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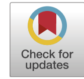

The role of mind-body interventions in traumatised refugees' primary care: A qualitative exploration of professionals' experiences in a dedicated programme in Geneva

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ABSTRACT

Post-traumatic physical and psychological symptoms are pervasive among refugees. Primary care staff face numerous challenges and often seek innovative ways of addressing their refugee patients' physical and mental health needs. A nascent body of literature suggests that mind-body interventions (MBIs[1]) have a positive effect on post-traumatic symptoms in this population. But the quality of evidence is still poor, and little is known about the role MBI could play in the primary care of refugees. Following the implementation of two different kinds of MBI in a dedicated primary care unit, this study aimed to explore staff members' perceptions and prescribing habits for MBI. Given the paucity of information about this topic, we used a qualitative design combining ethnography and discourse analysis providing in-depth insight into professionals' experiences of MBI. Data collected over five-months of non-participative observation and the transcription of twelve interviews were analysed following the Interpretative Phenomenological Analysis method (IPA) yielding four main results: (1) Generally poor initial understanding of MBI; (2) A variety of conditions and situations where MBIs appeared acceptable and helpful; (3) A persistent lack of experience and knowledge about the indications for MBI, hindering prescription; (4) The importance of articulating MBIs with mental health services. These results, in the light of the existing literature, suggest that stronger evidence for MBI efficacy for refugees is required, a key to improving professionals' understanding of MBI, providing them with explicit prescription criteria, and encouraging stakeholders to implement these innovative interventions.

Introduction

Worldwide, numbers of refugees have more than doubled in the past decade, reaching 110 million in 2023, the highest figure since World War II.[1] Most of them settle temporarily in a neighbouring country, but a significant proportion seek asylum in the West. In Switzerland, almost 135′000 people are currently registered in the asylum process (54′000 in 2021) .[2] About half come from Ukraine, the other half from more distant countries (Afghanistan, Eritrea, Syria, etc.) .[2]

Forced displacement is known for its detrimental effects on refugees' physical and mental health. Generally speaking, communicable and non-communicable diseases are found to be more prevalent among refugees.[3–5] Similarly, existing data reflects the high burden of mental health illness among refugees. Recent meta-analyses estimate the proportion of Post Traumatic Stress Disorder (PTSD) and depression/anxiety disorder in this population at about 30 % and 28 % respectively.[6–8] These figures are higher than in the general population and in other migrant populations,[7,9] and their impact is long-lasting, with detrimental effects on health outcomes, wellbeing and integration.[10] Although one in three refugees meets the criteria for PTSD diagnosis,

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these criteria inadequately capture the full range of disorders associated with psychological trauma. Several authors have underlined the difficulties in apprehending this variability and have proposed the notion of sub-threshold PTSD (Sub-PTSD), which takes account of a wider range of trauma-related symptoms.[11] In the general population, Sub-PTSD is associated with significant physical and mental impairment.[11,12] A survey among US veterans showed a significant association between PTSD and Sub-PTSD and somatic conditions such as chronic pain, migraine, sleep disorders and asthma.[13] Concerning refugees, a nascent body of research suggests a similar impact of Sub-PTSD[8,14,15] and highlights the prevalence of sleep disturbances[16] and chronic pain[17–19] in this population, and their link to exposure to trauma.

The WHO has underlines inadequate response from healthcare systems to these specific health needs as a result of: 1) systemic barriers (e.g. stringent regulations, lack of health insurance, etc.), 2) inadequate use of interpreting services and 3) language and cultural differences.[20] To address these issues, specialised healthcare programmes are recommended. In Western Europe, this is often the responsibility of the primary care sector. A wide range of challenges in addressing refugees' health needs in primary care has already been described, comprising health and social issues, language and cultural issues, time constraints, a perceived lack of training and professional support, referral difficulties, inadequate system organisation, workload and conflicts of value generated by the interplay between healthcare and legal aspects.[21–23] More specifically, the impact of PTSD and Sub-PTSD and the frequency of somatic expressions of psychological distress - combined with limited access to specialised mental health services - form a persistent challenge for satisfactory primary care delivery, and call for innovative approaches.[11]

Complementary and Alternative Medicine (CAM) approaches have been proposed to enhance the efficacy of conventional primary care practices for patients with PTSD, generally with promising results but low levels of evidence.[24–26] CAM has also been proposed for other conditions possibly linked to manifestations of Sub-PTSD. For example, chronic back pain is recognised as a good target for CAM in several systematic reviews and meta-analyses, and research quality assessments have been satisfactory.[27–29] With lower levels of evidence, CAM has nonetheless yielded interesting results on sleep disturbances[30,31] and migraine.[32,33] The most widely studied CAM subtype is Mind-Body Intervention (MBI), comprising meditation, breathing and relaxation techniques, movement therapies, yoga, manual therapies, art, music and dance. A couple of recent meta-analyses showed interesting results for MBIs with a reduction in PTSD symptoms, but overall poor-quality methodology of the studies included.[34,35]

Despite this evidence, authors often underline the gap between favourable evidence and the existence of clinical guidelines on the one hand, and actual knowledge among health professionals and the use of CAM in daily practice[36,37] on the other. In a qualitative study exploring care providers' perceptions of CAM in the Veteran Health Administration, Fletcher et al. reported several barriers to prescription identified by physicians and nurses: lack of awareness of the evidence, fear of being perceived as "non-scientific", poor endorsement by institutions, lack of recognition for CAM providers, lack of time, funding and referral criteria.[38] Professional culture also plays a role and CAM is variably endorsed by specialists, while it finds wider acceptance among primary care physicians.[39] Similar results have been found among nurses[40] and midwives.[41] Similar barriers to use and referral regarding MBI have been found among young physicians reporting a lack of training and experience, doubts about scientific validity, a lack of acceptance among peers, insufficient clinical time and inadequate reimbursement from insurance bodies.[42] Other studies have shown that nurses with a better knowledge of MBIs had a more positive attitude and referred more frequently.[40]

Research focusing on MBIs for refugees specifically is still scarce and presents similar methodological flaws.[43] However, interest in this topic is notable and a few studies report promising results. In a report on two dance/movement therapy (DMT) interventions for young Sierra Leone torture survivors, Harris stated that DMT overcomes cultural differences and helps traumatised individuals gain the skills they need, both for anchoring themselves "in their bodies," and for understanding the relationship between bodily sensations and traumatic memories.[44] Consequently, the author noted that MBIs could help reduce PTSD-related hyperarousal and hypervigilance, cope with reexperiencing, and yield promising results in treating mild traumatic symptoms and somatic distress. In a RCT on traumatised refugees from Kosovo, Gordon et al. showed that mind-body skill groups were effective in reducing PTSD symptoms, especially reexperiencing and numbing.[45]

Given the paucity of data regarding the use of MBI for refugees in primary care setting, information is needed about how MBI could complement professional efforts to help traumatised refugee patients. As health professionals' experiences and attitudes towards MBI are known to influence their use in various clinical settings but have so far been poorly documented in refugee patient populations, we sought to explore the staff's perceptions of the use of MBI and factors limiting or facilitating their prescription. For this purpose, we designed an exploratory qualitative study aiming to describe professionals' experiences of the role of MBI in their practices.

Methods

Approach, characteristics and reflexivity among researchers

This study was designed by a research group focusing on the use of mind-body interventions in primary care for refugee patients. This group gathers researchers experienced in quantitative, qualitative and mixed-method research, and it is currently deploying several studies using different methodologies to diversify the observational perspectives on these under-documented approaches. Here, we chose to combine two complementary qualitative approaches: non-participative ethnography and interview surveys. The research group offers theoretical, methodological, and practical training to young researchers. For the purpose of this study, two 5th-year medical students (A1, A2) benefited from ten hours of structured theoretical and methodological training and were directly supervised during the first interviews and along the analysis process, as part of their training. Because of the researchers' professional proximity with the object studied, emphasis was placed on researcher reflexivity. Before the study began, the researchers documented their preconceptions about the research question and expected results, and later compared them to the final outcomes. The two researchers directly involved in the research field (A1, A2) also kept field diaries to record their impressions and observations. Additionally, the research group was overseen by a psychiatrist (A5) and a mental health nurse (A4), both specialised in qualitative research, whose role was to identify and discuss the effects of subjectivity in the study implementation and analyses of the results.

Context and sampling

The migrant health unit (Programme Santé Migrant, PSM), hosted by the University Hospitals of Geneva (HUG), is a primary care facility responsible for initial health assessments and for organising holistic care for individuals registered as asylum seekers. The unit staff is comprised of a senior clinician, two and a half full-time equivalent (FTE) chief residents, five and a half FTE residents, nine and a half FTE nurses (two FTE on the PSM premises, the other doing outreach work), a counsellor, and a half-time psychomotor therapist. According to HUG recruitment policies, a large majority of the residents and chief residents were trained at the university of Geneva medical school. Similarly, nurses working at PSM were trained in Switzerland. In 2023, some 3500 patients visited PSM. Their mean age was 27 and 65 % of the total were male. The main countries of origin were Afghanistan, Turkey and Syria.

From 2020, two different MBIs were implemented in the PSM unit: 1) a capoeira group mixing refugee patients and participants from the

general population, and 2) psychomotor therapy with individual and group sessions. Capoeira is a Brazilian martial art combining music, dance, and self-defence. Its use in care and education has been documented,[46,47] including refugee camp settings.[48] The refugee patients from the PSM unit were included in a general community capoeira group led by a "Mestre" for 90-minute sessions. The refugee/non-refugee ratio in the group was about 2–3/10 and the patients could attend one to three sessions a week. The staff members of the PSM unit were informed of the setting of the capoeira group and invited to refer patients to the counsellor who was in charge of the recruitment for this group. Psychomotor therapy on the other hand, is based on movement therapies and various MBIs, combined and coordinated to achieve a better integration of emotions and bodily sensations, relaxation and increased wellbeing.[39] It is a paramedical practice officially recognised by several Western European administrations. In the PSM unit, the psychomotor therapist offered individual 60-minute sessions for patients directly referred by physicians or nurses. Depending on the patients' need, the frequency of the sessions could be twice a week to once a month. After several individual sessions, stabilized patients could be offered to participate in weekly group sessions gathering three to five patients. Following each resident's rotation (i.e. once a year), the psychomotor therapist gave a 30-minute talk about the theory and the expected benefits of psychomotor therapy to staff members of the PSM unit.

To initiate the interview phase of the study, two information sessions were conducted with PSM professionals from February to June 2022. Sampling deployed a purposive approach based on criteria such as age, gender, occupation, and length of practice in the PSM unit, to ensure diversity and representativeness among the participants. The only prerequisite was to recruit patients receiving mind-body intervention (MBI) sessions. On the basis of good practice recommendations,[49,50] our estimated target to achieve a satisfactory level of data saturation ranged from 8 to 15 participants. Detailed information was given to the participants, written consent for recording and use of the data was obtained, and data was promptly coded, stored, and analysed in accordance with institutional data protection procedures. As the study does not fall within the scope of the Swiss Human Research Act, the Cantonal Research Ethics Commission provided an ethics waiver. No compensation was offered.

Tools

The ethnographic phase was backed up by a field guide, comprising general topics to be explored and indicating key informers. The participants' socio-demographic data was collected using a self-administered questionnaire. To facilitate the research interviews, a semi-structured interview guide was developed. Drawing on elements in the scientific literature and the initial ethnographic data, we designed a guide to explore the professionals' points of view on: (1) their representations of MBIs, (2) the perceived benefits and limitations of MBIs, and (3) their prescribing habits for MBI in this healthcare context. Following the principles of semi-structured interviews and qualitative surveys, the set questions served as a flexible framework for the interviews and were refined throughout the study to enhance the data collected. Given the relatively recent implementation of MBI in migrant healthcare settings and the expected heterogeneity of professionals' representations and practices, individual interviews appeared more appropriate than group settings for the purpose of this exploratory study.

Conduct of the study

From October 2021, two researchers (A1, A2) initiated the non-participative ethnographic data collection within the PSM unit by formally and informally meeting various team members and observing the overall functioning of the facility, particularly focusing on practices and patient trajectories related to MBI. The researchers also used existing institutional documents describing the implementation of the MBIs used there and the initial evaluations of patient acceptability for capoeira.[51] This initial phase ended in February 2022 when the semi-structured interviews were initiated. For these interviews, approximately one-hour timeslots were reserved. The researchers ensured a secure interview environment, as free as possible from disruptions related to the healthcare facility's activities. The research interview started once the participants' consent and socio-demographic forms had been completed. The interviews were conducted by the two researchers, each taking on a different role. One researcher engaged in direct conversation with the participant, while the other took notes on the conduct of the interview on the topics discussed before and after recording. All conversations were recorded and later transcribed verbatim. We discontinued the interviews after twelve encounters, when data saturation was reached.

Data analysis

The transcribed interviews were analysed using the Interpretative Phenomenological Analysis (IPA) method. This method combines phenomenological and hermeneutical approaches to discourse analysis, and seeks to give an account of participants' efforts to express their thoughts accurately and researchers' attempts to make sense of the participants' experiences.[52] The resulting theory should reflect a dual analysis of the discourse: a phenomenological approach aiming to systematically and faithfully analyse the manifest discourse, and an interpretation seeking to restore the meaning of the discourse within the context of its production. In this study, the interpretation drew on the previously collected ethnographic aspects and the researchers' field notes and observations during the interviews. The interviews were independently analysed by two researchers after determining the appropriate level of analysis. Themes were extracted from each interview and gradually organised and grouped into meta-themes, reflecting the participants' common perspectives. Isolated or divergent discourses were also analysed to develop a coherent emerging theory. Throughout this process, various meetings were held, either between the two researchers (A1, A2) or within the research group (A1, A2, A4, A5), to discuss the definition of meta-themes and the integration of interpretive data.

Results

Participants

Twelve professionals took part in the study. Their mean age was 35 and a majority of them were physicians (8 out of 12). Interview durations ranged from 25 to 75 min. Participants' socio-demographic data is summarised in Table 1.

Table 1
Participants' sociodemographic data.

Participant	Age	Self-defined Gender	Occupation	Time as staff member at PSM unit
A	31	M	Resident	10M
B	41	F	Advanced nurse	3Y
C	31	M	Resident	10.5M
D	32	F	Chief resident	12M
E	33	F	Resident	12M
F	34	F	Nurse	4Y
G	29	F	Resident	10M
H	30	M	Resident	11M
I	54	M	Counsellor	7Y
J	33	F	Chief resident	11M
K	35	F	Resident	12M
L	37	M	Chief resident	2.5Y

Ethnography

The field notes and documents compiled during this first phase of the study yielded four main observations: (1) Heterogeneous prescribing habits. The researchers noted that some professionals were clearly inclined to prescribe MBIs and referred patients while others were more reluctant to do so; (2) Various and inexplicit patterns of capoeira and psychomotor therapy referral. Psychomotor therapy seemed more clearly perceived by professionals as a therapy. On the other hand, capoeira was identified more as a non-therapeutic activity; (3) Strong adherence and acceptance for psychomotor therapy but relatively poor adherence for capoeira; (4) A continuous struggle to fund MBIs. The absence of administrative status and of health insurance reimbursement require repeated searches for private funding, which are time-consuming, laborious and sources of insecurity for the sustainability of MBIs.

Health professional interviews

The thematic analysis resulted in an emerging theory comprising four main themes: representations of MBIs, perceived benefits and limitations, prescribing habits, and coordination with mental health services.

Representations of MBIs: generally poor initial knowledge of MBI

Most of the professionals participating in our study did not have an elaborated representation of MBIs before starting to work at the PSM unit or before the implementation of MBIs in the unit.

> *"No, it's not something [MBI] I was really familiar with, um… it wasn't really part of care for me." F*

Lacking adequate insight into MBI, they struggle to delineate its field and grant the two techniques the same therapeutic status. The participants blamed a lack of training on MBIs during their studies or their later careers. They related this fact to a global western culture and to a western medical culture with little openness towards alternative medicines. However, a few participants reported a degree of understanding of the therapeutic potentialities of MBI. And they often related this to their own practice of mind-body activities and their positive impact on themselves.

> *"Meditation, breathing exercises, these are things I do for myself, and it feels good. So when I saw they were doing body-based approaches at PSM, I thought that was a good thing." C*

Perceived benefits and limitations: MBIs are viewed as acceptable and helpful for a range of problems in the care of refugees

The overall perception of the effects of MBI was positive. Professionals referring patients to one or both MBIs implemented underlined the interest of such approaches for refugee patients, but with varying degrees of adherence.

Varying degrees of support

For participants perceiving positive effects, the MBIs were acceptable for patients and helped retain them in treatment. Furthermore, the MBIs contributed to the establishment of a strong therapeutic alliance.

> *"It can be exciting because there are often positive developments with MBI […] it's very encouraging to see that. Sometimes, it only takes two or three sessions, and we shift from situations where we're really scared to a real progress. It's really good to see." A*

But other participants were more uncertain about the benefits of the MBIs and reported only partial or temporary improvements.

A variety of areas where MBIs could be beneficial

The participants in the study listed a variety of medical conditions and difficulties where the MBIs used in the unit appeared helpful: somatic expressions of PTSD, cultural and communication issues, and social isolation.

Somatic expressions of PTSD

The MBIs explored here appeared helpful in relaxing physical tension related to stress, anxiety, depression, sleep disturbances, post-traumatic flashbacks, dissociation, and chronic pain.

> *"The goal [of MBI] can be to help with stress, to lower tension, etc. It brings the focus back to your body." F*

Some other issues, potentially improved by MBIs, were cited by the participants, such as substance use and eating disorders resulting from PTSD, sexual abuse and violence.

Culture and communication

The participants considered that culturally determined expressions of symptoms and perceptions of illness and care were barriers when offering conventional treatment to refugee patients. MBIs could be more acceptable, possibly because bodily expression is less culturally coded, and MBIs afford patients more control.

> *"I think what's interesting is that it's all about bodily expression… and they [MBI practitioners] let the patient take the lead.] I think these [cultural] barriers can be overcome." G*

The MBIs were also perceived as means to overcome communication and language barriers.

Social isolation

For several participants, the MBIs also addressed issues of social isolation and integration.

> *"Capoeira, it gets them to integrate into a group, to also learn French, to get out of their rooms, to have an objective for the week, and social connections with the other participants." B*

Few limitations perceived

Very few clear limitations were found in the discourse. The participants reported that some patients had stated that the MBIs offered did not suit them, but they were not able to provide an explanation. Only one participant reported traumatic re-living as an adverse effect of capoeira.

Prescribing habits: the professionals experienced difficulties in prescribing MBIs, except for those who had personal experience

The participants in the study reported barriers to prescribing MBIs, partly due to a limited offer for PSM patients, but mainly to their own lack of knowledge and experience of MBI.

A lack of experience

The physicians regularly pointed out that they had not had many patients attending MBIs or that they had not known their patients for long and therefore could not claim significant experience in prescribing them.

> *"My patients in MBI, they're all kinda just starting out, and I haven't had the chance to catch up with them yet to ask what they think about it." D*

In contrast, nurses who had been working at the PSM unit for a longer period were more likely to report an experience with MBIs for patients.

Unclear prescribing criteria

The physicians participating in the study were aware of their poor

understanding of indications for MBI and of their difficulties in thinking of MBIs as the right tools at the right moment.

"Because I don't have clear criteria, whereas I do for medical decisions, I won't consider it right away." G

And several professionals ended up describing MBIs as makeshift or last-resort solutions.

The role of professional and personal experiences

According to many participants, experience is the key to understanding the practical basis of MBIs and their place in the therapeutic toolbox. Applying MBIs to themselves while accompanying patients in the initial sessions helped the participants to draw on this experience. But those who were the most comfortable prescribing MBIs were those who had had experience of MBI for their own needs.

"For me personally, it helps a lot [physical activity, breathing exercises] … anything that works for me, I give it a try for others." H

A complex coordination with mental health services

According to the PSM professionals, several problems can hinder refugee patients' access to mental health services: their negative perceptions of western psychiatry, their fear of facing traumatic memories, poor psychological literacy, and lack of adjustment of the psychiatric offer. In this respect, different roles of MBI were described.

A facilitator for psychiatric access

When patients are reluctant to talk and attend psychiatric appointments, MBIs can be of help to refer them at a later stage.

"When I sense a lot of stress [in the patient] and I think psychiatric follow-up could help them, but they don't want it, [MBI] can help alleviate their fears." E

An alternative to psychiatric care

MBI is also sometimes viewed as a "soft" therapy belonging to primary care rather than to the psychiatric sector.

"The follow-up [with MBI] is much smoother than with medication or even psychiatric treatment… It needs to be separated from the psychiatrist." A

A complement to psychiatric care

More often in the participants' opinion, MBIs need to coexist with psychiatric care, as they add a bodily approach to conventional talk therapies, and they foster compliance with treatment.

"MBIs [and psychiatry] complement each other. It's not one or the other. We need both." B

Discussion

Our study addressing the lack of research on MBIs implemented in primary care and focusing on traumatised refugee patients sheds light on health professionals' perceptions of the two MBIs deployed in our unit, on perceived benefits and limitations, and on the professionals' prescribing habits. Combining results from ethnography and interviews allowed us to observe heterogeneous perceptions and habits regarding MBIs and their use. Some professionals expressed a strong belief in the benefits of MBI while others were more guarded. Despite a widespread lack of prior understanding of MBIs by the professionals, they identified several clinical, social, and organisational issues where MBIs were helpful. They were generally willing to prescribe or refer for MBIs, but reported barriers such as their own lack of training and experience. It can be noted that professionals having personal experiences with MBIs referred refugee patients to these interventions more readily. Two additional themes in the results were found in a single phase of our study. The difficulty in funding MBIs was found in the ethnographic data only, while combining MBIs with psychiatry was mentioned in the interview phase alone.

The present work contributes to the still small body of literature dedicated to the role of MBIs in refugee patients' healthcare. To our knowledge, it is the first to propose a qualitative account of professionals' perceptions and prescribing habits in this field. Our approach enabled us to collect and analyse rich and comprehensive dataset in order to address our research question. The good internal validity of our results was ensured by our focus on rigorous research, researcher reflexivity, triangulation throughout the study process, a satisfactory level of data saturation and thorough reporting.[53] However, our study presents certain limitations. Despite our initial plans, we were unable to discuss our final results with the participants because of time constraints and staff turnover. This could account for a slight shortfall in our results, which we believe was compensated by the quality aspects mentioned previously. It should also be noted that our study was conducted in a single centre and the participants' accounts unavoidably referred to a specific context of MBI implementation. The lack of published studies in similar contexts calls the transferability of our results into question. Similar observations are needed in other refugee care settings to extend our results to broader levels of discussion.

Our results showed contrasted perceptions and attitudes among the professionals towards MBIs. The PSM unit care providers obviously presented different levels of understanding and appreciation of the potential benefits for their patients. A recent systematic review showed that general practitioners and psychiatrists were mostly in favour of MBIs in their practice, while internal medicine physicians were predominantly against them.[39] It could reside in differences in appreciation of the nature of scientific evidence, as suggested by several studies.[54–56] Although they share quite similar training and medical culture, PSM physicians and staff could be diversely influenced by either the general practice culture or the internal medicine culture, and could therefore assign different values to scientific evidence. In a qualitative study conducted among academics in the UK, Maha and Shaw[56] formed three categories according to their views on CAM and MBI: the "enthusiasts", the "sceptics" and the "undecided". The last two were prominent in the sample, with the "sceptics" underlining the absence of positive scientific grounding for the use of MBI, and assigning them to a non-medical field they did not feel comfortable with. In our study, we did not observe strong rejection, but the discourse collected clearly rallied the "enthusiast" or the "undecided" stances. According to Maha and Shaw, the "undecided" emphasise the uncertainty of the scientific evidence for MBI and report a lack of knowledge and training. As for the "enthusiasts", the principal factor supporting their position was positive professional experiences when referring patients for MBI, or practising MBI with their patients. Our results show uncertain professional stances, with the same concerns about knowledge, training and scientific evidence. Furthermore, several participants, mainly young doctors, underlined their lack of professional experience in MBIs while more experienced nurses were more favourable towards MBIs with examples of patients who had benefitted from MBI sessions. This impact of professional experiences on healthcare professionals' views of MBI has already been highlighted in other medical fields, such as oncology.[55] Interestingly in our study, personal experience appeared as a strong rationale for the "enthusiasts". Self-care, relaxation, physical activity and dance were cited as personal practices underpinning their tendency to prescribe these practices to their patients. This mirrors the results of another qualitative survey among primary care physicians in the USA, which identified personal experience of MBI as the key facilitator for practitioners' commitment to MBI practice and referral.[57] This points to necessary adjustments in the

nursing and medical curricula and the need to include training and work experience in MBI, and more generally CAM.[58]

When the participants in our study relate their views on MBI to the specific population of refugee patients, they identify a variety of areas where MBIs could be helpful. Without specifically mentioning the concept of sub-PTSD, they stressed the prevalence of sleep disturbances, chronic pain and diffuse anxious-depressive symptoms among their patients, along with the feeling that their skills and techniques, although culturally sensitive, were not sufficiently helpful. In this case, they viewed MBI as a promising complement to usual care, sometimes with a spectacular impact, or for the "undecided", as a harmless way of addressing patients' distress and inactivity. This aspect is in line with conclusions from a recent comprehensive review on mental health prevention and treatment methods among refugees and displaced populations.[43] The author suggested that the positive impact of MBIs on refugee patients' mental health could be mediated by the cultural dimension of body-centred approaches. According to her synthesis, body-centred rituals allow patients to share their histories and emotions.[43,44,59] These approaches could also help refugee patients unfamiliar with western healthcare in two ways. Firstly, they do not fundamentally rely on language and verbal skills to express emotions and distress, and are therefore widely accepted, and they are also cost-effective as there is no need for an interpreter.[60] Secondly, MBIs could provide partial or temporary alternatives to psychiatric care and treatment.[43] In refugee patients' original cultural backgrounds, psychiatry is often perceived as frightening and shameful, so that MBIs might be more easily accepted. In line with this, the participants in our study identified MBI as “soft” therapy, either a substitution or a facilitator for psychiatric care. Our results and the aforementioned aspects point to the potential transcultural relevance of MBIs. However, further research including refugee patients' views on MBI and their cultural perceptions and acceptance is necessary.

Overall, our results show a contrasted picture of the implementation of MBIs in primary care dedicated to refugee patients. On the one hand, MBIs are generally perceived as useful, well accepted, and promising. On the other, their prescribing criteria do not seem to be well known, their referral circuits are inexplicit, and their funding and sustainability not ensured. These difficulties could hinder professionals' motivation and inclination to enhance their knowledge about MBIs and prescription/referral strategies for MBI, as well as the institutional scope for sustaining MBI practice. This raises the issue of structural and organisational factors facilitating the implementation of new interventions in primary care settings. These factors have been listed by several systematic reviews[61–63] and grouped into three main categories: system, staff, and intervention characteristics. Among these factors, several were identified in our study, such as open communication, adaptation of the premises, and funding (system); beliefs regarding needs, knowledge and skills, and competing demands (staff); training, feedback, and evidence quality (intervention). Implementing new interventions in primary care for refugees thus appears to be a delicate task, and it is necessary to identify facilitating factors. In this respect, Lau et al. proposed a comprehensive set of recommendations for changing staff behaviour in primary care, which should be considered when planning new interventions.[62] More specifically concerning MBIs, the issue of the quality of evidence spans the three categories of factors influencing the success of implementation, as it affects the readiness of the system to fund interventions and provide an appropriate setting, as well as the professionals' perceptions of MBI and their motivation to learn and train. In a seminal article about the role of evidence in the effective implementation of change in patient care, Grol & Grimshaw showed that professionals' willingness to comply with new recommendations depended on: the type of health problem (compliance was better in acute care than in chronic care); the quality of evidence supporting the recommendation; compatibility of the recommendation with existing values; reduced complexity in the decision-making process; more specific description of the desired performance; and few new skills and organisational changes needed.[64] This points to several barriers to MBI implementation in primary care for refugees already identified in the literature and in our results: chronic conditions, moderate quality evidence, conflict of values, unclear expectations regarding the effects and poor access to training. This illustrates the many challenges faced by staff and institutions when trying to address refugee patients' distress through innovative MBIs. Additional reports on similar interventions in refugee care are needed to more fully document the specificities of MBI implementation in primary care and to progress towards the drafting of specific guidelines.

Conclusion

The use of MBIs to address traumatised refugee patients' mental health needs in primary care is supported by a nascent body of experience and literature. Our study contributes to this still under-researched field by showing: (1) professionals' positive perceptions of MBI – stressing its cultural relevance and acceptability – partly tempered by a lack of training and experience; (2) numerous challenges raised by the implementation of MBIs in primary care (e.g. lack of awareness of current evidence and expected benefits, insufficient staff training, funding issues, etc.). Further reports, research and expert discussions are necessary to document the potential benefits of MBIs for traumatised refugee patients, to better define the place of MBIs in primary care for refugee patients and to help design recommendations for specific training programmes in medical and nursing curricula, and in continuing education. Future MBI programmes in similar settings could also benefit from tailored implementation guidelines.

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CRediT authorship contribution statement

Caterina Incagli: Writing – original draft, Investigation, Formal analysis. **Nora Sommer:** Writing – original draft, Investigation, Formal analysis. **Sophie Durieux-Paillard:** Writing – review & editing, Project administration, Conceptualization. **Eva P. Rocillo Aréchaga:** Writing – review & editing, Supervision, Conceptualization. **Aymeric Reyre:** Writing – review & editing, Writing – original draft, Supervision, Project administration, Conceptualization.

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Supplementary materials

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