From a "*Terrifying Challenge*" to a "*Professional Revelation*" - Implementing Motivational Interviewing through Participatory Action Research

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Research

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Abstract

Background

Motivational Interviewing (MI) is a humanistic and evidence-based counseling approach within primary care. However, MI rarely translates to clinical practice that follows the usual introductory training programs; a lack of evidence regarding its implementation persists today. A participatory action research was conducted to (1) facilitate and describe the clinicians' professional transformation through interprofessional communities of practice on motivational interviewing (ICP-MI), and (2) explore the contribution of ICP-MI in transforming their daily practices. This article addresses the first objective.

Methods

Data collection involved the principal investigator's research journal, participant observation of four ICP-MIs (76 hours, 16 clinicians), and four appraisal focus groups. A general inductive approach was used for qualitative data analysis.

Results

Findings describe the four processes of MI implementation in primary care as motivational endeavors: ambivalence, introspection, experimentation, and mobilization. The clinicians were initially ambivalent with respect to MI implementation, taking into consideration the significant challenges involved. After introspecting previous practices, they realized the limits of their clinician-centered counseling approach, which consolidated their engagement in ICP-MI. Thus, the experimentation of MI implementation initiatives in the workplace followed and enabled clinicians to witness the feasibility and effectiveness of MI. Finally, the clinicians were intrinsically mobilized to ensure MI sustainability in their practices. Two categories of influencing factors were reported. Intrinsic factors included personal traits, and perception about MI as a clinical priority. Extrinsic factors related to organizational support that was crucial in providing the appropriate resources and supporting the clinicians' implementation efforts. Results are discussed according to the Consolidated Framework for Implementation Research (CFIR).

Conclusions

As described in a fragmented manner in previous studies, MI implementation processes and influencing factors are presented in our study as integrated findings; we also suggest innovative avenues for future research projects. Considerations in elaborating effective training programs are highlighted, especially when it comes to providing motivational and organizational support to succeed at MI implementation within primary care.

Contributions To The Literature

- Research has shown that motivational interviewing is rarely translated into clinical practice despite its well documented effectiveness in many fields including primary care.

- The processes of implementing motivational interviewing are scantily reported in the literature, although the common challenges that primary care clinicians face refer to their insufficient training in counseling, resulting in a low sense of self-efficacy to develop the required knowledge and skills.
- These findings contribute to recognized gaps in the literature; MI implementation processes are presented as a motivational endeavor from ambivalence to mobilization, which are facilitated by organizational support to create a favorable learning environment.

Background

Healthcare knowledge and technology have evolved at a rapid pace during the last few decades, but an important gap persists between the care that is provided and that which would be recommended, a phenomenon called the “quality chasm” (Institute of Medicine, 2014). It would take up to 17 years for research findings to translate into clinical practice (Balas and Boren, 2001). Nearly two thirds of healthcare institutions launching implementation projects would fail to achieve the targeted organizational change (Burnes, 2004).

Motivational Interviewing (MI) is an evidence-based counseling practice that makes no exception to this phenomenon. MI is based on a humanistic philosophy of care and the use of person-centered communication skills to support health behavior change (Miller and Rollnick, 2013). Its core concepts include the MI spirit including collaboration, compassion, acceptance, and evocation; the use of counseling skills such as reflective listening, affirmations, and solicited health education; and overlapping processes including engagement in a working alliance, focalization on a behavioral health goal collaboratively established, evocation of intrinsic motivations to reach that goal, and the planification of a change plan while developing personal commitment (Miller et al., 2013). Even though primary care (PC) clinicians highly value MI as a humanistic and effective approach, most of them attending a training program will never succeed in implementing the approach (Brobeck et al., 2011; Graves et al., 2016; Midboe et al., 2011; Östlund et al., 2015) as they will often return to their old ways as soon as they return to the workplace (Brobeck et al., 2011; Östlund et al., 2015; Pfister-Minogue et al., 2010).

MI implementation in PC is characterized by the complexity of this counseling approach as feelings of discomfort and incompetence are commonly observed among newly trained clinicians (Brobeck et al., 2011; Midboe et al., 2011; Östlund et al., 2015; Pfister-Minogue et al., 2010; Pollak et al., 2016; Sargeant et al., 2008). Insufficient past training within health behavior change support would contribute to the suboptimal applicability of MI in PC, in addition to a disseminated role conception of clinicians as health experts contrasting with MI principles (Brobeck et al., 2011; Graves et al., 2016; Midboe et al., 2011; Östlund et al., 2015). However, these documented challenges are scantily reported in the literature.

Therefore, this study aims to address the knowledge gap in (1) facilitating and describing the clinicians’ professional transformation through interprofessional communities of practice on motivational interviewing (ICP-MI); and (2) exploring the impact of ICP-MI on daily practices. Four ICP-MIs were

facilitated and investigated using a participatory action research (PAR) methodology. This paper addresses the first objective.

Methods

Research Design

A PAR approach based on Kemmis, McTaggart, and Nixon's work (2016) guided this study. The primary goal of PAR is to facilitate professional transformation by implementing tangible actions in the co-participants' practices and workplaces to overcome their everyday professional challenges. PAR also bridges gaps between research and practice as the different actors involved in the situations of interest are mobilized as partners in professional development and research projects. To succeed in this endeavor, a cyclical process of reflection, planning, and action/observation is conducted until the co-participants are satisfied with their professional transformation (Kemmis et al., 2016).

The detailed methodology for this study was published (Authors, 2014). In sum, the PAR included ten cycles that were completed in over almost a year, in three stages: PAR preparation (cycles 1–2), PAR facilitation (cycles 3–9), and PAR appraisal that targeted the impact of ICP-MI on PC nursing practice (cycle 9–10). This paper focusses on PAR facilitation and appraisal, addressing the PC clinicians' MI implementation processes and their influencing factors.

Research Context and Intervention

The study took place in a suburban city near Montreal (Canada) and derived from the TRANSforming InTerprofessional clinical practices to improve cardiovascular prevention in primary care (TRANSIT) research program. TRANSIT participants included patients, caregivers, clinicians, administrators and researchers. The participants collaborated in identifying and investigating different priorities for action to improve chronic disease prevention in PC, which made MI training for PC clinicians a priority (Lalonde et al., 2014). Our study stems from this consultation and became independent as a doctoral project.

All clinicians participating in TRANSIT were invited to an introductory two-day training that was delivered by MI Network of Trainers (MINT) members. In total, 45 PC clinicians, including nurses, nutritionists, kinesiologists, pharmacists, family physicians, and psychologists participated in this orientation. These clinicians were approached in person to participate in the study. Emails were also sent to all TRANSIT participants. Four ICP-MIs were created as the subjects of this study, each ensuring seven meetings every four to six weeks. Nineteen hours of MI learning and implementation support were delivered through various learning activities providing ongoing feedback and coaching opportunities based on workplace learning in continuing interprofessional education (Kitto et al., 2012). PAR co-participants collectively elaborated the studied MI training program according to the clinicians' preferences and the principal investigator's ideas. ICP-MIs provided coaching and feedback opportunities facilitated by the principal investigator (SL), a PC nurse trained in MI and in external facilitation of communities of practice, who became a MINT member during the study.

Participants' Recruitment

To recruit co-participants, a purposive sampling was used according to three inclusion criteria: (1) to participate in the TRANSIT research program as a PC clinician, (2) to have attended an introductory training on MI in the past two years, and (3) to be available and interested to participate in an ICP-MI. Purposive sampling was used to recruit 16 clinicians who provided written consent and whose profiles are detailed in Table 1. Two clinicians dropped out of the study halfway; one clinician elicited time constraints, while the other changed her job and her new employer refused the continued involvement in our project. After PAR facilitation, a focus group was conducted for each ICP-MI. Finally, 12 clinicians participated in these discussions.

Data Collection

Three qualitative data collection methods were used: a research journal, participant observation of ICP-MI meetings, and focus groups (See Additional File for COREQ checklist)

Using a research journal is recommended in PAR to document the pedagogical and methodological decision-making process of the study conducted in collaboration among the researchers and the practitioners involved as co-participants (Kemmis et al., 2016). Qualitative research compiles field notes of observational methods and initiates data analysis (Pope et al., 2020). The research journal proved a useful tool in initiating data analysis and reporting the collaborative decisional process of PAR in documenting meeting reports following participant observation during ICP-MI meetings.

Participant observation is frequently used in PAR based on the collaborative nature of the research approach among the co-participants, namely researchers and practitioners (Kemmis et al., 2016). The researcher acts as the external facilitator stimulating the clinicians' reflections and resolutions from their unsatisfactory professional practices and involved workplace circumstances (Kemmis et al., 2016). The participant observation of 76 hours was completed during the seven meetings of the four ICP-MIs that took place in the clinicians' workplace, which were recorded and transcribed.

The last data collection method was the focus group, which facilitated discussions among participants who shared their experiences and triangulated perspectives regarding the studied phenomenon (Pope et al., 2020). In PAR, focus groups encourage power sharing among the co-participants, and facilitate the transformational process of this inquiry to overcome workplace challenges and organizational change through critical reflection and experiential learning (Chiu, 2003). A focus group of 90 to 120 minutes was conducted by the principal investigator after the last meeting of each ICP-MI. The participants provided an exploratory appraisal of the study according to the research objectives.

Data Analysis

A general inductive approach was completed during the qualitative data analysis (Thomas, 2006). This five-step approach includes the immersion of the researchers in the raw data followed by data codification, segmentation, recontextualization, and conceptualization. The data reduction process was

supported by the QDA-Miner software and involved all the authors who performed inter-coder reliability. The clinicians contributed to the data analysis, especially during the conceptualization of the research findings, thereby ensuring the rigor of the results according to Thomas' general inductive approach in qualitative data analysis (2006), and the collaborative nature of PAR (Kemmis et al., 2016). Half of the clinicians who took part in the entire study actively participated in this activity, and data saturation was achieved.

Findings

Clinicians' Profiles

Table 1
Participants' profiles

		Nutritionists	Nurses	Physicians	Kinesiologists	Psychologist
Numbers of Clinicians (Gender)		6 (6F)	5 (5F)	2 (1F, 1M)	2 (2F)	1 (1F)
Years of practice in PC	0–15	4	2	—	1	—
	15–30	2	3	2	1	1
Years since the first training on MI	0–2	4	5	2	—	1
	3–11	2	—	—	2	—
Years of MI use among trained clinicians (n = 7)	0	1	—	—	2	—
	1–3	4	—	—	—	—

MI Implementation Processes

MI implementation was described as a motivational endeavor that was initially perceived as a terrifying challenge, which evolved into a professional revelation (Fig. 2). Four implementation processes were documented: ambivalence, introspection, experimentation, and mobilization. Two categories of factors had influenced the participants through these processes. The intrinsic factors involved the clinicians' personal traits, thereby impacting their attitudes toward implementation challenges and their readiness to conduct the underlying professional transformation of implementing MI in their daily practice, and their perception of MI as a clinical priority. The extrinsic factors related to organizational support that revealed to be crucial in providing appropriate resources and encouraging the clinicians' implementation efforts in various ways.

Ambivalence

The processes of MI implementation began with a conflicting journey, according to the PC clinicians.

The two-day training was a professional revelation! I said to myself "*Gosh, it's beautiful! It looks easy! It's really interesting!*". We find them so skilled, the trainers! It flows by itself! After that, when you go back to the field, in the real life, it takes so much time! "*How am I going to do all of this*?" You are searching for your words. You weigh everything you say. You feel like you have to put on white gloves every time you speak. You are afraid of making a mistake! It's quite a puzzle. (CIL)

MI is so interesting, but is also a very different way of doing things! There is so much to change in my consultations that I am destabilized. (AK)

The clinicians' ambivalence regarding MI implementation was described as a dilemma between the perceived relevance of the approach as a "*professional revelation*" and its feasibility representing a "*destabilizing puzzle.*" This first process of MI implementation led to the following statements: "*I ended up doing what I always did."* since *"(…) the confidence in implementing MI was lacking."*, "*MI was not within my reach. I thought it took too much time, too much energy*."

You can freeze by the lack of skills and confidence. A kind of terror sets in. People are panicking, uncomfortable applying MI. It's been almost two years that we have been doing clinical discussions within my team to try to break down these barriers related to MI implementation. (CN)

Introspection

Eventually, the ambivalence of implementing MI in PC progressed into a rich opportunity for the clinicians to conduct an introspection regarding their counseling practices. Mid-project, they recognized the limitations of their previous directive interventions in health behavior support, which consolidated their motivation to pursue the MI implementation.

To be able to sit down and think about our practices, to see also what other clinicians think and do, it triggered a turning point for me. (BNJ)

I realized that what I thought I was doing well, but fundamentally it wasn't the case. I realized that there were much better ways to intervene with patients and work with them to get results, to make changes. (DI)

Once a few clinicians shared their insights about the limitations of their previous counseling approach, rich and authentic discussions were encouraged among all the clinicians, who progressively engaged in an individual and collective reflective practice.

In the context of this ICP-MI, it was good to see that we all had the same fears. It normalized our challenges [to implement MI]!" (AK)

Our fears in implementing MI in our everyday practices, we named them. Our doubts also. Eventually, we weren't afraid to put them on the table. And what was interesting when we talked about our doubts is that we were able to give each other feedback and support. It helped a lot to gain confidence, to see that it is possible to use MI bit by bit. (AN)

Experimentation

Gradually, bonds of trust and mutual support were consolidated among ICP-MI members creating a constructive learning environment. Overcoming the "*fears of being judged by peers*," the clinicians were ready to "*make room for individual incompetence*" while cultivating the "*pleasure of learning.*"

We took turns practicing one thing at a time. In this way, I see that I am learning and that she is also learning, we are experiencing the same difficulties. So that is motivating and reassuring to pursue with this training. (BI)

Over time, the initial "*feeling of terror*" dissipated to allow clinicians to dare to implement MI. At this stage, the process of experimentation evolved as the clinicians instigated MI implementation initiatives in their daily practice. Their workplace constituted a "*laboratory*" where they could learn by "*trial and error*":

I think we see more the impact that MI has. We have the chance to work in a laboratory. Everyday! We are here on Tuesday evening and the next day, from Wednesday morning, we see patients. What a beautiful laboratory! This is precious! (AK)

I remember once using a little sentence that made an impact on a patient! It was like... he almost started to cry after I told him something that hit a nerve. I wasn't used to intervening that way, it's a new way of doing things for me. I realized "*Wow, this is working*!" (DI)

The first experimentations of the clinicians were discussed in ICP-MI, which highlighted the contribution of MI in improving PC practices and patient outcomes. These successes motivated others to overcome their ambivalence with MI implementation.

At first, I saw MI contribution through you, the experience you had with the approach and that you shared here [DI talking to DN]. For me, it always takes a little time before I change my habits. I watch, I listen. At one point, I tried MI with a patient, and I realized even more how well it works! (DI)

At the beginning of the training, I didn't see how I was going to incorporate MI into my consultations. I was thinking "*It's too long*!". Finally, I see that we are more and more capable, and I realize that it does not take longer. It is even more effective and facilitating for us! (DN)

At one point, the clinicians felt confident enough to discuss and experiment with MI in challenging clinical situations.

Now I am more mindful of my interventions. With a difficult patient, I can prepare my interview [with the ICP-MI] to establish what I want to say and how I would use MI accordingly so that when I see that

patient, I know where I want to go and how to go there. (AK)

Patients reluctant to change… Before, I didn't know how to intervene to help them! I felt completely destabilized. I've learned here how to talk to these patients, how to get to them. (DI)

Mobilization

The clinicians proactively instigated various actions to ensure MI sustainability after the study that suggested their mobilization to pursue its implementation. These initiatives were motivated by clinicians perceiving the approach that "*makes beautiful little miracles!*".

I will complete a summary of everything I've learned: MI core ideas, the principal techniques. I would like to display it on my desk. It would be a way to remind me of MI concepts everyday. (AK)

I borrowed one of our tools that we've discussed here, and I explained it to my team, even though some of the clinicians did not participate in this project. If we want to bring MI to life in our workplaces, it has to be a priority. I believe it is possible and important. (CN)

I will do another training on MI. It seems a lot, but at the same time, I'm still in the thick of it. It's not something I want to leave on the shelf. (…) My interviews are more efficient, and it also requires less energy. (DN)

Organizational change was conducted as some clinicians planned diverse projects to promote MI in their workplace, thereby showing leadership among their peers and decision-makers.

I went to see my manager and I said to her: "The whole team must be trained in MI. We must use the same language." And I had an impact. (BK)

When I say that MI implementation takes a lot of energy, it's because you have to really want it to make it happen. In team meetings or an administrative committee, things go very quickly, and it must be a priority. For me, this is my number one priority as a manager. (CN)

Implementing MI: A Motivational Endeavour

Throughout the study, the participating clinicians underlined the extent to which MI implementation required motivation. A parallel was established between MI implementation processes as facilitating professional behavior changes among PC clinicians, similarly to MI clinical processes facilitating health behavior change among patients.

It's funny because it's like if we are the patients here. We must prepare ourselves before our meetings, we set our goals, we have to practice and change our habits! And you Sophie [PI acting as the external facilitator of ICP-MI], you guide us through it all. (…) Changing our lifestyle, changing our professional practice, it's pretty much the same and it takes time. (BI)

Table 2 illustrates how the clinicians progressed as they presented ambivalence in implementing MI in their PC settings at the beginning of the study and progressed toward their mobilization at the end of the study. The clinicians' motivational discourses were analyzed according to MI concepts as sustain talk was preponderant during the first ICP-MI meetings and change talk, in their last encounters. "Sustain talk and change talk are conceptually opposite – the person's arguments against and for change." (Miller et al., 2013, p.165).

Table 2 The Motivational Endeavour of MI Implementation in PC

Clinicians' Motivational Discourses	Sustain Talk →	Change Talk
Preparatory Change Talk		
Desire to change	*I ended up doing what I always did. (...) MI takes too much time, too much energy.*	*My interviews are more efficient, and it also requires less energy. Everything prompts me to continue.*
Ability to change	*Patients reluctant to change? Before, I didn't know how to intervene! I felt completely destabilized.*	*I've learned here how to talk to these patients [reluctant to change their behaviors], how to get to them.*
Reasons to change	*It made me realize how I worked. (...) I thought I was doing well*	*I realized that there was something that could greatly improve my relationship with patients and led to better outcomes.*
Need to change	*It would be so easy to realize that everything went out the window eventually!*	*MI implementation must be a priority. For me, this is my number one priority as a manager.*
Mobilizing Change Talk		
Activation	*I will do another training on MI. It seems a lot, but at the same time, I'm still in the thick of it. It's not something I want to leave on the shelf.*	
Taking First Steps	*I remember once using a little sentence that made an impact on a patient! It was like... he almost started to cry after I told him something that hit a nerve. I wasn't used to intervene that way, it's a new way of doing things for me. I realized "Wow, this is working!".*	
Commitment	*Personally, I needed to set my own goals. If I don't have a deadline... phew! "So there, I will focus on open questions by the next meeting.". Another time, it was the tool « Ask - Provide – Ask ».*	

Factors Influencing MI Implementation in PC

Intrinsic Factors

The clinicians' personal traits were decisive in perceiving MI implementation challenges as normal and stimulating or confronting and discouraging. Some clinicians perceived professional development as a lifelong learning project, which facilitated their MI implementation processes: "*I leave our meetings, I don't have complexes. Not at all. We don't know everything in life and I'm 55, so I still have a lot to learn from life.*" Others aimed for perfection: "*MI is still new and the fear of not performing… It freezes me!*" These participants took more time to overcome their initial ambivalence.

Presenting the readiness to transform practices was helpful in ICP-MI. Having developed personal and professional maturity seemed to be favorable in reflective practice and professional transformation. In fact, the youngest clinician who participated in the study was in her thirties; all the others were more than 40 years old, with extensive clinical experience.

After 13 years as a dietitian, I felt like I was playing a tape, always saying the same thing over and over again. I wanted something else. (…) It's also good that I was in my 40s and not my 20s! I can be easily insecure, and it was especially the case when I was younger. (BNJ)

The perception of MI as a clinical priority revealed itself to be another influence on the clinicians' intrinsic disposition to change their counseling practices. A family physician exposed the challenges regarding MI implementation, as it competed with other clinical priorities in general medicine. On the contrary, clinicians from other professions stated how useful MI was for their practice, as health behavior change support is a cornerstone of patient care.

When I see a patient, I have a series of priority topics to address in a given timeframe which leaves little time, even no time at all to provide counseling interventions. At all. (…) but it also happens that it is quite unidimensional and that I can take the time to provide MI. In a standard practice, however, it is not easy. (DM)

The bulk of my work, and I think for my colleagues from other professions as well, it's motivation. People say that I do fitness programs. I say « No, I try to motivate people to move. ». Only that. I can give the best program in the world, if the person is not motivated, it is useless. (AK)

Extrinsic Factors

The organizational support provided to the clinicians greatly influenced their MI implementation processes. Benefitting from the support of colleagues, managers, and globally from the organization influenced their motivation to implement MI in their workplace.

The collaboration of the colleagues to take over patient care or to plan healthcare services in their absence while attending ICP-MI meetings was varied.

As the researchers involved in TRANSIT are members of my healthcare team, we automatically believed in this study. We are part of several research projects, so it was very motivating for the team and me. (BI)

Today, there is nobody who takes over my work. And my colleagues complain about it. The doctors need to plan their work accordingly. Usually, I'm there all afternoon to help them, but now I won't be there. So eight times, it's a lot! (CIM)

Support from managers also encouraged the clinicians' efforts in implementing MI within their own practices and to influence colleagues to follow suit as *"it's a lot to put on the shoulders of the clinicians the challenge to bring MI to life within healthcare teams."*

Everyone on the team has had at least one day of MI training and I have a coordinator who is convinced of the relevance of MI. (…) It encourages me to implement it in my work so I may have less difficulty than others in the future because my work stimulates me in that regard. (AK)

Administrative support from the organization was included during the PAR preparation phase to provide human, logistical, and financial resources. This gesture endorsed the clinicians' venture as they felt *"(…) extremely privileged to have been able to manage [their] agenda and to be paid [for attending PAR meetings]*." In their daily practice, they also had *"(…) the possibility to postpone topics that were addressed in another consultation, which took off some stress and left time for MI*." The flexibility allowed the clinicians to conduct *"(...) follow-up of [their] patients' progress and gave [them] the opportunity to adjust MI interventions accordingly."* Those clinicians working in a private practice deplored the lack of such an organizational support.

Of course, the time spent here is time that I'm not working. It's time that I take for myself, for work. I really wanted to be here. I thought it was going to bring something, for me and for my patients. I wouldn't have taken three hours every month for eight months otherwise! (BNJ)

Close to the end of the study, the organization that coordinated the regional PC public services confirmed its intention to implement a vast project around MI diffusion. This announcement facilitated MI sustainability while highlighting the specific challenge faced by self-employed clinicians.

MI is actually popular, even across Quebec, but what I believe will help us a lot is that there is a three-year project that will be launched soon by the organization. We are starting another wave of MI training so there will be more and more people trained. This time, the budgets come from our organization and not from a research project, so MI will be used more and more across our territory. (CIM)

The context is not as facilitating in private practice. There's no supportive environment. At least in TRANSIT, there were people involved, there were the meetings with Sophie where we talked about MI. How

to maintain this momentum and continue to implement MI in my practice? It can be done, but it will require strategies! (AN)

Discussion

The inductive qualitative design led to the contextualization of our findings in the light of the Consolidated Framework for Implementation Research (CFIR). This framework presents five domains in implementing healthcare innovations according to (1) the characteristics of the intervention to be implemented, (2) the individual factors specific to the people involved, (3) the internal and (4) external contextual factors of the targeted healthcare settings, and (5) the conduct of implementation processes (Damschroder et al., 2009). Regarding the first domain, (1) the specific characteristics of MI as a complex counseling approach are reported in another publication that describes MI learning processes and its influencing factors (Authors, 2021a). As for the study findings, intrinsic factors of influence refer to (2) individual characteristics of the participating clinicians including their personal traits, readiness for professional transformation and perception of MI as a clinical priority. Local (3) and regional (4) organizational support provided by the public healthcare system, which was missing for those clinicians working in private practice, were described as impacting MI implementation in PC; they also corresponded to key factors of the CFIR model. Organizational support is of particular interest, considering that this project also benefitted from human and financial resources provided by the TRANSIT research program, such as the provision of a two-day introductory training on MI that would be otherwise provided by the organization alone. Finally, CFIR presented (5) four phases of implementation process, namely planning, engaging, executing, and reflecting/evaluating. These phases are similar to PAR cyclical process involving planning, action/observation and reflection, which support the benefits of using PAR methodology to facilitate professional transformation within healthcare settings. Damschroder and colleagues (2009) emphasized the understudy of intrinsic factors influencing the implementation of healthcare innovations and the frequent omission of engaging activities within implementation process. This study specifically addresses these knowledge gaps and contributes through its thorough description of clinicians' motivational endeavor in implementing MI within PC, as experienced and analyzed by the co-participants.

To our knowledge, no studies have documented the MI implementation processes by PC clinicians. However, a few researchers have looked at the perspectives of clinicians implementing MI within PC. They underlined the underestimated importance of evoking the limitations of previous authoritarian counseling approaches to engage PC clinicians early in MI training programs (Brobeck et al., 2011; Östlund et al., 2015; Pfister-Minogue et al., 2010). Through an introspection of their practices, the participants realized the dissonance between their actual and desired counseling approach to progress towards MI implementation (Pfister-Minogue et al., 2010). Therefore, our findings suggest a new and integrated empirical perspective about MI implementation within PC through four processes—ambivalence, introspection, experimentation, and mobilization—that were related to MI method in exploring and resolving the ambivalence of the patient by evoking intrinsic motivations to adopt a healthy lifestyle, since both facilitate behavioral changes. Future studies would gain from delving deeper into

these findings and investigating how MI training programs could consolidate its engaging activities to support clinicians in the motivational endeavor of implementing MI within PC.

As for the influence of clinicians' intrinsic factors regarding their personal traits, they were reported in this study as well as in the existing literature. Presenting a positive attitude and self-confidence to transform clinical practices would help clinicians implementing MI in PC (Brobeck et al., 2011; Graves et al., 2016; Östlund et al., 2015). Experienced clinicians would also be more inclined to conduct reflective practice activities to succeed in MI implementation, compared to their colleagues with less clinical experience (Brobeck et al., 2011; Östlund et al., 2015). A meta-analysis has also reported that clinicians, who presented a minimum of five years of clinical practice, typically benefit more from MI training compared to their peers who are recent graduates (Schwalbe et al., 2014). As for the different perspectives of MI as a clinical priority in different professions, it is an influencing factor that our literature review did not uncover. The small number of participants who took part in the study prevents us from drawing any generalizations, and further research using an interdisciplinary perspective is encouraged to clarify the impact of this factor.

As for extrinsic factors, the study revealed that the organizational support had a central influence on MI implementation processes. An organization promoting a culture of continuing education and person-centered care would facilitate MI implementation initiatives within PC settings (Brobeck et al., 2011; Graves et al., 2016; Östlund et al., 2015). Providing financial, logistical, and human resources would avoid a work overload which constitutes a significant barrier that discourages most clinicians from attending extensive trainings on MI (Brobeck et al., 2011; Graves et al., 2016; Östlund et al., 2015). Peer support would also play a key role, as having a colleague trained in MI offers the opportunity to share successes, challenges and strategies adapted to their unique professional realities (Östlund et al., 2015; Graves et al., 2016). As for the difference between clinicians working in public or private PC services, this factor was absent from our literature review and constitutes an interesting topic to elucidate in future studies.

Study Limitations

The clinicians' contributions throughout the research process were notable during PAR preparation and data collection, especially during participant observation. Although they partially contributed to data analysis and dissemination of research findings as decisions jointly taken among PAR co-participants. Another limitation relates to the possibly limited transferability of findings, especially when typical top-down implementation projects are conducted, considering the favorable context that this PAR provided. A sense of ambivalence regarding MI implementation was nevertheless observed, which underlines the relevance of anticipating the implementation processes and influencing factors described earlier. Finally, the study did not include patients and administrators, whose perspectives would be interesting to detail in further inquiries.

Conclusion

In the literature, MI implementation within PC remains an understudied research domain. To our knowledge, no study has previously described its underlying processes and influencing factors through the unique lens of PAR methodology and inductive qualitative data analysis. Innovative findings are thus presented here, including the crucial role that motivation plays through these implementation processes. This aspect manifests the need to conduct further research on the topic. In the meantime, clinicians, trainers, healthcare managers, and administrators may consider the implications put forth by this paper to improve the MI training programs and implementation initiatives for PC clinicians.

Abbreviations

MI
Motivational Interviewing
PC
Primary Care
ICP-MI
Interprofessional Community of Practice on Motivational Interviewing
PAR
Participatory Action Research
CFIR
Consolidated Framework for Implementation Research

Declarations

Ethics approval and consent to participate

The ethics approval was delivered from the ethics committee of Centre intégré de santé et de services sociaux de Laval (01.2.1 / 2012-2013).

Consent for publication

All participants provided written consent to participate in this study including the publication of its findings.

Availability of data and materials

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

Competing interests

The authors declare that they have no competing interests

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Authors' contributions

SL and JG have made substantial contributions to the design of the work; the acquisition, analysis, interpretation of data;

SL have drafted the work and JG substantively revised it.

SL and JG have approved the submitted version.

SL and JG have agreed both to be personally accountable for the author's own contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.

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Figures

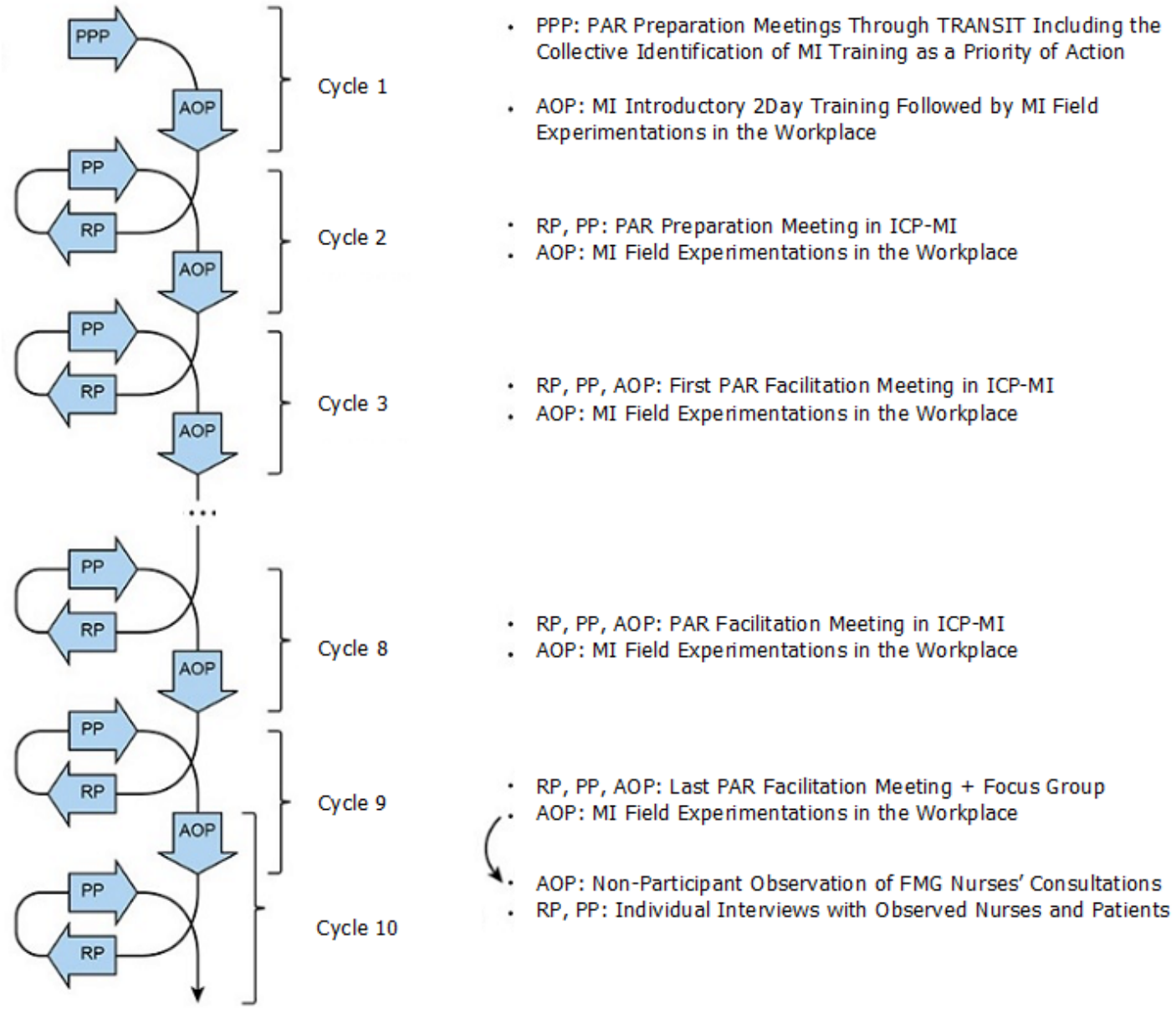

Figure 1

PAR cyclical process PPP: Preliminary Planning Phase, AOP: Action/Observation Phase, RP: Reflection Phase, PP: Planning Phase

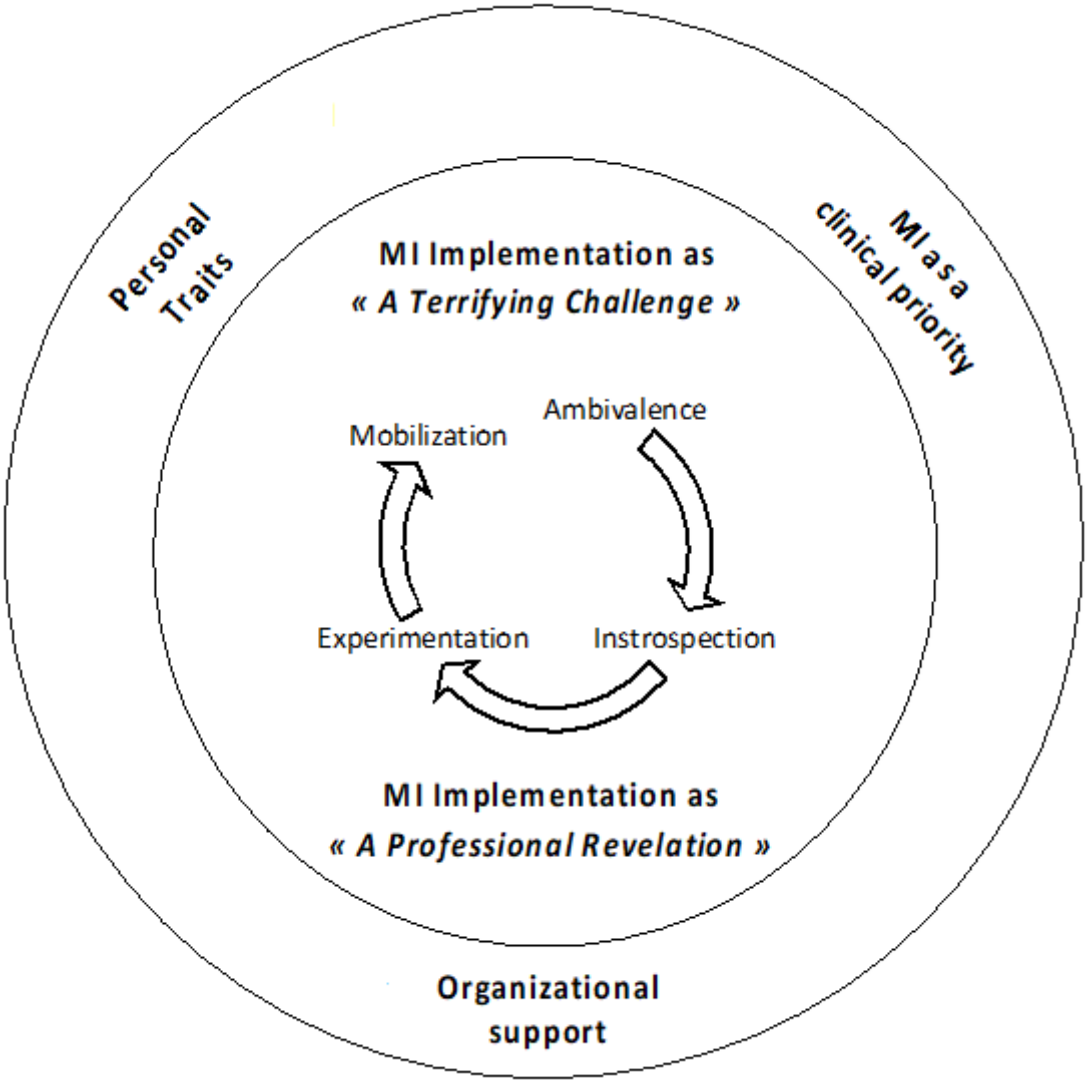

Figure 2

The Motivational Endeavour of MI Implementation in PC The arrows in the middle of Figure 1 illustrate the evolutive processes of MI implementation with ambivalence about implementing MI in PC as a starting point. The clinicians then progressed toward professional introspection to realize MI implementation benefits in order to pursue with experimenting with MI implementation initiatives. Witnessing MI contribution to improve PC counseling practices, the clinicians were finally mobilized in actively implementing the approach in their counseling practices and workplaces. Two categories of influencing factors are described in the second circle as intrinsic (at top) and extrinsic (at bottom) factors.

Supplementary Files

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- ImplScCOREQChecklist.pdf