“Not shifting, but sharing”: stakeholders’ perspectives on mental health task-shifting in Indonesia

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Abstract
Background: Task-shifting, the distribution of tasks among health workers to address health workforce shortage, has been widely used to tackle mental health treatment gaps. However, its implementation in Indonesia has still been rarely explored. This study aimed to explore stakeholders’ perspectives on the implementation of mental health task-shifting to nurses in Indonesia’s primary health care.

Methods: An exploratory descriptive approach using in-depth interviews and focused group discussions (FGDs) was used. The study involved 19 stakeholders from the government’s ministry directorates, professional organisations, and mental health practitioners. Thematic analysis was used to analyse the data.

Results: Three themes emerged namely, task-shifting feasibility and acceptability, shared task implementation, and nurse role enhancement issues, with 14 sub-themes.

Conclusions: Task-shifting on mental health issues in the eye of Indonesian stakeholders is viewed as a matter of sharing and collaboration. Implementation of task-shifting in Indonesia may require policies in place and political will across stakeholders. Further scrutiny on task-shifting implementation is needed by considering the local context and national environment.

Keywords: Health worker, Mental health, Nurses, Primary care, Psychiatrists

Background
Mental disorders are one of the main factors contributing to global burden of disease [1]. People with mental disorders have increased risk of all cause mortality, as well as substantial reduction in life expectancy between 10 and 20 years [2]. Moreover, the COVID-19 pandemic has exacerbated mental health problems among the general population [3], yet many mental health problems are not adequately addressed [4]. This situation leads to a situation referred to as the ‘treatment gap’, which is the difference between the number of people suffering from a disease and those receiving treatments [5, 6].

The treatment gap shows disparity in mental health services between developed and developing countries [7], mainly related to scarcity, limited access, and inefficiency in the use of resources in mental health services [8, 9]. The WHO World Mental Health Survey (WHO-WHMS) revealed that more than half of people with mood, anxiety, and substance abuse disorders from 25 countries did not get the treatments they needed [10]. Overall, the gap in high-income countries reached 63.2% and even wider gaps were found in the upper- and lower-middle-income categories with 78% and 86.3%, respectively [10].

Numbers of people with mental disorders in Indonesia are predicted to rise from around 2.58 million in 2017 to
around 2.99 and 3.24 million in 2020 and 2024 respectively [11]. During the pandemic, rates of anxiety, depression, and trauma among the Indonesian population were reportedly around 70% across 34 provinces [12]. The provision of mental health services in Indonesia's community health centres (widely known as puskesmas) can be dated back to the late-1960s, through deployment of psychiatrists [13], which was then shifted to trained general practitioners and nurses since the 1990s [14] and for some regions, clinical psychologists since the mid-2000s [15]. However, the country only has 0.31 psychiatrists, 0.17 clinical psychologists, and 2.52 trained mental health nurses per 100,000 people [16]. These numbers are considered insufficient to serve the population of around 270 million people, especially when the majority of those specialists are still concentrated in Java Island [15].

One strategy that has emerged to address treatment gaps is task-shifting, involving non-specialist health workers providing mental health services [17–19]. Since producing specialists takes time and is a long-term investment, training available health workers can improve a health system in the short to medium term and save costs [20]. Nurses are often involved in task-shifting because they constitute the largest group of health professionals, have good capabilities and are available in almost every health care facility [21].

In Indonesia, task-shifting to nurses had been tested around two decades ago but its implementation was not as successful as expected. In early 2000, the Indonesian Medical Association (IMA) and Indonesian National Nurses Association (INNA) agreed to implement a task-shifting program to enhance health care service provision, however, the agreement between the two professional organisations was cancelled due to inter-professional conflicts in some regions [22]. Recently, task-shifting has been considered in addressing some health issues in the country, including child health [23], HIV/AIDS [24], mental health [25, 26], and COVID-19 [27]. The IMA considered task-shifting as a temporary solution while waiting for the required number of medical personnel to be fulfilled [28]. In addition, since 2014, task-shifting has been regulated with Health Worker and Nursing Laws [29, 30], which permit nurses or other health workers to perform limited medical actions in the absence or shortage of medical personnel.

Research on mental health task-shifting has been conducted in developed and developing countries with promising results [31–41]. Nevertheless, studies focused on mental health task-shifting in Indonesia are very limited. Among others, a randomised controlled trial conducted in some puskesmas in Yogyakarta concluded task-shifting involving trained general practitioners and nurses could effectively manage mild to moderate mental health cases [25]. However, a cross-sectional study found task-shifting was not effective because, compared to psychiatrists and psychologists, non-specialist practitioners did not have capacities to withstand stigmatised views of patients with mental health problems and implement evidence-based mental health practices [26]. These findings reflect the existing opposing views on task-shifting implementation in Indonesia, which to date have barely been explored. Therefore, this study aimed to explore stakeholders’ perspectives on the implementation of mental health task-shifting to non-specialist health workers, especially nurses, in Indonesia’s primary health care setting.

Methods
This qualitative study used an exploratory descriptive approach [42], using in-depth interviews and focused group discussions (FGDs). A question that guided this study was: “What do stakeholders think about shifting mental health interventions normally provided by mental health specialists to non-specialist providers, especially nurses, in primary health care settings?”

Regarding the specific tasks included in task-shifting, this study referred to the World Health Organisation (WHO) mental health Gap Action Programme (mhGAP) – version 2.0 [43]. The list of tasks included in mhGAP was quite broad, including procedures that can only be undertaken by medical personnel in normal circumstances such as diagnosis and pharmacological interventions. However, as an exploratory study, this study did not specify these procedures from the beginning and was more focused on the participants’ views regarding what they perceived about task-shifting phenomenon in Indonesia.

This study used data source triangulation to ensure broad perspectives and voices were obtained by involving participants from different organisations and professions [44, 45]. The investigators invited key stakeholders to take part, including the Ministry of Health’s directorates, professional organisations and mental health practitioners. The choice of the invitees was made by consensus among investigators considering their proximity to task-shifting and mental health issues, institutional representations, as well as availability during data collection.

The interviews and FGDs were led by two team members with nursing backgrounds and conducted in Bahasa Indonesia. As the investigators were all nurses, unconscious bias could occur in the form of directed questions and interpretations that may favour the involvement of nurses in the provision of mental health care.

Data collection was conducted from May to November 2021 in Jakarta (3 FGDs and 1 individual interview) and online Zoom meeting (7 interviews), due to the
increasing COVID-19 cases in Indonesia Table 1. The data collection activities were postponed from July to September following the implementation of Community Activities Restrictions Enforcement.

The investigators developed semi-structured questions focused on five topics: 1) stakeholders’ perspectives on mental health treatment gaps and the situation of mental health services in Indonesia’s primary health care; 2) strategies implemented to reduce disparities in mental health services; 3) stakeholders’ perspectives on task-shifting and its implementation; 4) prerequisites that must be met to implement task-shifting; and 5) other issues related to mental health services in Indonesia. The contents of interviews and FGDs were audio-recorded, transcribed verbatim, and translated by the team members into English before the analysis commenced.

Thematic analysis was used to analyse the data. This analysis is appropriate to identify, analyse, and find patterns on qualitative data that require low interpretation levels [46]. The investigators imported the data to NVivo to identify codes through iterative reading and re-reading of the transcripts. Codes were grouped to sub-themes and themes based on the similarity of topics addressed. The team held a series of discussions to generate themes until a consensus was reached. The findings were checked by the participants’ representatives to ensure trustworthiness.

### Results

Nineteen key stakeholders were interviewed representing three Ministry of Health organisations and directorates, two professional nursing organisations, and five community mental health nursing practitioners Table 1. Representatives from IMA and Indonesian Psychiatric Association (PDSKJI) were invited by email but did not respond.

Three themes emerged, namely task-shifting feasibility and acceptability, shared task implementation, and nurse role enhancement issues, with 14 sub-themes Table 2.

#### Task-shifting feasibility and acceptability

Before being implemented, participants identified task-shifting required some aspects to be met, such as the legal framework, appropriate contexts, in-service training provision, and acceptability from related stakeholders.

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"Regarding task-shifting, the main regulation is Nursing Laws in article 35, which regulates how to deal with emergencies, how nurses must provide services. This is detailed in the 26th Minister of Health Regulation [of 2019] on the imple-
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Task-shifting implementation was seen to be limited by contexts, such as issues, place, and time. If the context is no longer relevant, the authority granted to nurses can be revoked.

"The [task-shifting] form would be an assignment from the head of regional health office, which would be adjusted to the needs of each region. Even the time is also adjusted. For example, if later there is a doctor, the decree will be revoked. If it is no longer needed, there is no more delegation." (P7, MoH-Primary Health Service)

Various views on task-shifting
In Indonesia, task-shifting has yet to become mainstream strategy to tackle treatment gap because the policymakers did not see it as a promising option. Furthermore, task-shifting was still considered new and stakeholders held different opinions about its definition and implementation.

"The concept [of task-shifting] is not yet determined. We're still looking for the [policy/program] format, so it's still uncertain. It is because the leaders' policy for task-shifting isn't there yet." (P1, MoH-CPMHRH)

"In Indonesia, the model is not task-shifting but collaboration among mental health professions

| Themes                               | Sub-themes                                      |
|--------------------------------------|-------------------------------------------------|
| Theme 1: Task-Shifting Feasibility and Acceptability | Legal framework                                 |
|                                      | Contextual dependability                         |
|                                      | In-service training                              |
|                                      | Various views on task-shifting                   |
| Theme 2: Shared Task Implementation   | Collaborative and coordinated care               |
|                                      | Staged and referral services                     |
|                                      | Communications technology innovation              |
|                                      | Intertwined and complementary roles              |
|                                      | Overwhelming administrative and other tasks      |
|                                      | Lack of delegation standards                     |
|                                      | Interprofessional bargain                         |
|                                      | Nurse competence boundaries                       |
|                                      | Unequal training distribution                     |
|                                      | Inadequate national-level supports                |
| Theme 3: Nurse Role Enhancement Issues| In-service training                              |
|                                      | "Ideally, they should have been given special training. If there are special needs [for mental health], ideally, it would be good if there is special briefing and training with a standardised curriculum." (P8, MoH-Primary Health Service)
|                                      | "Counselling, according to the theory, is a specialist competence. But in Indonesia, it's permitted if the [non-specialist] counsellor has been trained. Abroad, only senior or specialist nurses can provide it. [If it needs to be delegated], in principal, they should be trained first." (P11, INNA)
|                                      | "Task-shifting is a delegation caused by a big issue, such as high maternal and infant mortality rate. So it must be triggered by a big issue. For other issues, not yet. Well, for areas like villages where people are far away from doctors, simple [medical] treatment can be delivered [by nurses]." (P5, MoH-CPMHRH)
in accordance with their respective duties and authorities. As for task-shifting, according to my understanding, the task that should be done by a psychiatrist is delegated to a general practitioner, then to a nurse, right? This is delegation. For me, building a system for mental health is not using task-shifting." (P6, MoH-Mental Health)

"The context that will be explored is whether task shifting is more specialised or basic for a nurse to recognise social psychiatry. We really hope, for remote areas or in provinces that do not have mental hospitals, nurses or their teams with doctors have been equipped with how to do initial therapy for patients suspected or having symptoms. [...] Don't let this not be handled just because there has never been any training, no mental hospitals, or no psychiatrists in that district." (P7, MoH-Primary Health Service)

Shared Task Implementation
Although the concept of task-shifting was relatively new for some stakeholders, health personnel arrangements in primary health care have long existed in practice. However, in mental health contexts, they were implemented more of a "shared" manner than the "shifted" ones.

Collaborative and coordinated care
Collaboration and coordination were described as often being used to strategise mental health specialist shortages, for which the tasks were shared among stakeholders considering their roles and competences, instead of being shifted to only one or two parties.

"In reality, there is a lot of work that has been done by our colleagues in puskesmas, especially related to mental health and human resources. So, there are a lot of collaborative activities." (P10, INNA)

"I think civic engagement and task-shifting are interrelated concepts. Despite positive or good ideas, shifting the work and duties of health workers did not always run smoothly. Therefore, we should recognise the service users, from people with mental health disorders, their families or caregivers. Then we also know there are communities around them that are also stakeholders. Then, there are health workers, government, whether it's local at the village level, community level, or neighbourhood level." (P13, IPKJI)

Staged and referral services
Some stakeholders believed that mental health services should be carried out in stages, not only between interdisciplinary teams but also across service levels.

"The services should be levelled up to the end, to primary services, but still based on their authority in primary care. For instance, because the chronic condition is stable, by using a back referral system from mental health and psychosocial support, the patients can be treated there. If then they experience an exacerbation [...], the patients are referred [to the higher service level]." (P6, MoH-Mental Health)

"For mild common mental health disorders, the programs during home visits are educating families about mental health and how to find solutions if their complaints continue. If it's not successful, we will suggest to the family or patient themselves to visit the puskesmas. If in around one week the complaints still persist, then a referral will be given." (P17, Primary Care Nurse)

Communications technology innovation
Communication technology was identified as enabling the implementation of task-shifting and task-sharing, so the specialist did not have to present in person to manage mental health cases and nurses could obtain direct and real-time supervision to perform the delegated tasks.

"When they feel stuck or unable to do [the intervention], usually they will try to refer or ask other health workers from a remote location where the doctor is available. This is the reason for telemedicine, which allowed them to consult with other health workers who might understand more." (P7, MoH-Primary Health Service)

"There were some times when the patient experienced a condition that I couldn't solve on my own. So I asked the doctor to come immediately. Or sometimes via video call, I consulted with the doctor, either general practitioner or psychiatrist." (P15, Primary Care Nurse)

Intertwined and complementary roles
Some stakeholders believed that mental disorders were complex problems and thus required interdisciplinary approaches. Nurses were seen to have unique roles and competences, as did doctors and other health professionals.
"In primary care, the treatment was carried out by the team of doctors and nurses. The initial interview is conducted by a nurse, then the diagnosis is by a doctor. [After the doctor] gave therapy, medication and education, they are returned to the nurse again to be given nursing care. In my opinion, that is the ideal one. There are competencies that nurses do not have but general practitioners do. But there are also competencies that general practitioners do not have but nurses do." (P6, MoH- Mental Health)

"I could say medicine is indeed the [doctor's] domain, but it doesn't mean if we don't have medicine, we don't provide services. We still provide [nursing] care. [...] I always say that drugs can't make a person able to control hallucinations or to communicate or to socialise if we don't train them with care. I always emphasise that. Medicine is very important, but if there is no medicine, don't make the service unavailable." (P14, IPKJI)

Nurse Role Enhancement Issues
Nurses are identified as available from the top-level to community-based services. Therefore, nurses’ role enhancement was considered pivotal to strengthen the health system, especially in light of shortages of medical personnel. However, such enhancement was found to pose numerous challenges.

Overwhelming administrative and other tasks
Primary care nurses were often seen to be assigned to many programs and overwhelmed with administrative tasks.

"The mental health program holder is only one person in every puskesmas, but they manage not only one program. So many programs need to be managed which makes them not focus on that one [mental health] program." (P14, IPKJI)

"We have to carry out several programs. I myself can handle three, apart from the main services at puskesmas. All of my colleagues are also like that. One person can handle two or three." (P18, Primary Care Nurse)

Lack of delegation standards
Participants identified that nurses had raised concerned about the lack of delegation standards when they had to carry out medical interventions. To avoid legal problems, a written and documented delegation procedure is required to ensure the nurses’ safety while performing actions beyond their usual level of authority.

"There is a delegation of authority. So far, it hasn't been written yet, only a letter of assignment given to us which was brought by the psychiatrist. They immediately gave us orders to treat the mental health clients, so we just have to be ready. As there was already permission from the psychiatrist, [we felt] that also gave us the authority to act." (P15, Primary Care Nurse)

"I think the key word is: it should be in black and white, clearly from the top. And that’s what we need. There is legalisation that nursing is indeed allowed to have the authority to do certain things." (P13, IPKJI)

Interprofessional bargain
It was raised that task-shifting could not be carried out without involving and obtaining approval from the medical profession. However, to some extent, it was still seen to be difficult to get such approval as there was still a sense of competition among mental health professionals.

"We can’t say that we encourage it, because to issue a task-shifting policy is not easy. Because there are bargainings between professions, and determining boundaries on how far the competencies can be delegated is also complicated." (P5, MoH-CPMHRH)

"There’s a kind of sense of competition among mental health professionals, which ideally should be sit together." (P13, IPKJI)

Nurse competence boundaries
Participants recounted that recognition was something that nurses still fought for. Some stakeholders questioned whether nurses were capable of delivering the shifted tasks and what kind of interventions nurses could offer to treat people with mental health issues.

"It’s different when the task shifting was related to, for example, nurses carrying out environmental health or nutrition services. Maybe the friction or problems that will arise [are minimum]. If it’s about medical treatment and so on, there are risks given the limited knowledge [of nurses] about medications or diagnosing a disease, causing them to be at risk of giving the wrong prescription." (P8, MoH-Primary Health Service)

"In more developed countries, we know there are
shared competences that can be done together. For example, a specialist therapy, cognitive behaviour therapy [CBT]. How about Indonesia? Therapies such as CBT should be carried out and recognised by all professional health workers, mental health workers, and also the community, as a competence that is mutually shared, including for nurses. I think that’s our task [to achieve that].” (P13, IPKJI)

**Unequal training distribution**

Despite being pivotal, standardised mental health training was seen to not be widely available for nurses, especially in remote areas.

“In our some districts], all [mental health] nurses have been trained about CMHN [community mental health nursing], but in other districts there are none. So, it affects their ability to provide care.” (P14, IPKJI)

“There is CMHN in some provinces, including East Java, but in other provinces it is not evenly distributed depending on the provincial government. So yes, we are already there [providing training], but how can it be leveled up until evenly distributed [to all regions]?” (P13, IPKJI)

**Inadequate national-level supports**

The implementation of task-shifting and task-sharing was seen to require a myriad of supports both from government and professional organisations. However, the current supports were deemed to be insufficient to drive the implementation of task-shifting.

“If you want the ideal, [the support] should be from the top, from the national level will be very strong. And in the process it certainly involves multi-professions. If the top said A, the bottom will be A, right? However, if from the top is not clear, it would not be A but given the authority to each provincial or regional government. They will make their own policies.” (P13, IPKJI)

“The ones who know best about regulations and the impact of unregulated interventions are professional organisations. It’s mandatory for professional organisations to advocate and lobby primary care units to encourage official and regulated delegation.” (P14, IPKJI)

**Discussion**

This study explored the perspectives of stakeholders on the implementation of mental health task-shifting in Indonesia with three key themes emerging: task-shifting feasibility and acceptability, shared task implementation, and nurses’ role enhancement issues.

**Theme 1: Task-shifting feasibility and acceptability**

It was recognised that a number of aspects should be considered when implementing task-shifting. The first of these is a legal framework. The WHO has emphasised that task-shifting should be supported by appropriate health legislation and administrative regulation that enables checks and balances and ensures the safety of both patients and health workers involved [47]. Otherwise, task-shifting implementation can induce jurisdictional debates on nurses’ scope of practice [48]. In Indonesia, at least two laws have covered task-shifting topics: Health Workers and Nursing Laws. These laws grant permission to nurses and health workers to provide medical services in certain limited contexts in the absence of medical personnel. The implementation should consider the providers’ competence and authorisation from the regional government [29, 30]. Indonesia’s laws have generally regulated the task-shifting standards, including the requirements that must be fulfilled upon implementation. Technical guidelines, however, are still needed to make sure the task-shifting is implemented smoothly and sustainably.

The requirements set by the laws are also in line with the other aspects covered in this theme, namely appropriate contexts in which task-shifting is urgently needed, in-service training to enhance the providers’ competence, and acceptability from stakeholders. These aspects correspond with task-shifting implementation criteria recommended by a systematic review and an international Delphi study involving participants from the United States, South Africa, United Kingdom, Nigeria, India, and Australia, among others, trained health providers, existing health human resources shortage or inaccessibility, important health issues, and socially acceptable interventions [33, 49]. These requirements are needed to maintain quality and ensure effective and efficient implementation.

Regarding acceptability, stakeholders in this study had different attitudes on task-shifting. One stakeholder opposed task-shifting, given that they believed mental health services should be conducted collaboratively in accordance with each profession’s competence. Meanwhile, others supported the implementation citing that task-shifting is needed to make sure no one is left behind. This finding corresponds with some evidence
from some countries in Africa and South Asia finding that stakeholders generally have various attitudes on task-shifting, either positive, negative, neutral, or even skeptical [33, 50]. Opposing views can be barriers to task-shifting implementation, particularly if they come from policymakers.

**Theme 2: Shared Task Implementation**

Despite different views on task-shifting, participants in this study had similar perceptions about the collaborative nature of mental health services. This supports the use of so-called ‘task-sharing’, a term that is closely linked with task-shifting. Although both terms similarly involve redistribution of duties among health workers, task-shifting gives more emphasis on task delegation or transfer, while task-sharing focuses on the involvement of providers with different qualifications to complete the tasks [49]. An Indonesian-based grounded theory coined the term ‘connecting care’ to describe collaborative mental health service models that involve multiple stakeholders [51]. Therefore, we consider that task-sharing is generally more acceptable for most stakeholders in Indonesia compared to task-shifting.

Task-sharing is implemented based on the intertwined and complementary roles of mental health workers through some approaches, e.g., collaborative and coordinated care; staged and referral services; and communication technology utilisation. These approaches are supported by a literature review as evidence-based components that facilitate task-sharing [52]. Usually implemented within a system involving various care components, from specialist services to self-care, these approaches also correspond with the WHO pyramid framework designed to provide optimal mental health services [53, 54]. Furthermore, communication technology, such as phone calls or Whatsapp, plays a pivotal role in mediating collaboration and care delivery. A systematic review identified technology as a strategy to leverage the scope of mental health services [31]. Another study focusing on developing medical devices for task-shifting for health professionals in Ethiopia, Ghana, and Uganda revealed devices should be easy to use, safe, and effective, especially for target users, i.e., less specialised health workers [55]. Technology utilisation can improve agility and responsiveness of mental health services and allows task-shifting to be demanded.

**Themes 3: Nurses’ role enhancement issues**

Task-shifting (and task-sharing) require nurses’ roles to be enhanced. However, this study found that the enhancement process faced numerous barriers. First, nurses had administrative and other task responsibilities, such as finance, medical record maintenance, nutrition, health promotion, and environmental health. Primary care nurses may not be able to provide optimum services if they are burdened with too many administrative tasks [56]. Second, nurse delegation procedures were unstandardised. Delegations that do not follow any protocol or standard can raise accountability problems and be detrimental to nurses [57]. In Indonesia’s context, nurses carrying out medical actions without written delegation can be considered a criminal case [58]. Therefore, nurses’ role enhancement should be supported by policies to reduce unnecessary burdens and develop standardised delegation protocols.

Third, participants raised serious concerns about nurses’ abilities in undertaking medical tasks and which tasks could be performed independently by nurses. These concerns were associated with the duration of training and scope of practice, particularly on diagnostics and therapeutics, which are considered insufficient to take on medical roles [59, 60]. Fourth, there is potential resistance from the medical profession regarding task-shifting implementation. Doctors were concerned that nurses would take their authority and threaten their jobs [61]. Therefore, doctors preferred nurses to carry out only non-medical tasks [60].

Fifth, nurses’ role enhancements were found to be hindered by unequal training distribution. In-service training determines task-shifting feasibility [31, 62, 63] and can improve the knowledge, skills, and confidence of non-specialist health workers to deliver mental health interventions [64]. However, training and supervision for mental health task-shifting were generally seen to be lacking in terms of duration and frequency [34]. Policymakers should provide regular training and supervision for nurses to improve their abilities in delivering mental health services.

Sixth, supports from national-level stakeholders was perceived by participants to be lacking. In general, the participation of nurses in the policy-making process is also still very limited [65]. Therefore, nurses need to be encouraged to be more involved in the policy-making process, both at clinical, local, and national levels. Compared to the medical profession, nurses were particularly seen to be lacking representation in policymaking institutions.

**Strength and limitations**

This is the first qualitative study to explore task-shifting and task-sharing in Indonesia involving stakeholders from national to clinical levels and could be a reference for the development of the emerging approaches in Indonesia and other settings, especially low-and-middle income countries where mental health services are not widely available in primary care.
Besides those strengths, this study has several limitations. Multi-leveled participants involved made it difficult to find commonalities in their answers, especially among national-level participants. This situation was inevitable as these participants had different backgrounds, positions, and organisations with their respective roles and proximity to task-shifting and task-sharing issues. Data from primary care nurses was saturated after the third participant and interviews were stopped at the fifth. For other participants, the investigators did not wait until the data was saturated and stopped data collection after all invitees were interviewed, unless they were unavailable or not responding.

Although some stakeholders have medical backgrounds, official representatives from medical professional organisations could not be recruited in the given research period, particularly from the Indonesian Psychiatric Association, so this study could not capture their opinions. Besides, invitations were addressed to the organisation and position instead of the person. The organisation appointed their representatives, which made the investigators could not control the personal representations such as gender and professional background.

The investigators planned to involve clinicians from some regions to capture different perspectives. However, due to implementation of COVID-19 restrictions, only primary care nurses from Bali Province could be interviewed. Therefore, this study cannot capture clinical situations in broader contexts to enrich the data as mental health services in each region are likely to be different. The findings are limited to the Indonesian context that has specific circumstances regarding the availability of mental health services and the supporting systems. Implementation in other countries requires careful examination.

The three-month gap became an obstacle as it significantly changed the research plan set by the investigators. It also delayed the data collection, analysis and manuscript writing. As the funder had a strict reporting deadline to adhere, the investigators cannot sent the transcript and research findings to all participants to get appropriate member checking.

Conclusions
Despite facing numerous challenges, task-shifting in mental health service delivery has been practised in Indonesia for many years, especially in collaborative and coordinated formats (i.e., task-sharing). Interprofessional collaboration across stakeholders is inevitable to ensure the best quality services of mental health care in community, particularly in rural and remote areas. This becomes more important when task-sharing has a more practical basis in Indonesia’s mental health services compared to task-shifting.

For future practice, the implementation of task-shifting or task-sharing of mental health interventions requires the involvement of highly skilled primary care nurses. Nurses have to improve their knowledge and skills in managing mental health patients through continuous training and education. Supporting laws and policies are pivotal for the sustainability of task-shifting and task-sharing. Nurses also need to consider legal aspects before accepting any delegated medical tasks, which are beyond their scope of practice, to avoid ethical or legal issues.

Further studies should assess the need to implement task-shifting or task-sharing from local leaders in very remote areas where mental health specialists are not available. The capacity of primary care nurses to undertake advanced mental health tasks also needs to be explored. This study can be initial guidance for nurses who have to undertake extended roles in mental health services in rural and remote settings.

Abbreviations
CMHN: Community Mental Health Nursing; COVID-19: Coronavirus Disease 2019; IMA: Indonesian Medical Association; INNA: Indonesian National Nurses Association; IPKJI; Indonesian Mental Health Nurses Association; PDSKJI: Indonesian Psychiatric Association; Puskesmas: Pusat Kesehatan Masyarakat (Community Health Centre); WHO-WHMS: World Health Organization World Mental Health Survey.

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Authors’ contributions
FE and GEA designed the study, collected and interpreted the data, drafted the work and substantively revised it. AY contributed to the data collection and interpretation. LM critically and substantively revised the work. All authors read and approved the final version of the work.

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Availability of data and materials
All relevant data are within the paper and its supporting information files.

Declaration
Ethics approval and consent to participate
This study received ethical approval from the Health Research Ethics Committee, Faculty of Nursing, Universitas Airlangga, No. 2281-KEPK, on June 9th, 2021. Participants voluntarily participated and signed informed consent before data collection started. All methods conducted adhered to the relevant guidelines and regulations in accordance with the Declaration of Helsinki.

Consent for publication
Not applicable.
Competing interests

The authors declare that they have no competing interests.

Author details

1. Hay SI, Abajobir AA, Abate KH, Abbafati C, Abbas KM, Abd-Allah F, et al. Global, regional, and national disability-adjusted life-years (DALYS) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet [Internet]. 2017;390:1260–344 Available from: https://linkinghub.elsevier.com/retrieve/pii/S014067361732130X. Accessed 14 Jan 2020.

2. Chesney E, Goodwin GM, Fazel S. Risks of all-cause and suicide mortality in mental disorders: a meta-review. World Psychiatry [Internet]. 2014;13:153–60. Available from: https://doi.org/10.1016/j.wopsp.2012.8.

3. Xiong J, Lipsitz O, Nasiri F, Lui LW,M, Gill H, Phan L, et al. Impact of COVID-19 pandemic on mental health in the general population: A systematic review. J Affect Disord [Internet]. 2020 277:55–64. Available from: https://doi.org/10.1016/j.jad.2020.08.0010.

4. Thornicroft G. Most people with mental illness are not treated. Lancet [Internet]. 2007; [cited 2020 Jun 24];370:807–8. Available from: www.thelancet.com. Accessed 24 June 2020.

5. Kohn R, Saxena S, Levav I, Saraceno B. The treatment gap in mental health care: Bull World Health Organ [Internet]. World Health Organization; 2004 [cited 2020 Jun 18];82:858–66. Available from: http://www.who.int/bulletin. Accessed 18 June 2020.

6. WHO. Developing Country Specific Community-Based Strategies for Reduction of Treatment Gap in Common Neuropsychiatric Conditions. Rep. an Intercountry Work. New Delhi, India, 18-20 Novemb. New Delhi, World Health Organization, 2004. p. 2005.

7. Patel V, Prince M. Global Mental Health: a new global health field comes of age. JAMA [Internet]. 2010 [cited 2020 Jun 20];303:1976. Available from: https://www.who.int/mental_health/evidence/atlas/profibond2017/IDN/pdf/2017.pdf?sequence=1. Accessed 6 Sept 2018.

8. Thornicroft G. Most people with mental illness are not treated. Lancet [Internet]. 2007; [cited 2020 Jun 24];370:807–8. Available from: www.thelancet.com. Accessed 24 June 2020.

9. Kohn R, Saxena S, Levav I, Saraceno B. The treatment gap in mental health care: Bull World Health Organ [Internet]. World Health Organization; 2004 [cited 2020 Jun 18];82:858–66. Available from: http://www.who.int/bulletin. Accessed 18 June 2020.

10. Kaligis F, Indraswari MT, Ismail RI. Stress during COVID-19 pandemic: a systematic review. Hum Resour Health [Internet]. 2017;15:29 Available from: http://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0209-9. Accessed 26 June 2020.

11. Martínez-González NA, Tandjung R, Djališ S, Rosenmann T. The impact of physician–nurse task shifting in primary care on the course of disease: a systematic review. Hum Resour Health [Internet]. 2015;13:55 Available from: https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-015-0049-8. Accessed 18 Aug 2020.

12. Idris F. Task Delegation Versus Task Shifting in the Indonesia Health Service [Internet]. World Med. J. 2011; Available from: www.wma.net. Accessed 30 July 2020.

13. Trisnantoro L, Soemantari S, Singhij B, Pritasari K, Mulasti E, Agung FH, et al. Reducing child mortality in Indonesia. Bull World Health Organ. 2010;88:642.

14. Deusom RH, Rottach E, Prabavanti C, Rahmat E, Rachmawati T, Sirajul-munir N. Health Workforce Assessment in Jakarta for Effective HIV Policy Implementation: Challenges and Opportunities toward Epidemic Control. J Dien Kesehat Indonesia. 2019;3.

15. Anjara SG, Bonetto C, Ganguli P, Setiyawati D, Mahendradhata Y, Yoga BH, et al. Can General Practitioners manage mental disorders in primary care? A partially randomised, pragmatic, cluster trial. Martinuzzi A, editor. PLoS One [Internet]. 2019;14:e0224724. Available from: https://doi.org/10.1371/journal.pone.0224724.

16. Efendi et al. BMC Nursing [2022] 21:165 Page 10 of 11

17. Republic of Indonesia. Laws No. 36th of 2014 on Health Workers. 2014.

18. Sideman G, Atun R. Does task-shifting yield cost savings and improve efficiency for health systems? A systematic review of evidence from low-income and middle-income countries. Hum Resour Health [Internet]. 2017;8:7–18 Available from: https://linkinghub.elsevier.com/retrieve/pii/S0005796716300997.

19. Kazdin AE. Addressing the treatment gap: A key challenge for extending evidence-based psychosocial interventions. Behav Res Ther [Internet]. 2017;88:7–18 Available from: https://linkinghub.elsevier.com/retrieve/pii/S0005796716300997.

20. Seidman G, Atun R. Does task shifting yield cost savings and improve efficiency for health systems? A systematic review of evidence from low-income and middle-income countries. Hum Resour Health [Internet]. 2017;8:7–18 Available from: https://linkinghub.elsevier.com/retrieve/pii/S0005796716300997.

21. Bateman AL, Tredwell D, Brummett CM, Garg R, Hintzpeter B, Mccarty T, et al. Use of mental health services for anxiety, mood, and substance-abuse disorders in 17 countries in the WHO World Health surveys. Soc Sci Med [Internet]. 2010;97:82–6. Available from: https://doi.org/10.1016/j.socscimed.2013.08.004.

22. Idris F. Task Delegation Versus Task Shifting in the Indonesia Health Service [Internet]. World Med. J. 2011; Available from: www.wma.net. Accessed 30 July 2020.

23. Trisnantoro L, Soemantari S, Singhij B, Pritasari K, Mulasti E, Agung FH, et al. Reducing child mortality in Indonesia. Bull World Health Organ. 2010;88:642.

24. Deusom RH, Rottach E, Prabavanti C, Rahmat E, Rachmawati T, Sirajul-munir N. Health Workforce Assessment in Jakarta for Effective HIV Policy Implementation: Challenges and Opportunities toward Epidemic Control. J Dien Kesehat Indonesia. 2019;3.

25. Anjara SG, Bonetto C, Ganguli P, Setiyawati D, Mahendradhata Y, Yoga BH, et al. Can General Practitioners manage mental disorders in primary care? A partially randomised, pragmatic, cluster trial. Martinuzzi A, editor. PLoS One [Internet]. 2019;14:e0224724. Available from: https://doi.org/10.1371/journal.pone.0224724.

26. Praharsi NP, Pols H, Tillipoulos N. Mental health literacy of Indonesian health practitioners and implications for mental health system development. Asian J Psychiatr [Internet]. 2020;54:102168. Available from: https://doi.org/10.1016/j.ajp.2020.102168.

27. Ruskar D, Helmi M, Widana I, Nurrobi T, Ramtomo T. Task shifting dalam pendistribusian obat di rumah sakit darurat penanganan COVID-19. Wisma Atlet Kemayoran. J Kebijak Kesehat Indonesia. 2021;10:112–9.

28. Sidrapotro P. Task shifting in rural area. Japan Med Assoc J. 2010;53:398–402.

29. Republic of Indonesia. Laws No. 38th of 2014 on Nursing. 2014.

30. Republic of Indonesia. Laws No. 36th of 2014 on Health Workers. 2014.

31. Hoefj TJ, Fortney JC, Patel V, Unutzer J. Task-Sharing Approaches to Improve Mental Health Care in Rural and Other Low-Resource Settings: A Systematic Review. J Rural Heal [Internet]. 2018 34:48–62. Available from: https://doi.org/10.1111/jrh.12229.

32. van Ginneken N, Thayan P, Lewin S, Rao GN, Meera S, Pian J, et al. Non-specialist health worker interventions for the care of mental, neurological and substance-abuse disorders in low- and middle-income countries. Cochrane Database Syst Rev [Internet]. 2013;2013:131–2. Available from: https://doi.org/10.1002/14651858.CD009149.pub2.

33. Padmanathan P, De Silva MJ. The acceptability and feasibility of task-sharing for mental healthcare in low and middle income countries: A systematic review. Soc Sci Med [Internet]. 2013 97:82–6. Available from: https://doi.org/10.1016/j.socscimed.2013.08.004.
Shahmalak U, Blakemore A, Waheed MW, Waheed W. The experiences of lay health workers trained in task-shifting psychological interventions: a qualitative systematic review. Int J Ment Health Syst [Internet]. 2019;13:64. Available from: https://doi.org/10.1186/s13033-019-0320-9.

Dham P, Colman S, Saperson K, MacIney C, Lourenco L, Kates N, et al. Collaborative Care for Psychiatric Disorders in Older Adults: A Systematic Review. Can J Psychiatry [Internet]. 2017;62:761–771. Available from: https://doi.org/10.1177/0706743717720699.

Ola BA, Atiolu O. Task-shifted interventions for depression delivered by lay primary health-care workers in low-income and middle-income countries [Internet]. The Lancet Global Health. 2019;7:e829–30. [cited 2020 Sep 16]. Available from: www.thelancet.com/lancetchgh. Accessed 6 Sept 2020.

van Straaten A, Hill J, Richards DA, Cuipers P. Stepped care treatment delivery for depression: a systematic review and meta-analysis. Psychol Med [Internet]. 2015;45:231–246. Available from: https://doi.org/10.1017/ S0140525X14000701.

Galvin M, Byansi W. A Systematic Review of Task Shifting for Mental Health in Sub-Saharan Africa. Int J Ment Health Syst [Internet]. 2020;1–25 Available from: https://www.tandfonline.com/action/journalInformation?journalCode=cmih20. Accessed 18 Aug 2020.

Verhey IJ, Ryan GK, Scherer N, Magidson JF. Implementation outcomes of cognitive behavioural therapy delivered by non-specialists for common mental disorders and substance-use disorders in low- and middle-income countries: A systematic review. Int J Ment Health Syst [Internet]. 2020;14:1–14. Available from: https://doi.org/10.1186/s13033-020-00372-9.

Ekers D, Murphy R, Archer J, Ebenezer C, Kemp D, Gilbody S. Nurse-delivered collaborative care for depression and long-term physical conditions: A systematic review and meta-analysis. J Affect Disord [Internet]. 2013;149:14–22. Available from: https://doi.org/10.1016/j.jad.2013.02.032.

Halcomb EJ, McNines S, Patterson C, Moxham L. Nurse-delivered interventions for mental health in primary care: A systematic review of randomised controlled trials. Fam Pract [Internet]. 2018;36:64–71. Available from: https://academic.oup.com/fampra/article-abstract/36/1/64/5144972.

Hunter DJ, McCullum J, Howes D. Defining Explanatory-Descriptive Qualitative (EDQ) research and considering its application to healthcare. J Nurs Heal Care [Internet]. 2019;4 Available from: http://eprints.gla.ac.uk/180272/http://eprints.gla.ac.uk. Accessed 12 Jan 2022.

WHO. mhGAP Intervention Guide for mental, neurological and substance use disorders in non-specialized health settings Version 2. Geneva: World Health Organization; 2016.

Hastings SL. Triangulation. In: Salkind N, editor. Encyl Res Des [Internet]. Thousand Oaks, CA: SAGE Publications, Inc.; 2012 [cited 2013 Nov 24]. p. 1538–40. Available from: https://doi.org/10.4135/9781412961288.

Heale R, Forbes D. Understanding triangulation in research. Evid Based Nurs [Internet]. 2013;16:98 Available from: http://ebn.bmj.com/. Accessed 13 Dec 2019.

Vaisaradi M, Turunen H, Bondas T. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. Nurs Health Sci [Internet]. 2013;15:398–405. Available from: https://doi.org/10.1111/nhs.12048.

WHO. PEPFAR, UNAIDS. Task Shifting: rational redistribution of tasks among health workforce teams: Global Recomendations and Guidelines. Geneva. 2008. https://apps.who.int/iris/bitstream/handle/10665/43821/9789241500809-eng.pdf?sequence=1. Accessed 25 June 2020.

Mijovic H, McKnight J, English M. What does the literature tell us about health workers’ experiences of task-shifting projects in sub-Saharan Africa? A systematic, qualitative review. J Clin Nurs. 2016;25:2083–100.

Orkin AM, Rao S, Venugopal J, Rithudeogna N, Weger P, Ritchie SD, et al. Conceptual framework for task shifting and task sharing: an international Delphi study. Hum Resour Health [Internet]. 2021;19:1–8. Available from: https://doi.org/10.1186/s12992-021-00694-6.

Dambiya YM, Matinhure S. Policy and programmatic implications of task shifting in Uganda: a case study. BMC Health Serv Res [Internet]. 2012;12:61 Available from: https://bmchealthservs.biomedcentral.com/articles/10.1186/1478-7026-12-61.

Nurjannah I, Mills L, Park T, Usher K. Human rights of the mentally ill in Indonesia. Int Nurs Rev. 2015;62:153–61.

Raviola G, Naslund JA, Smith SL, Patel V. Innovative Models in Mental Health Delivery Systems: Task Sharing Care with Non-specialist Providers to Close the Mental Health Treatment Gap. Curr Psychiatry Rep [Internet]. 2019 21:14. Available from: https://doi.org/10.1007/s11920-019-1028-x.

Patel V, Chisholm D, Dua T, Laxminarayan R, Medina-Mora ME. Mental, Neurological, and Substance Use Disorders. Dis. Control Priorities, Third Ed. (Volume 4); Ment. Neurol. Subst. Use Disco. Washington DC: World Bank, 2017.

WHO. Integrating mental health into primary care. Geneva: World Health Organization and World Organization of Family Doctors (Wonca); 2008.

Sabet Servestani A, Coulentinos M, Senikho RH. Defining and characterizing task-shifting medical devices. Global Health [Internet]. 2021 17:60. Available from: https://doi.org/10.1186/s12992-021-00684-4.

Norful A, Martsolf G, de Jacq K, Poghosyan L. Utilization of registered nurses in primary care teams: A systematic review. Int J Nurs Stud [Internet]. 2017;74:15–23. Available from: https://doi.org/10.1016/jijnurstu. 2017.05.013.

Richards A, Carley J, Jenkins-Clarke S, Richards DA. Skill mix between nurses and doctors working in primary care-delegation or allocation: A review of the literature. Int J Nurs Stud. 2000;37:185–97.

Suryanti R, Putra Jaya NS, Pujiyono. Legal Protection of Nurses in Medical Action on the Basis of Delegation of Doctors. Indian J Forensic Med Toxicol. 2021;15:3947–53.

Rashid C. Benefits and limitations of nurses taking on aspects of the clinical role of doctors in primary care: Integrative literature review. J Adv Nurs [Internet]. 2010;66:1658–170. Available from: https://doi.org/10.1111/j.1365-2648.2010.05537.x.

Karimi-Shahjanari A, Shakibazadeh E, Rashidian A, Hajimini K, Glenton C, Noyes J, et al. Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: A qualitative evidence synthesis. Cochrane Database Syst Rev. 2019;2019.

Wilson A, Pearson D, Haasay A. Barriers to developing the nurse practitioner role in primary care - The GP perspective. Fam Pract. 2002;19:1641–6.

Spedding M, Stein D, Sorsdahl K. Task-shifting psychosocial interventions in public mental health: a review of the evidence in the South African context. South African Heal Rev [Internet]. 2015;2014(2015):73–87. Available from: https://journals.co.za/content/healthr/2014/1/EC189295.

Aurtski GE, Wilson I. Nurse-led task-shifting strategies to substitute for mental health specialists in primary care: A systematic review. Int J Nurs Pract [Internet]. 2022;28 Available from: https://onlinelibrary.wiley.com/d/doi/full/10.1111/j.1193-1046. Accessed 13 Mar 2022.

Caultfield A, Vatansever D, Lambert G, Van Bortel T. WHO guidance on mental health training: A systematic review of the progress for non-specialist health workers. BMJ Open [Internet]. 2019;9:24059 Available from: http://bmjopen.bmj.com/. Accessed 24 Aug 2020.

Hajizadeh A, Zamanzadeh V, Kakemam E, Bahreini R, Khodayari-Zarnaqi N. The impact of task shifting on mental health care workers in Iran: A Delphi study. Hum Resour Health [Internet]. 2021 19:1–8. Available from: https://doi.org/10.1186/s12960-021-00605-z.

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