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Conditions for the effectiveness of health mediation on the healthcare use by underserved populations: A scoping review

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Abstract

Objectif: This article aims to analyse the conditions under which health mediation for healthcare use is effective for underserved populations.

Method: We conducted a scoping review on the conditions for effective health mediation according to the PRISMA Extension for Scoping Reviews standards. We searched the following databases: Pubmed, PsychINFO, Scopus and Cairn. We selected the articles concerning health mediation interventions or “going towards” and which sought to strengthen people’s empowerment through a third-party mediator, implemented in high-income countries and conducted among underserved populations, along with articles that questioned their effectiveness conditions. We created a two-dimensional analysis grid of the data collected: a descriptive dimension of the intervention and an analytical dimension of the conditions of effectiveness of mediation in health.

Results: 22 articles were selected and analysed. The scoping review underlines many health mediation characteristics that articulate education and healthcare system navigation actions, along with mobilisation, engagement, and collaboration of local actors among themselves and with the populations. The conditions for effectiveness were grouped in a conceptual framework for health mediation.

Conclusion: The scoping review allows us to establish an initial framework for analysing the conditions for the effectiveness of health mediation and to question the consistency of the health mediation approach regarding cross-cutting tensions and occasionally divergent logics.

Keywords: healthcare use, health mediation, underserved population, effectiveness

- The underserved populations are subject to a threefold penalty: they are more exposed to the disease, they are less receptive to prevention messages, and finally, they have less healthcare use. Health mediation represents a promising intervention to reduce inequalities in healthcare use but we don’t know why and how it works.
- To maintain its necessary flexibility, health mediation could be considered as a systemic and dynamic process with multiple and permanent interactions between interventional and contextual components.
- The scoping review allows us to draw up an initial framework for analysing the conditions of effectiveness of health mediation and to question the coherence of the approach to health mediation considering the divergent tensions and logic that permeate it.

Introduction

Healthcare use integrates the need for care, the intention to consult, and the care system's effective use. Its depends on different factors (1) and questions people's perception of the need for care and their ability to obtain appropriate care services without delay and obstacles. No use of healthcare refers to anyone who has proven health needs that are not being met. The study of no use of healthcare considers all unmet needs, whether perceived or not by the individual. This can be expressed in different ways: non-observance of treatment, lack of medical follow-up, delay in treatment and even healthcare renunciation, such as situations where individuals do not use care services when they are experiencing a physical or psychological manifestation or discontinue an ongoing care process (2).

The lack of healthcare use is a major issue in France debating on social health inequalities, although research insists that care plays only a small part in their explanation (3). Indeed, because they are exposed to more harmful living conditions and do not always have the resources to cope with them, people belonging to the most disadvantaged socio-economic groups are characterised by higher morbidity and mortality rates than the rest of the population (4,5). However, they do not use care and prevention and face difficulties of integration and continuity in the care pathway (4,6,7). Phenomena of renunciation and no use of care, which are preponderant among the most disadvantaged people (given their socio-economic status, their social or cultural background), illustrate the difficulties of access and healthcare use, and raise questions concerning the effectiveness of the public policies.

Although it has a universal social protection system, France faces social inequalities in accessing and using health services. Healthcare use is socially differentiated, even considering age, gender and health status (8). Numerous studies identified primarily structural factors leading to inequalities in healthcare use, notably the cultural barriers, a low level of literacy, poor social integration and social support, the prioritisation of health needs to other basic needs, specific psychosocial characteristics, the internalisation of medical standards and life experiences. These factors are significant in the most vulnerable, disadvantaged and least educated populations. This use, often less frequent, delayed and more oriented towards curative care, is in part linked to a lesser knowledge of the care channels, a different relationship with the body and disease, along with a different conception of time, risk and the importance given to their health (7). These factors impact personal attitudes towards care or preventive measures and, consequently, the intention of people to seek care or not. Other authors have shown the role of accessibility to rights (9), geographical and financial accessibility to care (10–12), to a healthcare professional or digital technology (11,13) in inequalities in healthcare use. The care relationship appears to provide different responses, for a given disease, according to the social characteristics of the patients, in particular because of the social and cultural gap between physicians and their patient, along with the lower quality of the resulting interaction in the patient-caregiver relationship (7,14). Healthcare organisations may play a role due to the insufficient availability of caregivers due to a lack of personnel, ad hoc training for the specificities of underserved populations, the lack of equipment, and a lack of coordination (15). These factors tend to lengthen the waiting and support times (14) which are accentuated by the preceding factors. These factors act as potential obstacles to seeking care. This is why, in addition to encouraging the intention to seek care, it is necessary to enable disadvantaged people to overcome these obstacles (16) and to adapt the health system to the specific characteristics of these populations.

Underserved populations include very heterogeneous populations (4,17). They are represented by all populations underserved by the healthcare system because of their living conditions, in particular, about material conditions and their socio-economic precariousness (housing, employment, education,

1
2
3 income), administrative precariousness (access to rights and administrative status, health coverage),
4 their geographical mobility, or their psychosocial characteristics (integration and social support, history
5 of the healthcare system use) and, on the other hand, to the inability of the system organise and adapt
6 to reach and support them (6). Underserved populations face specific systemic barriers, considered as
7 structural factors : strong competitiveness with basic needs (i.e. Food insecurity, housing instability
8 (9,18)), discrimination (19), insecurity (4), language barriers and difficulties in accessing healthcare
9 interpreters (20). At the individual level, underserved people have socially representations (ie. body,
10 health, care perceptions) different from dominant (21). This leads to a lowered benchmark for good
11 health and underestimating the severity of the disease (22) and tend to hinder formulating a request
12 for care, healthcare use or quality care (23–25). These populations are, in a way, subject to a threefold
13 penalty: more exposed to the disease, less receptive to prevention messages, and finally, less user of
14 healthcare. Therefore, interventions promoting healthcare use by underserved populations must go
15 beyond the sole issue of supply. They must promote the ability of services to adapt their organisations,
16 to strengthen the abilities of people to make decisions favourable to their health and to support them
17 in overcoming the obstacles encountered (25). Simultaneously they must develop programs of access
18 to rights, housing, employment, and tackle discrimination and exclusion.

24
25 Health mediation is one such intervention (24,26)(27). Health mediation corresponds to connection
26 mediation. It differs from healthcare mediation, which focuses on resolving conflicts within healthcare
27 facilities (27). The French National Authority for Health (Haute Autorité de Santé, HAS) defines it as a
28 temporary process of “going towards” populations, health and social professionals and institutions and
29 “working with” people in a logic of empowerment of individuals (23). This definition highlights the
30 articulation between two functions : facilitating access to rights, prevention and care and raising
31 healthcare workers awareness about the access difficulties (5,23). Finally, mediation involves third
32 party mediators, generating connections and participating in a change in representations and practices
33 between healthcare stakeholders and the population. This third-party must enable the transformation
34 of healthcare system as an element of socialisation (28). Characterising health mediation remains a
35 difficult task, because of its multi-faceted nature, particularly in high-income countries (patient
36 navigator, health mediators, relay individuals, etc.). Moreover, the evaluation of health mediation
37 provides very different results from one context to another, from one population to another. Apart
38 from pioneering militant studies (29–31), no study has conclusively estimated its effectiveness and
39 conditions of effectiveness.

44
45 This article aims to analyse the conditions under which health mediation for healthcare use is effective
46 when applied to underserved populations and exposed to numerous vulnerabilities, such as people
47 living in precarious habitats, travellers, migrants, and homeless people.

50 **Method**

51 We conducted a scoping review (32), relevant when information on a given topic is not
52 comprehensively examined, complex or diverse. It is thus particularly suitable for our subject as it
53 allows (i) the identification of existing types of evidence in the field, (ii) the clarification of key concepts
54 or definitions, (iii) the identification of key characteristics related to our subject, and (iv) the
55 identification of knowledge gaps (33). We conducted this review according to PRISMA Extension for
56 Scoping Reviews (PRISMA-ScR) standards : Check-list and Explanation (34).

Articles identification

We searched for articles in English and French, published between 1st January 2015 and 18 December 2020, in the following databases: Pubmed, PsychINFO, Scopus and Cairn.

The review was conducted using a keyword search equation organised around three concepts: health mediation as an intervention strategy (health mediation, community health, community approach, etc.) or as a position adopted in a function (e.g. health mediator, community health worker, health assistant, etc.), conditions of effectiveness, and underserved populations. The search equation is presented in Appendix 1 (see Appendix 1).

Articles selection

We selected the articles according to the following criteria:

- Health mediation interventions or interventions to “going towards” to local populations and actors and seeking to strengthen the empowerment of individuals by a third-party mediator,
- Interventions implemented in high-income countries,
- Interventions conducted with underserved populations,
- Articles questioning the conditions of effectiveness of the interventions carried out,
- Articles in English and French.

We excluded all articles that did not meet the inclusion criteria.

Data analysis

Data were collected to help answer the following questions: What is the purpose of the study? What is the target population? What are the characteristics of the study? What are its study scheme and the methods used? What intervention is implemented in detail? What are the role and duties of the health mediator? How is the intervention planned? Is a community approach envisaged and implemented? If so, which one? What is the implementation process? What is the implementation context? What are the identified effects of the intervention? What are the conditions of effectiveness related to the context, the intervention, the actors, its organisation, and the individuals?

Our analysis grid was built through two dimensions: i) a descriptive dimension: design, planning, implementation process of health mediation, its effectiveness; ii) an analytical dimension assessing the conditions of its effectiveness. For the first dimension (i), we organized this description using two tools, the Template for intervention description and replication (TIDieR) grid (35) and the Tool for The Analysis of Transferability and Support for the Adaptation of Interventions in Health Promotion (Outil d’AnalySe de la Transférabilité et d’accompagnement à l’Adaptation des InteRventions en promotion de la santé, ASTAIRE) (36). For the second dimension (ii), we grouped the identified conditions of effectiveness into five categories: the conditions related to the context, the intervention, the organisation of the intervention, the actors, and the individuals. Finally, we added an analysis of cross-sectoral collaborations, i.e. the level of interaction between sectors or between actors and/or institutions using the work of Bilodeau and al (37). For these authors, the first level of collaboration is networking, representing information exchange. Cooperation refers to working together to optimise resources to accomplish one’s own goals better. This requires less interdependence between sectors than the coordination of actions. Coordination involves joint work between actors to make mutual adjustments to render actions more coherent and robust to achieve shared objectives. Integration aims to co-construct new, more systemic interventions (e.g., multi-sector government policies) and

requires the integration of objectives, processes, resources, and actions. It requires an even higher degree of collaboration and interdependence between actors (37).

Patient and Public Involvement statement

No patient or public were involved for this research.

Ethics approval statement

Not applicable

Results

We identified 1407 articles. After excluding duplicates, 22 articles were selected (see Figure 1).

Figure 1: Flow chart for selecting articles according to established eligibility criteria

Study description

Among the twenty-two articles, eleven were conducted in the United States (38–48), nine in France (28,29,49–55), one in the United Kingdom (56) and one in Australia (57).

Twelve articles presented case studies (28,29,38,39,44,45,47–52,54), seven from literature reviews (41,43,53,55–57), two from cohort studies (42,46) and one article presented one randomised controlled trial (40). A qualitative method was used in twenty articles, and a quantitative method in two articles (40,46).

Twenty articles presented studies conducted on third-party mediators (i.e. “Person of trust, from or close to the population, competent and trained with guidance and support function. They create a link between the healthcare system and a population that has difficulty accessing it” (24)) and two collected data from persons of the intervention (45,57).

In seven articles, third-party mediators intervened with underserved populations in general, (38,41–44,46,49) including one article with Travellers (49), six articles with vulnerable populations (28,38,48,54–56), six articles with migrants (29,39,40,42,47,51), including three articles with Latin Americans (39,42,47), and two articles with Roma (29,51).

Health mediation: descriptive aspects

The missions of health mediation

The interventions promoted healthcare and essential services use, two of which focused on mental healthcare use (49,52) and one on colorectal cancer screening (53). The health mediation intervention consisted of joint action methods by i) education actions and navigation in care system aimed at persons, or ii) a third-party mediation.

The first type (i) referred to individual or collective educational actions. They offered support for persons in a logic of empowerment (i.e. process by which an individual or a group acquires the means to strengthen their capacity for action (58)) (28,54,56). However, planned education actions were only possible when persons were stabilised and showed low competitiveness of needs, i.e. the primary needs necessary for survival, such as food or housing, were secure.

The navigation actions focused on two complementary principles: the first is “going towards”, which locates and directs, the second is “bringing back to”, i.e. the physical accompaniment of people to the healthcare system and essential services such as health insurance or social assistance services for persons (28,38,49,50,52,54,56,57).

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3 These education and navigation actions helped people understand and accompanied them in their
4 healthcare use (identification of the need and promotion of access). Moreover, the health behaviours
5 of third-party mediators were models of inspiration for behaviours favourable to persons' health (45).
6
7

8 The second type aimed to mobilise, engage and collaborate local actors (i.e. healthcare professionals,
9 social workers, decentralised state services agents and elected officials) and in particular healthcare
10 professionals, in order to "being together". The role of third-party mediators is to identify and consider
11 the specific needs of these populations (38,42,45,49,51,53) in order to "working together" to share a
12 diagnosis (28,38,39,41,50,55,56). They developed collaborations to more or less formalise steering
13 role, local networking by sharing knowledge between healthcare professionals , social sector
14 professionals, and public health and social institutions (42,53,54). These collaborations are intended
15 to acculturate actors to underserved population's needs (49,51) and shared concrete solutions for
16 health . For example, free neighbourhood shuttles were set up to facilitate mobility to a medical centre
17 following coordination between municipal services, third-party mediators and healthcare
18 professionals (44); or implementation of walk-in slots with healthcare professionals to facilitate their
19 availability about such as food or administrative insecurity and residential instability (28,44). These
20 local actors formed a network capable of monitoring the difficulties encountered by the populations
21 and helping research by collecting health data and healthcare use, as proposed by Harris MJ. and
22 Haines A (56), during the COVID 19 pandemic in the United Kingdom (56) around a common interest
23 or objective (49,53), although divergences, in particular between security versus health issues (50,53).
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30 *The health mediator*

31 The term used to designate the third-party mediator differed according to the countries and
32 populations. They were called health mediators in France (28,29,49–55), community health workers in
33 the United States (38–41,43–45,47), the United Kingdom (56), and Australia (57), "promotor"
34 regarding third-party mediators in Latin American populations (42,46) and navigator in France (53).
35 We grouped them under the term "health mediator".
36
37

38 In the articles, the health mediators were employed mainly by associations (28,29,49–52,54) with
39 labile funds and a little perspective on contracts (39,56). As a result, there is no job security nor
40 prospects for sustainability or career development (39). Moreover, the training and profiles of health
41 mediation actors were very heterogeneous (29,49–52,55,56). The training could be of variable
42 duration (3 months and two years) (55). Some mediation actors might not have a diploma (50,51,56),
43 such as training in the health sector (49,52). They could come from the population or not, be trained
44 or not. However, they acquired legitimacy with the population through their excellent knowledge of
45 their territory, populations and local actors (40,45,53).
46
47

48 The professional framework for health mediation is under construction (38–41,44,55–57). There is a
49 significant "asymmetry" in the training offer, whether the course or its local availability (55,57).
50 Additionally, health mediator training is considered complex as it must articulate theoretical elements
51 and integrate a degree of flexibility to the fields of practice (38). Thus, there is no standard of duration
52 or content to guarantee the quality of training (41). Health mediation competencies are poorly
53 identified (56), the content is not homogeneous (44,56), the visibility and recognition of this exercise
54 in an integrated manner in the healthcare system (44,57), and the populations (44,50,57) are not
55 stabilised. A few authors have nevertheless proposed the development of skills repositories in order
56 to facilitate the professionalisation process (39,40,44,50).
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Effects of health mediation

Multiple outcome measures were used to determine the effects of health mediation on the healthcare use: i) participation rate in the health mediation actions ii) criteria for essential services and healthcare use (e.g. the number of entitlements to social security coverage issued) (29), iii) health indicators (e.g. measurement of body mass index or glycaemia) (41) (47). Other articles, primarily literature reviews, took the effectiveness of health mediation for granted and presented only an analysis of the conditions (39,44,56).

Only one article included a process criterion - fidelity (42) and notably highlighted the need to ensure that mediation is proportionate to the needs encountered. In particular, mediation was adjusted in frequency and duration to the characteristics of the persons and to the extent of the health and access to health problems with which they were confronted (42). The development stages of the health mediation action plan were covered in just one article. This was used to support its implementation on a French territory with the Roma and Traveller populations (29). However, the other articles mentioned planning, but without specifying the development of the action plan and its stages, nor the anticipation of the necessary resources.

Conditions for the effectiveness of health mediation: analytical aspects

Context-related

Health mediation was facilitated by a political and financial commitment from public social and health institutions, both local and national (39,41). The funding period, however, was short (1 to 3 years) (39,41). This lack of sustainability was unsuited to the needs (38) and created a form of insecurity for health mediation actors, particularly by a high turnover (43). Moreover, the articles also highlighted a poor connection between the needs of the people and the human resources made available to implement mediation actions (53,56). Finally, a significant obstacle to the effectiveness of health mediation was highlighted: the difficulties encountered by health mediators in acting on the living conditions of the persons or health controversies relayed in the media (28,29,54). However, the purpose of health mediation is not to transform them (e.g. the squalor of communal reception areas made available to Travellers) (29). In this context, the role of mediators turns out to be one of catching up with an inadequate system, whose effectiveness can only be reduced in the event of inconsistent policies.

Related to the health mediation intervention itself

health mediation draws its success from its population-based approach (43,56) i.e. a holistic approach to health considering, on the one hand, determinants outside the healthcare system and on the other hand, the interdependence of these determinants and their systemic functioning. This approach differs from a disease- and risk factor-based approach, often reduced to proximal behavioural factors. Thus, health mediation is accessible to the entire community and not only to those exposed to risk factors (56). This approach allows openness towards others while respecting their perceptions of illness, health and care (29).

Work organisation-related

Health mediation was organised at the local level through the collaboration of the local actors (38,42,49,51,53,54,57). The collaboration led to the establishment of a trust relationship between local actors (54). While this collaboration led to a better interdependence of the actors, it benefited by remaining flexible, adaptable and on the border of the organisations (39,42,50,53,54). Moreover, the

necessary cross-sectoral work is a source of resistance in certain institutions for which this is not the traditional mode of operation (41,50,54) (56). Furthermore, the lack of development of a clear action plan limited its operationalisation (43).

One of the significant conditions for the effectiveness of health mediation on healthcare use was its integration into the care system (38–45,49–51,53,55–57). The lack of integration of health mediation actors presented as missed opportunities for example, through the lack of transmission of information between health mediation actors and healthcare professionals (39,54,56), or even the difficulty in relating the health problems of individuals and the healthcare use difficulties (56). The complexity of this integration lies in the difficulties of cooperation, setting up spaces for sharing knowledge (39,50) and the presence of power issues between the social and medical fields (50). Notwithstanding these obstacles, some authors have proposed that health mediation actors serve as interfaces between “health and non-health resources” (40,44,56) and thus manage this collaboration (40).

Health mediators related

the soft skills necessary for health mediation differed according to the persons of the intervention. A standard base of soft skills and professional posture could nevertheless emerge. The first essential soft skill was congruence (with the persons (40,42,44,45,50,53,57). This congruence could be cultural, ethnic, linked to the life history, or linked to the disease experience. The health mediator had to present essential soft skills favourable to communication: benevolent, adapted, listening and respectful attitude (28,40,45,47,49,53). Thus, communication had to be based on the principles of non-judgment, trust in the persons’ ability to make decisions that are favourable to their health, and understanding of their representations, for example, how a person considered traditional medicine or the place of religion in health (28,40,45,49). Finally, the health mediator must show perseverance and great mental flexibility (53).

These soft skills influence the mediator posture in their relationship with the persons. This must be based on equality, powers and knowledge sharing. This sharing takes root in the relationship of trust (28,40,44,47,50). The health mediator must offer support, favouring positive feedback during exchanges, or establishing “contracts” of suitable and feasible progressive objectives while favouring the reinforcement of the persons’ abilities to make decisions favourable to their health (40,45).

These soft skills and posture characteristics facilitate the establishment of a climate of trust (28,40,44,47,49,50,54), which reinforces them. All of this contributes to strengthening the empowerment of persons (28,40,54).

the recruitment of a health mediator is a crucial issue (38–41,43,50,53). The choice of the health mediator’s initial training was decisive, whether social or medical training. Garcia and al. (41) favoured the recruitment of healthcare professionals-health mediators to promote their integration with care services (41). In contrast, others favoured socio-cultural training to facilitate integration within the populations (39,43,53). Indeed, Ingram et al. (39) specified that professionalisation could compromise cultural congruence (39). They stated that whatever the obstacles, the health mediator must retain their ability to adapt, with the possibility of providing appropriate support, thanks to their soft skills and a coherent posture acquired through ad hoc training or experience (39). For Gerbier-Blanc et al. (50), it was possible to move away from cultural congruence to facilitate the integration of the health mediator into the healthcare system while maintaining congruence with the health mediator biographical history (50).

Related to the effect on persons

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3 From the persons' point of view, health mediation needed to i) respond to their needs as they
4 expressed it (38,50), ii) respect their need for control over the situation (53) iii) promote their ability
5 to make their decisions (53) and iv) strengthen their sense of self-efficiency (the personal ability to
6 think that they can overcome obstacles to seek care) and their motivation to resort to care, in a positive
7 environment conducive to healthcare use (46,47). Health mediation should also strive to strengthen
8 the ability to make decisions favourable to health in a logic of empowerment (45,52,55) while
9 objectifying the perception of the benefits of resorting to health care (46).
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14 Discussion

15 Towards a conceptual framework of health mediation

16 The literature review underlines several characteristics of health mediation that articulate education
17 and healthcare system navigation actions, along with actions of mobilisation, engagement, and
18 collaboration of local actors among themselves and with the populations. Health mediation thus
19 corresponds to a complex health intervention (59) because of its contextual anchoring (60). Indeed,
20 health mediation practices are multi-faceted (61,62) even though a joint intervention base exists.
21 Health mediation has blurred boundaries in the healthcare system, torn between the community
22 approach and the universalist paradigm, the biomedical and the social worlds (50). Consequently,
23 health mediation must combine various practices to adapt to a socially changing context and the
24 populations' characteristics (23). To maintain this flexibility, health mediation could be considered as
25 a systemic and dynamic process with multiple and permanent interactions between interventional and
26 contextual components (63). These interactions produce some mechanisms (ie. "elements of
27 reasoning and reaction of an agent about an intervention producing a result in a given context" (64))
28 impacting themselves "this interventional system" (63). According to this systemic approach, we
29 propose to map the data collected in a conceptual framework hypothesizing their interrelations (see
30 Figure 2).
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41 *Figure 2: Conceptual framework of health mediation*

42 In this figure, the contextual components (i.e. The factors external to the mediation intervention and
43 which drive it) form the macro-system. This includes political and financial commitment, coherence
44 and the possibility of acting on the structural and intermediate determinants of health, along with
45 securing the health mediator in their activity. Additionally, other conditions for the effectiveness of
46 health mediation are arranged within a mesosystem closely circumscribing the actors, persons and
47 characteristics specific to the intervention, organised in three pillars: the principles (i.e. Approach or
48 paradigm), the functions (i.e. Key elements of the intervention assumed to be the basis of its
49 effectiveness and which cannot be adapted (65)) and the actions of health mediation. The conditions
50 of effectiveness linked to the health mediator are themselves organised in three pillars: soft skills,
51 posture and the interdependence of the health mediator with the local actors and the population.
52 Finally, mediation's effect mechanisms, prefiguring its effectiveness in healthcare use, are positioned
53 as seeking goals in mediation. It should be noted that, although the persons remain central in this
54 system, we were not able to collect in the literature any elements describing the characteristics specific
55 to persons as contributing to the effectiveness of health mediation. This constitutes a shortcoming that
56 could be the subject of further research.
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Interface difficulties: the inability to act on healthcare system organisation

The healthcare system is organized with a strong structural compartmentalisation between the social and medical worlds. It hinders the congruence of decision-making needed to manage the complex issues posed by underserved populations. Health mediation represents a “border organisation” (66), interfacing with the different communities. This role is possible thanks to a combination of soft skills, such as flexibility and neutrality, know-how and professional postures, allowing for both the coexistence of divergent interests and the rallying around common objectives (66). Nevertheless, this role raises some questions for health mediators: Aren't the issues at stake in the organisation of the health care system itself (ie. based on universality paradigm)? Indeed, the French healthcare system is built in a universalism paradigm. This has long made the idea of no access to care unthinkable (67). Yet what is universal is not necessarily equitable. One of the answers could then be to question the system to make it more equitable by adapting the response to various needs. Instead, health mediation catches up with the individual consequences of an inadequate system to the difficulties encountered by populations (68), because built by economic cost reduction considerations (61,68).

The second question is : does health mediation seek to emancipate people or gently impose behavioural norms to bring people back to a system that is nevertheless inadequate? Indeed, although the term "empowerment" is regularly used, it raises questions when health mediation aims to make adopt behaviours considered as "good" by a third party. It is a normative approach, different from community health (69), sometimes referred in articles, and calling for action (70) based on a process of knowledge and issues co-construction, rather than rallying some people to behaviours decided by others. Therefore, it could be necessary to clarify characteristics and goals of health mediation if the purpose is to provide autonomy : what autonomy? in whose eyes? for whom? (71).

Study limitations

Our study has certain limitations. First, the polysemy of the word mediation and the variety of terms used according to the concept of mediation are some obstacles to the in-depth exploration of the actions carried out. Indeed, this led to identify a significant number of articles. For example, we included the interventions conducted by peers in the equation, finally excluded because they did not correspond to the same interventional logic. Consequently, we cannot exclude the possibility of selection biases. Moreover, we observed conceptions sometimes very far removed from mediation, from empowerment to “bringing back to”, which, as developed above, is closer to health education. Additionally, the people point of view is very poorly assessed in the articles: what do they think? Are there any prerequisites for effective mediation? To complete the framework presented, observations and interviews with communities’ members about their own experience is needed.

Finally, the review is based on articles using different methods and the effectiveness is unevenly addressed. Finally, the relevance of mediation is discussed from the actors’ point of view more than effectiveness as an object of scientific demonstration. Moreover, it remains difficult to evaluate the effectiveness of health mediation without having clarified its purpose: to bring people back to a system not designed for them by making them adopt behaviours considered appropriate from the point of view of a third party? or to give them the means to make an informed choice, including choosing not to use care?

Conclusion

Health mediation is more than ever on the agenda of health authorities. In a world impacted by an unprecedented health crisis, the question of “going towards” becomes a slogan brandished as in the past during previous epidemic crises, especially that of HIV, as a solution to the flaws in system organisation to reach those populations most underserved. In the context of underserved populations, we wondered about the conditions under which this mediation works. While since the implementation of health mediation, everyone agrees that there is an improvement in access to care, few publications are available on the evaluation of its effectiveness, which could facilitate the recognition of the profession, whose proper functioning is already undermined by the lack of cross-sectorality and the compartmentalisation of public policies. This hinders this approach, which is nevertheless promising to reduce inequalities in healthcare use. Moreover, the scoping review allows us to draw up an initial framework for analysing the conditions of effectiveness of health mediation and to question the coherence of the approach to health mediation considering the divergent tensions and logic that permeate it. Thus, three questions remain i) how can we reconcile empowerment and the more normative logic of “bringing back to”? ii) how can we secure health mediators to promote the sustainability and effectiveness of mediation mechanisms? iii) how can we resolve the tensions between a “going towards” rendered almost palliative by the inability of the actors to modify “the causes of the causes” of the lack of care?

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Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Contributor ship statements

ER has made substantial contributions to the conception and design, data collection and analysis, drafting and critical review of the manuscript for important intellectual content. LC and SV have participated in developing the review protocol, data collection and analysis and have contributed to the manuscript. They have also supervised this work. All authors discussed the results. Linda Cambon proposed the first version of the model. They give final approval of the version to be published. They agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Data Sharing Statement

Not applicable

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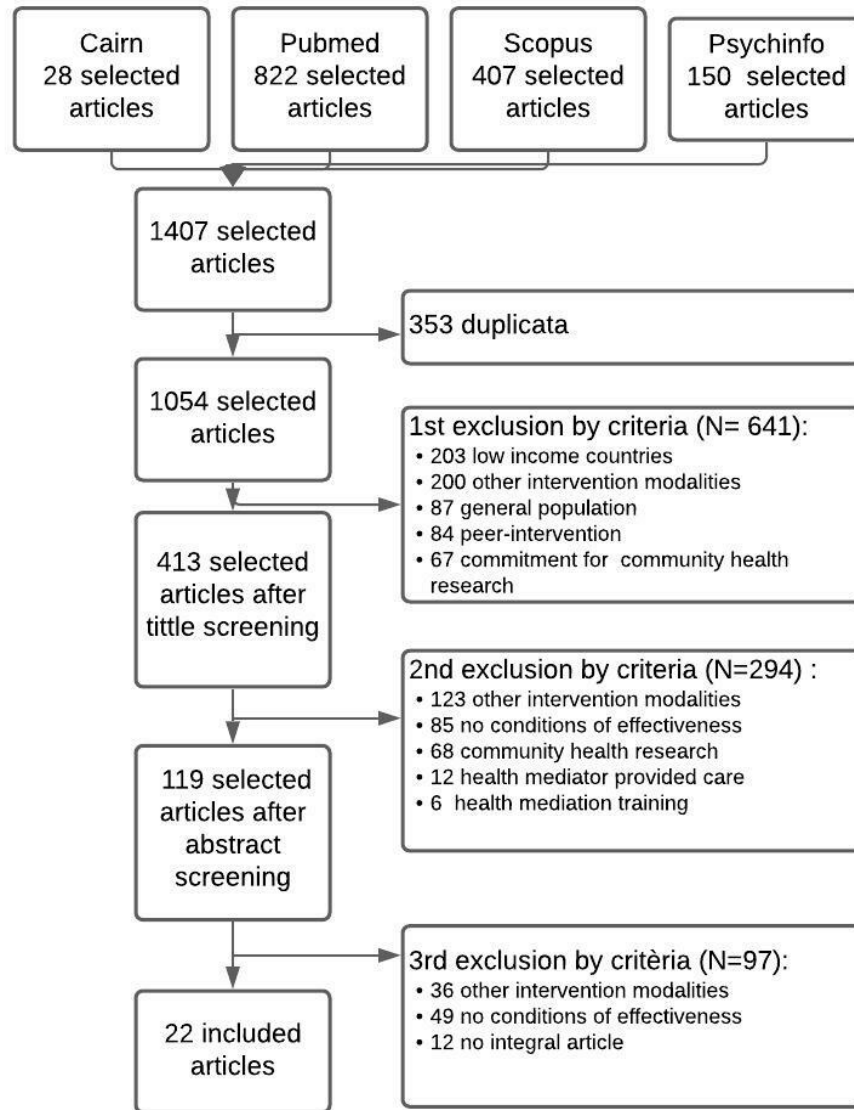
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For peer review only



45 Figure 1: Flow chart for selecting articles according to established eligibility criteria

46 123x156mm (160 x 160 DPI)

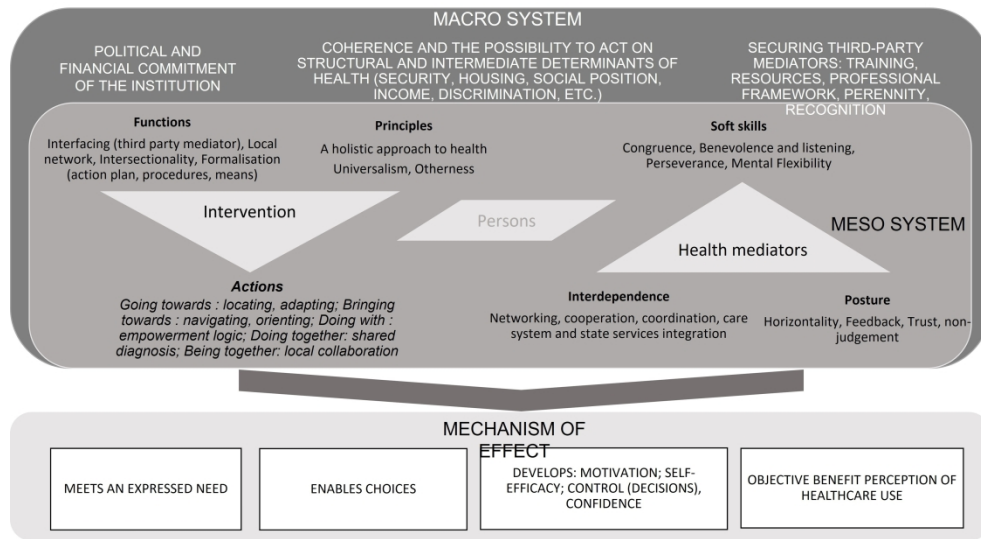


Figure 2: Conceptual framework of health mediation

344x185mm (300 x 300 DPI)

Appendix 1: Search algorithm

Pubmed	Number of articles	Date extracted
(("Health mediation"[TI] OR "Health mediator*"[TI] OR (communit*[TI] AND ("health worker*"[TI] OR "intervention*"[TI] OR program*[TI])) OR "Peer mentor*"[TI] OR "Peer mentorship"[TI] OR "Peer mentoring"[TI] OR "peer-led"[TI] OR "Community Participation"[Mesh] OR "Community Health Workers"[Mesh]) AND (effectiveness[TIAB] OR efficacy[TIAB] OR effective[TIAB] OR success[TIAB] OR successful [TIAB] OR evaluation*[TIAB] OR Assessment*[TIAB] OR impact*[TIAB] OR outcome*[TIAB] OR effect*[TIAB] OR performance*[TIAB] OR attainment*[TIAB] OR consequence*[TIAB] OR influence*[TIAB] OR evaluating[TIAB] OR assessment[TIAB] OR Barrier* [TI] OR Facilitator* [TI] OR Implementation [TI] OR Factor* [TI] OR lesson*[TI] OR "Evaluation Studies as Topic"[Mesh] OR "Program Evaluation"[Mesh] OR "Evaluation Study" [Publication Type] OR "Comparative Effectiveness Research"[Mesh]) AND ("hard to reach"[TIAB] OR immigrant*[TIAB] OR immigration*[TIAB] OR Emigrant*[TIAB] OR Migrant*[TIAB] OR refugee*[TIAB] OR traveller*[TIAB] OR Traveler*[TIAB] OR Traveling[TIAB] OR gypsy[TIAB] OR Roma[TIAB] OR romani[TIAB] OR Gypsies[TIAB] OR Gipsies[TIAB] OR Romany[TIAB] OR Romanies[TIAB] OR homelessness[TIAB] OR homeless[TIAB] OR houseless[TIAB] OR Vulnerable[TIAB] OR marginalised[TIAB] OR Marginalization[TIAB] OR "Minority group*"[TIAB] OR "Minority Health"[TIAB] OR "Social exclusion*"[TIAB] OR "Transients and Migrants"[Mesh] OR "Emigrants and Immigrants"[Mesh] OR "Minority Groups"[Mesh] OR "Minority Health"[Mesh] OR "Homeless Persons"[Mesh] OR "Vulnerable Populations"[Mesh] OR "Poverty"[MAJR] OR "Roma"[Mesh]) AND 2015/01/01[crdt]:2020/12/01[crdt]) AND (2015:2020[pdat])	822	15/12/2020
Scopus		
TITLE ("Health mediation*" OR "Peer mentor" OR "Peer mentors" OR "Peer mentorship" OR "Peer mentoring" OR "peer-led" OR (health W/5 mediation* OR mediator*) OR (community* W/5 "health worker*" OR intervention* OR program*)) AND TITLE-ABS-KEY (effectiveness OR efficacy OR effective OR success OR evaluati* OR assessment* OR impact* OR outcome* OR effect* OR performance* OR attainment* OR consequence* OR influence* OR successful) OR TITLE (barrier* OR facilitator* OR implementation OR factor* OR lesson*) AND TITLE-ABS-KEY ("hard to reach" OR immigrant* OR immigration* OR emigrant* OR migrant* OR refugee* OR traveller* OR traveler* OR traveling OR gypsy OR roma OR romani OR gypsies OR gipsies OR romany OR romanies OR homelessness OR homeless OR houseless OR vulnerable OR marginalised OR marginalization OR "Minority group" OR "Minority groups" OR "Minority Health" OR "Social exclusion" OR "Social exclusions") AND (LIMIT-TO (PUBYEAR,2020) OR LIMIT-TO (PUBYEAR,2019) OR LIMIT-TO (PUBYEAR,2018) OR LIMIT-TO (PUBYEAR,2017) OR LIMIT-TO (PUBYEAR,2016) OR LIMIT-TO (PUBYEAR,2015)) AND (LIMIT-TO (LANGUAGE,"English") OR LIMIT-TO (LANGUAGE,"French"))	407	15/12/2020
Psycinfo		
TI ("Health mediation*" OR "Peer mentor*" OR "Peer mentorship" OR "Peer mentoring" OR "peer-led" OR "health mediation*" OR "health mediator*" OR	150	15/12/2020

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"community health worker*" OR "community-based worker*" OR "community-based intervention*" OR "community-based program*) AND AB (effectiveness OR efficacy OR effective OR success OR evaluati* OR assessment* OR impact* OR outcome* OR effect* OR performance* OR attainment* OR consequence* OR influence* OR successful OR barrier* OR facilitator* OR implementation OR factor* OR lesson*) AND AB ("hard to reach" OR immigrant* OR immigration* OR emigrant* OR migrant* OR refugee* OR traveller* OR traveler* OR traveling OR gypsy OR roma OR romani OR gypsies OR gipsies OR romany OR romanies OR homelessness OR homeless OR houseless OR vulnerable OR marginalised OR marginalization OR "Minority group*" OR "Minority Health" OR "Social exclusion" OR "Social exclusions")		
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BMJ Open

Conditions for the success and the feasibility of health mediation for healthcare use by underserved populations: A scoping review

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2022-062051.R1
Article Type:	Original research
Date Submitted by the Author:	09-Aug-2022
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Primary Subject Heading:	Public health
Secondary Subject Heading:	Health services research, Research methods
Keywords:	Quality in health care < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, PUBLIC HEALTH, STATISTICS & RESEARCH METHODS

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Conditions for the success and the feasibility of health mediation for healthcare use by underserved populations: A scoping review

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Abstract

Objectif: This article aims to analyse the conditions under which health mediation for healthcare use is successful and feasible for underserved populations.

Method: We conducted a scoping review on the conditions for effective health mediation according to the PRISMA Extension for Scoping Reviews standards. We searched for articles in the following databases: Pubmed, PsychINFO, Scopus and Cairn published between 1st January 2015 and 18 December 2020. We selected the articles concerning health mediation interventions or similar, implemented in high-income countries and conducted among underserved populations, along with articles that questioned their effectiveness conditions. We created a two-dimensional analysis grid of the data collected: a descriptive dimension of the intervention and an analytical dimension of the conditions of effectiveness of mediation in health.

Results: 22 articles were selected and analysed. The scoping review underlines many health mediation characteristics that articulate education and healthcare system navigation actions, along with mobilisation, engagement, and collaboration of local actors among themselves and with the populations. The conditions for effectiveness were grouped in a conceptual framework for health mediation.

Conclusion: The scoping review allows us to establish an initial framework for analysing the conditions for the effectiveness of health mediation and to question the consistency of the health mediation approach regarding cross-cutting tensions and occasionally divergent logics.

Keywords: healthcare use, health mediation, underserved population, effectiveness

Strengths and limitations:

- We conducted a scoping review, to clarify key concepts and characteristics of health mediation rarely analyzed.
- The review was conducted by using two complementary approaches of health mediation: as an intervention or as a position in a professional function.
- The review focused mainly on the structural conditions for the success and feasibility of health mediation for improving healthcare use for undeserved population.
- The polysemy of the term “mediation” and the variety of different terms used to describe health mediation makes it difficult to globally assess.
- The effectiveness of health mediation is rarely really demonstrated.

Introduction

Underserved populations include very heterogeneous populations (1,2). They are represented by all populations underserved by the healthcare system because of their living conditions, in particular, about material conditions and their socio-economic precariousness (housing, employment, education, income), administrative precariousness (access to rights and administrative status, health coverage), their geographical mobility, or their psychosocial characteristics (integration and social support, history of the healthcare system use) and, on the other hand, to the inability of the system to organise and adapt to reach and support them (3). Underserved populations face specific systemic barriers, considered as structural factors : strong competitiveness with basic needs (i.e. Food insecurity, housing instability (4,5)), discrimination (6), insecurity (2), language barriers and difficulties in accessing healthcare interpreters (7). At the individual level, underserved people have socially representations (ie. body, health, care perceptions) different from dominant (8). This leads to a lowered benchmark for good health and underestimating the severity of the disease (9) and tend to hinder formulating a request for care, healthcare use or quality care (10–12). These populations are, in a way, subject to a threefold penalty: more exposed to the disease, less receptive to prevention messages, and finally, less user of healthcare. Therefore, interventions promoting healthcare use by underserved populations must go beyond the sole issue of supply. They must promote the ability of services to adapt their organisations, to strengthen the abilities of people to make decisions favourable to their health and to support them in overcoming the obstacles encountered (12). Simultaneously they must develop programs of access to rights, housing, employment, and tackle discrimination and exclusion.

Health mediation is one such intervention (11,13)(14). Health mediation corresponds to connection mediation. It differs from healthcare mediation, which focuses on resolving conflicts within healthcare facilities (14). The French National Authority for Health (Haute Autorité de Santé, HAS) defines it as a temporary process of “going towards” populations, health and social professionals and institutions and “working with” people in a logic of empowerment of individuals (10). According to HAS, the "going towards" approach has two components: (i) physical movement, "outside the walls", towards the places frequented by underserved populations on the one hand and towards health professionals or institutions on the other, (ii) openness towards others, towards the person as a whole, without judgement, with respect. This definition highlights the articulation between two functions : facilitating access to rights, prevention and care and raising healthcare workers awareness about the access difficulties (10,15). Finally, mediation involves third party mediators, generating connections and participating in a change in representations and practices between healthcare stakeholders and the population. This third-party must enable the transformation of healthcare system as an element of socialisation (16). Characterising health mediation remains a difficult task, because of its multi-faceted nature, particularly in high-income countries (patient navigator, health mediators, relay individuals, etc.). Moreover, the evaluation of health mediation provides very different results from one context to another, from one population to another. Apart from pioneering militant studies (17–19), no study has conclusively estimated its effectiveness and conditions of effectiveness.

This article aims to analyse the conditions under which health mediation for healthcare use is successful (ie.effective from authors’ point of view) and feasible when applied to underserved populations and exposed to numerous vulnerabilities, such as people living in precarious habitats, travellers, migrants, and homeless people.

Methods

We conducted a scoping review (20), relevant when information on a given topic is not comprehensively examined, complex or diverse. It is thus particularly suitable for our subject as it allows (i) the identification of existing types of evidence in the field, (ii) the clarification of key concepts or definitions, (iii) the identification of key characteristics related to our subject, and (iv) the identification of knowledge gaps (21). We conducted this review according to PRISMA Extension for Scoping Reviews (PRISMA-ScR) standards : Check-list and Explanation (22) (See appendix 1).

Articles identification

We searched for articles in English and French, published between 1st January 2015 and 18 December 2020, in the following databases: Pubmed, PsychINFO, Scopus and Cairn. We selected the articles based on a keyword search query organised around three concepts: health mediation as an intervention strategy (health mediation, community health, community approach, etc.) or as a position adopted in a function (e.g. health mediator, community health worker, peer mentor, etc.), conditions of effectiveness, and underserved populations. The search equation is presented in Appendix 2 (see appendix 2).

Articles selection

We selected the articles according to the following inclusion criteria:

- Health mediation interventions or interventions to “going towards” to local populations and actors and seeking to strengthen the empowerment of individuals by a third-party mediator,
- Intervention with a third-party mediator,
- Interventions implemented in high-income countries,
- Interventions conducted with underserved populations,
- Articles questioning the conditions of effectiveness of the interventions carried out,
- Articles in English and French.

The exclusion criteria were as follows:

- Interventions without the presence of a third-party mediator
- Interventions conducted by peers (interface role with populations only),
- Health mediation interventions in which the third-party mediator provided care,
- Health promotion interventions that did not mobilise “going towards” actions,
- Interventions implemented in low-income countries,
- Interventions conducted in the general population,
- Methods promoting community engagement in research,
- Articles that did not report the conditions of effectiveness of the intervention.

Data analysis

Data were analysed to help answer the following questions: What is the purpose of the study? What is the target population? What are the characteristics of the study? What are the study designs in the different articles? What intervention is implemented in detail? What are the role and duties of the health mediator? How is the intervention planned? Is a community approach envisaged and implemented? If so, which one? What is the implementation process? What is the implementation context? What are the identified effects of the intervention? What are the conditions of effectiveness related to the context, the intervention, the actors, its organisation, and the individuals?

Our analysis grid was built through two dimensions: i) a descriptive dimension: design, planning, implementation process of health mediation, its effectiveness; ii) an analytical dimension assessing the conditions of its effectiveness (see appendix 3). For the first dimension (i), we organized this description using two tools, the Template for intervention description and replication (TIDieR) grid (23) and the Tool for The Analysis of Transferability and Support for the Adaptation of Interventions in Health Promotion (Outil d'AnalySe de la Transférabilité et d'accompagnement à l'Adaptation des InteRventions en promotion de la santé, ASTAIRE) (24). For the second dimension (ii), we grouped the identified conditions of effectiveness into five categories: the conditions related to the context, the intervention, the organisation of the intervention, the actors, and the individuals. Finally, we added an analysis of cross-sectoral collaborations, i.e. the level of interaction between sectors or between actors and/or institutions using the work of Bilodeau and al (25). For these authors, the first level of collaboration is networking, representing information exchange. Cooperation refers to working together to optimise resources to accomplish one's own goals better. This requires less interdependence between sectors than the coordination of actions. Coordination involves joint work between actors to make mutual adjustments to render actions more coherent and robust to achieve shared objectives. Integration aims to co-construct new, more systemic interventions (e.g., multi-sector government policies) and requires the integration of objectives, processes, resources, and actions. It requires an even higher degree of collaboration and interdependence between actors (25).

Results

We identified 1407 articles. After selection the selection based on inclusion and exclusion criteria and elimination of the duplicates, 22 articles were selected (see Figure 1).

Figure 1: Flow chart for selecting articles according to established eligibility criteria

Description

Among the twenty-two articles, eleven were conducted in the United States (26–36), nine in France (16,17,37–43), one in the United Kingdom (44) and one in Australia (45).

Twelve articles presented case studies (16,17,26,27,32,33,35–40,42), seven from literature reviews (29,31,41,43–45), two from cohort studies (30,34) and one article presented one randomised controlled trial (28). A qualitative method was used in twenty articles, and a quantitative method in two articles (28,34).

Twenty articles presented studies conducted on third-party mediators (i.e. "Person of trust, from or close to the population, competent and trained with guidance and support function. They create a link between the healthcare system and a population that has difficulty accessing it" (11)) and two collected data from persons of the intervention (33,45).

In seven articles, third-party mediators intervened with underserved populations in general, (26,29–32,34,37) including one article with Travellers (37), six articles with vulnerable populations (16,26,36,42–44), six articles with migrants (17,27,28,30,35,39), including three articles with Latin Americans (27,30,35), and two articles with Roma (17,39).

Health mediation: descriptive aspects

The missions of health mediation

The interventions promoted healthcare and essential services use, two of which focused on mental healthcare use (37,40) and one on colorectal cancer screening (41). The health mediation intervention

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3 consisted of joint action methods by i) education actions and navigation in care system aimed at
4 persons, or ii) a third-party mediation.

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6 The first type (i) referred to individual or collective educational actions. They offered support for
7 persons in a logic of empowerment (i.e. process by which an individual or a group acquires the means
8 to strengthen their capacity for action (46)) (16,42,44). However, planned education actions were only
9 possible when persons were stabilised and showed low competitiveness of needs, i.e. the primary
10 needs necessary for survival, such as food or housing, were secure.

11
12 The navigation actions focused on two complementary principles: the first is “going towards”, which
13 locates and directs, the second is “bringing back to”, i.e. the physical accompaniment of people to the
14 healthcare system and essential services such as health insurance or social assistance services for
15 persons (16,26,37,38,40,42,44,45).

16
17 These education and navigation actions helped people understand and accompanied them in their
18 healthcare use (identification of the need and promotion of access). Moreover, the health behaviours
19 of third-party mediators were models of inspiration for behaviours favourable to persons’ health (33).

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22 The second type aimed to mobilise, engage and collaborate local actors (i.e. healthcare professionals,
23 social workers, decentralised state services agents and elected officials) and in particular healthcare
24 professionals, in order to “being together”. The role of third-party mediators is to identify and consider
25 the specific needs of these populations (26,30,33,37,39,41) in order to “working together” to share a
26 diagnosis (16,26,27,29,38,43,44). They developed collaborations to more or less formalise steering
27 role, local networking by sharing knowledge between healthcare professionals, social sector
28 professionals, and public health and social institutions (30,41,42). These collaborations are intended
29 to acculturate actors to underserved population’s needs (37,39) and shared concrete solutions for
30 health. For example, free neighbourhood shuttles were set up to facilitate mobility to a medical centre
31 following coordination between municipal services, third-party mediators and healthcare
32 professionals (32); or implementation of walk-in slots with healthcare professionals to facilitate their
33 availability about such as food or administrative insecurity and residential instability (16,32). These
34 local actors formed a network capable of monitoring the difficulties encountered by the populations
35 and helping research by collecting health data and healthcare use, as proposed by Harris MJ. and
36 Haines A (44), during the COVID 19 pandemic in the United Kingdom (44) around a common interest
37 or objective (37,41), although divergences, in particular between security versus health issues (38,41).

43 44 *The health mediator*

45
46 The term used to designate the third-party mediator differed according to the countries and
47 populations. They were called health mediators in France (16,17,37–43), community health workers in
48 the United States (26–29,31–33,35), the United Kingdom (44), and Australia (45), “promotor”
49 regarding third-party mediators in Latin American populations (30,34) and navigator in France (41).
50 We grouped them under the term “health mediator”.

51
52 In the articles, the health mediators were employed mainly by associations (16,17,37–40,42) with
53 labile funds and a little perspective on contracts (27,44). As a result, there is no job security nor
54 prospects for sustainability or career development (27). Moreover, the training and profiles of health
55 mediators were very heterogeneous (17,37–40,43,44). The training could be of variable duration (3
56 months and two years) (43). Some health mediators might not have a diploma (38,39,44), such as
57 training in the health sector (37,40). They could come from the population or not, be trained or not.

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3 However, they acquired legitimacy with the population through their excellent knowledge of their
4 territory, populations and local actors (28,33,41).

5 The professional framework for health mediation is under construction (26–29,32,43–45). There is a
6 significant “asymmetry” in the training offer, whether the course or its local availability (43,45).
7 Additionally, health mediator training is considered complex as it must articulate theoretical elements
8 and integrate a degree of flexibility to the fields of practice (26). Thus, there is no standard of duration
9 or content to guarantee the quality of training (29). Health mediation competencies are poorly
10 identified (44), the content is not homogeneous (32,44), the visibility and recognition of this exercise
11 in an integrated manner in the healthcare system (32,45), and the populations (32,38,45) are not
12 stabilised. A few authors have nevertheless proposed the development of skills repositories in order
13 to facilitate the professionalisation process (27,28,32,38).
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18 Effects of health mediation

19 Multiple outcome measures were used to determine the effects of health mediation on the healthcare
20 use: i) participation rate in the health mediation actions ii) criteria for essential services and healthcare
21 use (e.g. the number of entitlements to social security coverage issued) (17), iii) health indicators (e.g.
22 measurement of body mass index or glycaemia) (29) (35). Other articles, primarily literature reviews,
23 took the effectiveness of health mediation for granted and presented only an analysis of the conditions
24 (27,32,44).
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27 Only one article included a process criterion - fidelity (30) and notably highlighted the need to ensure
28 that mediation is proportionate to the needs encountered. In particular, mediation was adjusted in
29 frequency and duration to the characteristics of the persons and to the extent of the health and access
30 to health problems with which they were confronted (30). The development stages of the health
31 mediation action plan were covered in just one article. This was used to support its implementation
32 on a French territory with the Roma and Traveller populations (17). However, the other articles
33 mentioned planning, but without specifying the development of the action plan and its stages, nor the
34 anticipation of the necessary resources.
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37 From the persons' point of view, health mediation needed to i) respond to their needs as they
38 expressed it (26,38), ii) respect their need for control over the situation (41) iii) promote their ability
39 to make their decisions (41) and iv) strengthen their sense of self-efficiency (the personal ability to
40 think that they can overcome obstacles to seek care) and their motivation to healthcare use, in a
41 positive environment conducive to healthcare use (34,35). Health mediation should also strive to
42 strengthen the ability to make decisions favourable to health in a logic of empowerment (33,40,43).
43 To this end, health mediators could reinforce people's perception of the health care benefits (34).
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48 Conditions for the success and feasibility of health mediation: analytical aspects

49 *Limited funding*

50 Health mediation was facilitated by a political and financial commitment from public social and health
51 institutions, both local and national (27,29). The funding period, however, was short (1 to 3 years)
52 (27,29). This lack of sustainability was unsuited to the needs (26) and created a form of insecurity for
53 health mediators, particularly by a high turnover (31). Moreover, the articles also highlighted a poor
54 connection between the needs of the people and the human resources made available to implement
55 mediation actions (41,44). Finally, a significant obstacle to the effectiveness of health mediation was
56 highlighted: the difficulties encountered by health mediators in acting on the living conditions of the
57 persons or health controversies relayed in the media (16,17,42). However, the purpose of health
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3 mediation is not to transform them (e.g. the squalor of communal reception areas made available to
4 Travellers) (17). In this context, the role of mediators turns out to be one of catching up with an
5 inadequate system, whose effectiveness can only be reduced in the event of inconsistent policies.
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8 *Success from a population-based approach*

9 health mediation draws its success from its population-based approach (31,44) i.e. a holistic approach
10 to health considering, on the one hand, determinants outside the healthcare system and on the other
11 hand, the interdependence of these determinants and their systemic functioning. This approach differs
12 from a disease- and risk factor-based approach, often reduced to proximal behavioural factors. Thus,
13 health mediation is accessible to the entire community and not only to those exposed to risk factors
14 (44). This approach allows openness towards others while respecting their perceptions of illness,
15 health and care (17).
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17
18 Health mediation was organised at the local level through the collaboration of the local actors
19 (26,30,37,39,41,42,45). The collaboration led to the establishment of a trust relationship between local
20 actors (42). While this collaboration led to a better interdependence of the actors, it benefited by
21 remaining flexible, adaptable and on the border of the organisations (27,30,38,41,42). Moreover, the
22 necessary cross-sectoral work is a source of resistance in certain institutions for which this is not the
23 traditional mode of operation (29,38,42) (44). Furthermore, the lack of development of a clear action
24 plan limited its operationalisation (31).
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29 *Need for integration into healthcare system*

30 One of the significant conditions of health mediation on healthcare use was its integration into the
31 care system (26–33,37–39,41,43–45). The lack of integration of health mediators presented as missed
32 opportunities for example, through the lack of information sharing between health mediators and
33 healthcare professionals (27,42,44), or even the difficulty in relating the health problems of individuals
34 and the healthcare use difficulties (44). The complexity of this integration lies in the difficulties of
35 cooperation, setting up spaces for sharing knowledge (27,38) and the presence of power issues
36 between the social and medical fields (38). Notwithstanding these obstacles, some authors have
37 proposed that health mediators serve as interfaces between “health and non-health resources”
38 (28,32,44) and thus manage this collaboration (28).
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43 *Non-judgment communication posture and strong flexibility soft skill*

44 The soft skills necessary for health mediation differed according to the persons of the intervention. A
45 standard base of soft skills and professional posture could nevertheless emerge. The first essential soft
46 skill was congruence with the persons (28,30,32,33,38,41,45). This congruence could be cultural,
47 ethnic, linked to the life history, or linked to the disease experience. The health mediator had to
48 present essential soft skills favourable to communication: benevolent, adapted, listening and
49 respectful attitude (16,28,33,35,37,41). Thus, communication had to be based on the principles of non-
50 judgment, trust in the persons’ ability to make decisions that are favourable to their health, and
51 understanding of their representations, for example, how a person considered traditional medicine or
52 the place of religion in health (16,28,33,37). Finally, the health mediator must show perseverance and
53 great mental flexibility (41).
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57 These soft skills influence the mediator posture in their relationship with the persons. This must be
58 based on equality, powers and knowledge sharing. This sharing takes root in the relationship of trust
59 (16,28,32,35,38). The health mediator must offer support, favouring positive feedback during
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3 exchanges, or establishing “contracts” of suitable and feasible progressive objectives while favouring
4 the reinforcement of the persons’ abilities to make decisions favourable to their health (28,33).
5 These soft skills and posture characteristics facilitate the establishment of a climate of trust
6 (16,28,32,35,37,38,42), which reinforces them. All of this contributes to strengthening the
7 empowerment of persons (16,28,42).
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10 *Recruitment of health mediator*

11 The recruitment of a health mediator is a crucial issue (26–29,31,38,41). The choice of the health
12 mediator’s initial training was decisive, whether social or medical training. Garcia and al. (29) favoured
13 the recruitment of healthcare professionals-health mediators to promote their integration with care
14 services (29). In contrast, others favoured socio-cultural training to facilitate integration within the
15 populations (27,31,41). Indeed, Ingram et al. (27) specified that professionalisation could compromise
16 cultural congruence (27). They stated that whatever the obstacles, the health mediator must retain
17 their ability to adapt, with the possibility of providing appropriate support, thanks to their soft skills
18 and an accurate and adaptative posture acquired through training or experience (27). For Gerbier-
19 Blanc et al. (38), it was possible to move away from cultural congruence (ie. the same culture or
20 ethnicity as the population served) to facilitate the integration of the health mediator into the
21 healthcare system while maintaining congruence with the health mediator life history (38).
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27 **Discussion**

28 Towards a conceptual framework of health mediation

29 We conducted a scoping review which identified nine conditions for the success and feasibility of
30 health mediation acting at different levels with underserved populations. This review underlines
31 several characteristics of health mediation that articulate education and healthcare system navigation
32 actions, along with actions of mobilisation, engagement, and collaboration of local actors among
33 themselves and with the populations. Health mediation thus corresponds to a complex health
34 intervention (47) because of its contextual anchoring (48). Indeed, health mediation practices are
35 multi-faceted (49,50) even though a joint intervention base exists. Health mediation has blurred
36 boundaries in the healthcare system, torn between the community approach and the universalist
37 paradigm, the biomedical and the social worlds (38). Consequently, health mediation must combine
38 various practices to adapt to a socially changing context and the populations’ characteristics (10). To
39 maintain this flexibility, health mediation could be considered as a systemic and dynamic process with
40 multiple and permanent interactions between interventional and contextual components (51). Health
41 mediation needs multiple interventions referring to multiple levels. It is an interventional system
42 producing some mechanisms (ie. “elements of reasoning and reaction of an agent about an
43 intervention producing a result in a given context” (52)) impacting themselves this interventional
44 system (51). According to this systemic approach, we propose to map the data collected in a
45 conceptual framework hypothesizing their interrelations (see Figure 2).
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55 *Figure 2: Conceptual framework of health mediation*

56 In this figure, the contextual components (i.e. The factors external to the mediation intervention and
57 which drive it) form the macro-system. This includes political and financial commitment, coherence
58 and the possibility of acting on the structural and intermediate determinants of health, along with
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3 securing the health mediator in their activity. Additionally, other conditions for the effectiveness of
4 health mediation are arranged within a mesosystem closely circumscribing the actors, persons and
5 characteristics specific to the intervention, organised in three pillars: the principles (i.e. Approach or
6 paradigm), the functions (i.e. Key elements of the intervention assumed to be the basis of its
7 effectiveness and which cannot be adapted (53)) and the actions of health mediation. The conditions
8 of effectiveness linked to the health mediator are themselves organised in three pillars: soft skills,
9 posture and the interdependence of the health mediator with the local actors and the population.
10 Finally, mediation's effect mechanisms, prefiguring its effectiveness in healthcare use, are positioned
11 as seeking goals in mediation. It should be noted that, although the persons remain central in this
12 system, we were not able to collect in the literature any elements describing the characteristics specific
13 to persons as contributing to the effectiveness of health mediation. This constitutes a shortcoming that
14 could be the subject of further research.
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20 Interface difficulties: the inability to act on healthcare system organisation

21 The healthcare system is organized with a strong structural compartmentalisation between the social
22 and medical worlds. It hinders the congruence of decision-making needed to manage the complex
23 issues posed by underserved populations. Health mediation represents a "border organisation" (54),
24 interfacing with the different communities. This role is possible thanks to a combination of soft skills,
25 such as flexibility and neutrality, know-how and professional postures, allowing for both the
26 coexistence of divergent interests and the rallying around common objectives (54). Nevertheless, this
27 role raises some questions for health mediators: Aren't the issues at stake in the organisation of the
28 health care system itself (ie. based on universality paradigm)? Indeed, the French healthcare system is
29 built in a universalism paradigm. This has long made the idea of no access to care unthinkable (55). Yet
30 what is universal (ie. the same service for all) is not necessarily equitable. Indeed, health equity is
31 achieving the highest level of health for all people. It entails focused societal efforts to address
32 avoidable structural inequalities by equalizing the conditions for health for all groups, especially for
33 those who have experienced socioeconomic disadvantage or historical injustices. This requires, among
34 other things, rethinking the system and environments so that it adapts to the different needs of the
35 populations and understands the structural inequalities. Instead, health mediation catches up with the
36 individual consequences of an inadequate system to the difficulties encountered by populations (56),
37 because built by economic cost reduction considerations (49,56).
38

39 The second question is : does health mediation seek to emancipate people or gently impose
40 behavioural norms to bring people back to a system that is nevertheless inadequate? Indeed, although
41 the term "empowerment" is regularly used, it raises questions when health mediation aims to make
42 adopt behaviours considered as "good" by a third party. it is a normative approach, different from
43 community health (57), sometimes referred in articles, and calling for action (58) based on a process
44 of knowledge and issues co-construction, rather than rallying some people to behaviours decided by
45 others. Therefore, it could be necessary to clarify characteristics and goals of health mediation if the
46 purpose is to provide autonomy : what autonomy? in whose eyes? for whom? (59).
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55 Study limitations

56 Our study has certain limitations. First, we have selected articles on titles only for feasibility reasons
57 (selection on titles and abstracts would have identified 7514 articles). Even if the nature of the review
58 (a scoping review) does not require exhaustive identification, this constitutes a limitation to the study.
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3 The second limit is the polysemy of the word mediation and the variety of terms used according to the
4 concept of mediation. They are some obstacles to the in-depth exploration of the actions carried out.
5 Indeed, this led to identify a significant number of articles. For example, we included the interventions
6 conducted by peers in the equation, finally excluded because they did not correspond to the same
7 interventional logic. Consequently, we cannot exclude the possibility of selection biases. Moreover,
8 we observed conceptions sometimes very far removed from mediation, from empowerment to
9 “bringing back to”, which, as developed above, is closer to health education.

10
11 Additionally, the people point of view is very poorly assessed in the articles: what do they think? Are
12 there any prerequisites for effective mediation? To complete the framework presented, observations
13 and interviews with communities’ members about their own experience is needed.

14
15 Finally, the review is based on articles using different methods and the effectiveness is unevenly
16 addressed. Finally, the relevance of mediation is discussed from the actors’ point of view more than
17 effectiveness as an object of scientific demonstration. Moreover, it remains difficult to evaluate the
18 effectiveness of health mediation without having clarified its purpose: to bring people back to a system
19 not designed for them by making them adopt behaviours considered appropriate from the point of
20 view of a third party? or to give them the means to make an informed choice, including choosing not
21 to use care?
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25 **Conclusion**

26 Health mediation is more than ever on the agenda of health authorities. The scoping review allows us
27 to draw up an initial framework for analysing the conditions of successful and feasibility of health
28 mediation and to question the coherence of the approach to health mediation considering the
29 divergent tensions and logic that permeate it. Thus, three questions remain i) how can we reconcile
30 empowerment and the more normative logic of “bringing back to”? ii) how can we secure health
31 mediators to promote the sustainability and effectiveness of mediation mechanisms? iii) how can we
32 resolve the tensions between a “going towards” rendered almost palliative by the inability of the actors
33 to modify “the causes of the causes” of the lack of care?
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40
41

42 **Conflict of interest**

43 The authors declare that they have no known competing financial interests or personal relationships
44 that could have appeared to influence the work reported in this paper.
45
46

47 **Patient and Public Involvement statement**

48 No patient or public were involved for this research.

49 **Ethics approval statement**

50 Not applicable
51

52 **Data Sharing Statement**

53 Data are available upon reasonable request.
54

55 **Contributor ship statements**

56 ER has made substantial contributions to the conception and design, data collection and analysis,
57 drafting and critical review of the manuscript for important intellectual content. LC and SV have
58 participated in developing the review protocol, data collection and analysis and have contributed to
59
60

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3 the manuscript. They have also supervised this work. All authors discussed the results. Linda Cambon
4 proposed the first version of the model. They give final approval of the version to be published. They
5 agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy
6 or integrity of any part of the work are appropriately investigated and resolved.
7
8

9 Bibliography

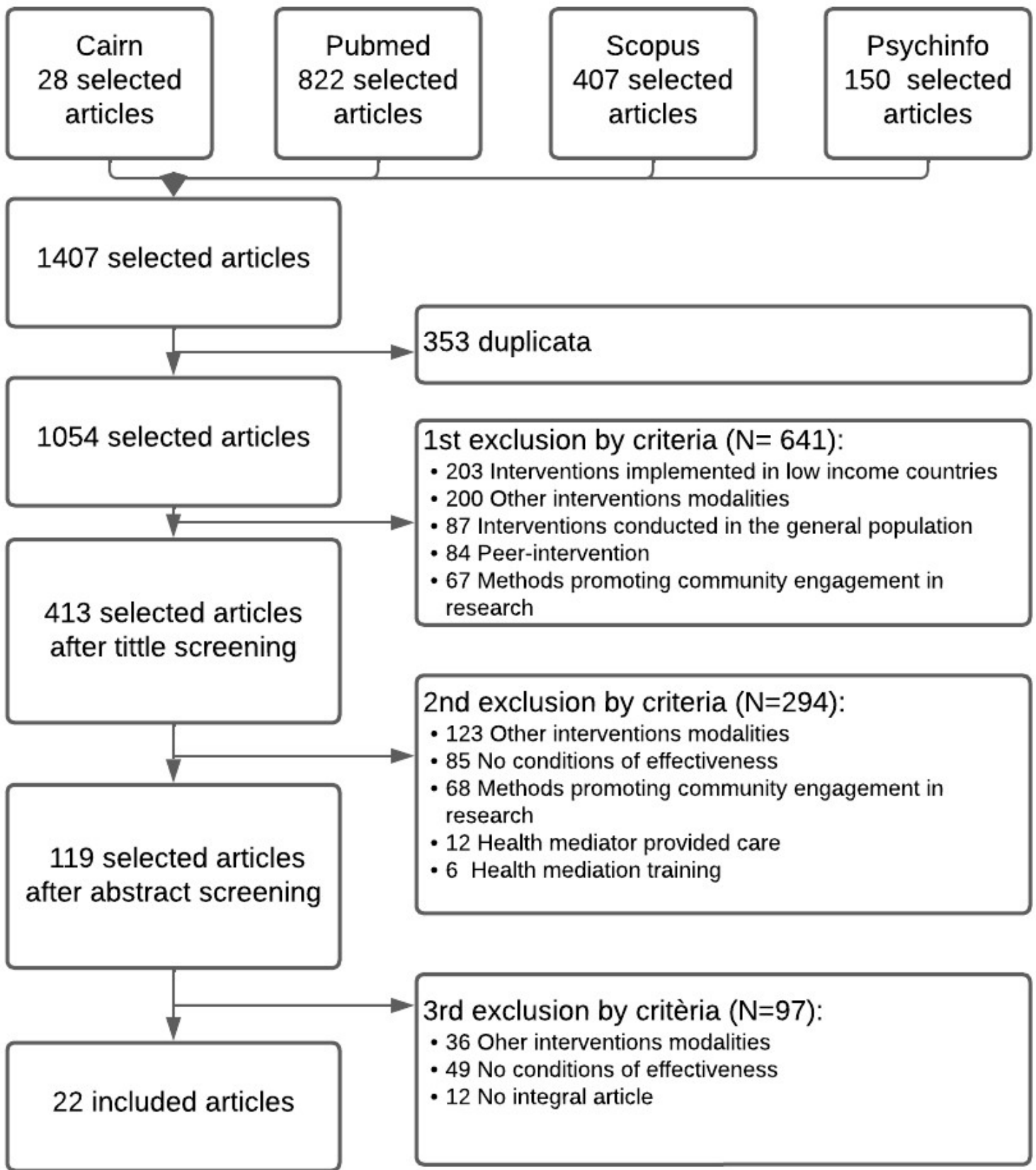
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MACRO SYSTEM

POLITICAL AND FINANCIAL
COMMITMENT OF THE
INSTITUTION

COHERENCE AND THE POSSIBILITY TO ACT ON STRUCTURAL AND
INTERMEDIATE DETERMINANTS OF HEALTH (SECURITY, HOUSING,
SOCIAL POSITION, INCOME, DISCRIMINATION, ETC.)

SECURING THIRD-PARTY MEDIATORS:
TRAINING, RESOURCES, PROFESSIONAL
FRAMEWORK, PERENNITY, RECOGNITION

Functions

Interfacing (third party mediator), Local
network, Intersectionality, Formalisation
(action plan, procedures, means)

Principles

A holistic approach to health
Universalism, Otherness

Soft skills

Congruence, Benevolence and listening,
Perseverance, Mental Flexibility

Intervention

MESO SYSTEM

Health mediators

Actions

*Going towards : locating, adapting; Bringing
towards : navigating, orienting; Doing with :
empowerment logic; Doing together: shared
diagnosis; Being together: local collaboration*

Interdependence

Networking, cooperation, coordination, care
system and state services integration

Posture

Horizontality, Feedback, Trust, non-
judgement

MECHANISM OF EFFECT

MICRO SYSTEM

MEETS AN EXPRESSED NEED

ENABLES CHOICES

DEVELOPS: MOTIVATION; SELF-EFFICACY;
CONTROL (DECISIONS), CONFIDENCE

OBJECTIVE BENEFIT PERCEPTION OF
HEALTHCARE USE

Appendix 1 : Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	2
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	2
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	3
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	3
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	3
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	3 and appendix 2
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	3
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	3-4
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	3-4
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	Not appropriate
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	4
RESULTS			

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	4
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	4
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	Not appropriate
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	5-8
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	5-8
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	8-9
Limitations	20	Discuss the limitations of the scoping review process.	10
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	10
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	10

Appendix 2: Search algorithm

Pubmed	Number of articles	Date extracted
(("Health mediation"[TI] OR "Health mediator*"[TI] OR (communit*[TI] AND ("health worker*"[TI] OR "intervention*"[TI] OR program*[TI])) OR "Peer mentor*"[TI] OR "Peer mentorship"[TI] OR "Peer mentoring"[TI] OR "peer-led"[TI] OR "Community Participation"[Mesh] OR "Community Health Workers"[Mesh]) AND (effectiveness[TIAB] OR efficacy[TIAB] OR effective[TIAB] OR success[TIAB] OR successful [TIAB] OR evaluation*[TIAB] OR Assessment*[TIAB] OR impact*[TIAB] OR outcome*[TIAB] OR effect*[TIAB] OR performance*[TIAB] OR attainment*[TIAB] OR consequence*[TIAB] OR influence*[TIAB] OR evaluating[TIAB] OR assessment[TIAB] OR Barrier* [TI] OR Facilitator* [TI] OR Implementation [TI] OR Factor* [TI] OR lesson*[TI] OR "Evaluation Studies as Topic"[Mesh] OR "Program Evaluation"[Mesh] OR "Evaluation Study" [Publication Type] OR "Comparative Effectiveness Research"[Mesh]) AND ("hard to reach"[TIAB] OR immigrant*[TIAB] OR immigration*[TIAB] OR Emigrant*[TIAB] OR Migrant*[TIAB] OR refugee*[TIAB] OR traveller*[TIAB] OR Traveler*[TIAB] OR Traveling[TIAB] OR gypsy[TIAB] OR Roma[TIAB] OR romani[TIAB] OR Gypsies[TIAB] OR Gipsies[TIAB] OR Romany[TIAB] OR Romanies[TIAB] OR homelessness[TIAB] OR homeless[TIAB] OR houseless[TIAB] OR Vulnerable[TIAB] OR marginalised[TIAB] OR Marginalization[TIAB] OR "Minority group*"[TIAB] OR "Minority Health"[TIAB] OR "Social exclusion*"[TIAB] OR "Transients and Migrants"[Mesh] OR "Emigrants and Immigrants"[Mesh] OR "Minority Groups"[Mesh] OR "Minority Health"[Mesh] OR "Homeless Persons"[Mesh] OR "Vulnerable Populations"[Mesh] OR "Poverty"[MAJR] OR "Roma"[Mesh]) AND 2015/01/01[crdt]:2020/12/01[crdt]) AND (2015:2020[pdat])	822	15/12/2020
Scopus		
TITLE ("Health mediation*" OR "Peer mentor" OR "Peer mentors" OR "Peer mentorship" OR "Peer mentoring" OR "peer-led" OR (health W/5 mediation* OR mediator*) OR (community* W/5 "health worker*" OR intervention* OR program*)) AND TITLE-ABS-KEY (effectiveness OR efficacy OR effective OR success OR evaluati* OR assessment* OR impact* OR outcome* OR effect* OR performance* OR attainment* OR consequence* OR influence* OR successful) OR TITLE (barrier* OR facilitator* OR implementation OR factor* OR lesson*) AND TITLE-ABS-KEY ("hard to reach" OR immigrant* OR immigration* OR emigrant* OR migrant* OR refugee* OR traveller* OR traveler* OR traveling OR gypsy OR roma OR romani OR gypsies OR gipsies OR romany OR romanies OR homelessness OR homeless OR houseless OR vulnerable OR marginalised OR marginalization OR "Minority group" OR "Minority groups" OR "Minority Health" OR "Social exclusion" OR "Social exclusions") AND (LIMIT-TO (PUBYEAR,2020) OR LIMIT-TO (PUBYEAR,2019) OR LIMIT-TO (PUBYEAR,2018) OR LIMIT-TO (PUBYEAR,2017) OR LIMIT-TO (PUBYEAR,2016) OR LIMIT-TO (PUBYEAR,2015)) AND (LIMIT-TO (LANGUAGE,"English") OR LIMIT-TO (LANGUAGE,"French"))	407	15/12/2020
Psycinfo		
TI ("Health mediation*" OR "Peer mentor*" OR "Peer mentorship" OR "Peer mentoring" OR "peer-led" OR "health mediation*" OR "health mediator*" OR	150	15/12/2020

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"community health worker*" OR "community-based worker*" OR "community-based intervention*" OR "community-based program*) AND AB (effectiveness OR efficacy OR effective OR success OR evaluati* OR assessment* OR impact* OR outcome* OR effect* OR performance* OR attainment* OR consequence* OR influence* OR successful OR barrier* OR facilitator* OR implementation OR factor* OR lesson*) AND AB ("hard to reach" OR immigrant* OR immigration* OR emigrant* OR migrant* OR refugee* OR traveller* OR traveler* OR traveling OR gypsy OR roma OR romani OR gypsies OR gipsies OR romany OR romanies OR homelessness OR homeless OR houseless OR vulnerable OR marginalised OR marginalization OR "Minority group*" OR "Minority Health" OR "Social exclusion" OR "Social exclusions")		
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For peer review only

Appendix 3: Analysis grid

Name of the authors
 Newspaper/Magazine
 Title
 Year
 Country or region
 Population
 Purpose of the article
 Study design and methods

Intervention

Who is requesting this intervention?

Who considers this a priority? How is it a priority?

What are the components of the intervention (training, communication, education, physical support, orientation, etc.)

When does the intervention start: intervention delivered, intervention built with
 When does the intervention end: is there an end, is there a continuation outside the period

observed, does it create 'girl' interventions

What is the stated purpose of the intervention?

What is the granularity of the intervention (modules adapted to different times or (e.g. different needs, e.g. proportionate universalism)?

What resources are mobilised: financial, human, material?

What types of actors (target populations, representative populations of the direct target, close to the target population, identified realisations of the target population, carers, stakeholders, decision-makers, researchers, etc.) are involved in :

- Definition of the problem to be solved
- Definition of the objectives of the intervention
- Definition of the means to be mobilised
- Definition of the components of the intervention

-Implementation of these components

- Adaptation of these components to the context
- Definition of the evaluation modalities

- Evaluation

- Communication about the intervention
- Definition of perspectives following the intervention
- Steering the intervention

Within each of these levels, and for each type of actor, how each actor involved is involved: is consulted / validates / actively contributes / observes / receives / is absent

Mediation actor role/ health mediator function and similar

Where does he come from? the type of job, what were his missions? his training?
 its host structure? its working methods? What support and resources
 (human and material) did he have? What type of remuneration did it receive? What was
 the

level of stability of the work team?

What was his level of integration into the community? What was their level of
 of integration into the health system?

What were the modalities of mobilisation of health mediators and the like?

who defines his missions? who evaluates his missions? how is he chosen (criteria)? how
 does he carry out his missions (his actions)?

Planning the intervention

1 How was the steering of the intervention organised?
2 How are members chosen? How was the distribution of powers organised?
3 ?
4 Was the intervention planned? If so, was it coordinated? by whom?
5 Which actors were involved?
6

7 **Implementation process**

8 Are the interventions true to their design? If not, what adaptations have been made?
9 necessary?
10 Are the beneficiaries satisfied?
11

12 **Evaluation of the effectiveness of the intervention**

13
14 What is the endpoint? Is there evidence of effectiveness? What were the outcomes in
15 terms of effectiveness on the health of the target population? What other outcomes did
16 they identify?
17

18 **Acceptability, sustainability**

19
20 How has health mediation to promote the use of primary health care been accepted
21 by health professionals? The population?
22 Is it considered relevant a posteriori? Under what conditions?
23 Is it sustainable? Under what conditions?
24

25 Was the audience that benefited the target audience at the time of conception?
26

27 **Brakes and levers identified**

28 Contextually related :

29 Linked to the actors (their characteristics, desire, habits)

30 Linked to the working habits of the stakeholders (trust, established process, etc.)

31 Related to the beneficiaries (their characteristics, desires, habits, etc.)

32 Linked to the intervention: resources, skills, guidance, etc.

33 Linked to the environment of the intervention, other intercurrent interventions,
34 other

35 intercurrent events,

36 efficiency

37 **Were the ethical rules respected?**

38 **Discussion: limitations and strengths**
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