Unahon Tool: The Development of a Mental Health Triage Tool for Evacuation Centers in the Philippines

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ABSTRACT

Background. The Philippines faces a challenge in addressing the mental health needs of internally displaced persons (IDPs) following disasters. The lack of an integrated mental health triage system within evacuation centers and the shortage of specialists trained in post-traumatic stress triaging have hindered effective emergency response. Existing interventions primarily focus on traditional trauma and psychiatric symptoms, often lacking standardized mental health triage classifications and leading to data gaps, complicating resource allocation decisions.

Objective. To develop a culturally relevant mental health triage system, this study proposes the "*Unahon* Tool" to meet the needs of Filipino IDPs. Integrating with existing medical triage protocols equips frontline responders to identify stress-related concerns, enables informed decision-making for mental health and psychosocial support (MHPSS) allocation, and optimizes resource utilization.

Methods. The study involved key informants, including disaster responders, mental health specialists, and government officials, who participated in interviews and focus group discussions. Thematic analysis was used to identify behavioral aspects affecting IDP communities. The *Unahon* Tool development incorporated disaster response frameworks, mental health interventions, and other existing triage tools. A red-yellow-green categorization system was employed based on the severity and urgency of observed behaviors. Stakeholder consultations and expert reviews guided tool refinement.

Results. The final *Unahon* Tool includes 17 behaviors categorized into red (urgent), yellow (moderate), and green (low) severity levels. It provides corresponding recommended interventions to aid responders. During direct observations, yellow-category behaviors like shouting and cursing were prevalent. Responders focused on reminders for peace and order in response to these behaviors. The tool's "Notes" section was identified as a potential area for contextual information inclusion.

Conclusion. The *Unahon* Tool fills a crucial gap in the Philippine disaster response infrastructure by offering a behavior-based mental health triage system. It enables responders to prioritize mental health resources effectively, reducing the burden on specialists and enhancing overall disaster response effectiveness. Future directions

eISSN 2094-9278 (Online)
Published: September 30, 2025
https://doi.org/10.47895/amp.v59i14.9508

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include expanding tool adoption beyond Metro Manila, translating it into regional languages, and developing a version for children and teenagers. Collaboration with other regions and age groups will ensure broader applicability and effectiveness in addressing mental health needs among diverse IDP populations.

Keywords: mental health, triage tool, disaster, evacuation center, Philippines

INTRODUCTION

Internally displaced persons (IDPs) often grapple with post-traumatic stress reactions in the wake of disasters. However, the existing emergency response infrastructure in the Philippines lacks an important component to consider during disaster recovery—an integrated mental health triage system within evacuation centers and camps, along with specialists specifically trained for post-traumatic stress triaging.[1] Mental health triages typically employ a color or letter "tagging" system to categorize patients' severity, ranging from red for high-risk cases requiring immediate care to green for lower-risk cases, necessitating intervention when resources permit.[2-6] Traditionally, assessment and interventions have focused on addressing conventional trauma and psychiatric symptoms, chiefly in emergency cases involving suicidality, violence, as well as symptoms of psychosis (e.g., hallucinations) and other severe mood or perceptual disturbances (e.g., disorganized thinking or speech, flashbacks). Given their emphasis on more psychiatric presentations of stress and trauma, such triage systems and their prescribed mental health service responses rely heavily on the expertise of specialists. They also fail to account for more behavioral and interpersonal manifestations of post-traumatic stress, such as disruptive communication and expression (e.g., shouting, cursing).[2-6]

In the Philippines, various organizations use different documentation systems, but they lack standardized mental health triage classifications, hindering the provision of timely and appropriate care.[1] This deficiency results in data gaps, complicating resource allocation decisions, particularly in resource-scarce post-disaster scenarios. For instance, the Disaster Assessment Family Card (DAFAC) of the Department of Social Work and Development (DSWD) focuses on demographic and socioeconomic data but does not address mental health needs, while some local government units (LGUs) like Marikina City use locally developed tools that vary significantly in their focus and comprehensiveness.[7-9] While some foreign-developed mental health triage systems exist[2-6], they focus on trauma exposure and clinical trauma symptoms and/or focus on psychiatric symptoms of the individuals. In addition to this, these triage systems are also complex and demand extensive training and knowledge, which may be more challenging in the Philippine setting, where there are only an estimated 2.02 mental health professionals per 100,000 Filipinos.[10] Furthermore, given this scarcity, disaster mental health response typically includes a wider variety of responders, such as teachers, parish workers, community leaders, and staff of government agencies, whose training on mental health response may not include detection and intervention for severe psychiatric cases

Government agencies and responders have also used locally developed mental health assessment tools. However, these function as screening tools to detect signs and symptoms of mental illness or to make an inventory of those presenting psychological risk factors among IDPs.[11,12] At the same time that stress and trauma reactions may develop into symptoms of mental illness, they are not limited to such presentations either. Issues of harm or disruption to the evacuation community also become a risk as large groups are thrust into unfamiliar environments with limited resources.[13-15] In addition, stressors that aren't necessarily pathological in a clinical sense, such as strained relationships and existential concerns, may also cause significant distress to IDPs.[13,15] Such incidences have yet to be indicated in mental health triage systems used in medical settings, as well as the diagnostic or inventory forms used by local responders. Furthermore, these tools do not include recommended responses or interventions to detected symptoms or reactions, which may impede a responder's decision-making process, especially for those who are less experienced in mental health response.[16]

Recognizing the scarcity of specialists and the varied presentation of stress and post-traumatic reactions that go beyond psychiatric symptoms, particularly during large-scale disasters, there arises a pressing need for a more streamlined and locally relevant approach. To address this challenge, this study proposes the development of a mental health triage system designed to meet the needs of the Filipino population. This system, when integrated with existing medical triage protocols, equips disaster responders with the tools to identify stress-related concerns that could compromise safety. It also enables informed decision-making for the timely provision of mental health and psychosocial support (MHPSS) while optimizing resource allocation. Such an approach prevents overburdening specialist responders and enhances the overall effectiveness of disaster response efforts.[16]

Hence, this study responds to the demand for a contextually appropriate mental health triage system in post-disaster Filipino settings and outlines the development process of the "*Unahon* Tool." The term "*Unahon*" originates from the Bisaya word meaning "to prioritize." Its development followed an indigenous approach[17], drawing from established MHPSS frameworks (e.g., IASC)[18], disaster-related stress and trauma literature, prevailing medical and mental health assessment protocols during disasters, clinical risk assessment practices (e.g., target hierarchy framework from Dialectical Behavior Therapy)[19], and insights from cultural informants, including disaster responders and MHPSS specialists with experience in evacuation camps and centers. The current study highlights how such information shaped the development of the *Unahon* Tool.

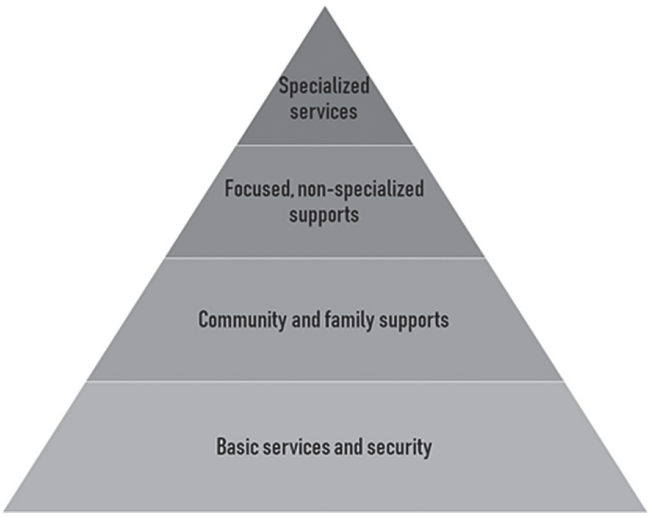


Figure 1. IASC pyramid of MHPSS interventions.[18]

IASC MHPSS Framework in the Philippine Context

According to the Inter-Agency Standing Committee (IASC), a humanitarian coordination forum of the United Nations system, responders should provide MHPSS using a multi-layered system of support to meet the mental health needs of groups and individuals (Figure 1).[18] The integration of basic services, community, and family support, focused non-specialized supports, and specialized supports helps ensure that responders provide diverse, holistic, and appropriate care for IDPs who may be experiencing a variety of mental health concerns.

While effectively providing basic services and security for all IDPs can already positively impact their mental health, other IDPs may require a different response. The IASC pyramid illustrates that after ensuring basic services for all individuals in an evacuation center, a smaller number of people will require the MHPSS interventions at the higher levels, with the smallest percentage of IDPs requiring specialized services. As each level increases, the MHPSS interventions become more focused and specialized.

In addition, the IASC guidelines identify action sheets covering the following areas: Coordination, Assessment; Monitoring and Evaluation, Protection and Human Rights Standards, Human Resources; Community Mobilization and Support, Health Services; Education, Dissemination of Information, Food Security and Nutrition, Shelter and Site Planning, and Water and Sanitation. Each action is guided by the core principles of the IASC, which are human rights and equity, participation, do no harm, building on available resources and capacities, integrated support systems, and multi-layered supports.

In the Philippine context, the principles and components of the IASC guidelines were adopted by the National Disaster Risk Reduction and Management Council (NDRRMC) Memorandum 62, which is also known as the National Guidelines on Mental Health and Psychosocial Support.[20] Its main purpose is to set guidelines for the proper implementation of "essential minimum high-priority responses in emergencies and disasters." It seeks to assist in the development of policies, planning, and implementation of responses for people's mental health and psychosocial well-being, endorse an institutional framework and systems for MHPSS management, define roles and responsibilities of stakeholders involved in the responses; ensure and facilitate effective coordination of MHPSS; and ensure adherence to MHPSS related activities. Such principles also guide the training and capacity-building of disaster responders in carrying out MHPSS response.[21]

Stress- and Trauma-related Reactions to Disasters

Following initial life-saving emergency care, disaster survivors often seek temporary refuge in evacuation centers or camps, where their recovery becomes intricately linked to their mental well-being. In diverse disaster scenarios, notably elevated stress levels and potential trauma reactions are nearly ubiquitous, leading to a range of behavioral, cognitive, and emotional changes among those affected by these catastrophic events. Survivors may grapple with shock, numbness, negative emotions like fear or anger, feelings of guilt and hopelessness, or may neglect self-care and caregiving responsibilities.[18,21,22]

While disaster survivors can indeed experience stress- and trauma-related reactions, it is essential to recognize that many individuals effectively cope with and recover from these challenges, especially when they receive basic and MHPSS services and when they resume their daily functioning.[23] Nevertheless, it is crucial to acknowledge that stress and trauma reactions can sometimes divert attention from adherence to necessary care protocols.[24] Moreover, unaddressed stress reactions can lead to delays in managing more urgent issues, such as severe mental health conditions.

Additionally, the absence of mental health and psychosocial services in some evacuation centers exacerbates the plight of camp residents, impeding their recovery.[25] Alongside stress-related reactions and other mental health risks, disaster survivors contend with disrupted social relationships, economic strain, and temporary or permanent displacement.[15] Indigenous populations with strong ties to their ancestral lands may also experience fear and anxiety from being displaced, being unable to freely practice their cultural traditions, and limited access to food and medicinal plants.[26] Furthermore, it is imperative to consider that disasters are multifaceted events influenced by factors such as the nature of the disaster itself, the actions of responders, personal safety concerns, inter-agency and intra-organizational coordination challenges, sociopolitical dynamics, and cultural factors. All these elements can significantly impact the response following a disaster.[1]

In emphasizing the comprehensive scope of the *Unahon* Tool, it is important to recognize that it extends beyond the traditional psychiatric boundaries of stress and trauma-related reactions. Apart from the distress directly linked

to the disaster, it encompasses secondary stressors (such as food security, job loss, strained relationships, and existential concerns) and pre-existing stressors that may surface among disaster survivors.[13-15] The *Unahon* Tool's distinction lies in its ability to address all these psychosocial concerns by focusing on the behaviors that a disaster responder observes in an evacuation center without fixating solely on conventional trauma symptoms that can inadvertently overlook or misinterpret other vital psychosocial aspects, potentially mischaracterizing them as personality traits, diagnoses, or even criminal behavior.

Mental Health Assessment Tools in Evacuation Centers

Existing local mental health assessment tools from the Department of Health (DOH) and the Department of Social Welfare and Development (DSWD)—both leading government agencies in implementing MHPSS at the national level—are mainly inventory forms of IDPs presenting risk factors and interventions needed and completed in evacuation camps or centers.[7,12] Such assessments are part of a larger set of inventories used to keep track of all available and needed resources. At the level of the local government, social welfare and city health offices use similar inventory forms, though these focus more on family details and emergency medical response, respectively.[8,9,27]

Specialists have also made use of mental health screening tools to capture disaster experiences among survivors in evacuation centers. For instance, the use of the Self-Report Questionnaire (SRQ)[28] was documented following the eruption of Mt. Pinatubo in 1991[11]. The SRQ was developed to screen individuals for the presence of a psychiatric disorder by asking patients if they experience certain symptoms or signs of disorders (e.g., "Do you often have headaches?" "Do you sleep badly?"). The five additional items to the SRQ developed during the Pinatubo eruption assess the presence of trauma symptoms (e.g., "Have flashbacks of what happened," "Feel bad when in situation that reminds of the disaster," "Make a point to stay away from place that reminds of the disaster").[11] While the SRQ provides information regarding diagnosis and symptoms that may place IDPs at risk, it differs from a triage system in that it does not include categorizing and prioritizing IDPs, as well as making decisions on how to allocate available resources in an evacuation center.

OBJECTIVES

In light of the diverse spectrum of mental health concerns that internally displaced persons (IDPs) may confront in the aftermath of a disaster, the researchers aimed to develop a comprehensive mental health triage system that complements the existing frameworks, protocols, and assessment systems employed within the local context. This study serves as a focal point in the ongoing development of this system, with specific emphasis on the results stemming from the needs assessment phase conducted as part of the *Unahon* Tool project. This phase critically examines the behavioral aspects that may disrupt the IDP community, ranging from psychiatric concerns to crisis management issues, in order to create a holistic triage approach.

The researchers highlight the significance of incorporating the insights and experiences of diverse cultural informants, including disaster responders seasoned in working within evacuation centers, as well as mental health specialists (such as psychologists, psychiatrists, and social workers) who have delivered mental health and psychosocial support (MHPSS) services within these contexts. Government officials responsible for overseeing the provision of MHPSS following disasters also contribute valuable perspectives. This inclusive approach ensures that the *Unahon* Tool not only aligns with established literature and research but also resonates with the practical realities and unique nuances encountered in the field.

The needs assessment conducted as part of this study serves as a critical step in identifying the essential features and components that should be integrated into the *Unahon* Tool. By focusing on behavioral aspects that demand worker attention, from psychiatric concerns to crisis management issues, the objective is to create a robust mental health triage system that can effectively address a wide spectrum of mental health challenges experienced by disaster-affected individuals, ultimately fostering community well-being and resilience. However, the *Unahon* Tool currently focuses on observable behaviors of IDPs. Monitoring of stress-related behaviors and/or responses of responders is beyond the scope of this study.

MATERIALS AND METHODS

Participants

Participants were selected through purposive sampling and gathered by contacting local government agencies in Metro Manila, government offices, international and local non-government organizations, and experts in the field of disaster response. These organizations volunteered a roster of available disaster responders to participate in the initial phase of the research. Key informants (n = 21) of this phase are disaster responders whose backgrounds include but are not limited to medical doctors, nurses, firefighters, psychologists, social workers, and volunteers. Some participants have been in disaster response for decades, while others have only been in the field for a few years; however, all of them have experienced responding to various disaster situations. All participants have received some form of training in mental health (such as Psychosocial Processing and Psychological First Aid) from their respective organizations and/or as part of their education.

During the stakeholder consultation phase, an additional twelve participants (n = 12) from government units, non-government organizations, and volunteer groups were invited

to focus group discussions (FGDs) and interviews to orient them about the tool and elicit their feedback on it. Another 30 participants were administered the *Unahon* tool during the pretest portion of the consultation phase to test the tool in scenario-based exercises. These participants are responders and office staff recruited from two local government units. Similar to the previous phase, all participants have received training in mental health response.

Procedures

The procedures encompassed three key components. First, the researchers conducted a literature review by collecting and reviewing available disaster assessment forms and protocols from various national and local government organizations in order to identify gaps in mental health assessment in evacuation centers. These materials were found through a comprehensive search of online databases (e.g., PubMed, Scopus, PsycINFO, ERIC, and Google Scholar) and coordinating with local government agencies and organizations for available policies or assessment forms. The last step of the literature review involved synthesizing key findings from the reviewed literature and relevant sources.

Next, the researchers did a needs assessment to gather information about disaster responders' experiences. The researchers conducted a total of five focus group discussions and eight individual interviews, and gathered information about participants' experiences, challenges, and protocols in response to mental health concerns encountered, particularly in evacuation centers. Some questions asked during the FGD and interviews include the following: "What is your background in disaster and camp management?", "What psychological conditions do some of the disaster survivors present or exhibit?", "What were the biggest concerns that you had as a service provider?", "What were the challenges you encountered in deciding what service to provide?", "How did you manage challenges?", and "What would be a useful design of a mental health triage tool for you?" Additional questions were raised to probe for more information, when needed. Participants also gave their inputs about elements of a mental health triage tool (e.g., format, design, content) that could aid them in their response.

Following the early development of the tool, the researchers conducted a direct observation in one of the evacuation camps in Metro Manila in coordination with the local government's social services development department. The IDPs were evacuated and brought to the camp due to a fire. During the observation, the researchers tested the *Unahon* Tool, using it as the framework for systematically recording observable behaviors among the IDPs. Behaviors were classified into risk categories—Red (high risk), Yellow (moderate risk), and Green (low risk)—based on indicators defined in the tool. Field notes were taken to capture additional contextual details, such as environmental factors and interactions among the IDPs. To ensure adherence to ethical protocols, the researchers engaged only with responders and avoided direct interaction with the IDPs, minimizing disruption and stress while respecting the participants' privacy and well-being.

Finally, during the stakeholder consultation phase, participants were oriented to the *Unahon* Tool (i.e., its purpose, parts, and procedure) and interviewed about the clarity, relevance, and appropriateness of each behavior item. They were also asked to provide any feedback on the format and content of the tool. In the pretest portion, participants were provided the same orientation during the brief training program. This training also included elaborating on the tool's items and demonstrating its use through sample cases. The objective of the pretest was to check if participants could identify behaviors described in specific scenarios and correctly categorize them into Red, Yellow, or Green using the tool. The pretest was composed of five scenario-based questions, each detailing cases of adult IDPs and behaviors they were exhibiting in an evacuation setting. Cases also included relevant background details such as the IDPs' ages, occupation, civil status, and medical history. Participants used the *Unahon* Tool to identify the behaviors they noted in the scenarios and categorized them accordingly. The suggested interventions on the right side of the tool were not tested during this phase. In addition, participants used a Likert scale ranging from 1 (not at all) to 5 (extremely) to rate how clear, relevant, and appropriate the items and cases were.

Data Analysis

This study used thematic analysis to identify relevant and recurrent themes.[29] The researchers' coding approach was inductive and comprised three stages: open coding, axial coding, and selective coding. Open coding involved a detailed examination of the data, including transcribed FGD and interviews, with codes applied line-by-line, paragraph-by-paragraph, and segment-by-segment. These codes were considered tentative and subject to revision as the analysis progressed. Through axial coding, the research team established connections between codes, organizing them into meaningful categories to uncover data patterns. Finally, selective coding integrated all categories around a core category, facilitating the development of overarching themes or main themes.

To ensure the reliability and validity of the analysis, the research team employed iterative engagement with the data, regularly revisiting the raw transcripts to confirm the alignment of codes and themes with participants' narratives. Reflexive discussions were conducted throughout the coding process to critically examine interpretations and ensure consistency across researchers. Additionally, member checking was utilized, wherein selected participants reviewed preliminary findings to validate their accuracy and relevance. Feedback from participants was incorporated into the final themes, ensuring that the results authentically represented the experiences of disaster responders. The analysis was also grounded in the primary concerns expressed by disaster responders during the FGD: (1) the identification of

individuals needing assistance or at risk of self-harm, and (2) addressing IDP behaviors jeopardizing responder's safety and job effectiveness. These concerns served as the guiding framework for the main thematic findings.

The same iterative process was used to analyze the qualitative data gained from the stakeholder consultation. Stakeholder feedback was also analyzed using an inductive content analysis to identify codes and group them into content categories relevant to the revision of the tool. This type of analysis is typically used when there is little known research about an area or if the approach is not solely dependent on an existing theory or model. This method may be also more relevant for areas such as health practice and developing guidelines or policy, as interview questions may elicit more specific descriptions of situations or experiences that could inform how research findings may address particular problems.[30] This method was used alongside a statistical approach, the Kuder-Richardson Formula 20 (KR-20), which was used to compute the tool's reliability during the pretest phase. The KR-20 is used to measure reliability of tests and instruments with binary variables. In the case of the *Unahon* Tool, reliability was based on whether or not participants consistently observed the correct behavior and categorized these accurately.

Ethical Considerations

Ensuring the psychological well-being of disaster responders was a key priority throughout the study. The research team adhered to ethical guidelines approved by the University of the Philippines Manila Research Ethics Board (UPMREB) and took precautionary measures to minimize psychological risks throughout data collection. A crisis management protocol was in place to address any emergencies that might arise during focus group discussions (FGDs) and interviews. This protocol provided clear procedures for managing participants experiencing significant distress, including immediate psychological first aid, containment techniques, and referral to appropriate mental health services, such as the Philippine General Hospital (PGH), if necessary. A clinical psychologist was also present during data collection to monitor participants and provide support when needed. Although no major incidents occurred during the data collection process, the team offered to facilitate debriefing sessions to ensure the well-being of both participants and researchers. Additionally, a responder self-care module was integrated in the training under the pilot phase where it included information on how disaster responders can recognize the different pictures of stress and manage the emotional demands of their roles. These measures ensured a safe and ethical research environment while safeguarding participants' well-being.

RESULTS

Disaster Responders Experiences

Thematic analysis of the responses from disaster responders to the question: "What psychological conditions do some of the disaster survivors present or exhibit?" showed the types of conditions they encounter from disaster survivors. The following themes emerged: emotional (fearfulness, anger, frustration, panic, sadness), cognitive (survivor's guilt, violent thoughts, hopelessness, anxious thoughts), and behavioral (crying, hoarding, inability to sleep, clingy, restlessness, blaming others, lying, silent, argumentative). A responder described how they identify a survivor who may be on the verge of becoming violent in the evacuation camp, *"Physically, verbally and yung physical outlook niya. Yung expressions niya, yung gestures niya. So ano naman yan eh, makikita mo naman kung...yung galit niya or yung pagtitimpi niya eh totally wala na."* Other responders also observed other potentially disruptive behaviors as a result of too many survivors in an evacuation camp, *"Because thinking of it na nasa 3,000 kayo. Maingay, may asong kumakahol, may nagsisigawang mga bata, may mga parents na minumura yung mga anak dahil hindi sumusunod, yung mga ganun. So I think isang factor yun kaya sila ganun. Kaya maiinitin ang ulo, irritated, and demanding as well."*

Further, the question: "How did you manage it?" generated themes related to the challenges they faced as responders and their decision-making process. Some of the challenges include socio-political issues, lack of services for responders and survivors, lack of training or knowledge, additional tasks for responders, and problems with implementation or coordination. In one of the FGDs, a responder shared that they faced accusations of blame from the survivors while they were providing services, *"Sa response minsan nasisisi ka nila. Katulad sa sunog, "Bakit nasunog bahay namin dahil sa inyo?" Which is responder ka lang naman. Di naman ikaw yung nagsunog ng bahay."* This sentiment was shared by another responder who said, *"May ganung feeling sila na parang whatever you do, it's not enough for them or they blame you."* In addition to these, another responder acknowledged that while there is no perfect camp management, it was frustrating to hear what other people say about the service they provided.

Likewise, respondents shared their decision-making processes when faced with difficult situations, which were through adapting, making referrals, prioritizing, utilizing available information, following guidelines, and taking responsibility. A responder answered that they lack protocols when it comes to combative individuals, often de-escalating the situation by restraining the individual and then turning them over to other agencies for proper handling, *"Sa protocol wala naman kaming protocol tungkol dun kasi kung tutuusin hindi naman talaga namin balwarte yun. Balwarte ng DSWD yun or pulis so napapasa lang sa amin kung talagang walang wala na talagang resources. So ang ginagawa lang talaga namin dun kung talagang combative na siya... ay i-bondage...*

talagang tinatali na namin sa stretcher para lang... provided na may clearance doon sa relative."

Tool Objectives and Frameworks

Frameworks from existing triage tools such as the Emergency Medical Services START[3] and the Inter-Agency Standing Committee on Mental Health and Psychosocial Support in Emergency Settings framework[18] were considered when developing the triage tool. Participants also cited the guidelines and frameworks from the National Disaster Risk Reduction Management Council Memorandum 62, otherwise known as the National Guidelines on Mental Health and Psychosocial Support[21] as a key resource informing their MHPSS response. Specifically, this memorandum indicated MHPSS Core Competencies for disaster responders to perform mental health interventions at specific levels of the IASC Pyramid of Intervention[18], and these were taken into account in the Interventions section of the triage tool.

Since the participants from the needs assessment phase highlighted behaviors that posed a risk to safety and those that contributed to disrupted operations or services, the research team used an existing framework that took these two factors into account, specifically the target behavior hierarchy from Dialectical Behavioral Therapy (DBT)[19], a treatment modality that specializes in high-risk behaviors such as suicidality, self-harm, and harm to others, which aims to address behaviors prioritized in the following order: life-threatening behaviors, therapy-interfering behaviors, and quality-of-life-interfering behaviors. DBT is the only framework that considers both the individual's risks to their safety and risks to operations and services being provided to the individual. In DBT, life-threatening behaviors refer to suicide-related behaviors that must be addressed, as the clients need to be safe in order to engage in therapy. Next, therapy-interfering behaviors that may interfere with the quality of therapy are addressed to ensure that the interventions are effective. To adapt this to the evacuation center context, the research team modified this to service-interfering behavior. Finally, quality-of-life-interfering behaviors include behaviors that interfere with clients working towards long-term goals and living a meaningful life. This framework of categorizing and prioritizing behaviors served as the basis for the tool's development and format.

Further, data from disaster responders presenting the challenges they faced involving their clients' behaviors were used to guide the creation of the tool's objectives. Thus, the goal of the tool is to help responders prioritize mental health personnel and resources in cases wherein there is a great demand that exceeds current resources at evacuation camps or centers. Further, the tool aims to aid responders' decision-making, particularly in making appropriate referrals for individuals experiencing considerable distress and showing challenging behaviors following a disaster, and to reduce any possible risk to IDPs' safety and any disruption of community and operations.

Behavior Ranking and Categorization

Following these objectives, the researchers focused on including IDPs' observable behaviors as these can be seen and measured as compared to mental or emotional processes. From the identified observable behaviors, two themes emerged: those that a) may harm self and or others and b) have the likelihood to disrupt others, community, and operations.

The first theme encompasses IDP behaviors such as suicidal crisis behaviors, suicidal ideation and communication, physical and/or verbal aggression, and threats to harm. Respondents shared several experiences wherein IDPs attempted or even completed suicide, *"Survivor siya for a day, tapos dahil nga hindi nabantayan, nag-suicide."* Harm or threats to harm were also directed towards other IDPs or even the responders themselves, *"May instance kasi na may threat na, 'Pag nakita kita sa labas…' may ganoon."* In other instances, family members of IDPs or patients may also be a threat, *"Pag stabilize namin ng pasyente, sinugod kami ng mga kapatid kasi kung ano daw yung ginagawa namin sa kanya. Nandoon na 'yung susuntukin kami."* Finally, they also included conditions, such as severe disorientation or hallucinations that interfere with an individual's ability to secure their own safety, "*Yung mga kilos niya, hindi akma doon sa paligid niya, nakakakita na ng kung ano-ano…*"

The second theme encompasses IDP behaviors that interfere with the provision of services following a disaster. Respondents shared how they are often on the receiving end of anger or blame from IDPs who insist on receiving relief immediately, *"Kasi ang mga tao pag tumawag, andoon na kaagad 'yung talagang nagdedemand...yung pressure andoon dahil gusto nila agad-agad."* At times, some IDPs may insist on special treatment, and responders feel forced to bypass others who may have more urgent needs to address. Threats to responder safety were also identified as complications that interfere with services, *"Parang sasaktan [niya] 'yung tao ko dahil hindi [siya] nabigyan ng relief."* Finally issues of conduct such as theft and quarrels also arose, as IDPs would sometimes argue over the goods they received, *"Pag chaos na, nawawala na yung humanitarian mentality mo na tulungan ko yung isang tao. 'Anim na kilo akin yun kasi kailangan ng pamilya ko, at least may reserve kami.' Hindi 'yung 'apat na kilo samin sakto… bigay ko sayo yung dalawang kilo.' Wala na yung ganun."*

The main themes were used as dimensions to identify and arrange the severity of the respondents' identified IDP behaviors. Through consultation and discussions with the research team, the initial framework was created (Figure 2).

Consultations with public health and emergency medicine professionals from the research program narrowed down the list of behaviors. The behaviors were also organized into a hierarchy to present behaviors that require immediate action at the top, followed by the least severe and urgent behaviors. Table 1 shows the initial list of behaviors.

Conventional triage colors used by emergency medical service agencies for tagging guided the categories presented above.[3,4] The color tags 1) Red (Immediate), 2) Yellow, and 3)

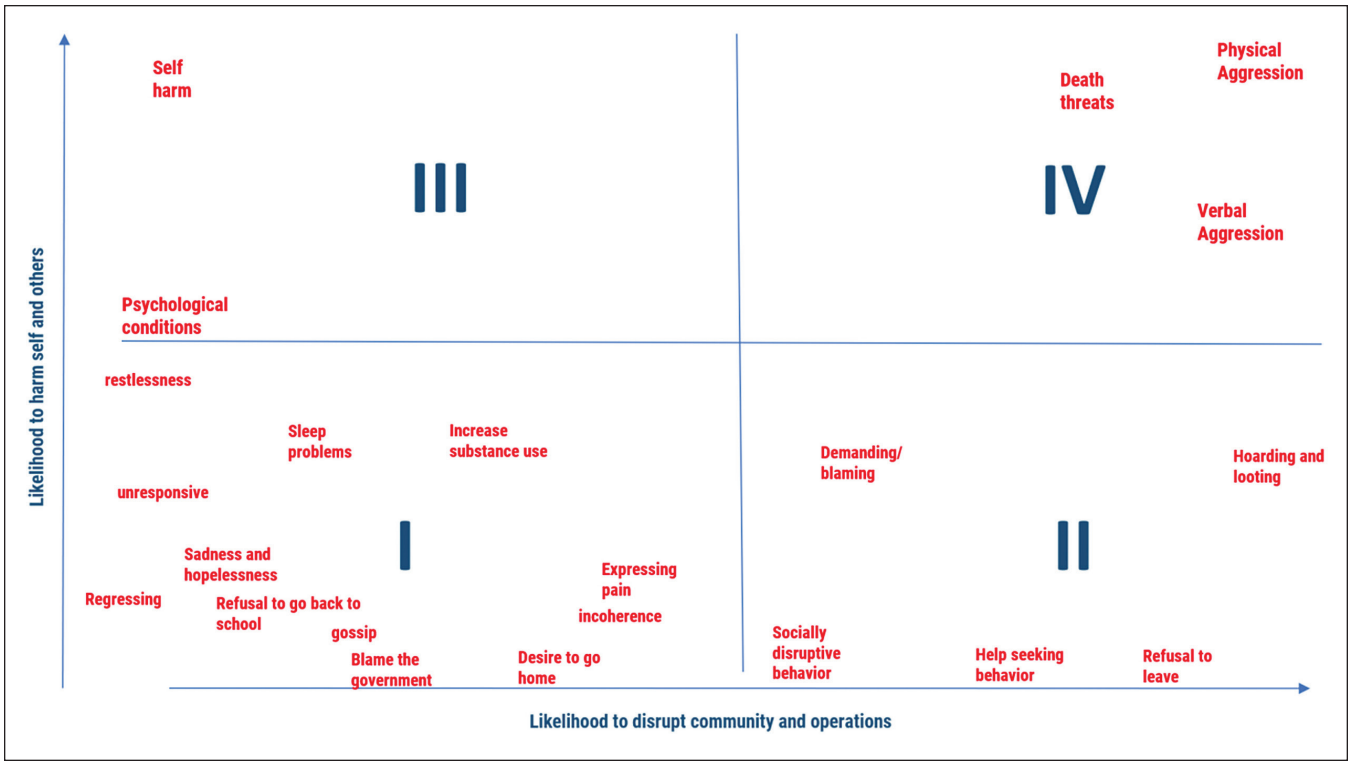


Figure 2. Quadrants of IDP behaviors based on the likelihood to harm self and others, and the likelihood to disrupt community and operations.

Table 1. The Initial List of IDP Behaviors Ranked according to their Urgency

Hierarchy of IDP Behaviors
Red:
1. Homicide
2. Suicide
3. Self-harm ideation, threats, attempts
4. Death threats
5. Physical aggression resulting in physical injury
Yellow:
6. Physical aggression without significant physical injury
7. Throwing, hitting, or breaking objects
8. Cursing and shouting directed at another
9. Hoarding and looting
Green:
10. Looking for a loved one
11. Catastrophizing pain
12. Increased substance abuse
13. Restlessness
14. Incoherence
15. Unresponsive
16. Crying spells/excessive crying
17. Gossip
18. Expressing the desire to go home
19. Blaming the government

Green were adapted to present the severity and urgency of each behavior. Specifically, red pertains to items that present an acute risk of harm to self/others, disrupt community and operations, and need specialized services. Yellow are behaviors that present a likelihood of harm to self/others, disrupting community and operations, and no need for specialized services. Lastly, the green indicates a behavior that has no likelihood of harming self/others and of disrupting community and operations and can be given Psychological First Aid (PFA).

Further deliberation led to the addition of items that pertain to suicidal ideations, psychotic symptoms, physical injuries, signs of agitation, and signs of distress. This was supported by a literature review of existing mental health triage scales.[31] The researchers also decided to remove the item on hoarding and looting, and compress all items under the green category into one general item: "not showing any behavior stated above." This item was added to simplify the tool and still account for other possible observable behaviors that may not pose a high risk to safety and camp operations. Provision of PFA to respond to these behaviors will ensure that survivor needs are met.

Tool Design

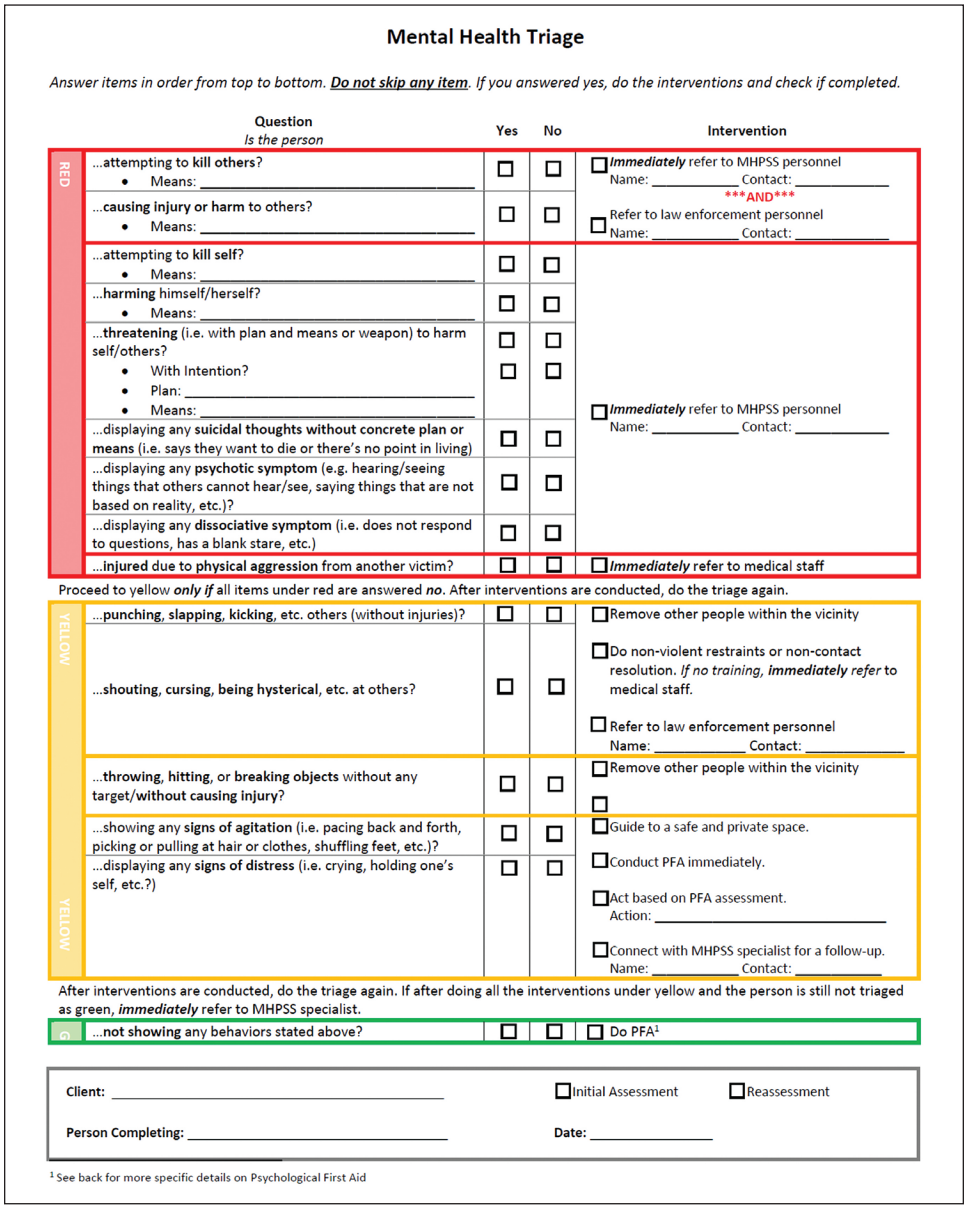
Consultation with the technical experts of the Department of Science and Technology–Philippine Council for Health Research and Development (DOST–PCHRD)

revealed the need to include interventions corresponding to each behavior listed in the tool. As such, the researchers included specific interventions based on the needs assessment data and interventions recommended in the Harmonized MHPSS Training Manual.[21]

Respondents decided that the tool was intended for IDPs in evacuation sites. Specifically, the tool is designed for adult IDPs (18 years old and above) based on the themes that emerged from the respondent's disaster survivor behaviors examples. Further, discussions identified that the tool should be used by any responder who serves as the frontline of disaster operations, with appropriate training on how to use it. Local Government Units also determined how the tool could be integrated into their current system. Three situations were pointed out: during registration or intake, during observation rounds, and during critical incidents.

Stakeholder Consultation and Application of the Tool

The preliminary tool (Figure 3) contained 15 items and was then presented for a technical review by an expert panel chosen by the Department of Science and Technology – Philippine Council for Health Research and Development (DOST – PCHRD). Stakeholder consultation from a psychiatrist, Department of Health, Department of Social Works and Development, local government units, and other private and non-government organizations concurred with the utility and necessity of the tool. Codes generated



Mental Health Triage

Answer items in order from top to bottom. ***Do not skip any item****. If you answered yes, do the interventions and check if completed.*

	Question *Is the person*	Yes	No	Intervention
RED	...attempting to **kill others**? • Means: _____	☐	☐	☐ ***Immediately*** refer to MHPSS personnel Name: _____ Contact: _____ ***AND*** ☐ Refer to law enforcement personnel Name: _____ Contact: _____
	...**causing injury or harm** to others? • Means: _____	☐	☐	
	...attempting to **kill self**? • Means: _____	☐	☐	☐ ***Immediately*** refer to MHPSS personnel Name: _____ Contact: _____
	...**harming** himself/herself? • Means: _____	☐	☐	
	...**threatening** (i.e. with plan and means or weapon) to harm self/others? • With Intention? • Plan: _____ • Means: _____	☐ ☐	☐ ☐	
	...displaying any **suicidal thoughts without concrete plan or means** (i.e. says they want to die or there's no point in living)	☐	☐	
	...displaying any **psychotic symptom** (e.g. hearing/seeing things that others cannot hear/see, saying things that are not based on reality, etc.)?	☐	☐	
	...displaying any **dissociative symptom** (i.e. does not respond to questions, has a blank stare, etc.)	☐	☐	
	...**injured** due to **physical aggression** from another victim?	☐	☐	☐ ***Immediately*** refer to medical staff

Proceed to yellow ***only if*** all items under red are answered ***no***. After interventions are conducted, do the triage again.

YELLOW	...**punching, slapping, kicking**, etc. others (without injuries)?	☐	☐	☐ Remove other people within the vicinity
	...**shouting, cursing, being hysterical**, etc. at others?	☐	☐	☐ Do non-violent restraints or non-contact resolution. *If no training,* ***immediately*** *refer* to medical staff. ☐ Refer to law enforcement personnel Name: _____ Contact: _____
	...**throwing, hitting,** or **breaking objects** without any target/**without causing injury**?	☐	☐	☐ Remove other people within the vicinity ☐
YELLOW	...showing any **signs of agitation** (i.e. pacing back and forth, picking or pulling at hair or clothes, shuffling feet, etc.)?	☐	☐	☐ Guide to a safe and private space. ☐ Conduct PFA immediately. ☐ Act based on PFA assessment. Action: _____ ☐ Connect with MHPSS specialist for a follow-up. Name: _____ Contact: _____
	...displaying any **signs of distress** (i.e. crying, holding one's self, etc.?)	☐	☐	

After interventions are conducted, do the triage again. If after doing all the interventions under yellow and the person is still not triaged as green, ***immediately*** refer to MHPSS specialist.

G	...**not showing** any behaviors stated above?	☐	☐	☐ Do PFA[1]

Client: _____ ☐ Initial Assessment ☐ Reassessment

Person Completing: _____ **Date:** _____

[1] See back for more specific details on Psychological First Aid

Figure 3. Initial version of the *Unahon* Tool presented to DOST for review.

from these consultations were grouped into the following categories: behavior (anything content-related but specific to behavior), instructions (how instructions are stated), tool design and format, language (how items are stated and use of other language), interventions (suggestions on interventions included), manual (content that could be included in the tool's manual), training (to be conducted prior to using the tool), and references (documents, materials, and files that could be referenced).

Several participants agreed that certain terms were needed to be further defined, *"review the signs of agitation, any signs of distress, and crying. Flesh (being hysterical) out,"* or needed simplifying for users of different backgrounds to understand, *"the terms are too medical."* They also agreed that items relating to suicidality and aggression were needed to be included in the tool, *"ganoon na naman ang nangyayari. We need to talk about suicide, people need to be aware."* Participants from government agencies also stressed the importance of referencing the different levels of MHPSS competencies[18] for the interventions recommended, "(Check) what kinds of behavior correspond to each level and what interventions are there for each level." They also highlighted the need to train responders before using the tool, as well as some skills that may need to be taught, *"include components of confidentiality, active listening, and so on…"*

After going through a technical review and several stakeholder consultations, the researchers refined the *Unahon* Tool, resulting in its final version (Figure 4). This ultimate iteration of the tool encompasses 17 behaviors, categorized into 11 under the red category, five under the yellow category, and one under the green category, along with their corresponding recommended interventions. Additionally, the final *Unahon* Tool incorporates a summary outlining the re-assessment guidelines for behaviors falling under the red category. This summary serves as a reference for responders, specifying when re-assessment should be conducted in response to any red-category behaviors.

This version of the tool was tested during the pretest phase. The overall KR-20 results show acceptable internal consistency (KR-20 = 0.77; Table 2). Table 3 contains the KR-20 results for each item and each case. *Unahon* items with item-total correlations that fall below 0.05 indicate that some participants had difficulty in answering these items. Blank columns and rows did not yield any result due to lack of variance (i.e., all participants answered the same way).

Participants (n = 30) also rated the *Unahon* items as very clear (M = 4.3, SD = 0.7), very relevant (M = 4.3, SD = 0.8), and very appropriate (M = 4.3, SD = 0.8). Similarly, the cases provided were rated as very clear (M = 4.3, SD = 0.8), very relevant (M = 4.3, SD = 0.8), and very appropriate (M = 4.3, SD = 0.8).

Unahon items with item-total correlations below 0.05 include Item#3 and Item#4, which involve "attempting to inflict fatal harm on one's self" and "threatening to harm self," respectively. After various consultations with stakeholders and statistical analysts, these items remained in the *Unahon* Tool as these behaviors were identified and raised as a concern by the participants during the needs assessment phase of the project. As the low item-total correlations might be related to the item being more difficult to identify compared to the other items, it was advised that for the future training sessions to spend more time explaining these items and to give more illustrative examples during training.

The use of the tool was also tested during the direct observation phase. The researchers primarily observed behaviors categorized under the yellow category, such as shouting (Item #12), cursing (Item #13), and staring blankly (Item #14). While the researchers did not execute any interventions as specified in the final *Unahon* tool, they noted that the responders responsible for the evacuation camp addressed individuals exhibiting behaviors like shouting or cursing by reminding them to maintain peace and order in the area. Additionally, the researchers recognized the potential benefit of including contextual information related to observed behaviors in the "Notes" section of the *Unahon* Tool. For instance, it was observed that individuals shouting and cursing were engaged in recreational activities at the time of observation, thereby lowering the risk and urgency of the behavior.

Table 2. Overall KR-20

KR-20	0.77
SD of Total	2.17
SEM	1.04

Table 3. KR-20 and Item-Total Correlations

	Case 1	Case 2	Case 3	Case 4	Case 5
KR-20	0.79		0.90	0.86	0.68
SD of Total	2.07	0.00	2.94	2.49	1.27
SEM	0.94		0.94	0.92	0.72
i1			0.66	0.11	
i2			0.66	0.08	
i3	0.03		0.66	0.31	
i4	0.03		0.66	0.54	
i5	0.47		0.66	0.77	
i6	0.38		0.66	0.77	
i7	0.63		0.66	0.77	
i8	0.69		0.67	0.77	
i9	0.69		0.67	0.77	
i10	0.69		0.67	0.77	
i11	0.69		0.67	0.77	
i12			0.46	0.77	0.40
i13			0.65		0.40
i14			0.22		0.38
i15			0.25		0.54
i16			0.25		0.38
i17			0.25		0.38

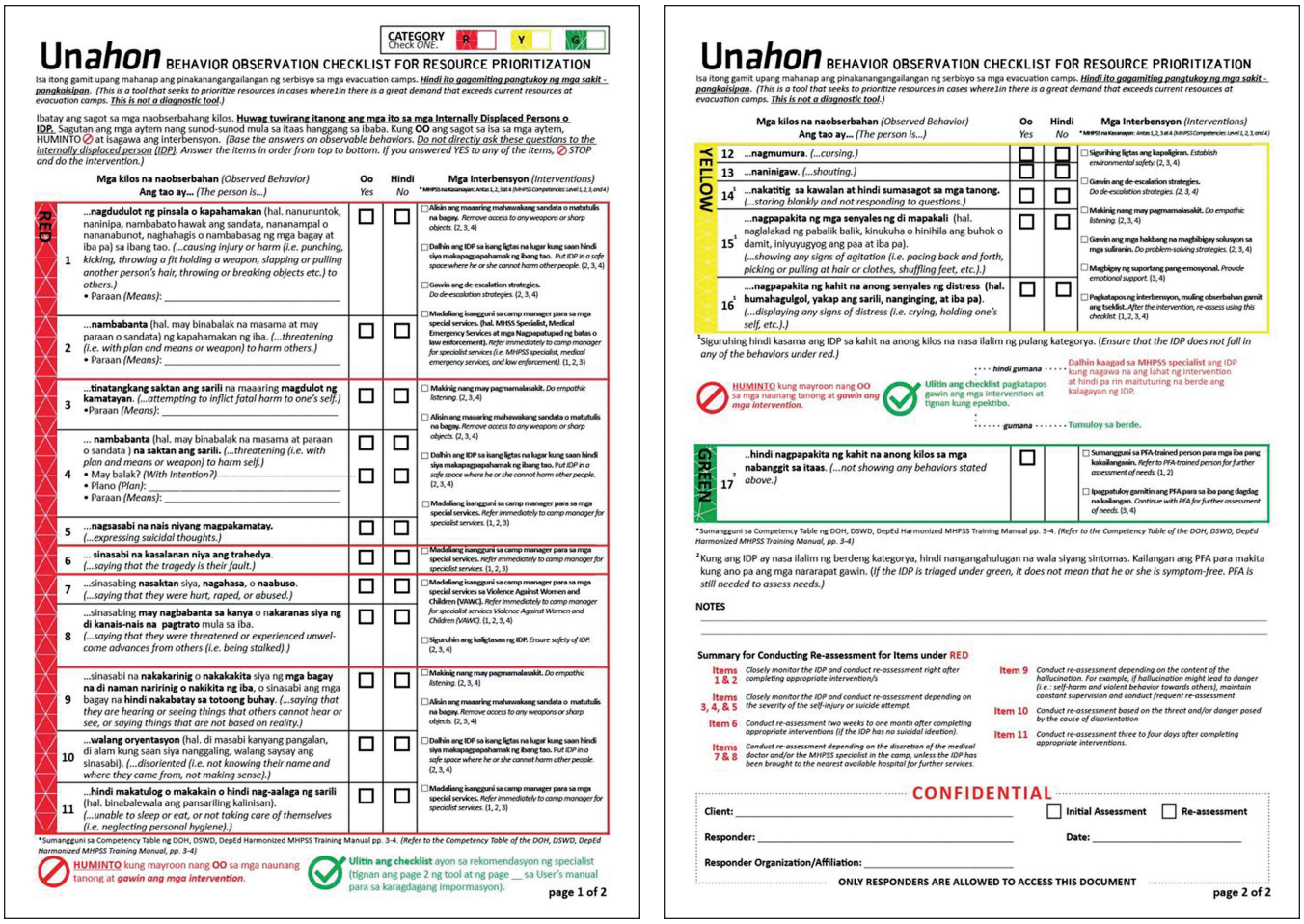


Figure 4. Final version of the *Unahon* Tool.

The final version of the *Unahon* Tool was developed, guided by the experience and feedback from various stakeholders, as well as existing, well-established frameworks. The IASC MHPSS guidelines[18] and the Harmonized MHPSS Training Manual by the DOH, DSWD, and DepEd[18], which were chief resources cited by participants, were used as a chief basis to ensure that the tool was aligned with existing guidelines and policies. In addition, the final behaviors included in the tool were defined based on DBT principles[19] and align with commonly accepted definitions in current practices of disaster MHPSS[21]. For instance, behaviors like suicidal ideation, self-harm, aggression, and distress signals were classified and described according to established clinical standards.

DISCUSSION

The experiences recounted by various disaster responders across Metro Manila highlight the challenges they continuously face in supporting the IDPs within evacuation camps. With the primary goal of establishing whether there is a need for a mental health triage system designed for Filipinos in post-disaster settings, the development and creation of the *Unahon* Tool has shown that it is essential in aiding disaster responders when providing assistance to IDPs. The use of observable behaviors rather than symptoms addresses the scarcity of specialized services and the varied presentations of stress and post-traumatic reactions during disasters.[10,17,21,22] Specifically, using easily identifiable behaviors enables non-specialist responders to use the tool effectively as it does not require knowledge of psychiatric conditions. Thus, even with few specialists in evacuation centers, the tool is able to increase responders' capacity to perform MHPSS. By focusing on behaviors that may pose a risk to harm self and others, and behaviors that may disrupt community and operations, as well as arranging them according to severity, the *Unahon* Tool can assist disaster responders in identifying which behaviors should be prioritized or addressed first in the camp. This prioritization system allows non-specialist responders to triage for mental health and behavioral issues, as well as intervene before these progress into more severe mental health conditions.

Beyond the identification of these behaviors, the *Unahon* Tool likewise offers assistance to disaster responders in streamlining the decision-making process when providing

interventions. To remain consistent with existing guidelines on the provision of MHPSS[18], different interventions may be performed based on the disaster responders' MHPSS competencies[19], as indicated in the tool. Having options for interventions ensures that the tool may be used and applied based on an evacuation center's existing organizational structure and resources. Aside from difficulties with decision-making, disaster responders also experienced struggles with coordination and a lack of information on available resources for skills and referral. Including interventions in the *Unahon* Tool encourages a discussion on clarifying channels for referral and lays out relevant skills training (e.g., empathic listening, de-escalation strategies) to adequately equip responders needed to address IDPs' needs. Thus, the *Unahon* Tool can be used as a responsive tool (e.g., in evacuation camps) and a proactive tool as well (e.g., strategic planning and/ or evaluation of a unit's disaster response report).

The *Unahon* Tool also represents a localized instrument that captures the unique experiences and needs of local DRRM units. As items were derived from the bottom up using the experience of Filipino responders, this adaptation ensures that the tool aligns closely with the operational realities inherent in disaster response efforts across the country. Experiences such as responders encountering challenging behaviors from IDPs in evacuation camps, and having limited training, knowledge, and even the manpower to address them are specific experiences that foreign triage tools may not account for. The *Unahon* Tool then complements the existing resources, processes, and organizational structures that enable the responders to make empowered and informed choices. It may also serve as a supplement to existing local government forms used in evacuation camps[7-9,12,28] and provide additional documentation for referral and continuing care, which is an important part of the operations during disaster response. For instance, succeeding responders and service providers may reference the tool to ensure what interventions have already been provided and focus instead on more specialized treatment, maintenance of functioning, and others. The tool also includes instructions on re-assessment to account for any development following initial interventions and allows for ongoing monitoring and adjustment of interventions as needed. Lastly, the proper documentation of cases inside evacuation camps can be used as learning materials for training and case conferences to ensure the quality of services.

The *Unahon* Tool is an important development that significantly contributes to the disaster risk reduction management landscape in the Philippines by bridging gaps in the availability of a locally developed mental health triage for use in evacuation camps and offering a nuanced approach to behavioral assessment. This tool holds significant assistance and offers a practical framework to the disaster responders in providing the appropriate support and intervention to the IDPs during and after crises. Additionally, the development of this tool shows a proactive initiative, aligning with the evolving disaster response needs in the Philippines. Its implementation may aid in enhancing the effectiveness of mental health support within evacuation camps and serve as a helpful model for future disaster risk reduction management development in other local government units.

CONCLUSION

The *Unahon* Tool is a localized mental health triage tool that can help disaster responders in (1) identifying behaviors of IDPs that might need attention and (2) what or whose attention is needed in particular situations. In a highly stressful and resource-deprived situation, using the *Unahon* Tool can help unburden responders by providing a structure and direction on doing mental health work in evacuation camps.

Recommendations

Since the *Unahon* Tool can be considered the first mental health triage tool or behavior resource prioritization checklist developed in the Philippines to be used in evacuation camps and centers, the study has various limitations. This section outlines the challenges of the tool's utility in real-life settings and the limitations of the study itself. Recommendations are also outlined in this section to give direction for the tool's further development and growth.

One limitation of this tool is that the participants are all from Metro Manila who are predominantly Tagalog speakers, given that the mandate of the funding was to develop a mental health triage tool for the region. Therefore, regional differences are possible in terms of stress and trauma-related reactions and other behaviors observed inside the evacuation centers and camps. As the Philippines has a multitude of regional languages, there might also be regional differences in terms of expressions of stress or idioms of stress. One of the recommendations for the future direction of this tool is to expand its reach beyond Metro Manila and have other local government units and DRRM offices from other regions adopt this in their current protocol inside their respective evacuation centers and camps. In addition to this, the *Unahon* Tool can also be translated into the local languages of the various regions across the country instead of using Tagalog in order to take into account regional specific idioms of stress. This serves as a means to adapt the *Unahon* Tool locally to be easily used by disaster responders in identifying behaviors in evacuation centers and camps using their own language.

In adapting the tool in local languages using regional specific idioms of stress, the adaptation should remain behavior-based and include items that are easily observable. For example, participants of this study mentioned *nag-aamok* and *mali-mali sumagot* as expressions of stress-related reaction, which the researchers had to describe in more detail in the current version of the tool to make it easily understandable and can be observed by any evacuation center staff even with minimal training. *Amok* is item 1 which describes a person causing harm to others and/or damage to property. *Mali-*

mali is item 10 which describes a disoriented person whose answers to questions do not make sense. If the idiom of stress is a cluster of different behaviors, the researchers recommend breaking it down to its component behaviors and mapping it out to the current item prioritization of the tool. However, this should be mentioned in the adapted tool and discussed in their respective local training for the usage of the tool. This way, the tool is able to capture and is sensitive to cultural variations, but it still remains faithful to one of the objectives of this research which is to have a triage tool that can be used even by individuals with minimal training.

In addition to considering regional specific idioms of stress, the local adaptation of the tool should also consider including culture-sensitive and culturally appropriate responses to stress. Culture-sensitive and culturally appropriate trauma care might vary from region to region given cultural differences within the country. However, for some examples of locally adapted culture-sensitive disaster trauma response, they can refer to Hechanova and colleagues' *Katatagan* Intervention Framework[32] and Terol's community-based trauma care intervention for indigenous Filipino survivors of disaster[26]. Both utilized foreign frameworks, but adapted them to take into account the culture of their initial study participants. Local adaptations of the *Unahon* Tool can take inspiration from these studies as they build on intervention strategies initially identified by proponents of the tool.

The *Unahon* Tool has been designed and developed to be used on adult IDPs, so another future direction in developing this tool further is to create a version that is designed for children and teenagers (18 years old and below). Some of the participants in the FGDs and interviews have expressed that they are interested in having a behavior checklist that is specifically for children and teenagers since they are aware that stress and trauma-related reactions are different in this particular group compared to adults. Developing a tool designed for this age group may be useful in identifying children and teenagers who may be at risk of hurting themselves or others and those whose behaviors may risk disrupting the services inside the evacuation centers and camps.

The *Unahon* Tool was created with IDPs in mind. However, in a highly stressful situation, even responders will exhibit behaviors that can impede services and put others and themselves at risk. While this study acknowledges that responder stress-related behaviors and/or reactions occur in evacuation camps, the *Unahon* Tool, in its current form, does not take these into account. As a possible extension of this study, the tool can be tested with responders to check its reliability in identifying behaviors of concern from them. From there, the tool can be revised to remove and/or add behaviors that are more relevant to responders to create another version of the tool specifically for them to address their unique needs and challenges.

Finally, the triage tool's roll-out stage took place during the height of the COVID-19 pandemic from March to May 2020, and a full-blown and rigorous roll-out and deployment of the use of the tool to the LGUs could not be conducted. Given these constraints, there was also no opportunity to conduct training on the final version of the tool. Instead, electronic training materials were sent to organizations that participated during the needs assessment and consultation phases. However, due to the demands placed on emergency responders during the pandemic, the team was unable to follow up and discuss if these materials were shared with and accessed by responders. This also meant that there was no data regarding the performance of the tool and any challenges encountered while using it.

The research team aims to continue testing and refining the tool, specifically, conducting more formal measures of expert validation in future testing phases. To ensure the tool's effectiveness and scalability, stakeholder involvement is critical. Next steps may focus on piloting the tool in selected evacuation centers, gathering feedback from responders and camp managers regarding ease of use, usability, and practicality, and incorporating these insights to refine the tool further. Collaborations with disaster response agencies and mental health professionals should also be prioritized during its implementation to ensure that the *Unahon* Tool may remain accurate and be effectively integrated into existing disaster response systems. Structured feedback mechanisms, such as surveys and focus group discussions, can be established to collect insights from responders and ensure the tool remains practical and relevant. Statistical measures to test agreement between raters (e.g., Cohen's Kappa, Intraclass correlations) may also strengthen the tool's validity and reliability. Quantitative and qualitative evaluations of the tool's performance in identifying behaviors and improving service delivery should also be undertaken.

Through these steps, the *Unahon* Tool can continue to grow and adapt in changing times, ultimately enhancing its utility in disaster response and mental health prioritization across evacuation centers and camps in the Philippines.

Acknowledgments

The authors wish to acknowledge the contributions of the research team project assistants and consultants, particularly Lorraine Chulipa, Queenie Rose Chico, Allan Ulitin, Sheila Marie Martinez, Darynne Ariana Solidum, Carolina Samia, George Abay, and Kathlyn Caragay. The authors also wish to extend their gratitude to the Metro Manila local government units and their respective Disaster Risk Reduction teams, non-government organizations, and professionals for their expertise, time, and effort throughout the whole duration of the study.

Statement of Authorship

All authors certified fulfillment of ICMJE authorship criteria.

Author Disclosure

All authors declared no conflicts of interest.

Funding Source

This study was a project under the Department of Science and Technology (DOST), Niche Centers in the Regions for R&D (NICER) program, and was funded by the DOST Philippine Council for Health Research and Development.

REFERENCES

1. Gundran C, Lam H, Lopez J, Santamaria E, Tuazon A, Tayao L. Medical needs documented by EMS responders to areas affected by Typhoon Haiyan in the Philippines: implications on disaster response policy. Acta Med Philipp. 2018 Apr;52(2):168-75. doi: 10.47895/amp.v52i2.433.
2. Schreiber MD. PsySTART emergency mental health triage systems for disasters and public health emergencies [Internet]. 2018 [cited 2024 Jan 30]. Available from: https://www.myctb.org/wst/HELPERS/Emergency%20Preparedness%20Documents/PsySTART_Overview.pdf
3. Benson M, Koenig KL, Schultz CH. Disaster triage: START, then SAVE - A new method of dynamic triage for victims of a catastrophic earthquake. Prehosp Disaster Med. 1996 Apr-Jun;11(2):117-24. doi: 10.1017/S1049023X0004276X. PMID: 10159733.
4. Romig L. The JumpSTART pediatric multiple casualty incident triage [Internet]. 2023 [cited 2024 Jan 30]. Available from: https://chemm.hhs.gov/startpediatric.htm
5. Sands N, Elsom S, Colgate R, Haylor H, Prematunga R. Development and interrater reliability of the UK Mental Health Triage Scale. Int J Ment Health Nurs. 2016 Aug;25(4):330-6. doi: 10.1111/inm.12197. PMID: 27027419.
6. Victorian Government Department of Health. Statewide mental health triage scale - guidelines [Internet]. 2010 [cited 2024 Jan 30]. Available from: https://www2.health.vic.gov.au/about/publications/policiesandguidelines/triage-scale-mental-health-services
7. Department of Social Work and Development. Disaster assessment family card. n.d.
8. Marikina Health Office. Emergency medical system response sheet n.d.
9. Marikina Social Service Office. General intake sheet. n.d.
10. World Health Organization. Mental health ATLAS 2017 member state profile: Philippines [Internet]. 2017 [cited 2024 Jan 30]. Available from: https://www.who.int/mental_health/evidence/atlas/profiles-2017/PHL.pdf?ua=1
11. Ladrido-Ignacio L, Perlas AP. From victims to survivors: Psychosocial intervention in disaster management in the Philippines. Int J Ment Health. 1995 Dec;24(4):3-51. doi: 10.1080/00207411.1995.11449321.
12. Department of Health. Rapid Mental Health Assessment Tool. n.d.
13. Galea S, Nandi A, Vlahov D. The epidemiology of post-traumatic stress disorder after disasters. Epidemiol Rev. 2005; 27:78–91. doi: /10.1093/epirev/mxi003. PMID: 15958429.
14. Norris FH, Friedman MJ, Watson PJ. 60,000 disaster victims speak: Part II. Summary and implications of the disaster mental health research. Psychiatry. 2002 Fall;65(3):240–60. doi: 10.1521/psyc.65.3.240.20169. PMID: 12405080.
15. Bonanno GA, Brewin CR, Kaniasty K, La Greca AM. Weighing the costs of disaster: consequences, risks, and resilience in individuals, families, and communities. Psychol Sci Public Interest. 2010 Jan;11:1-49. doi: 10.1177/1529100610387086. PMID: 26168411.
16. Brannen DE, Barcus R, McDonnell MA, Price A, Alsept C, Caudill K. Mental health triage tools for medically cleared disaster survivors: An evaluation by MRC volunteers and public health workers. Disaster Med Public Health Prep. 2013 Feb;7(1):20-8. doi: 10.1001/dmp.2012.49. PMID: 23109617.
17. Guanzon-Lapeña MA, Church AT, Carlota AJ, Katigbak MS. Indigenous personality measures: Philippine examples. Journal of Cross-Cultural Psychology. 1998 Jan;29(1):249-70. doi: 10.1177/0022022198291013.
18. Inter-Agency Standing Committee. IASC guidelines on mental health and psychosocial support in emergency settings. Geneva: IASC;2007. pp. 1-19.
19. Linehan M. Cognitive-behavioral treatment of borderline personality disorder. New York: Guilford Publications; 1993. pp. 124-160.
20. National Disaster Risk Reduction and Management Council. Memorandum no. 62 s-2017: National guidelines on mental health and psychosocial support in emergencies and disaster situations. 2018.
21. Department of Health, Department of Social Welfare and Development, Department of Education. Harmonized mental health and psychosocial support (MHPSS) training manual. 2018.
22. Bautista V. Urabayan: Kagalingan sa panahon ng krisis [Slide presentation]. 2006.
23. Kronish I, Edmondson D, Li Y, Cohen B. Post traumatic stress disorder and medication adherence: Results from the mind your heart study. J Psychiatr Res. 2012;46(12):1595-9. doi: 10.1016/j.jpsychires.2012.06.011. PMID: 22809686; PMCID: PMC3485414.
24. International Committee of the Red Cross. Mental health and psychosocial support [Internet]. 2016 [cited 2024 Jan 30]. Available from: https://www.icrc.org/sites/default/files/topic/file_plus_list/4174_002_mental-health_web.pdf
25. Ramos R, Reyes V, Sucaldito M, Tayag E. Rapid health assessments of evacuation centers in areas affected by typhoon Haiyan. Western Pac Surveill Response J. 2015 Nov 6;6 Suppl 1(Suppl 1):39-43. doi: 10.5365/WPSAR.2015.6.2.HYN_003. PMID: 26767134; PMCID: PMC4710077.
26. Terol E. Developing a culture-sensitive community-based trauma care intervention for Filipino indigenous people survivors of disaster. In: Applied Psychology Around the World. International Association of Applied Psychology; 2022; 4(4). pp. 44-46.
27. Social Services Development Department - Department of Social Welfare and Development. General intake sheet. n.d..
28. Harding T, de Arango M, Baltazar J, Climent C, Ibrahim H, Ladrido-Ignacio L, et al. Mental disorders in primary health care: A study of their frequency and diagnosis in four developing countries. Psychol Med. 1980 May;10(2):231-41. doi: 10.1017/s0033291700043993. PMID: 7384326.
29. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006; 3(2):77-101. doi: 10.1191/1478088706qp063oa.
30. Vears DF, Gillam L. Inductive content analysis: A guide for beginning qualitative researchers. Focus on Health Professional Education. 2022 Mar 31; 23(1):111-27. doi: 10.11157/fohpe.v23i1.544.
31. Broadbent M, Moxham L, Dwyer TA. The development and use of mental health triage scales in Australia. Int J Ment Health Nurs. 2007 Dec;16(6):413-21. doi: 10.1111/j.1447-0349.2007.00496. PMID: 17995512.
32. Hechanova MRM, Waelde LC, Docena PS, Alampay LP, Alianan AS, Flores MJB, et al. The development and initial evaluation of Katatagan: a resilience intervention for Filipino disaster survivors. Philippine Journal of Psychology. 2015 Dec;48(2):105-31.