

An Exploration of Psychological First Aid in Climatic Disaster Contexts of the Pacific Islands

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Abstract

Psychological first aid is an activity of mental health and psychosocial support. This study reviews the purpose of the Inter-Agency Standing Committee (ISAC) guidelines on mental health and psychosocial support and the level of intervention. The study also uses survey questionnaires to explore psychological first aid (PFA) interventions in the context of climate disasters in Pacific Island countries (PICs). In addition, the keyphrases were used to search for published scientific articles on PFA in PICs. The review of ISAC guidelines indicates that the intervention matrix can be applied to prevent and, at the same time, promote recovery. The literature review demonstrates the effectiveness of PFA activity intervention in different contexts. However, such studies on the climate disaster context of the PICs are lacking. A preliminary online survey found that 50% of PFA is part of the disaster response, recovery and rehabilitation program. The study reveals that the current PFA has a low level of consultation and lacks strategic planning and localization. However, the PFA is widely used and is acceptable as a valuable tool during climate disaster response and recovery. There are limitations to this research, and it requires further in-depth study. Some recommendations suggest filling these gaps as areas of improvement for PICs, such as community consultations, based on community needs to ensure that PFA intervention in the context is measurable and recognized. A preventive approach should therefore be taken into account to build mental resilience.

Keywords: Effectiveness of PFA, the Effectiveness of Psychological First Aid, Pacific Island Countries

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Introduction

Recent years have seen psychological first aid (PFA) intervention as an upcoming mental health and psychosocial support (MHPSS) activity in responding to natural and climatic disasters and health emergencies. Climatic disasters more significantly impact Pacific Island Countries (PICs) due to their demographic, location and size. In addition, the health effects of climate catastrophes and pandemics are increasing (Ober & Bakumenko, 2020). Climate disasters in the PICs have destroyed infrastructure and shelter, affected livelihoods and raised public health and socioeconomic issues. Furthermore, the effects of global warming, sea level rise and storm-driven flooding are likely to increase, making smaller islands more susceptible to disasters (Williams & Gutierrez, 2009). Several natural disasters have been observed in the PICs in recent years, including the tsunami in Tonga and King Tide Waves in Fiji, Tuvalu, Cook Islands and Hawaii in 2022, as well as two major tropical cyclones in Vanuatu within 24 hours in early 2023.

PFA provides practical assistance, emotional comfort, and social support using skills designed to assist individuals, communities, and families exposed to traumatic or stressful situations. Therefore, any individual with proper PFA training should be able to provide PFA assistance. The need for PFA is more established as a reactive approach to disaster emergencies rather than an action that, if implemented proactively, can build psychological resilience. Nevertheless, the impacts of disasters have highlighted the growing need for mental health in emergencies, especially for PFA (Zafar, et al., 2021) & (Everly & Lating, 2021). However, this increase with lack of consideration given the event types, contextualization and localization makes it challenging to measure the effectiveness of the intervention, let alone its implementation trends, impacts and issues.

Therefore, this study identifies the critical functions of contextualization using the MHPSS intervention pyramid and explores PFA intervention in the climatic disaster context of PICs using desktop review, online survey questionnaires and interviews. In addition, the study gains insight into the dynamics of PFA effectiveness through a literature review and explores the areas of improvement needed for PICs. The study's outcome aims to inform policy and decision-makers, providers and trainers on ways to enhance mental health support services through PFA to ensure appropriate policies, training and timely psychological support in times of disaster emergencies.

Background Literature Review

PFA support individuals exposed to traumatic events to cope better by providing a safe and supportive environment. PFA is an in-built psychosocial support (PSS) activity in the MHPSS intervention pyramid (Inter-Agency Standing Committee (IASC), 2007). PFA, defined in a disaster context, is the first and most immediate support for people who go through stressful and traumatic situations. The expert consensus primarily recognizes the PFA interventions as an activity for extreme events, disaster response, and recovery (Shultz & Forbes, 2014). A study confirms that PFA is an identified approach to a broader public health strategy to address distress after an event and supposedly a mental health education in the community (Newnham, et al., 2020). The IFRC (2018) states that PFA uses core principles to help people recover from distress, including providing safety, calming distress, coping, encouraging self-help and connecting people to social supports, a principle adopted from Hobfoll et al. (IFRC, 2018). The John Hopkins model defines PFA as a continuum of care integrating physical first aid and the psychological, supportive, and compassionate

notion of recognizing and mitigating distress (Everly & Lating, 2017). Thus, PFA provides a framework to help distressed people build coping skills and reconnect with their community. The ongoing climate change events will continue to negatively impact the health of vulnerable communities, affecting their socioeconomic capacity. Dawes et al. (2019) noted mental illness issues in developing PICs as an impact of natural disasters. The study acknowledged the need for mental health services against the inadequacy and unavailability of such services post-disaster (Dawes et al., 2019). In addition, the need for immediate assistance to mental well-being post-crisis in Fiji, and in some cases, the need for longer-term psychosocial support, was identified (Empower Pacific, 2016).

A tropical cyclone has many impacts, including damage to the agriculture infrastructure, psychological impacts and a rise in health epidemics. In addition, cyclone brings in economic loss and derail effects on economic development (Deo, et al., 2022). For example, in tropical cyclone Winston in Fiji, 15,661 people assessed direct PFA services by a PSS provider. Of these, 9367 were girls and women, indicating that girls and women were the primary beneficiaries standing at 59.8%. In contrast, boys and men stood at 40.2% (Empower Pacific, 2016). However, data from Tropical Cyclone Harold in Fiji shows that 50.89% of the people who benefited were boys and men, and 56.34% were girls and women. Therefore, a slight increase in males' percentage to 10.69% and a decrease in girls and women by 3.46% were seen during TC Harold in 2020 (Empower Pacific, 2020). This fluctuation, associated with many aspects, is seen as one of the research gaps. However, there is no data stating why there has been a fluctuation and what could be the reasons for gender disparity. In addition, contextualization should pay attention to gender, integrate relevant multi-sectoral considerations, access to a range of support according to the intervention pyramid, use appropriate language, and avoid using assessment tools that have not yet been validated in the local or climate disaster context (Inter-Agency Standing Committee (IASC), 2007).

PFA in the humanitarian context is designed to assist individuals and groups under stress and distress, making them feel calm and supporting the distressed with coping mechanisms (IFRC, 2020). The basis of PFA, however, is to adopt a humane approach to support and care for individuals during and in times of distress (Inter-Agency Standing Committee (IASC), 2007). According to the Empower Pacific 2016 annual report, most longer-term support groups are people who lack family support and live alone, families who have lost breadwinners or loved ones, people with disabilities and single parents in maritime and remote areas (Empower Pacific, 2016). While attempting to rebuild their lives, the service focused on ensuring safety concerns and normalizing feelings for those affected with practical support (Empower Pacific, 2016).

The MHPSS intervention pyramid is used in emergency settings and recognized by multiple sectors (Inter-Agency Standing Committee (IASC), 2007). MHPSS is a broad concept of specialized and non-specialized levels of emergency support, as shown in Figure 1.



*Figure 1 Mental Health and Psychosocial Support Intervention Pyramid
(Source: IASC, 2020)*

The IASC defines MHPSS as "any kind of external or local support aimed at promoting and protecting psychosocial well-being, assisting and preventing mental illness" Pg 2 (Inter-Agency Standing Committee (IASC), 2007). The intervention pyramid shows the range of integration from recognizing services with more severe conditions to essential services embedding cultural and social considerations. PFA is an in-built concept of the overall MHPSS intervention pyramid (IFRC, 2018). The bottom three activities of the intervention pyramid are supporting primary, social and security concerns, strengthening the capacity through family and community support and other non-specialized support that can reach through PFA activities (Inter-Agency Standing Committee (IASC), 2007).

The MHPSS in emergency settings has a clear matrix of intervention with cross-cutting domains and social considerations to explain the type of response. The type of response includes (1) emergency preparedness with rapid implementation, (2) the minimum response implemented immediately with high priority and (3) a comprehensive response implemented during stabilized and recovery phase (Inter-Agency Standing Committee (IASC), 2007). PFA applies in all three types of response. The domains tell when an emergency happens and what needs consideration at each stage. However, scientific research is not entirely detailed on whether the exact areas can form a framework for building the psychological resilience of the vulnerable community as a proactive intervention and if the effectiveness is determined. Therefore, more priority and assessment on emergency preparedness is necessary. Furthermore, there is a lack of scientific evidence on proactive PFA implementation to make the climate-vulnerable community psychologically resilient before a potential disaster occurs.

There is also insufficient evidence on the effectiveness or impacts of integrating PFA activity into the health, disaster and climate change resilience Program. However, PFA can be integrated as part of other interventions or a stand-alone activity because knowledge and skills are not limited to either psychosocial programmes or reactions (IFRC, 2018). In addition, community engagement and stakeholder consultation are critical at all PFA intervention levels, whether proactive or reactive. For example, in response to the tropical cyclone Yasa response in Fiji, many organizations providing psychosocial support intervened in affected areas with communities having no idea of their scope of work or purpose. How many of them returned to meet the needs of individuals and communities? This question needs further exploration.

The "do" and "do not" outlined in the IASC MHPSS intervention can form indicators for contextualization and, above all, can also be considered for proactive or psychological resilience programs. One ideal contextualization is learning about the local cultural practices without assuming that practices or techniques from the universal concept will necessarily be better in the local context (Inter-Agency Standing Committee (IASC), 2007). The establishment of coordination support with stakeholders and the ability to determine a response should form policies and procedures, a localized training manual, and proper assessment tools for monitoring and evaluation tailored to the local context and type of disasters (Inter-Agency Standing Committee (IASC), 2007). The IASC model further outlines that facilitation should include developing community-owned run programmes and management by the community. The efficacy of PFA could only be more feasible if a proactive approach integrates this activity into climate or disaster resilience programs. Contextualization should also reflect two-way communication, locally appropriate coping solutions and building local capacities by supporting self-help within their resources (Inter-Agency Standing Committee (IASC), 2007).

Methods

This study explores the current trend of PFA in the Pacific countries. One of the agencies that significantly responded to the disaster in their country participated in responding to survey questionnaires and followed by four countries participating in the online interviews. Therefore, this study used semi-structured interviews to explore the PFA trend in the PICs.

PICs include the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Palau, Nauru, Tuvalu, Solomon Islands, New Caledonia, Tonga, Wallis and Futuna, New Zealand and Vanuatu, Samoa and the Commonwealth of the Northern Mariana Islands. The United Nations' list of least developed countries includes Tuvalu, Kiribati and the Solomon Islands. The remaining are developing countries except New Zealand, classified as developed Pg IX (United Nations, 2022). The paper excluded five countries from this study; The Northern Mariana Islands, New Zealand, Nauru, New Caledonia and Wallis and Futuna.

The online survey questionnaire was shared with eleven countries' agencies using Microsoft Forms, of which eight responded to the survey, followed by survey interviews. The survey took place from December 2022 – February 2023. These representatives were selected based on their extensive knowledge of responding to climate disasters and implementing climate-disaster resilience programs in vulnerable communities. The online survey questionnaire included a summary and consent. Those who participated in the interview gave their consent by answering the survey.

The author's extensive knowledge, work in the humanitarian sector, and further understanding gleaned from the literature reviews were used to design the interview outline and formed the basis of the interview. The design outline guided the interview and focused on understanding the topic in different contexts and identifying the research problems and impacts of PFA. Furthermore, the interview questions were accommodated based on the views and experiences of the respondents, thus giving the flexibility of the interview questions (Chang, Tai, Lien, & Chien, 2022).

In addition, this study used grey literature to review and demonstrate whether the IASC emergency matrix of interventions can be equally modified and used for preventative mental health programs and would reflect in any localization of PFA activities or interventions.

IASC guideline was used based on reliability, quality and robustness as it is an expert consensus. For scientific sources and to demonstrate the effectiveness of PFA, articles in PubMed, MEDLINE and Cochrane journals were analyzed using the keyphrases. In addition, published articles in English from 2012 to 2022 included those relevant to climate disasters and PICs. Articles excluded that did not include keyphrases, Pacific Island Countries (PICs), or the effectiveness of PFA.

Results & Discussion

Review of the IASC Guidelines on MHPSS in Emergency Setting

This section reviewed the overall intervention matrix using the IASC guidelines on MHPSS (Inter-Agency Standing Committee (IASC), 2007). The review recommended in this study is not limited to PFA only; therefore, similar domains and functions can observe for implementing the whole MHPSS program. Furthermore, the domains and functions in the intervention matrix also indicate that the guideline **prevents** and promotes MHPSS. Therefore, the intervention matrix can be applied and contextualized as part of a proactive, preventative approach to building the psychological resilience of individuals and the community. In addition, the IASC guideline serves two purposes (1) to protect and (2) to improve mental health and psychosocial support (Inter-Agency Standing Committee (IASC), 2007). Thus, if further contextualized, the functions can focus on **protecting or preventing** mental health and can be applied through PFA.

Furthermore, the matrix of interventions contains three types of response; emergency preparedness, minimum response and comprehensive response. The proactive PFA approach of protecting, preventing, or minimizing the psychological impact of an emergency is lacking in the PICs. 50% of the survey interviews, ideally covering six PICs, confirm that PFA is a reactive activity implemented during the disaster response, recovery and rehabilitation program.

Furthermore, the three levels of commitment to building community psychological resilience through PFA include:

1. National Level – government and non-governmental actors of humanitarian requires coordinated actions, effective coordination, data management and policy making.
2. Stakeholders Engagement & Consultation – includes all PFA providers, disaster responders, social workers, specialized persons, or organizations. At this level, the PFA providers should identify the local coping mechanisms that form the basis for psychosocial support interventions in that particular context.
3. Engaging the community – identify communities or areas vulnerable to climate disasters and conduct an assessment.

Implementation organizations must use a national PFA needs assessment form to identify social problems or psychological risks in emergencies (Inter-Agency Standing Committee (IASC), 2007). The PFA needs assessment would provide a concise level of priority needs for each area and community according to the type of climate disaster.

Analysis of Survey Questionnaires and Interviews

The current state of PFA intervention in the respective PICs was explored using online survey questionnaires. As a result, 73% responded to the online survey questions and had extensive experience responding to climate disasters and implementing resilience programs in vulnerable communities.

The results from the PICs show that 55% are commonly affected by tropical cyclones, 27% typically face king tides and droughts, and 18% of the countries are vulnerable to natural disasters such as earthquakes and volcanic activity eruptions. It is evident that tropical cyclones (also known as typhoons) impact every cyclone season, bring in the most extensive devastation, and significantly contribute to flash flooding, storm surge and strong winds. A study report by the Centre for Research on the Epidemiology of Disasters, UNDRR highlighted that between 1998 to 2017, climate-related disasters dominated, accounting for 91% of the 7,255 events recorded, of which flood was the most frequently observed at 43.4%, followed by storm at 28.2% of all recorded events (Wallemacq & House, 2018).

Of the participating country, 50% responded as 'No', stating that there are no MHPSS policies or legislation at the national or organizational level. Only one responded to having an MHPSS policy and legislation at the organizational and national levels. An estimated 45% indicated PFA in their organization as a sole activity, not an overall MHPSS program. The PFA by a humanitarian organization adopts the IASC MHPSS intervention principles (Inter-Agency Standing Committee (IASC), 2007) and the WHO PFA manual (WHO; War Trauma Foundation; World Vision International, 2011).

The study's most significant findings through the questionnaire survey indicated (1) 50% of PFA is part of disaster response, recovery and rehabilitation program and (2) that none of the eight PICs that took part had any PFA monitoring and evaluation framework or tools to measure the effectiveness of PFA interventions let alone prior assessment. The absence of assessment, monitoring and evaluation is a significant concern for an activity or program's sustainability because the intervention fails to measure effectiveness and identify gaps for further improvements.

Analysis of literature reviews on the effectiveness of PFA interventions

A literature search string used keyphrases 'effectiveness of PFA' and 'effectiveness of psychological first aid'. The PubMed, MEDLINE, and Cochrane database searches analyzed english articles between 2012 and 2022. The overall search result showed eight hundred fifty-nine papers according to the key phrase "effectiveness of PFA" and three hundred and twenty-six papers on the "effectiveness of psychological first aid." Results with open access were subsequently refined further by the type of article, including reviews, systematic reviews, clinical trials, comparative studies, evaluation studies, meta-analyses, observational studies and randomized controlled trials. Finally, the manually reviewed included PFA and its effectiveness in the climate disaster context of PICs for its absolute relevance. A total of one hundred and one articles had relevance to PFA effectiveness and implementation. However, only eleven articles were relevant to PFA in disasters and precisely zero on PFA effectiveness in the climate disaster context of PICs. Furthermore, the study excluded grey literature and was limited to PubMed, MEDLINE and Cochrane.

Overall, there is still little evidence of the effectiveness of PFA interventions. A systematic literature review shows that no evidence shows the effectiveness of the PFA interventions (Dieltjens, Moonens, Praet, Buck, & Vandekerckhove, 2014). Evidence-based guidelines for psychosocial support will demonstrate its effectiveness in disaster (Dieltjens, Moonens, Praet, Buck, & Vandekerckhove, 2014). Evaluation to see the effectiveness of PFA interventions is still a gap in PFA programming (Dieltjens, Moonens, Praet, Buck, & Vandekerckhove, 2014). An investigation of post-PFA training confirmed increased preparedness at a personal level, resilience planning and community preparedness (McCabe, et al., 2014). In addition, the RAPID PFA showed a decline in acute distress in a small, recognized clinical trial (Everly G. S., Lating, Sherman, & Goncher, 2016). However, through the survey questionnaires, the respondents did not indicate implementation of the RAPID PFA model, thus lacking evidence.

Recommendation and Conclusion

What works well in a developed country may not work in a developing country, but to make PFA intervention more effective, one needs to "think globally and act locally". Unfortunately, based on the way of life of the Pacific community, the availability of resources, tradition and social structure, PFA activities and training implemented in the PICs still lack participation of the community and analysis of the context. The existing community social structure needs a broader cross-section of the community, involving youth, local faith leaders, elders and community groups to help establish collaborative and respectful relationships (Lim & Nakazato, 2020).

Discussion and consultation with communities is a method of addressing practical needs, which often involves linking people to trust in their strengths and resources to help in psychological recovery. The survey interview confirmed that this area needs to be considered and recommended for further community consultation.

Findings from the desktop and survey interviews also confirm the lack of stakeholder engagement and assessment of PFA needs. Thus this study strongly recommends context and situation analysis and assessment. The community consensus supports the psychosocial preparedness and response framework to develop the PFA training programs and the evaluation process (Everly & Lating, 2017). Community-driven and community-supported response approaches allow the community to recognize their lived experience (Newnham, et al., 2020), making it better accepted.

The limitation of this research is that the survey questionnaire and interview were from a perception of one organization in those particular countries. Thus, data is limited. Therefore, it requires further in-depth study and exploration from the national government level to all stakeholders and community study to understand better the trends, impacts and challenges of such intervention. To make PFA intervention cost-effective, more exploration within local communities is essential to improve public health. The PFA aims to support the affected individuals, families and communities in regaining control over their lives and reducing their experience of post-traumatic distress events. Therefore, national policymakers and providers must prioritize PFA preparedness and needs-based approaches.

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