no. 3, p. 136, Dec. 2018, doi: 10.22146/rpcpe.41698.

[17] M. L. Barnett, A. Gonzalez, J. Miranda, D. A. Chavira, and A. S. Lau, "Mobilizing Community Health Workers to Address Mental Health Disparities for Underserved Populations: A Systematic Review," *Administration and Policy in Mental Health and Mental Health Services Research*, vol. 45, no. 2, pp. 195–211, Mar. 2018, doi: 10.1007/s10488-017-0815-0.

[18] A. Marastuti *et al.*, "Development and evaluation of a mental health training program for community health workers in Indonesia," *Community Mental Health Journal*, vol. 56, no. 7, pp. 1248–1254, 2020, doi: 10.1007/s10597-020-00579-7.

[19] S. George *et al.*, "The development of a novel, standards-based core curriculum for community facing, clinic-based community health workers," *Frontiers in Public Health*, vol. 9, 2021, doi: 10.3389/fpubh.2021.663492.

[20] L. Appleby *et al.*, "The treatment of postnatal depression by health visitors: Impact of brief training on skills and clinical practice," *Journal of Affective Disorders*, vol. 77, no. 3, pp. 261–266, 2003, doi: 10.1016/S0165-0327(02)00145-3.

[21] C. D. Baker, H. Kamke, M. W. O'Hara, and S. Scott, "Web-based training for implementing evidence-based management of postpartum depression," *Journal of the American Board of Family Medicine*, vol. 22, no. 5, pp. 588–589, 2009, doi: 10.3122/jabfm.2009.05.080265.

[22] S. A. Elliott, J. Gerrard, C. Ashton, and J. L. Cox, "Training health visitors to reduce levels of depression after childbirth: An evaluation," *Journal of Mental Health*, vol. 10, no. 6, pp. 613–625, 2001, doi: 10.1080/09638230120041362.

[23] L. S. Segre, R. L. Brock, M. W. O'Hara, L. L. Gorman, and J. Engeldinger, "Disseminating perinatal depression screening as a public health initiative: A train-the-trainer approach," *Maternal and Child Health Journal*, vol. 15, no. 6, pp. 814–821, 2011, doi: 10.1007/s10995-010-0644-1.

[24] Universitas Syiah Kuala, "Psikologi FK Unsyiah Cegah Depresi Melalui Modul 'Kenal Ibu,'" *Universitas Syiah Kuala*, 2018.

[25] Kusumorini, "Pelatihan Deteksi Dini dan Penatalaksanaan Gangguan Jiwa Bagi Nakes di Puskesmas Tingkat Provinsi Kalimantan Selatan," *Ministry of Health Republic Indonesia*, 2019.

[26] Maternal Mental Health Now, "Maternal mental health: The role of obstetrics & gynecology in screening & care," *Maternal Mental Health Now*. 2020. [Online]. Available: https://www.maternalmentalhealthnow.org/providers/the-role-of-obstetrics-gynecology-in-screening-care/

[27] Post Partum Support International, "Professional," *Post Partum Support International,*. 2020. Accessed: Sep. 24, 2020. [Online]. Available: https://www.postpartum.net/professionals/

[28] Transition Postpartum Support, "Perinatal Mental Health for Birth Proffessional," *Transition Postpartum Support*, 2021.

[29] The Postpartum Stress Center, "12hr professional training: The art of holding perinatal women in distress," *The Postpartum Stress Center*. 2020. [Online]. Available: https://postpartumstress.com/for-professionals/course-check-list-resources/

[30] Health Education England (NHS), "E-learning for healthcare." 2020. Accessed: Sep. 21, 2020. [Online]. Available: https://www.e-lfh.org.uk/programmes/perinatal-mental-health/

[31] CAI, "Trainer ' s Manual Training for Community Health Workers to Identify , Support , Educate and." 2022. [Online]. Available: https://caiglobal.org/building-capacity-for-addressing-maternal-depression/

[32] S. Andajani-Sutjahjo, L. Manderson, and J. Astbury, "Complex emotions, complex problems: Understanding the experiences of perinatal depression among new mothers in urban Indonesia," *Culture, Medicine and Psychiatry*, vol. 31, no. 1, pp. 101–122, 2007, doi: 10.1007/s11013-006-9040-0.

[33] H. S. Widiana, K. Simpson, and L. Manderson, "Cultural expressions of depression and the development of the Indonesian Depression Checklist," *Transcultural Psychiatry*, vol. 55, no. 3, pp. 339–360, 2018, doi: 10.1177/1363461518764491.

[34] A. Caulfield, D. Vatansever, G. Lambert, and T. Van Bortel, "WHO guidance on mental health training: A systematic review of the progress for non-specialist health workers," *BMJ Open*, vol. 9, no. 1, p. e024059, 2019, doi: 10.1136/bmjopen-2018-024059.

[35] C. Macneil *et al.*, "Effectiveness of a professional development training program in increasing knowledge of mental health clinicians specializing in early psychosis," *Early Intervention in Psychiatry*, vol. 13, no. 4, pp. 1003–1010, 2019, doi: 10.1111/eip.12785.

[36] C. Macneil, F. Foster, A. Nicoll, H. Osman, R. Monfries, and S. Cotton, "Evaluation of a professional development training programme for mental health clinicians specializing in early psychosis," *Early Intervention in Psychiatry*, vol. 12, no. 3, pp. 483–490, 2018, doi: 10.1111/eip.12424.

[37] L. Wang, I. Norman, T. Xiao, Y. Li, and M. Leamy, "Psychological first aid training: A scoping review of its application, outcomes and implementation," *International Journal of Environmental Research and Public Health*, vol. 18, no. 9, p. 4594, 2021, doi: 10.3390/ijerph18094594.

[38] B. X. Yang, T. E. Stone, and S. A. Davis, "The effect of a community mental health training program for multidisciplinary staff," *Archives of Psychiatric Nursing*, vol. 32, no. 3, pp. 413–417, 2018, doi: 10.1016/j.apnu.2017.12.007.

[39] M. Sijbrandij *et al.*, "The effect of psychological first aid training on knowledge and understanding about psychosocial support principles: A cluster-randomized controlled trial," *International Journal of Environmental Research and Public Health*, vol. 17, no. 2, p. 484, 2020, doi: 10.3390/ijerph17020484.

[40] F. A. Cottrill *et al.*, "Offering mental health first aid to a person experiencing psychosis: a Delphi study to redevelop the guidelines published in 2008," *BMC Psychology*, vol. 9, no. 1, p. 29, 2021, doi: 10.1186/s40359-021-00532-7.

[41] J. Evans, M. Romaniuk, and R. Theal, "Evaluation of mental health first aid training for family members of military veterans with a mental health condition," *BMC Psychiatry*, vol. 21, no. 1, p. 128, 2021, doi: 10.1186/s12888-021-03139-9.

[42] A. A. Williamson, L. Knox, N. G. Guerra, and K. R. Williams, "A pilot randomized trial of community-based parent training for immigrant latina mothers," *American Journal of Community Psychology*, vol. 53, no. 1–2, pp. 47–59, 2014, doi: 10.1007/s10464-013-9612-4.

[43] D. I. Castaneda and S. Cuellar, "Knowledge sharing in business education," *Sustainability (Switzerland)*, vol. 13, no. 7, p. 3657, 2021, doi: 10.3390/su13073657.

[44] A. Ayunis, A. Fauzan, and A. Ardipal, "The influence of active knowledge sharing strategies and initial ability of students' mathematical ability," in *Proceedings of the 1st International Conference on Innovation in Education (ICoIE 2018)*, 2019. doi: 10.2991/icoie-18.2019.50.

[45] R. Paramasivam, A. Elangovan, S. Amudhan, J. V. S. Kommu, H. Haridas, and S. B. Sriramalu, "Intervention-based mental health training for community level workers in India –A systematic review," *Journal of Family Medicine and Primary Care*, vol. 11, no. 1, pp. 1237–1243, 2022, doi: 10.4103/jfmpc.jfmpc_1134_21.

[46] S. S. Muke *et al.*, "Digital training for non-specialist health workers to deliver a brief psychological treatment for depression in primary care in India: Findings from a randomized pilot study," *International Journal of Environmental Research and Public Health*, vol. 17, no. 17, pp. 1–22, 2020, doi: 10.3390/ijerph17176368.

[47] E. R. Surjaningrum, A. F. Jorm, H. Minas, and R. Kakuma, "Personal attributes and competencies required by community health workers for a role in integrated mental health care for perinatal depression: Voices of primary health care stakeholders from Surabaya, Indonesia," *International Journal of Mental Health Systems*, vol. 12, no. 1, pp. 1–11, 2018, doi: 10.1186/s13033-018-0224-0.

[48] R. A. Green, "The Delphi technique in educational research," *SAGE Open*, vol. 4, no. 2, p. 215824401452977, 2014, doi: 10.1177/2158244014529773.

[49] C. Paz-Pascual, I. Artieta-Pinedo, and G. Grandes, "Consensus on priorities in maternal education: Results of delphi and nominal group technique approaches," *BMC Pregnancy and Childbirth*, vol. 19, no. 1, pp. 1–13, 2019, doi: 10.1186/s12884-019-2382-8.

BIOGRAPHIES OF AUTHORS

Endang Retno Surjaningrum is an Associate Professor in the Department of Mental Health and Clinical Psychology, Faculty of Psychology, Universitas Airlangga in Surabaya, Indonesia. She is an expert in qualitative mental health research with particular expertise in integrating mental health issues and qualitative studies to improve health service delivery with involvement of non-professionals including community health workers. Her research interests are mainly focused on the areas of: depression, health behaviour, mental health literacy, maternal mental health, and the role of community health workers in mental health areas, and cognitive behaviour therapy. She can be contacted at email: endang.surjaningrum@psikologi.unair.ac.id.

Tino Leonardi is a Lecture of Educational Psychology at Universitas Airlangga in Surabaya, Indonesia. His research mainly in the areas of Behavioral Psychology such using Health Belief Model to predict breast self-examination. He also developed training material for Bunda PAUD (teacher's of early childhood school) and teachers of Autism Spectrum Disorder students. He can be contacted at: tino.leonardi@psikologi.unair.ac.id.

Fitri Andriani is a teaching lecturer at the Department of Psychology, Faculty of Psychology, Airlangga University in Surabaya, Indonesia. She is also the Coordinator of the Psychology Doctoral Study Program. She is an expert in psychometric research with particular expertise in the development of both cognitive and non-cognitive psychological instruments. Her research interests are primarily focused on the areas of: psychometry, psychological measurement and educational evaluation. She can be contacted via email: fitri.andriani@psikologi.unair.ac.id.

Tiara Diah Sosialita is a lecturer at Faculty of Psychology, Universitas Airlangga in Surabaya, Indonesia. She worked as a psychologist at a Community Health Center, as well as dealing with psychological problems of pregnant women in the Antenatal Care (ANC) program together with other health professionals. Her research interests are focused on mental health in clinical settings such as intervention on health workers and the patients. She also conducted mental health program for mothers with caesarean section who experience post trauma stress disorder. She can be contacted at: tiarasosialita@psikologi.unair.ac.id.

Bani Bacan Hacantya Yudangara is a lecturer with expertise in community psychology. Before becoming a lecturer, she explored her interest in the community with joined several community development programs, such as Pencerah Nusantara as a health advocate and Indonesia Teaching Movement as a program officer. She is also interested in youth mental health and gender topics; now, she is a member of the community mental health and gender studies research group in Faculty of Psychology Universitas Airlangga, Indonesia. She can be contacted at: banibacan@psikologi.unair.ac.id.

Husnul Mujahadah is a Master of Professional Psychology student at Universitas Airlangga, Surabaya. Her major was Clinical Psychology. After getting her bachelor degree from Faculty of Psychology Universitas Airlangga, she worked as a research assistant and involved in several research projects with main topic on community mental health and marriage/family psychology. She is interested in researching the topics of family mental health and adolescents' mental health. She can be contacted at: husnul.mujahadah-2022@psikologi.unair.ac.id.