Keeping continuity: A Dance Movement Psychotherapy intervention for mothers, fathers and babies in the perinatal period

Dance movement therapy M.A.

Universidad Autónoma de Barcelona, 2021.

Tutor: Iris Bräuninger

Student: Amandine Vighi

I wish to thank Heidrun Panhofer for being my first dissertation tutor 9 years ago when I started this dissertation project.

I also want to thank Iris Bräuninger for her support in pursuing and finishing this work.

I want to thank from the bottom of my heart my friends and colleagues Marife, Diana, Carolina, Stephanie, Christiane, Salomé, Laure, Bénédicte and Myriam for their endless support.

A very special thank you to Marine without whom this would not have been possible.

To my ancestors, my mother, my father and my brother.

To Benoit.

To the star whom I shared a womb with.

To Milan and Lucia.

"Voir un enfant nouveau né…, l'entendre, le toucher, le sentir, le renifler, le lécher, le porter… émeut le corps, bouleverse le cœur, sidère d'une étrange manière. Les mots défaillent à supporter cette expérience, comme à en rendre compte. Cela surgit, envahit, dépossède; cela rend caducs les repères habituels. (...) On tente de reconstruire une histoire, on en fait un moment de désarroi, de grande excitation, où la fête et la misère se mêleraient. Quelque chose y est mort. Un mouvement intense de vie a jailli dans l'enfant et dans l'adulte. Ils pleurent. "

A. Bouchard Godard.

“On ne remerciera jamais assez les mères mélancoliques. Leur trône est au milieu du ciel. Elles ont jeté leur châle sur le soleil. Il sort de leur yeux une nuit si grande que leurs enfants s’émerveillent du plus petit brin de lumière.”

Christian Bobin, La dame Blanche, 2007.

I. SUMMARY

This work offers an extensive literature review of the dance movement therapy currently offered to women during pregnancy and postpartum, until the child is one year old.

We look at the specificities of DMT in the psychotherapy world, the similarities and the differences and show how DMT is relevant to work in the perinatal field. We take a closer look at the immediate postpartum period (the first 40 days) as a key moment where psychotherapeutic work can take place.

Postpartum mood disorders (depression and anxiety) impact a great number of parents (10 to 17% for postpartum depression) and make it a public health concern. It is of even greater importance to work on preventing postpartum mood disorders if the consequences on the child's future are taken into consideration. This work specifically looks at how DMT can help in the prevention of postpartum mood disorders (anxiety and depression) for both mothers and fathers.

This work then gives some guidelines for work in the perinatal field , offering a model of specific interventions directly with the family combined with psychotherapeutic group work. Both intervention models are thought of for pregnancy, immediate postpartum and until the child reaches 1 year old. This dissertation explores how flexibility in time and space modalities should be considered a priority during this period of life. Fathers should also be offered much more consideration and support during the perinatal time.

Keywords: DMT; perinatal field; pregnancy; immediate postpartum; postnatal mood disorders; Early infancy; home treatment; attunement

II. INTRODUCTION

Support during the perinatal period (Pregnancy and the first year of a child's life) has always been essential and is even more so in our current society. There has never been more public awareness of the impact of this period of life (the perinatal and up to the third year*)* on the child's future physical and mental health. In September 2020, a report led by Cyrulnik B., a neuropsychiatrist was submitted to the French government and received much coverage in the French media. It is known as the "1000 first days" report, referring to the first 3 years of the child and how crucial these years are for its future development and health.

From the parent's point of view the perinatal period is also an intense period of crisis, in the sense that it is also a moment when things can shift-for better or worse.

Today, the lack of extended family support, pressure to go back to work early and actual social pressure to not just be good enough but an high performing parent can be some of the many reasons why this life experience isn't always the blossoming one if it is socially expected to be.

The number of mothers and fathers suffering from postnatal depression and mental health distress make it a public health concern, especially as the impact for the child is well documented. Studies show postpartum depression rates are around 14% for mothers and 3,5% for fathers (Dave et al., 2010) in the UK, 10% for mothers in the US (Zhou et al., 2019), including pre-and postpartum depression rated at 10% for fathers in Australia (Paulson et al., 2010). One Australian study showed a surprising 17% rate of postpartum depression amongst parents (Yelland et al., 2010).

The American Psychological Association also reports that half of women suffering with postpartum depression are already affected during pregnancy highlighting the importance of readily available support during that period (APA). However, other sources show that if symptoms of milder rather than solely major depression are taken into account rates of postpartum depression would climb up to 19% amongst women in the first year (Naître et grandir).

Although postpartum depression is often considered to be the main postpartum disorder authors also warn that postpartum anxiety is also a frequent occurrence in the general public. Matthey et al. (2003) shows how the ratio of both mothers and fathers suffering from postpartum disorders increases significantly when postpartum mood screening includes anxiety symptoms and urges public health providers to assess both depression and anxiety in new and expectant parents. They also believe that the term "postnatal mood disorder" (PMD) should be prefered to describe these difficulties which are faced by a large number of new parents. Rates of anxiety in an Australian study are around 12% at 6 months postpartum and 8% for co-morbid depression and anxiety (Yelland et al., 2010). These are similar to another German study which finds 11% of anxiety symptoms amongst new mothers (Reck et al., 2008).

Another important fact is the significant association found between maternity blues and postpartum anxiety as well as depression (Reck, 2009). These authors recommend that women with maternity blues should be observed closely in the first few weeks and should be offered treatment at an early stage to prevent the worsening of mood disorders.

These studies show the importance of intervention during pregnancy and in the immediate postpartum as a way to prevent postpartum mood disorders (PMD).

The sources of questioning and motivation for this work are the observation and practical work of the author both as a psychologist working in a maternity ward (starting 2012) and as a trainee dance movement therapist in placement at a Mother and Baby Psychiatric Unit (6 months in 2011).

Current clinical considerations show the increase in depressive and narcissistic difficulties (Chabert, 2008). Chabert explains how this pushes the psychotherapy world to look increasingly at the period of the beginning of life.

There seems to be a definite interest from the DMT field in pregnant women and infant/mother populations. Brief internet research shows quite a few DMTs work with this population whether

in specialized services or in private practice. Recent graduate research (Wilson, 2020; Anderson-Frazier, 2020) highlights how little literature there is regarding DMT and pregnancy. There is a sense of natural evidence that this period of life and the technique of DMT have something in common. For both the young child and dancer, non-verbal communication and physicality are at the forefront. With Bowlby's attachment theory in mind and how much of it is sustained by non-verbal elements, DMT interventions seem recommended. We will look at the different concepts, elements and practical aspects of the work with this population and see if and how DMT can help to alleviate temporary psychological difficulties that can occur during and after pregnancy, such as symptoms of anxiety and depression. We also take into account that psychological and psychopathological difficulties are likely to impact the bonding between the mother and child and will look at how that aspect can be taken into account by the therapy process.

We will focus on the immediate postpartum period, namely the first few weeks. We will look at why this short period of time is essential for parents and babies and how DMT work can be supportive to the changes and challenges occurring at that time.

We will identify what is relevant amongst the psychodynamic, psychotherapeutic and DMT work for the perinatal period. We believe that the field of creative therapies and specifically DMP would greatly benefit from a review of the current available literature relevant to that field, to feed its own work and future literature.

We propose a model of intervention both on a theoretical and practical level for the period of pregnancy and up to one year of age. We choose to treat pregnancy through to the first year of the child as a continuity, wishing to unite/integrate DMT practice with the perinatal psychotherapeutic field.

It seems essential to us that DMT work would be thought of within the psychotherapeutic field and it seems useful for a novice DMT in the field to know what the work could look like. We also believe it is vital for DMTs to maximise dialogue with other psychotherapies working in this

field in order to gain recognition amongst all existing psychotherapies and the communication of such a model could be helpful in this direction.

It also seems essential that we consider fathers specifically in terms of how to engage them in the process of supporting the mother and child dyad as well as accompanying them as therapists in their own process of becoming a father. Thinking about how we work with fathers is even more important for today's therapists in this historical time when, for example, Spain has extended fathers' parental leave to equal that of the mothers.

Finally our clinical experience has shown how for numerous reasons that we will look into later the families most in need of support are the ones that find it harder to be physically present in the consulting room. This can be true during pregnancy when the mother's mobility is reduced or even non-existent. This is often true in the first few days or weeks when the baby arrives due to medical reasons for the mother (episiotomy, C-section) or because of tiredness, for medical reasons for the baby, or just simply needing time to bond with the baby. Thus there can be an interruption in the therapeutic process at a time when it is felt that it is most needed. Home intervention has been a resource for many health professionals working in the perinatal field (midwives and pediatric nurses specifically). It seems relevant to define the necessary conditions and the framework for this type of intervention to take place in the context of DMP. Also as we write we are in the midst of the coronavirus pandemic and global lockdown which requires us to reconsider how we can maintain the psychotherapeutic work with patients - face to face or virtually. Even if it modifies our work, what would make our DMP work and eyes specific?

Theoretical background:

We will first look at the different definitions of pre/perinatal period and early infancy that can be found, to finally define our period of interest to 20 completed weeks (140 days) of gestation and ends 28 completed days after birth for the perinatal period to up to 1 year of age for the child.

We will then look at the biological, physical and psychological changes that take place for the mother-to-be during the pregnancy, especially from a psychodynamic point of view. We will look at concepts such as differentiating pregnancy and maternity; the implications of a desired or undesired pregnancy; the desire to have children from a psychodynamic point of view; the concept of psychological transparency during pregnancy and the impact on the body image during that period (Mainly from Bydlowski body of work). We will see through the work of many different psychoanalysts the key concepts that support the birth of the newborn's psyche.

This recollection of the developmental and psychodynamic process will allow us to look at the impact this period of life can have on the mother and father's psyche and how those difficulties or illnesses can be understood after what has been described above as the "normal" process of becoming a mother.

We will evaluate the usefulness of those concepts for DMTs and any direct relationships to the current practice of DMT within that population or with other populations. After reviewing current verbal, non-verbal, and DMT perinatal practices, we hope to produce concise guidelines which could be useful for DMTs about to start to work in that field. We hope to illustrate the scope of DMP with regards to the particular psychological difficulties or illnesses where it appears more relevant.

Main objectives:

Our main objectives are to

- Collect all available literature relevant to the pre-post partum population in DMT and psychodynamic work and put them in dialogue: What would DMT specifically bring to the perinatal therapeutic field, compared to what already exists?

- Zoom in on pregnancy and the immediate postpartum period (first 40 days) and why and how a DMT intervention could take place in this context
- Draw a model of DMT intervention for the pregnancy/ first year of the baby's life

Method:

- We will review literature in the field of psychoanalytic psychotherapies and DMT
- We will produce theoretical and practical guidelines as a possible model of intervention for the work in the perinatal period.

III. Literature review and definitions

1. Definition and length of the perinatal period

The perinatal period length is defined by the World Health Organization as commencing at 22 completed weeks (154 days) of gestation and ending at seven completed days after birth (WHO).

This is however not the definition we will use. We choose to encompass here a broader period that would cover from the whole of pregnancy and up to 18 to 24 months after the birth of the child (Helfer, 1987).

2. Dance movement therapy work with families: an historical context

2.1. Dance movement therapy (DMT): Definition

Dance movement therapy (DMT) is one of the creative arts therapies, amongst, music therapy, art therapy and dramatherapy and was born out of the collaboration of psychiatry teams and dancers in the US during the 1940's.

DMT (or P, as psychotherapy) is defined by the ADTA (American Dance Therapy Association) as " the psychotherapeutic use of movement to promote emotional, social, cognitive, and physical integration of the individual, for the purpose of improving health and well-being" (ADTA).

The very definition of DMT shows how DMT and the perinatal field are interconnected.

Dance/Movement Therapy Relies on the Following Premises (ADTA):

- Movement is a language, our first language. Nonverbal and movement communication begins in utero and continues throughout the lifespan. Dance/movement therapists believe that nonverbal language is as important as verbal language and use both forms of communication in the therapeutic process.
- Mind, body, and spirit are interconnected.
- Movement can be functional, communicative, developmental, and expressive. Dance/movement therapists observe, assess, and intervene by looking at movement, through these lenses, as it emerges in the therapeutic relationship in the therapeutic session.
- Movement is both an assessment tool and a primary mode of intervention.

In the UK, DMT is defined as "the psychotherapeutic use of movement and dance through which a person can engage creatively in a process to further their emotional, cognitive, physical and social integration (ADMT UK, 1977 in Meekums, 2002).

DMT uses various techniques such as : body awareness, improvisation, authentic movement, symbolic work, empathic mirroring, play, rhythm, breathing, exploration of the personal space (kinesphere), grounding. Sheets-Johnstone (2010) describes how paying attention to kinesthetic dynamics of involuntary or impulsive movements can promote feelings of “aliveness” and that isn't something that is just happening but something that moves you. “Movements can be explored in the essence of therapy because of the way it gives validation

and expression to “I”(Sheets-Johnstone, 2010, p.5). This implies that movement is not only powerful in the sense of selflessness but in the sense of agency, capability and understanding the kinesthetic reality of “being moved”. (Sheets-Johnstone, 2010).

Payne (2006) states that DMTs have the ability to translate a person’s inner world, “widening the scope of their realities, creating tangible, relatable, and symbolic expression of emotions”, focusing on conscious and unconscious expression. Movements can indeed be the element of language that represents a past memory or speaks about the individual current views of the world.

DMT uses primarily movement and non verbal techniques but can also incorporate verbal ways to express the bodymind connection. This makes a great tool to help a pregnant woman and parents to be to attune and connect to their child to be.

2.2. Historical context of DMT work with families

DMT perinatal work should be placed in the context of larger family work and research in the DMT world.

Dulicai (1977) first worked with families with children aged 3 to 7 and observed families' synchronicity, accommodating, blocking or bonding behaviours. She developed a body movement scale observing factors such as access blocking or accommodation, approaching, molding, static or flexible body attitude, bonding behaviour, eye contact etc… She showed that functioning families display more molding and less static body attitudes.

Bell (1984) later observed family interactions and specifically movements in the horizontal plane, attempts to lead or follow (linked with control), near and far reaching (personal boundaries). Bell found that in families that functioned well together, each member seeked freely contact or privacy without being concerned about being intruded or ignored by others.

Meekums (1991; in Payne, 1992) worked with mothers and children aged 1-4 at risk of abuse through therapeutic groups using structured and more user led activities that encourage interaction, positive comments, suggesting, circles and songs. She found that maternal motivation, having other mother-child relationships in the family functioning normally and having suffered an interruption in the attachment process were appropriate referral factors for DMT. She mentioned that it would be helpful to offer individual DMT to mothers, especially the ones who suffered from abuse themselves. Mothers reported an increase in cuddles, better control of the child's behavior, feeling closer to the child, improved communication, improved relationship with other children.

Panhofer (2005) talked about her work in DMT with a 6 year old boy with attachment issues and shows the importance of mirroring and kinesthetic empathy as specific DMT techniques that help create a sense of safety in the therapeutic relationship.

Treefoot (2008) also published a DMT case study of a 24 months old focusing on attachment and attunement issues. Using the work of Dulicai (1977), Harvey and Kelly (1993) and Meekums (1991) she proposed a movement observation chart with items such as affect attunement; access to the caregiver's body; sustained eye contact; moulding (full body); moulding (partial); time spent in near reach space; time spent in distant space; breaks in interaction.

Tortora (2010) also described her work with a 16 months old baby. She outlines the importance in her method "Ways of seeing" of working with the child's sense of body and observe qualitative non verbal observation of movement styles in 8 categories: quality of eye gaze; facial expressivity; use of space; quality and frequency of touch; body shapes; tempo of nonverbal movement style; vocal patterns and nonverbal behavior and regulation. She outlined how the therapist is also engaged in the process through self observation of embodied attunement.

We will see that these considerations and specific movement observations are similar to those of the DMT perinatal field.

3. Pregnancy

3.1. From the mother's point of view

3.1.1 Healthy pregnancy

a. Physical changes

During pregnancy, the mother goes through intense physical changes. The body transforms itself, gets heavier, the posture changes. Bydlowski (2007) talks of an experience which is hard to be talked about and which makes the woman enter a state of feeling relaxed, slow, in a sort of reverie which contrasts and sometimes struggles to find its place in modern life (Bydlowski, 2007). She also mentions how surprising not complying to the promised ideal of pregnancy can feel (Bydlowski, 2007) for possible ways in which a pregnancy can become pathological, be it on the mother's physical or mental health, or the baby's health, or also on possible social factors.

b. Psychological implications of pregnancy

Pregnancy fulfills one or many of the following drives: the drive for the pregnancy in itself (being full), the desire to be pregnant from the loved man as well as the more obvious desire to have a child.

Bydlowsky worked intensively on the psychodynamic implications of pregnancy. She talks of pregnancy (Bydlowski, 2007) as both a great enigma and the most common event that can happen to a woman. She describes the nature of pregnancy as happening with and without the woman: without, as the embryo will develop on a parasitical mode and the foetus will be expelled would this pregnancy be desired or not, and with as, mostly in our western modern society, pregnancy can be controlled and often corresponds to a desire to become a parent. It is however, according to her, a moment in life which unites human beings to the universal program of the living.

It is a moment where life and death are interwoven. In the course of pregnancy or during birth, the foetus or baby, or the mother might die. This last eventuality, although fairly rare in our societies, is a sort of shadow floating around a mostly joyful as well as doubtful, painful and anxiety-making event.

There is indeed a considerable difference in the western societies: medical conditions and constant improvement of the care package makes pregnancy and birth less and less of a risk. Birth control and contraception allow one to choose when to have a child and whether to have a baby or not, which causes women to have fewer children and later in life.

Bydlowsky develops how the physiological aspect of pregnancy goes alongside an intimate process, making it a fully psychosomatic phenomenon.

She shows how the desire to have a child comes long before having a child, on an unconscious level.

She outlines key elements that are mobilized during pregnancy and should be kept in mind when working with a pregnant woman:

- The identification to the reliable mother in the beginning of life, seen and felt as a source of life, without which the baby wouldn't have survived.
- The wish to receive like the mother a child from the father. The pregnancy comes as a culmination of oedipian love.
- The adequate meeting with a man who will give a child to the woman and embodies the sum of the two previous loves.

Importantly Bydlowsky states how this desire for a child often is contrasted by ambivalence: Authentic desire, or temporary non-desire, the desire is not always clear, and shows the strength of unconscious drives. She says how sometimes the body refuses to act upon the conscious desire and the pregnancy doesn’t happen. That sense of irrationality in the child's conception also appears in unplanned pregnancies, and Bydlowsky mentions the frequency of

pregnancies where the conception or birth date corresponds to a painfully meaningful date for the mother (losing another child for example). The child can then come to repair mourning or solitude.

There is much to be said about the necessity to make the news of pregnancy a real thing through senses. The scans have been described by Missonier (2003) as key moments in the process of becoming a parent. For the mother there are the internal sensations of the baby such as brushing, uncontrolled movements, fondling. For the father this can be felt from the outside. Later at birth the mental representation of having a newborn is given more sense and reality by being completed by sight, smell, look exchanges and direct physical contact.

Racamier (1989) talks about pregnancy as a moment of “maturational crisis”, just like the start of adolescence. There is a slow withdrawal from the usual surroundings and habits.

Pregnancy is a moment of great psychological malleability and vulnerability, where the capacity to adapt is put to the test. An important concept is also the one of “psychological transparency” described by Bydlowski (2005) as a specific and privileged time where past reminiscence and fantasies usually kept secret or unconscious come easily to the woman’s memory, without being stopped by the usual censorship. She explains that usually such memories are repressed which serves as a defence, a protection for the mother-to-be. This can be happy and amused memories as well as more painful feelings, unexplained sadness, sometimes nostalgic remembrance of the pregnant woman's inner child.

Winicott (1969) offered to consider pregnancy as a state of “transitory psychosis” and noted that women hardly remember it once it’s over. Winnicott (2000) also talks about how pregnancy reactivates the memory of the origins, primitive anxiety, anterior to verbal language which are actualized in pregnancy.

3.1.2 Supporting factors and psychopathology during pregnancy

a. Supporting factors

We saw in the introduction the frequency of anxiety and depression appearing during pregnancy. The physical state of the baby, its health, as well as the mother's health have a great impact on the mother's psychological well-being. Material conditions, having a support network are also key factors for the pregnancy and first steps into motherhood. It is important for the therapist to consider recent or older events that have occurred for the patient or close relatives, events such as death, separations etc... which could impact on the mother's mental health. It can also be a key element to be aware of previous voluntary or therapeutic abortions as well as miscarriages.

At this time of life the mother will be particularly sensitive to her own mother's presence, support and investment in her pregnancy. This will greatly condition the perinatal period's conditions. In the absence of such support she could benefit from the support of another motherly figure be it in the family or friends circle.

The implication of the mother to be's partner is also essential to how safe she will be and is key to the pregnancy's best outcome.

More generally, the saying "It takes a village to raise a child" is also of great importance as moral and practical support during the perinatal period will also greatly impact the mother's mood and consequently the interaction with her child.

These considerations need to be in the DMP' s mind when working with pregnant women as ensuring that they are referred to other professionals and organizations that can help with those aspects would also impact greatly the dyad.

Lafuente (1995) summarizes the main factors we overviewed and that might give the best outcome to the pregnancy and in postpartum are whether the pregnancy is desired or not, the mother's own experience as a child, the relationship with her partner, certain personality traits (self esteem; spontaneity; capacity in adapting, mental flexibility; stable and strong personality;

desire to learn and improve, empathy, low levels of anxiety, positive consideration of its role as a mother and accepting responsibilities) as well as pre existing emotional or psychological difficulties.

b. Psychopathology during pregnancy

We choose to mention here psychological states that are not considered pathological but can still create some unrest for the pregnant woman. We have talked about the changes that pregnancy involves and Bydlowski (2005) details the evolution of pregnancy as such: during the first semester, emotional lability and anxiety is important. Thoughts of the possibility of having an abnormal child, to lose it and not to cope can be intense but transitory. The possibility of seeing the baby thanks to scans during the second semester impacts and helps alleviate those symptoms. Around the 3d trimester, the mother's anxiety tends to focus on the fear of delivery and the child abnormality.

- Anxiety

Psychosomatic manifestations such as intensive sickness or vomiting, uterine contractions and early delivery threat can frequently occur during pregnancy and can be linked to anxiety. Anxiety in itself is frequent according to those authors, especially during the first and third trimester. Phobic tendencies around the pregnancy or the foetus in itself can also be observed. They can occur as panic attacks or obsessive thoughts with the idea of killing the unborn child.

- Depression during pregnancy

Depression appears in 10 to 20% of pregnant women. The symptoms are the same as in any depression, it can be a minor or major depressive syndrome. Depression seems to appear mainly in the first trimester and is more likely when there are difficult conditions surrounding it (teenage pregnancy; material or affective problems; personal or family antecedent's history).

- Psychosis during pregnancy

A first occurrence of a psychotic episode during pregnancy is fairly rare. Existing psychotic difficulties however seem to tend to be alleviated: authors talk of the ”protective role” that pregnancy has over existing psychotic patients. If there is a decompensation, it seems to happen closer to the delivery or in post partum.

3.2. Becoming a father

Fathers are the number one support system for the mother during pregnancy. However much more support and research is needed regarding father's own psychological process during pregnancy and beyond during the perinatal period.

Fathers are much disregarded in the perinatal world and their importance to the child’s attachment and development should be more highly recognized as its impact on short and long term development is much greater on mood stability and cognitive aspects in general (Gressier et al. , 2017). Shauder et al. (2017) uses a beautiful patient's quote as the title of an article about becoming a father: " While my wife carries her belly, I'm growing a dad in my head". They outline the similarity of processes between becoming a mother and father and point how little knowledge there still is regarding fathers. Another author finds that the processes of pregnancy, birth giving and becoming a father are vastly underestimated by both professionals and fathers themselves (Vasconcellos, 2003). Schauder et al. (2017) explains how perinatality should be considered in terms of the triad mother-father-child and how each individual influences the family system. Working with fathers from a variety of countries and cultures, Schauder et al. (2017) showed, using interview techniques, what fathers go through: Deep upheaval during the first trimester was common, concern about what kind of father they would become and reminiscence about their own childhood and relationship to their parental figure. In the second trimester they showed how fathers accompanied mothers to their medical appointments but how there was a general sense of not knowing where to fit in. With the notion of the baby becoming more real (knowing the sex of the baby for example), there was greater questioning

regarding future work, household and general organisation as weel as regarding the relationship to the future child. In the third trimester they show that fathers became more worried about their supportive role in the birthing process. Feelings of envy or exclusion that were also present as early as the second trimester were sometimes increasing as pregnancy progressed. Moreau (1996) also underlined how much attention should be paid to anxious and depressive symptoms as well as to somatic difficulties occurring in pregnant women as well as their partners since thy could be precursors of postpartum depression.

Decherg and coll (2003) show how couples going through a perinatal crisis without being given the appropriate support are at risk of developing wider family problems including the breakup of the family and with further consequences for the child's psychological and physical health which would require much more treatment than if support was given as early as during pregnancy itself.

3.3. Working therapeutically with a mother and father to be

3.3.1. Psychodynamic psychotherapeutic frame

Based on the theory of "mental transparency", Bydlowsky explains how pregnancy for the woman is an opportunity to establish a therapeutic alliance. She sees the role of the therapist as unveiling painful memories and fantasies that would otherwise stay hidden and would risk weighting on the growing child. This would mean working in the perinatal field, from as early as pregnancy to diffuse what Fraiberg called "Ghosts in the nurseries" (1975) which would allow for a greater availability of the mother to the child. While it is not well documented we have also seen how there seems to be an equivalent process of "mental transparency" for fathers which should be taken into account in the same way. Lamour (2013) recommends that when a difficulty is identified during pregnancy, psychotherapeutic work is advisable for both fathers and mothers to allow them both to express their fear and difficulties and prevent further mood disorders and difficulties in the parent and child relationship. She shows how birth preparation as well as psychotherapy on an individual or group basis during pregnancy is relevant for fathers

as well as mothers. The idea of a framework for fathers would help alleviate the difficulties associated with the denial of their role on an individual and societal level.
For both mother and father working within a psychodynamic framework would help with the expression of the current difficulties as well as putting them into perspective with how they relate to each individual's history.

3.3.2. DMT during pregnancy

We have seen that dance therapy in contrast to verbal therapies which would be more likely to ignore or suppress body processes (Ogden and al., 2006) would help, according to Tantia (2014) support awareness of physical sensations, emotions, and memories through creative processes like mindfulness, movement and use of breath.

Payne (2006) outlines how DMT can be used as a tool to build a sense of trust and safety. Building such a therapeutic relationship provides a space for the mover's inner world. In this space the mover can become visible, accepted and safe. She states that these two elements are key components of the therapeutic relationship and that they facilitate awareness of self, help build interpersonal connections, reintegrate mind and body and expand self-expression. Building DMT work that takes into account factors of safety and trust also builds trust in the relationship of the mother with herself and her growing body, calming her anxieties and fears about the body's natural capacity to give birth.

These aspects of trust and safety are particularly relevant to work in the perinatal field during pregnancy and postpartum where DMT can alleviate a body/mind split. It can help pregnant women and future fathers connect with themselves on all levels and express conscious and unconscious conflicts and anxieties through movement. Meekums (2002) talks about how movement has a symbolic function and has the capacity to make unconscious processes visible.

Carbonnel Bejerano (2007) believes the following points would be relevant in DMT work during pregnancy .

General DMT benefits for pregnant women (Carbonnel Bejerano, 2007) :

- Improving body image and global self-image
- Learning to attune to her psychological and physical needs and feel more like she can act upon her own process of pregnancy, delivery and postpartum , instead of feeling passive about it (self-agency).
- Creating positive body experiences at a moment when physical changes and discomfort can make it a difficult experience (especially when they have been negative body experiences in the past) .
- Using the artistic process of dance and movement to help and solve emotional and psychological conflicts.
- Creating a safe space (psychotherapeutic space) where one can verbalize and communicate its own experience. A space where there is space for fears, fantasies, doubts, positives experiences and discoveries etc…

Specific DMT benefits for pregnant women(Carbonnel Bejerano M-R., 2007): :

- Improving communication and contact with the baby to create a connection which would improve the experience of pregnancy
- Physical discovery, awareness and flexibility
- Connecting with oneself in a creative and integrative manner
- Helping to adjust with the changes that take place in the physical, mental and spiritual environment during pregnancy.
- Learning to listen to signs from the body to help be in control of her own wellbeing and the one of her baby
- Reducing stress and fears around the experience of maternity.

Anderon-Frazier (2020) discusses how most DMT publications about pregnant women are qualitative researches and include a few case studies. She mentions how there is a lack of quantitative research based on statistical data relating to the work of DMT with this population and argues this constitutes a gap in the field of DMT research. She also outlines that few authors go into explicit details about what actually occurs during the DMT sessions. Anderon-Frazier (2020) also outlines that authors do not talk about what approaches of DMT they refer to, thus making DMT sessions with pregnant women very variable depending on the author's theoretical references. She argues that a better and clear description of sessions would help having a better image of how the work can be integrated into perinatal care.

a. Celebi's work

Celebi (2006), a UK based DMT working with pregnant women, details in a case study how the therapy may be applied through the use of movement sequences or phrases, guided meditation techniques, music, and visual representation such as pictures or imagination. This, she describes, enhances non-verbal attunement and stimulates sensations in the body. She goes on to explain that DMT not only increases emotional well-being but "can be adapted within the realm of holistic practice to foster body awareness and addresses the changes happening with the pregnant body" (Celebi in Payne, 2006, p.152). Women participating in Celebi's research report how the work was effective in helping them respond to their body's needs and gaining a sense of emotional support from meeting other pregnant women. It appears that active and intentional recognition of bodily experiences and sensations has a positive impact on raising women's determination and self-confidence in their process of giving birth (Payne, 2006). It increases their felt sense of empowerment and agency.

b. Kestenberg and Loman's work during pregnancy

Based on Kestenberg's long standing interest in theoretical issues of pregnancy, she and her colleagues developed practical work around pregnancy (Kestenberg, 1975, Loman, 1994, 2007, 2016).

They developed the prenatal project at the Center for parents and children, New York, as part of their intention to offer families a healthy start (Loman, 2016).
Their aim was to prepare parents for the birthing process, but specifically to help support their relationship with the child-to-be. They believed focusing on the kinesthetic attunement with the foetus (Loman, 1994) helps create a solid basis for empathic understanding between the parents and the child-to-be. This type of work was further described and developed by Loman at Antioch University, New Hampshire.

Kestenberg and Loman used movement notation as described in the Kestenberg Movement profile (KMP). Through notating the child's preferred movements using the KMP system the attachment and mutuality between the parents and baby is supported and thus enhances the attachment between them. Loman (2016) explained how this work is a way for parents to become acquainted with their unborn child. Kestenberg (1980) outlined how mothers can often feel estranged from their baby when it is born and how paying attention to foetal movement can help build a feeling of continuity and familiarity during its passage from the inside to the outside. This given attention helps the parents increase empathy and a feeling of empowerment and creates a sense of familiarity with their child's style and temperament even before it is born. The mutual support between the parents is essential in paving the way toward effective support of the baby. Loman (2016) believes that both mother and fathers can use encouragement to alleviate their fears and strengthen their care-giving skills. The whole process also helps envisage the child as a partner (Loman, 1994), thus helping with the delivery process.

Loman (2016) outlines how Piontelli's work (2000) supports Kesteberg's intuition and the idea of a specificity of each children's movement style pre- and post- birth. Along with her team, this italian psychoanalyst and child psychotherapist followed 11 mothers and their foetuses throughout pregnancy and during the 4 first years of the baby's life. According to her from the 8th week of pregnancy there are some distinct behavioral characteristics that appear to be consistent throughout pregnancy. Foetus repertoire showed an individuality, preferred postures and reactions, which she says indicates the child's future temperament and also expresses

emotional undertones. She also observed a consistency pre- and post- birth in the child's movement's preferences.

Mothers were encouraged to keep a journal of the foetal movement and tension changes. This could include flutters, kicks, twists and presses. The movements were first felt by the mothers on her back (through a modified back massage that could for example been given by the father) and then duplicated in the mother's hand and later on paper.

The perception of foetal movement evolves during pregnancy. Although they are present from as early as 8 weeks of pregnancy, the perception of sucking, scratching, yawning, hand and feet rubbing (Piontelli, 2000) by the mother generally starts when the foetus has less and less available space in the uterus. The first felt movements are often perceived as subtle stirrings. Later, larger and longer movements such as changes of positions can be felt. One can sometimes see a head, foot or elbow of the belly's surface. During the third semester movements are much more frequent and continuous.

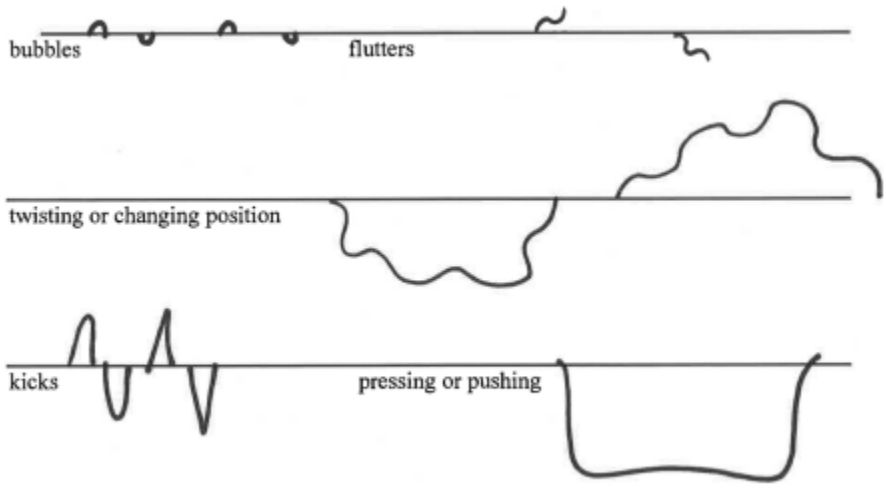

Fig. 2 Sample fetal movement notations

(Loman, 2016, p.7)

Mothers were also encouraged to note in their diaries what they observed as well as of their general physical sensations, feelings (hopes and fears) and dreams. Physical sensations could

include “shortness of breath, nausea, frequent urination, constipation, bloating, swelling and backaches'' (Loman, 2016, p.4). An increase in a mother’s general body mind awareness was thought to “help alleviate symptoms, learn self-soothing and develop a flexible body image” (Loman, 2016, p.4).

Loman outlined how breathing into the baby's movement in utero and gently responding by either moving in the same way as the foetal movement or pressing against a kick or a press of the baby would help attunement between mother and baby. Writing the movement on paper would also help attuning to the baby. This could be further developed into a diagram and would help show the mother how the baby moves and is expected to move later. Moving like her baby helps the mother accept her baby as it is. It might be a difficult exercise to some parents and they might even feel distanced from the baby but Loman states that it would still support the relationship in building and bonding.

A first step to teach parents to feel foetal movement is to use touch attunement exercises (Loman, 1994). The dad-to-be would for example give a back massage using different tension-flow patterns (Loman, 1998) which would reproduce the flutters and pushes of the fetus. The mother would attune to these sensations and try to reproduce them through hand movements, tensing simultaneously her arms and hands.

She is then taught how to notate tension flow rhythms in order to record her perceptions of fetal movements tension changes, that is to say the foetus muscular tensions and releases. This is recorded through a tracing.

Loman, 2016 “The notation records the variations in muscle tension and release seen in a wide variety of rhythms and attributes. The tension changes are recorded by drawing variations in tension level, intensity, and rate along a horizontal time axis. This time-line is called the *neutral line,* dividing the area of free or released tension-flow above the line from the area of bound or contracted muscle tension-flow below the line. The further the

perceived tension-flow is towards extreme (free or bound), the further the corresponding notation will be from the neutral line. Therefore, high intensity free or bound flow is recorded far away from the neutral line, while low intensity flow is recorded near it. Gradual changes of tension-flow are indicated by gradually slanting lines, and abrupt changes are indicated by sharply slanting, peaked lines (Kestenberg Aimighi et al., 1999).

To notate the feel of fetal movements we use a system of writing the changes in the flow of muscle tension in the following manner.

Above the horizontal timeline, we note free flow as seen in fluttering, flowing, or gliding. Below this line we notate bound flow as seen in pressing, wringing, or tense holding.

Fig. 3 Example of fetal movement that is continuous

(Loman, 2016,p.9)

The obtained sense of acquaintancy will generate a feeling of belonging and being protected (Loman and Foley, 1996). Mothers will later be more able to respond to their baby's needs such as when the baby is hungry, sleepy, happy or in pain. They will also be more able to hold them and give them security as they have already experienced and felt the baby movements, tension changes, tones and expressions during their pregnancy (Loman, 2016). They will later express themselves by facial expressions and body motions. Loman (2016) explains how peacefulness can be recognized as even or gradual tension changes whereas excitement could be expressed through high intensity and abruptness (Kestenberg Amighi et al., 1999)

Babies are used to the way mothers move as they experience it all through pregnancy, and we know the experience of a very active pregnancy or on the contrary having to spend a lot of time lying down will affect the child.

Table 1.

KMP exercises during pregnancy (by the author)

Movement that helps give space to the baby and support through the mothers pelvic floor which creates a firm base: -Firming the pelvic floor -Lengthening -Stretching upwards and downwards from the middle - pull the lower abdomen (Loman, 2016)	Symmetrical growing (bipolar shape flow) supports abdominal and pelvic breathing and may bring a feeling of comfort to the pregnant woman (Loman and Foley, 1996). Importance of working on feeling grounded and transferring the grounding up so that it reaches the pelvic floor (helps the baby feel grounded and secure as well, as good support is transmitted through the body. (Loman, 2016). Also helps prevent pain from pressure on the bladder or back. Feeling that she is actively carrying her pregnancy instead of being pulled down. Improved body image at a time when the body feels awkward, uncomfortable and not itself anymore.
-Breathe into painful spots	Encourages stretching to accommodate the baby's expansion.

Creative expression tool: Modified form of bellydance	Increases flexibility and coordination, helps with delivery.
Creative expression tool: Singing and chanting deep notes Singing patterns to prepare more specifically for delivery: deep inhalation bringing the diaphragm down followed by a long phase of a deep sung exhale tone (such as an Om sound in yoga) , accompanied by a movement of bending the legs in a plié.	Match the intensity and length of labour and delivery contractions: breathing is not distracting breathing, it's going and matching with the high intensity contractions the mother will feel in delivery. Increases the dilatation of the cervix during the transition phase of delivery. The opening of the larynx helps open the vaginal sphincter. Enables the mother to be active and in control instead of attempting to be distracting from the pain (Kestenberg, 1987). Strengthens and stabilizes the pelvic floor muscles. Creating a harmonious collaboration with the baby. Alleviates feeling of exhaustion.

c. A type of family therapy during pregnancy: "the calming womb model"

The calming womb model (Cortizo, 2019) is used in family therapy and can be used in family therapy from pregnancy until one year of age. Wilson (2020) explores how, although it isn't a DMT model, some practical elements could be used such as: talking to the baby (during pregnancy), engaging the baby in the activities the mother is doing, interacting with the baby

(reading, singing, dancing), experiencing mindfulness, speaking/hearing words of love, letting the baby feel wanted/released from responsibility, participating in forms of movement (yoga/tai-chi), experiencing fun, engaging in a meditative peace state with the baby and acknowledging the baby at birth (Cortizo, 2019). Other possible activities include talking to professionals, monitoring self-talk, practicing gratitude and groundedness, gaining an understanding and repairing one's own attachment and using play and humour.

d. Suzi Tortora's Awareness of body and child (ABC) program

Suzi Tortora's work, a DMT based in New York (Suzi Tortora) aims to support the mother and child's bonding and the mother's awareness. Tortora believes that this process starts from pregnancy. Tortora uses elements of dance, exercise, movement meditation and relaxation in order to increase balance, coordination and mobility.

3. Birthing: physical and psychological implications

3.1. Psychological implications

The moment of birth could be thought of as a moment where meeting finally happens. One hopes to meet in the best conditions, with the least medical interventions, and to preserve as much as possible the natural process of birth. It can be a magical and intense moment. It can also be a moment where life and death meet, and massive archaic anxiety can be reactivated for the mother and father.

Bydlowsky describes how the moment of birth contrasts with the experience of pregnancy, mainly with its violence. She explains how, whatever the progresses of medicine and possibility to partially alleviate the pain and control risks, the sense of disturbance and "effraction" (breaking, also in the sense of tearing a psychological defense and protection, as in a trauma) caused by the dilation and the baby's move towards coming into the world is real.

There is suddenly the image of that dreamed-about, almost abstract, baby.

Bydlowsky considers that the somatic breach which can constitute a difficult birth, both on the mother's or the baby's side, can leave the psychological breach that is the pregnancy open, that necessary time of closure and omission not taking place and possibly leaving the unleashed steam out and untamed.

3.2. From a movement perspective: accompanying the baby

Boland (2012), outlines of the baby's coming into the world is one of a dance and definitely a partnership between the mother, possibly father and child: the baby engages himself, descends, bends, rotates and is finally expelled out into the world.

KMP inspired exercises could help support the pregnant woman's growing body through pregnancy as we have seen but also during labor and delivery. This would help by giving active support to the mother's body, stretching and adjusting to the foetus. By giving enough room for her baby and not feeling weighed down, the mother reassures herself that she can support and hold her baby metaphorically. Moving in general and encouraging the mother to be flexible in her movements to make room for her baby can help during delivery.

3.3. Mental health risks of delivery

It is very important for the DMT intervening during the perinatal period to be aware of the frequency of birth induced post traumatic stress disorders (PTSD) that might occur. Dikmen Yildez et al. (2017) found that 4% of women suffered from PTSD following giving birth. To prevent PTSD from settling, early intervention in case of traumatic birth is paramount for both mothers and fathers.

4. Zoom on the first 40 days

We choose to focus on the period occuring in the first 40 days after the baby is born as it is a second chance, on a therapeutic level, to be there for the new father and mother.

The notion of 40 days echoes in a special way given that writing this work in the times of lockdown and indeed we believe this global experience should help us as therapists have a felt sense of what new mothers might go through and benefit from.

Rochette-Guglielmi (2009) mentions how traditionally the end of the period of the first 40 days is marked through some form of ritual: end of the quarantine for muslim women, shaving of baby's hair for buddhists , presentation to the temple and purification for jews… This would be the moment when the child actually becomes a baby and the mother a mother. The first 40 days could be considered as an in-between, a transition. This would help integrate the baby in the community and make a point of the psychological process involved in becoming a parent. It would also bring a sort of closure to the intense experience or birth and meeting the baby that can be felt as a bomb-like, chaotic experience according to Rochette-Guglielmi 2009).

When the baby is just born, frequent waking and difficulty soothing crying can indeed feel overwhelming and chaotic. After this time the mother could traditionally leave her bed and return to social life. The author also outlines that what is commonly named baby blues could also be viewed as an adaptive response to the novelty of the situation and encourages respecting and making space for this moment of flotation for both the mother and child. She explains how on the child's side there is a huge difference between the newly born baby and a nearly 2 months old baby ready to engage in protoconversations. This needs to be taken into account for DMTs working with babies and very early work with babies should be adapted to that reality.

On the parents side, during this very period the psychological activity is very much in the felt sense. Rochette-Guglielmi (2009, B) links this period with the concepts of "memories in feelings" of M. Klein and many other similar concepts described by psychoanalysts. It is about the most physical part of the psyche.

5. After the first 40 days

5.1. Psychoanalytical key concepts

Winicott (1956) talks about what he calls the “primary maternal preoccupation” as a normal illness where the mother feels excessively sensitive and can have surprising thoughts. This state allows the mother to accompany her child through its own development, as she herself goes through those steps again. It is this state the mother has the amazing capacity to understand her child.

Racamier (1989) talks about the crisis of maternity as having the same strength as the adolescence’s one. However, unlike the adolescent, the mother and child are caught in a sort of fluctuating and fragile “bubble” of their own, away from the rest of the world. Racamier explains that the mother lives an “almost psychotic” relationship with her child, before the child constitutes its own boundaries. Racamier (1989) sees that whole process as one of going through a normal and reversible state of psychotic state. Becoming two comes as a result and is not a given.

Lebovici (1989) talks about how great a gap there can be between the fantasized baby dreamed about during the pregnancy and the real baby who the parents meet in the hours and days after birth. Lebovici explains how the difficulties in adjusting to the real baby for the parents can lead to transitory psychosomatic symptoms such as asthma, skin problems, digestive problems, rhinopharyngitis et.. However Lebovici also underlines that the baby has its own personal characteristics which sometimes can’t be negotiated and have to be tolerated by the parents.

In the first month the child's mental state is dependent on the parent’s capacity to contain. Later on the child will slowly organize its own defense capacity and mechanism.

5.2. Babies capacities

Babies communicate their needs through movement and sounds (Amighi, Loman and Sossin, 1998). Through movement we gain awareness of our experiences in the world (Vermes, 2011). Murray (1996) synthesizes over 70 years of infant development research: babies less than 2 months old have the capacity to engage in meeting with others, complex repertoire and well

organized gestures and facial expressions reminiscent of the adult communication in its rhythm and style can be observed, especially in turn-taking.

5.3. The process of attunement

Stern (1985) talks about the proto-representative capacities of the newborn. According to him, the core of the sense of self is engaged in an interpersonal mental functioning from her early age. He thinks that it is when the intersubjective game between the mother and the child does not happen anymore that there is a difficulty in the connection between the mother and child. The baby is not attuned to the mother, possibly because the mother is not attuned to the baby. Stern stresses the importance of games and a sort of interactive dance between the two partners that are a mother and a baby. This attunement to the child, through repeated,is also surprising and rhythmic games allow for the child's psychological development.

Stern doesn't recommend intervening in the unconscious or preconscious phenomenon occurring for the mother but rather to support the mother's narcissism in the relationship she is trying to establish with her child. His work is entirely based on what is happening here and now.

5.4. Attachment, dysfunctional attachment and bonding

John Bowlby and Mary Ainsworth (1965) were the first to study attachment patterns. Babies' behavior has one sole objective: be in close contact with their figure of attachment so that they can meet their need for survival: food, shelter and protection. The attachment style, that is the relationship created between the child and the parent, is created from early on and will probably remain the baby's whole life. The attachment style depends on how the parent responds to the child and whether the child feels sufficiently safe, protected, secure or not. 4 types of attachment have been described: secure, insecure-avoidant, insecure-resistant and insecure disorganized. The attachment style can impact their emotional and social behaviour.

Attachment starts forming itself in the womb through the mother's attitudes, projections and the way the mother responds to the pregnancy.
There are different scales such as the maternal foetal attachment scale, maternal antenatal attachment scale and the prenatal attachment inventory (Redshaw and Martin, 2013). Such scales can give an insight as to how the parent-baby relationship is likely to develop once the child is born.

If attachment refers to the way the child will attach to their parental figure, bonding is the term that could constitute the feelings that exist for the parent towards their child. Oxytocin is known to enhance bonding during pregnancy and labour. It can happen as soon as the baby is born or sometimes later.

5.5. Parents postpartum mental health problems and potential consequences for the child

5.5.1. Maternal Postpartum blues

Postpartum blues tend to happen between the 2nd and 5th day after delivery, hence its other name the 3d day syndrome. It is not considered as pathological in itself but normal for up to 4 days. It can be delayed in time in case of C-section.
The symptoms may include asthenia, depressive tendency, crying, changes in mood, anxiety regarding the care of the baby, somatic pain, irritability and sleep difficulties.
Contrary to common belief, no link between hormonal changes and post partum blues exist as such it is rather the emotional and physical exhaustion, the feeling of being empty on a narcissistic level, meeting with the real baby and its needs, the mourning of the imaginary child and the focus being on the baby and not on the mother anymore that can be linked to this syndrome.

5.5.2. Maternal postpartum depression and anxiety (Postnatal mood disorders)

Postnatal depression has been extensively described (Pitt, 1968; Cox, 1989; Kumar and Robson, 1984). Depression can be observed for 10 to 20 % of women and 11% of fathers, making it a major public health concern. It can be fairly easily detected using the Edinburgh postnatal depression scale (1987), which is used worldwide. However it often goes undetected either by the mother, the immediate environment, family and professionals.

It happens during the year that follows delivery, mainly in between 3 and 10 weeks postpartum. The signs are more or less the same as in post partum blues or classic depression. Feelings of being unable to look after the child and self-blame linked to baby care often exist. The mother is able to care for the baby but does not take pleasure in it.

Feelings of fault towards the child, fear of acting out and anxiety are in the foreground. They lead the mother to distance herself from the child to reduce the anxiety and thus impoverish care and play contacts.

The mother tends to minimize those symptoms by fear of deceiving or worrying the family circle. The symptoms may also be underestimated by the GP. When the mother does express some difficulties, they often are about the physical complaints, hiding the depression: asthenia, headaches, hypochondriac pain, lack of concentration, feeling of exhaustion, insomnia or loss of weight.

The authors cite symptoms that can be found:

- Early disorder of the newborn: sleeping difficulties, eating disorder, anorexia, vomiting, little weight gain and hard to soothe crying.
- For the mother: excessive fear for the child's health, frequent medical consultation for reassurance; preoccupations about the child to the point of despair; feelings of inability to mother the way she had planned.

The mother might also show a sad or flat facial expression with lethargy and a lack of vivacity.

The observation of the interaction between the depressed mother and the child can also be a good indicator:

- Low tolerance level of baby's crying with a feeling of definitive incompetence.
- Impulsive phobia with a massive anxiety to hurt the child, injure him, drown him etc… Those murderous fantasies, of neurotic nature, are not followed by acts in principle.
- A concern for the child and its sleep, its health, its autonomy.
- Operative but not emotionally engaged care. The mother applies the rules and guidelines to look after the baby without taking pleasure in it.
- Difficulty in attending to the child cues regarding emotional and social needs.

Murray (1997) showed how the mother's postnatal depression impacted the child cognitive's development on a number of elements. After a while, the lack of responsiveness may affect the child's ability for social and emotional exchanges.

Sometimes projective mechanisms win over the depressive feeling, leading to abuse triggered by the child's behaviour:

- The mother transfers to the baby her own feelings of aggression towards him.
- She interprets his screaming, crying, avoiding to look at her as hostility towards her.
- The mother talks aggressively to the baby, justifying the brutality of her gestures as appropriate educational measures.

Those symptoms, if they last, can threaten the development of the child, leading to feelings of rejection and abandonment. The reactions of the child (sleeping difficulties, anorexia, diarrhea) can increase the attention to the child but also increase the uneasiness felt by the mother.

According to these authors mother's depression would be alleviated quickly if :

- They were given an opportunity to have their suffering recognized
- They were able to verbalize and be heard without feeling guilty.

It can be observed that fewer interactions take place: gazing, facial expressions, mother's speech and baby's vocalisation. Also the baby tends to be more physically attached to the mother than the baby of a non-depressed mother.
Tronick and Weinberg (1997), using the famous still-face situation developed in 1984, showed how the child of a mother, suddenly "absent" from the child for the sake of the experiment, ie not playing , vocalizing, using facial expressions or sharing smiles, tries to "reanimate" the mother, initiating the relationship if she doesn't react following the experiment's steps, the child gets tired, cries a little and then eventually gets bored and withdraws himself from the communication. For the authors, this shows what happens for a depressed mother, incapable to have empathy for and synchronicity with the baby.

M. Bydlowsky shows how in clinical situations, the anxiety of the mother can be even more present than silence. In such cases the interactions tend to be, on the contrary, overstimulating and discordant with the spontaneous needs of the child, and thus be just as pathogenic.
Murray et al. (1996) showed that 25% of children exposed to postnatal depression were at risk of developing cognitive and affective developmental delays.

Morisseau (2001) explains that the child of a depressed mother can show signs of not organising its first envelopes, being very agitated and hypotonic or on the contrary being stiff. Those babies are searching for limits, not finding physical boundaries to differentiate the inside and outside of their bodies. She also explains that sometimes the child will refuse food, or have great difficulties sleeping.

Cramer (2008) talks at length about the clinical case of a baby of a depressed mother. The child appears almost lifeless and slowed down. For this author the depression of the child himself is not enough as a defense mechanism to neutralize the effect of the mother's absence of psychological presence from the child. The author draws attention to the few interactions between the mother and the child, the mother's apparent absence. The mother feels as if her child is both depriving her of affection and trying to separate himself from her. She acts

mechanically towards the child and cries in silence. The observation of Cramer corroborates those of the still face situation, as the child checks the mother's face for reactions for a while, then passes through a phase of agitation before being back to sitting and whining. The child even ceases to be regarded as such by the mother who is unable to do anything for him. Although physically present she indeed is miles away psychologically from the child.

In another interaction the mother asks the child to imitate her and when he doesn't agree she calls the child "malina", meaning bad. What the mother means is that the child is not giving her what she expects. She feels rejected and this separation is difficult for her.

Cramer explains that over time this child adopts a lifeless and lethargic state, lacking in initiatives. He shows signs of poor affectivity and depression. Later on in his development he shows signs of a pseudo-self, faking smiles to "reanimate" his mother, living through reaction, without authentic drive and without expressing the true feeling of depression the child is actually experiencing. Much later on, the child is found to have a low IQ (70).

5.5.3. Postpartum mood disorders amongst fathers

Paulson and Bazemore's meta analysis (2010) that incorporated 43 studies showed a rate of paternal depression of 10.4%. They showed the highest rates of depression to be between 3 and 6 months after birth (25%) and the lowest around 3 months (7%).

Ramchandi et al. (2008) showed how paternal depression that is already present during pregnancy is likely to continue in postpartum. 50% of fathers that met diagnostic criteria for depression during pregnancy still had the same symptoms 8 weeks after birth.

Glangeaud-Freudenthal et al. (2017) outline that before 2011 there were very few international publications that specifically took into account paternal mental health where fathers were considered not just as a support to the mother.

Giallo et al. (2013, 2014) published a very large-scale study which identified the following risk factors: an uninteresting job, poor social support and network, maternal psychological difficulties, having a partner who has a better job and having little confidence as a parent.

The impact of cortisol, prolactin and testosterone levels could also play a role (Storey et al., 2000).

Ramchandani et al. (2013, p.63) showed how "disengaged and remote interactions between fathers and their babies at age 3 months independently predicted externalising behaviour problems at the age of 1 year". They concluded that these interactions might be "critical factors to address, from a very early age in the child's life, and offer a potential opportunity for preventive intervention" (2013, p.63).

Leach et al. (2016) show a high rate of anxiety amongst fathers and Capron et al. (2015) show how the high long term impact (up to age 18) of the father's anxiety during pregnancy, independently of the mother's, on the child's future anxiety and cognitive development. Matthey and coll (2003) found a high comorbidity between paternal postpartum depression and anxiety.

Gressier et al. (2017) describe paternal depression symptoms. Father's symptoms are generally not as visible as mother's. They observe that it is also harder for men to ask for help. Symptoms can be social isolation, indecisiveness, fear and/or a high irritability. Alcohol and drug abuse, an increase in domestic conflicts and violence between the partners can also be signs of paternal depression. They also mention that symptoms might be more on the somatic side such as a change in appetite, gaining or losing weight, digestive issues, headaches, nausea and insomnias. Early psychotherapeutic intervention, as soon as some anxiety or sadness appears, could help diminish the impact on the child's development (Gressier et al., 2017). However, in the same way as baby blues might be considered an adaptive situation, Missonier (2017) underlines that it would be important to consider paternal depressivity as being part of the "depressive capacity" which Fedida (2003) talks about, referring to accessing the depressive position in Klein's theory (1928, 1968). Missonier (2017) suggests that mild symptoms described as the couvade syndrome (sympathetic pregnancy) should be considered in this adaptive perspective

and that the term "paternal depression" should be used when the adaptive capacity fails and psychotherapeutic help is necessary.

Bidlowsky (2001) also develops on how the couvade syndrome affects fathers. A ritual exists, where the father lies in bed, imitating the mother and is complemented by neighbours, which Bidlowski believes serves to protect the young mother from the father's unconscious aggressivity. It shows an underlying conflict between the young father's own maternity desire and the identification to the father. The term "couvade" also covers a phenomenon of somatic symptoms affecting up to 10% of fathers during their partner's pregnancy. Bidlowsky (2001) describes how neurotic (hysteria, phobias, obsessional behavior etc..) as well as psychotic outbreaks can occur in the perinatal period. She shows how, for the father, the birth can be a psychological trauma and can reactivate early depression and anxieties that the father went through as a baby as well as reactivating some inner conflicts in later development that were left unresolved.

5.6. Mothers at risk: psychodynamic approach

Stern (1985) explained how the process of becoming a mother includes the shock of realizing that as a mother you are expected to know what the baby wants and why he is crying.

Winnicott (1996) outlines 18 legitimate reasons the healthy mother could hate her baby for taking up all the space.

Bydlowski (2008) places particular importance upon the following two points: First, she insists on the importance of the ambivalence in the mother's relationship to the child. She explains how the child, as much as he is desired, represents a narcissistic rival. If the mother's own narcissism is strong enough, she will have the capacity to allow space for another, her own child, without feeling or fearing being destroyed. According to Bydlowski, a mother with a fragile narcissism will feel threatened by this internal violence and have difficulty overcoming the ambivalence she can feel towards the child.

The other principle she insists on is the one of failure to contain. She talks about mothers who themselves have severe difficulty in containing early experiences. For those women, the child is considered as an internal threat or persecutory object. Believing herself unable to attain her

ideal of the mother she should be, she then feels depressed, with the need to defend herself against the impossible requests of the child.

Another key concept is the one of Green (1983), who talks about the “dead mother complex”. By this he means a mother who is alive but who simply appears dead to the eye of the young child she takes care of. The main consequences for the child are the loss of investment in the mother and the holes in the psyche that this lack of care implies, as well as the unconscious identification with the “dead mother”, possibly leading to the child acting and feeling as depressed as the mother, in the long term. Thus the lack of interest of the mother for the child will create a feeling of invisibility and separation within the child, as if he is “drowning”, merging with the mother. The child feels forbidden to exist for himself, as a detached being, which consequently leads to the constitution of a fake self.

6. Postpartum psychotherapeutic intervention models

6.1 Verbal parents-infant psychotherapies

Historically, Spitz (1945) shared his observation of depressive features in children who are brutally separated from their mother which led psychologists to work with this specific population. Later on, Fraiberg (1975) started working with “hard to reach” families. In France, Lebovici worked with mothers, fathers and babies in his infamous “therapeutic consultations”. Winnicott (1971) views the role of the psychotherapist working with the mother and child as embodying himself the role of the transitional object.

Debray (extracted 2012) describes her practice as one that relies on the characteristics of the mothers preconscious system, the preconscious playing a “pare excitation” (arousal containment) role for the baby, protecting him from the outside stimulations which could possibly have a de-structuring impact. When the father is also available, his own psychological organisation intervenes in containing the mother's anxiety. In this case, when the mother’s mental functioning is overloaded, it can be relayed by the father’s. Re-establishing and allowing

for containment in the therapeutic process, the author states, brings a surprisingly calming and sedating effect for the child and the possible psychosomatic conditions he may have. For her, treatment can last from 6 months to a year, with the mother, father and baby being involved, or just mother and baby, and sometimes later on with only the mother or father.

Missonier (2004) cites the work of Lebovici who developed his work with mother and infant particularly towards the end of his life. He described psychotherapeutic consultations with the mother or both parents with the child as an opportunity to observe their interactions, to hear about the mother's past and the place of the baby in her imaginary and fantasmatic life. It is notable that Lebovici met the mothers or parents and child only once, twice or very few times, but the length of the sessions could be up to 2 hours. Lebovici named this type of work "therapeutic consultation".

Lebovici also took interest in observing mothers in context, while remaining silent. He would explore the ambivalent feelings of the mother towards the child, for example in the moment of changing nappies where the mother can express gentle mockery to the baby, modulating and contradicting the words with the tone of her voice (in accordance with Winicott's thinking). Misonnier (2004) gives the example of the mother expressing their fear/desire of dropping the baby in the water while giving a bath where the baby appears frightened until the mother later congratulates him on something he's done. He considers these episodes to be necessary moments in the day for regulating emotions.

Missonier (2004) relates how Lebovici's consultations sometimes took place directly in the parent's home. That type of setting allowed him to observe moments of greater intensity for the family and heal the family much faster.

Videotaping, using double mirrors with other therapists as assistants were standard practice. The videotapes could be re-viewed during another consultation, sometimes years after. However Lebovici limited the use of video images stating "the impressive unfolding of what can be observed obviously does not allow us to have a complete idea of the organisation of the mental functioning of the mother, as it is expressed in the interactions." (in Missonier 2004, p.373)

Lebocivi views the psychotherapeutic process as a technique for clarifying transgenerational messages, re-fluidifying the circulation of unconscious material, frozen until then.

Interestingly for dance movement psychotherapists, Lebovici (1994) used at length the concept of enaction or enactment, which he defined as the embodiment of an emotion as a prerequisite for an empathic and intuitive understanding. Lebovici (1994) insists on the importance of an intervention which encourages active participation of the infant in the parent-infant interaction, and of the form of the intervention which should be determined by the interpretation of the interaction, body language and verbal language.

Bydlowski (2008) underlines how critical and difficult it can be to work with a mother in the first weeks and months postpartum. The first difficulties are to diagnose the need for psychotherapeutic help, to organize the necessary support for the newborn, i.e. concrete help for the mother etc… She underlines how important it can be to have a stable interlocutor. She recommends that the therapy starts as soon as the diagnostic is established and runs for up to 3 to 4 months. She recommends that the mother would be medicated if necessary, as well as receive practical help from child care professionals while she is receiving psychotherapy.
The aim of the therapeutic work is to help the mother trust in her mothering capability. For Bydlowski (2008), the goal is to help the mother express her ambivalence towards the child, detaching herself from overly rigid or idealized internal maternal functions, in order to be able to think of herself as an acceptable mother. The aim of this work is to focus on that specific period of life for the mother, without undertaking a full and lengthy therapeutic process of the mother's personality.

Garret-Gloanec and Pernel (2010) talk about how psychotherapists working with a mother and child should bear in mind phenomenons such as "anxiety, fear of falling (linked with Moro's reflex), anxiety of liquefaction, feelings of hatred, introjection, projection, projective identification, symbolic equations, sexual seduction and erotic polymorphism" (2010, p. 817) as well as Bion's conception of the alpha and beta function.

Houzel (1999) explains the importance of commenting on the observation of the baby rather than trying to give an interpretation. This is a process of empowering parent's function and ability. It allows parents to feel capable, able to respond appropriately to their child, to take pleasure in looking after them, communicating with and seeing the child develop. It advocates their right to be good parents. Houzel (1999) insists that the therapist, through its attitude of "sympathetic listening" should receive the parents' suffering without judging or giving advice. He insists that especially instead of giving advice the therapist should accompany the mother and also the father in finding the solution that they think is the right one.

6.2. Observing the infant: psychotherapeutic implications

While it is important to work with the mother/father and the child, teams working within early infancy underline how crucial it is to focus on the child itself as well. This latter technique is of particular importance to us as it focuses on observation of the child, hence the body cues he gives the carers. So unlike the psychotherapeutic views we looked at previously which focus on the internal and metaphorical work around the child, these techniques focus rather on the observable and actual behaviour of the child itself. Garret-Gloanec et al. (2010) consider that it is the baby who should be put first in any case and that it is a mistake to think that the child should be protected from the intrusion of the intervention as it might later on be the one suffering the most. These authors, using E. Bick and E. Pickler's methods of baby observation as well as the Brazelton's scale, worked to develop their capacities as observers even before the need to cure. They show how the "capacity in the observer to perceive novelty, creativity in each dyad, to define it in semiological terms, to not these observations, provides a sense of continuity of existence" (2010, p. 816) for the baby. They insist that the parents should be involved in these observations, given that they are the ones actually taking care of the child while the observations are being made. They explain how they do not focus on the interactions but on the child itself. They say that especially in the first weeks, the child appears withdrawn, detached, in a vegetable-like state, almost as if nothing could happen to him, a state which

offers little gratification to the mother. Those authors also insist on the capacity of the baby to recover and regain vitality.

Delion (2001) talks about baby observation as allowing behaviour to manifest itself to the therapist rather than the therapist interpreting behaviour to support master's theories. He says however, that this can require awareness of the therapist's countertransference at the very moment of the interaction.

6.3. Examples of individual and group work with fathers

Missonier (2017) presents the work he offers in a maternity ward close to Paris. In this article, he describes in depth the specificities of the psychodynamic theories that are relevant into his individual work with fathers. He also describes a preparation for birth and parentality group exclusively for fathers during their partner's pregnancy. Missonier had been leading "The apprentice daddies" for a decade at the time he wrote the article. The group meets monthly for one hour and a half on a drop-in basis. Missonier (2017) explains that the maximum attendance was 6 times. Meetings take place in the evening to allow for fathers to be able to come after work. The group aims to allow fathers to talk freely and the therapist encourages maturative questioning by the participants and tries to uncover and unlock their ideas about how a father should think and act. Missonier (2017) outlines how fathers lack such spaces in society which enables them to symbolise the metamorphosis they are going through.

Abel and Leclercq (2017) also describe a beautiful example of individual music therapy with a father and a 6 weeks baby which help the father to overcome his parental difficulty.

6.4. Body-Mind psychotherapies

Dugnat et al. (2006) give us an example of the body mind therapies that are used in specialized psychiatric mother and baby units in addition to more standard consulting with the mother and or parents. For the mothers, swimming, massage and relaxation sessions can be offered. For the

babies, working with a psychomotor therapist, in the presence of the parents is recommended. The aim of these therapies is to increase the awareness of maternity and to accompany the process of becoming a mother; to prepare the mother to meet her child, helping their interactions and interrelations, to allow for relaxation, narcissistic re-valuing of the mother's body and to support the psychomotor development of the baby by playful stimulation or respect of its movement.

Dugnat explains how therapeutic swimming pool activity serves as a moment of observation of the mother/baby interactions and malfunctioning. Aided by the warm environment of a swimming pool, the team creates a securing and mothering envelope, a " psychic cradle" for the mother and the child. The author describes the importance of "feeling" and "sensing" over "doing and saying". The accompanying therapist, also in the pool with the mother and child has a helper to relay information from the mother and child. Another therapist outside the pool, writes down what is happening. The therapies are prescribed by the team's doctor, for 4 sessions at first.

For mothers to be, this moment allows them to connect with the baby's current state of being surrounded in water and helps the mother reconnect with her own time in the womb.

6.5. DMT interventions

DMT allows the mother, father and child to communicate through the physical senses, the infant's natural way to explore the world.

Vlismas et al. (1999) first observed benefits of using music and movement for the mother-infant relationship in 1999. Later on, Vlismas et al. (2013) observed dyads of mothers and 2-6 months old babies in the context of movement and music groups and their result showed an increase in mother's interaction with their infant as well as better attachment scores. In the second part of their study they observed an increase in dyadic reciprocity and in the duration and pitch range of the mother.

Table 2.

DMT work with parents and children up to 1 year old (by the author).

Authors and Program, description and context	**Aims, concepts and practical tools named by the author**	**Study result/observation**
Kestenberg, Loman and Sossin (Loman, 2016, Sossin, 1999, Kestenberg, 1970) KMP as tool for formulation and therapeutic intervention and prevention	Focus on non-verbal communication to support developmental steps with the use of creative and practical solutions, helping to demystify the issues. These newly-founded interactions help promote healthy attachment. Influenced by psychoanalytic theory and attachment theory. Aims to: - Create continuity between pregnancy and postpartum - Support child development and help through its growing phases and developmental crisis (sleep issues, frustration, separations etc…). - Help parents build better communication with them. - Encourage parents to soothe their child and redirect the aggressive behaviors into satisfying and creative outlets. -Exploring alternative ways to hold babies (tendency to hold baby the way parents were held themselves as babies (Kestenberg and Buelte, 1977) lessens defensiveness and encourages flexibility amongst parents. Parents need to understand non-verbal signs and attune both their muscular rhythms and breathing rhythms flow to the child's. Beginning of a relationship of **mutuality and adjustment** to meet the child's need for nurturing, soothing, holding and support which will lead to a secure attachment. (Beebe, 2005; Stern, 1995, La Barre and Frank, 2011). KMP can provide techniques to soothe babies such as: -Supportive holding techniques, providing physical containment (=security, boundaries, formation of body image)	

James M. Murphy (1998), DMT, US Groups for mother, fathers and babies under one year old.	Aims to improve communication between parents and babies. Workshops based on learning-by doing way of teachings Use of guided activities in ten parenting skills areas. Participants recruited by word of mouth. 4 or 5 families per group. Often people who have themselves been in personal therapy before. More for well-functioning families than to treat troubled babies or families. Variety structured agenda (over 10 sessions): ● Sensory awareness ○ 1. Touching skill- The touch of health and healing ○ 2. Observing skill- Seeing more than is expected ○ 3. Hearing skills- Sounds in baby's world ● Parents interactions with baby: ○ 4. Playing skills-just for fun ○ 5. Communication skills- "Talking" without language ○ 6. Negotiating skills-my way or baby's way ● Providing care: ○ 7. Feeding skills- Hungry and full ○ 8. Sleeping skills-the rhythms of sleep ○ 9.Nurturing skills-Loving my baby ● Assessing dependence/independence ○ 10. Growing skills-Watching my baby grow.	Parents feedback: -Changed some of their ways of caring for their babies -Increased their ability to articulate their understanding of baby's language -increased awareness of non-verbal interactions with baby -increased options in parenting -resolved some parents-infants conflicts
Dawn Batcup (2004), DMT, UK. DMT groups, 6 weeks, mother and baby inpatient unit (with varied mental healths conditions) Babies **under 8 months old.**	Facilitating the exploration of the whole range of emotions, sharing thoughts and feelings that are difficult to acknowledge in a psychotherapeutic context through the use of creativity and non-verbal expression. Working with mothers and their babie in order to explore, better understand and develop this relationship. Framework: The DMT plus a nurse (to attend to babies and avoid sentimentality towards the children and envious relationships; 1 hour a week; Communicated by posters and presentations to both clients and nurses. Clinical supervision. Having an open, non-expert or judgmental approach, referring to infant observation literature. Interventions at time using therapeutic movement (Sherbourne, 1990) for babies safety (ex: helping repositioning). Influenced by Laban's movement analysis system for mothers ("in and out of focus").	Description of sessions; Good attendance levels and positive feedback from mothers. Difficulty with a psychiatric client group as thoughts or acts of harming the baby might be a real risk or have taken place. More focus from the author towards the mother than

	Sometimes used baby's movement to inspire the group (used in infant psychotherapy). Use of music and props. Used a non-strict Chacian (in Chaiklin, 1975) model: Beginning "warm up"; Middle;-End Themes that emerged: holding, attachment and separation, support, worries about not being "good enough mothers", dependency and neediness.	babies,a case of "mothering the mothers".
Intuitive mothering, a group of infants and mothers with postpartum depression . Lasts 8 weeks. Child age from **7-9 months at start.**	Aims: Promoting mother-infant responsiveness Framework: One DMT plus one assistant Builds on what the mothers do **naturally** with their infants and also on each mother's wish to **enjoy** being with her baby -*Shared somatic partnership* noted for the mother in terms of Weight, Pace, Flow and use of space and direction (Laban) and for the child as use of toys and gestures towards the mother -*Neurobiological aspects of intuitive learning* (encouraging parents to trust their intuition) -*Liminal space*: a space on the border of everyday life, heightening the experience -*Contribution of play:* Important for both the child and the mother (endorphins, access to memories) use of toys and objects that provoke interest for the child[1], moving and dancing in a circle, in line and other forms. M -*What did you notice about your baby today?*	-Reduction in parental stress, maternal depression and anxiety (even 9-11 months after the program) -Improvement in mother-infant interaction s -Increase in mutual play and more confidence within 2 to 4 weeks.

[1] "Large squat cylinders to look through at each other, hanging stripey hoops to toss to each other, see-through silver thread scarves in which to hide and be discovered, textured fly swatters for joining peek-a-boo, small feather dusters to tickle each other's toes, bell balls to roll between each other, a long length of rainbow chiffon to explore the colours together, sand buckets for joint drumming and other noises."

Doonan F. and Bräuninger I. (2015) DMT, UK, Andorra Research study with mother and babies groups in Andorra and the uk. Age group ranging from 3 to 16 months old.	Support physical, social and emotional space with her baby How to respond to mother and babies needs based on attachment theory, developmental movement and DMT research. Identical training for the 2 DMTS, group structures, props and music in both countries. 45 minute sessions. Structure: -Circle around the parachute, singing the "hello" song to welcome each baby. -Check in/warm up to music (rubbing feet, hand, belly, face, tapping the floor and body with feet or hands). -Objects exploration under parachute -Baby observation and movement led by mother using mirroring and matching. -Free dance for mothers and babies around the room -Checkout and goodbye ritual	Quantitative study on impact on mother's affect (Positive affect negative affect schedule questionnaire) Qualitative evaluation of the elements most valued by mother-infants dyads. (Open questions) Conclusions: Improves relational space (close to potential space) as well as physical space.

Ruth Price in Celebi M. (2017), DMT, UK Community care context, first time parents, Age 0-12 months	Therapeutic movement and meeting group Open group (4 to 14 babies) Free of charge Involved fathers who were encouraged by the mothers even more than the group leader. Even grandparents joined from time to time. Aim: Make space for both parents and baby and to enhance pleasurable experiences. Flyers, a website and invitation cards sent to health visitors. Facebook group. Word of mouth. Music, movement, props and rhythm. Chacian model: Check in/Physical warm up/expressive movement/winding down/check out Objectives: -Soothing: Movement helped parents to slow down, identify and experiment with rhythms that soothed their child. -Attunement supports attachment: role of therapist to nurture and structure the group, using her ability to attune and to create connections. Author used movement observation (KMP and Laban).	Author noted fathers were more physically involved than mothers. Feedback from parents: positive impact on the relationship with the baby and with each other. Appreciated slowing down and reflecting on how things actually were. Own needs of soothing or stimulation were met in the process. Created a community and reduced isolation.
Marina Rova In Celebi M. (2017), DMT Individual and group work in a Mother and baby inpatient psychiatric unit	Explore feelings and diverse stories of isolation, guilt and love. Supporting mother's interaction with their babies whilst attending to subtle nuances of non-verbal communication Creating opportunity for spontaneous joint movement and promotes bonding and attachment Movement prop (such as a giant stretchy cloth), art material, musical instruments and a selection of recorded music. Chacian group structure: -Opening circle: check in of mothers and babies. -Babies welcomed in the group with a hello song. -Guided warm up: dyadic and group movement Objective: Awareness of own and baby's bodies, breath and rhythms. Mobilising different body parts Engaging in relational interactions such as passing objects, exploring partner work and mirroring movements.	The author describes a case study of a mother who doesn't speak english and is very depressed and shows how through movement and sound she starts opening up.

	-Development: Themes as they emerged in the here and now (ex:"I don't know how to play"). Utilising a giant stretchy cloth to rock babies. Core aim: *feeling safe* (feeling held to hold the baby) and *being seen* : through movement synchronicity (moving together) and mirroring (echoing each other). Therapist resonates and amplifies the client's movement (quality, rhythm, affective content) which supports feelings seen by herself, therapist and others in the group.	
Sarah Haddow In Celebi M. (2017) DMT, UK Patients transitioning from acute inpatient ward to community mental health settings	Supporting mothers, babies and families affected by postpartum depression Create a space: Blankets on the floor, pillows, colourful fabric, disco lights, bubbles and small musical instruments. No chairs to be close to each other at ground level. -Trust as essential element: creating a safe space -support recovery -Grow sense of self worth Using body scan: helped to check in Movements of connection with babies and other mothers 10 week long group programs	

There are some common points amongst authors but settings, theoretical references and aims of DMTs working in the postpartum period are quite varied. Group work seems to be the most current choice for DMTs as opposed to working with a specific family. Loughlin (2009) outlines how for mothers with emotional problems resulting from previous trauma, it might be relevant to work in individual counselling as well. We believe that DMTs could offer this type of work for any family regardless of their background, known or not known.

Very importantly, DMT reconnects parents with a playful and intuitive part that might help parents suffering from anxiety by increasing pleasure in the newly formed relationship.

7. Thinking about a DMT Perinatal home treatment framework

Home treatment is common practice for many perinatal health professions such as midwives and nurses working in visiting support programs. It can also be the case for some psychologists and psychotherapists, for example in palliative care, but it isn't common practice for those working in the perinatal field (at least in France and to our knowledge in the UK).

Cohier-Rahban (2007) differentiates home intervention from teams or individuals working in mental health or early infancy intervention from interventions by self-employed therapists, mainly due to the fact that self-employed therapists have specifically been contacted by the patient or the family.

Home-visiting perinatal programs were put in place in the 1980's in the U.S by Fraiberg to address high-risk situations concerning the mother-infant relationship and the child's development, at times when institutional work was impossible (Morales-Huet, 1997). Morales-Huet (1997) and Lamuniere (1989) outline how home visits by institutional health workers who are able to adapt to the psychological and social situation of the families can have a positive impact on the parent and infant interaction and can help improve parental representations. It is especially relevant in severe cases. Lamunière (1989) states that for psychotherapists such interventions also allow them to observe positive behaviour that would contradict a negative observation that could have been made previously in hospital or during in-office consultation. These potentially stressful situations have often been observed during the author's clinical practice. Morales-Huet (1997) states how important it is to consider revisiting and reinventing the framework of intervention and quoting Fraiberg S. (1980) says that this allows for a better access to the family's internal and real world, especially with people who have had early, personal experiences of abandonment, separations and severe neglect or abuse.

Such work would ensure continuity in the therapy process, especially at times when it is needed most.

Cohier-Rahban (2007) argues that such work is appropriate for freelance therapists during pregnancy when the mother is advised not to move from home, or in the early days after the baby is born. She says that even in situations where a family appears to have all that it takes on a socio-economic level, the perinatal period can be the moment when, for the first time, a mother will admit to past painful experiences. Being isolated, whether geographically or emotionally, from her family or partner also will increase psychological suffering. Also, the short stays in maternity ward (currently in between 2 to 4 days in french maternity wards), varying degrees of pain and difficulties in moving after some birthing processes such as episiotomy or c-section and health difficulties for the baby can all be factors that will fragilise the young mother and make access to therapy more complicated .

Cohier-Rabahn (2007) argues that a psychotherapist intervening in a home makes herself available for the mother or mother to be in the same way that she makes herself available for the baby. The author believes that offering home intervention is especially important for mothers with a difficult past, which continues to affect their present life, and especially in the context of geographical or emotional distance from her own family, specifically from her mother.

Cohier-Rabahn V. (2007) explains that the therapist loses her own “security base” by being outside her own working environment, but that it creates a parallel with the transitory period the mother is going through and who also needs to create a security base for her child when she has lost her own landmarks. The author uses the image of Russian dolls to illustrate the framework of home interventions during the perinatal period. The therapist’s role will be one of an “attachment amplifier” thus facilitating the child’s attachment to the mother. The therapist embodies a sort of “professional primary preoccupation”, like the mother experiences “maternal primary preoccupation”.

Cohier-Rabahn (2007) also mentions that it is very important that the mother would be able to refuse the home visit as it could potentially reactivate the past experiences of an intrusive mother and for example to use phone consultations if that is more acceptable for the patient.

The author believes that the home can represent a safe space for the patient, especially one with attachment issues but it can on the contrary also become a place where one feels imprisoned.

She states that the earlier the intervention takes place the more impact it will have.
The main aim is to ensure the continuity of the therapeutic process. She argues that home treatment requires a great deal of professional experience from the therapist.

The perinatal period is a moment where the therapist, working with parents, needs to be able to think and act flexibly. There are peak moments when patients might need more input from professionals and specifically a therapist. This could be due to psychological or physical difficulties. There are moments where the mother might need to stay home, or might be too tired to come to the consultation, orre-scheduling to allow the father to be present during the therapy sessions.

IV. Development project:

We propose, after this extensive literature review, a set of conceptual, theoretical and practical guidelines that would be of use for a DMT working in the perinatal field.

1. DMT in the perinatal field: a concepts tool box

1.1. Attunement

Stern (1985, p. 139) describes the dance that needs to take place between parent and child: "First the parent must be able to read the baby's feeling state from the baby's overt behavior. Second, the parent must perform some behavior that is *not strict imitation but nonetheless corresponds in some way* to the baby's overall behavior. Third, the baby must be able to read this corresponding parental response asrealting to its own original feeling experience and not just imitating its behavior. It is only in the presence of these three conditions that feeling states within one person can be communicated to another and that they *can both sense, without using language, that* the transaction has occurred."

Stern (1985) showed in his “affect attunement” theory the importance of how the mother corresponds to the baby’s feeling state, mostly non-verbally, and how it is more sophisticated than mirroring.

Vlismas et al. (2013) described how attunement is the awareness and sensing of another's emotional and physical rhythms and they make a musical analogy with the way that a violin's strings will vibrate in response to another violin being played if they are tuned to the same frequency. They consider attunement as a resonance, that is resonating to others emotional and physical state.

Attunement (Kestenerg Amighi et al, 1999) produces feelings of mutuality and responsiveness to needs and feelings. Mutual empathy or an excessive similarity between partners will be felt as complete attunement where rhythms would synchronize in intensity (Kestenberg, 1975). This

is expressed through muscular tension rhythms, named in the Kestenberg movement profile (KMP) muscular tension-flow.

In perinatal work, attunement takes place between the foetus, then the baby and its parents. It is also important to consider the importance of attunement between the couple and parents-to-be and how this competency can be supported through the use of DMT work. Working specifically on the couple's attunement abilities can be both beneficial for the couple as such (Cuevas Lacson, 2020) but also for the relationship to the baby. Attunement work for the couple can be a way of revisiting their own attachment and affect regulation. Cuevas Lacson (2020) shows how such work with couples helps foster and enhances secure attachment and rewires potential neural patterns of trauma and dysregulations.

1.2. Mirroring

Mirroring is a key component of DMT work and, as we have seen, is essential to the work in the perinatal field. Mirroring is essentially recreating someone else's movement or general behavior in one's body, as a visual and kinesthetic reflection of that person's movement (Chaiklin and Shmais, 1979). Mirroring gives the mover (or the infant) a feeling of being seen and understood and helps organise the infant's behavior (Carillio et al., 1984).

Mirroring is a key component for establishing a secure base in DMT (Panhofer in Panhofer, 2005). Affect attunement and rhythmic attunement are ways to mirror the baby (Doonan and Bräuninger, 2015). Stern (1985) defines affect attunement as the mother reacting and responding with her own body and voice to the child's emotional expressions. It can be achieved using the same modality (voice to voice) or a different one (movement response to voice for example). This is what Stern calls cross-modal matching and would help the child feel seen, secure and valued.

Panhofer (2005) outlines how in DMT affect attunement is achieved by the mirroring technique. The therapist responds in a cross-modal manner to the patient's movement. This can produce a sense of security and visibility in the same manner as affect attunement does for the baby.

Kinesthetic empathy (Panhofer, 2005) is a technique used by DMTs and is about perceiving and reading kinesthetically the patient's emotional state. It is a process through which the therapist adapts its posture, breathing, muscular tension and movement quality to the one of the patient, trying to get a feel from the inside of the physical and emotional experience of the patient. This helps the patient feel empathy and being deeply accepted.

1.3. Other factors

-Touch is another key factor in perinatal work. Touch allows both the tactile experience, its emotional involvement, love, care, tenderness as well as being an essential element of body and psychological boundary formation.
-Turn taking, in movement as well as through vocalization is also key to creating a dialogue and creating the foundations for future speech capacity.

2. A perinatal intervention practical guidelines proposal:

We offer here a set of guidelines for DMT intervention during the perinatal period, that is during pregnancy and up to one year of age. This has specifically been thought of to prevent as much as possible mood disorders to develop during pregnancy and in the postpartum.

These guidelines could be applicable for DMT freelance work but also in community and public health services, to be made available for the largest possible population.

We have seen how crucial the period of the immediate postpartum can be, but also how much more efficient it is if the work starts during pregnancy.
We believe that a first referral or meeting should take place as early as possible and this would be facilitated through making information available to potential clients directly as well as via

teams or professionals likely to make referral. This could be through emailing, meetings, public communication about the work, use of social media groups…

We believe that parents taking part in such work should be fully willing to participate.

Based on the review of literature and the author's direct professional experience, we advocate a mixed approach, offering both couple/child work and a group approach.

We believe that the possibility for the therapist to be flexible, to work remotely and/or to offer home visits adapted to the evolving situation is ideal.

Written notes should be kept by the therapist and video recordings could also be useful. Participants could be invited to keep personal diaries of their own process.

Any DMT work in the perinatal period would need to be carried out in a therapeutic environment that is as safe and trustworthy as possible in order to effectively treat parents to be who are both particularly available for psychotherapeutic work in terms of psychological transparency but at the same time are more vulnerable at this time. The therapeutic environment itself plays a significant role in the therapeutic work that would take place.

2.1. Working with the triad: parents and baby

We have seen how psychodynamic-inspired DMT works during the perinatal period and needs to include both mothers and fathers regardless of who presents symptoms. We believe that work should include verbal check-in time for both as well as movement processes and verbal check-out. The work could be offered on a flexible basis, individual sessions if necessary, but bearing in mind the other partner. In order to ensure the continuity of the therapeutic work the

DMT would use her discretion and decide on the most appropriate environment for the work: at the office, at home or online. This would especially be important during pregnancy and the immediate postpartum where the mother might be house-bound or requires more regular sessions. A therapist who is flexible in terms of availability is also more likely to be able to meet with fathers.

Music may or may not be used as a tool in the therapeutic work.

2.1.1. During pregnancy

Before the actual start of a DMT session an initial consultation is advisable where both parents family and attachment histories and issues (starting from their own birth) can be revisited. Previous traumas might come up during the consultation, and pre-existing mental health conditions should be investigated. It is important for the dance movement therapist to determine if the pregnancy was desired or not, the duration and quality of the couple's relationship, including the level of support from the partner to the pregnant woman. It is also essential for DMT work to consider socio-economic factors such as work and time pressures.

After this initial work, sessions could be structured in the following way:

- Verbal check-in would be a moment when there is space for whatever is happening individually or as a couple on a bodymind level, fears, symptoms, fantasies, doubts, discoveries etc… The DMT could at that point choose to work with a specific thematic that arises.
- Warm-up would include propositions that would either respond to what was present in the check-in or to support general awareness of the body, of sensations, emotions and memories that might spontaneously be evocated. Tools could be exercises of mindfulness, breath work.
- Movement exploration might include exploring Laban's movement quality if that feels relevant, grounding exercises, attunement and mirroring games. The attunement and mirroring work could give the DMT more insight into how the pair clashes or matches in KMP terms, just as in dyadic work. In general, offering movement explorations generates

the feeling for both parents of being active and fosters a sense of control and would be of help during pregnancy. It could also be relevant to use the imagination and the artistic process to help and maybe resolve emotional and psychological conflicts. Creating, especially for the mother, physical experiences that could alleviate discomfort, such as the ones suggested by Loman and Kestenberg: creating space in the belly, to generate a feeling of grounding for the mother and the baby, breathing work and singing to help manage pain and discomfort. The work could potentially help parents to reconnect with or even experience for the first time a positive physical experience (when there is a history of trauma for example) which would be highly beneficial. Some form of bellydance could also be a way to explore the space of the pelvis as well as a fun activity for both parents.

- There should be some time allocated specifically to addressing the relationship to the baby. This could be through singing, talking directly to the baby. Based on Kestenberg and Loman's work regarding different steps of being in touch with the baby the DMT could offer exercises to parents relating to (back massages, learning and identifying foetal movement, foetal notation and parental movements in response to the foetal movements). This will greatly help create a relationship to the child as well as prepare for the birthing process. In these explorations, the child would join in as a third partner in the movement process. Parents could be given simple movement notation descriptions and be encouraged to both keep a journal of what is happening for them physically and emotionally and the baby.

2.1.2. During the immediate postpartum

We have seen how the period of the immediate postpartum (first 40 days) is a moment of intense psychological activity. It is important in that moment of life that dance movement therapists, along with the presence of other health professionals, be available to parents and babies in the maternity ward or through video call to debrief the birth process and the first

encounter and then in the home. More frequent sessions or phone contact would be highly advisable as early intervention would reduce the likelihood of future difficulties developing.
Not much space is required, just enough to be able to move arms freely.
DMT work at that stage could involve the therapist observing and taking notes of what is happening in the triad and the therapist's bodily countertransference. If and when the parents are ready for some gentle moving, stretching, relaxation exercises could be possible, as well as gently rocking the baby with music. There is a need for verbal expression as well as metaphorical movement at this time too.
We also believe from clinical experience that encouraging parents, as much as possible, to move in a slow manner would greatly support the attunement and attachment in process. Rochette-Guglielmi (2009) underlines how the first difficulties in bonding could be due to the difficulty in rhythmic attunement and we sometimes see such situations. Slowing down, allowing for breathing space in the body and grounding would facilitate the passage of the first few weeks.

2.1.3. Through the first year of life

When working with parents and babies, emotional and physical safety are a priority for all. Safety for the baby might be achieved by setting up a space with some soft mattresses or blankets or a baby swing. After the first few weeks, work could take place either at home or in the office, or online (if necessary but at the risk of diminishing the quality of the therapist's observation and fine attunement between the triad and the therapist).

There should be time for verbalizing at the beginning and the end of the session. 1h30 is an ideal time slot for such sessions as there would be a lot of possible levels to explore and accommodate the mother, the father, the baby and their interactions. This would also allow for sufficient time to slow down and let things unfold, to be close to the baby. It would also help differentiate the therapeutic time from the rush of everyday life or medical appointments etc…

Encouraging touch, visual contact, vocalisation are important. Providing time in the session for observation, paying attention, describing, qualifying movements, asking parents what they observe etc.. are key elements. It is important to make time and space available during the sessions for the full multimodal expressions.

Working directly with a triad of mother, father and baby allows the dance movement therapist to focus specifically on fine observation of parents clashing, attuning, matching and mismatching dynamics as we have seen in the work developed by Kestenberg and Loman.

This will allow for gentle support such as adjusting posture, encouragement in finding ways for the parents to soothe their child, exploring alternative ways to hold babies, encouraging flexibility, when the parents felt memory of being held as a baby can get in the way. Dance movement therapists can help parents attune to muscular rhythms and breath flow of the child.

This would help break down defenses, develop a relationship of reciprocity, with regulation, sensitivity, and mutual adjustment and to foster a healthy attachment.

It is important that the dance movement therapist refrains from giving too much direct or "lecture type advice" which could undermine the therapeutic relationship. The therapist needs to stay very finely attuned and maintain a pace that is as unthreatening and slow pace as possible.

We believe that KMP, as we have seen in previous chapters, would be relevant to work with smaller groups, the system of the triad. We have seen that the following techniques could be used:

-Supportive holding techniques, providing physical containment (=security, boundaries, formation of body image)

-Matching the child's muscle tension through rhythmic rocking

-Using deep breathing rhythms to create a feeling of dynamic support

-Using both voice and movement of equal intensity to the child's to convey a feeling of presence to the child

-Exploring alternative ways to hold a child given the intergenerational transmission of body qualities and of the way adults were themselves held as babies.

- Specifically exploring attunement in tension flow, the tension changes of a person, as it will help foster a sense of empathy.

- Specifically exploring shape flow as it will help build trust in the triad.

There is a great need for the dance movement therapist to keep in mind all possible psychodynamics that we have explored in the previous chapters and how previous trauma, individual and family history might be unconsciously present for the individuals concerned. This could then be identified by the DMT and explored verbally or through movement work. The use of creativity and non-verbal expression, we have seen, will greatly facilitate the exploration of a range of emotions, negative as well as positive ones that might also be difficult to access, sharing thoughts and feelings that could be difficult to acknowledge otherwise.

2.2 Groups during the perinatal period

The main benefit of offering DMT group work in the perinatal period is for the mother and father to get a sense of belonging and community, re-creating the village they might be missing. It would be a way of sharing this life event with other women and men going through it at the same time. Hearing of and sharing different experiences of motherhood could be helpful.

This could take place in a face to face or on an online mode as feasible. It could be further discussed as whether women only or men only or mixed groups would be more relevant.

Groups should be open without any limit of time for attendance apart from the child's age or the pregnancy status. It would need to be possible for families to come once or several times.

2.2.1. During pregnancy

Groups during pregnancy should have the same focus and chase-like structures as the one mentioned for couple work during pregnancy: A check-in, movements promoting the integration of mind and body, an increase of self-confidence and self-expression, foetal movement awareness and notation, methods of pain management and check-out time to express and integrate the processes verbally.
This would give the body/mind the tools to counteract the changes occuring in the body, the mind and in the future parents life. It would allow them to attune to the baby to be born.

2.2.2. From birth through the first year of life

Postpartum groups with both parents being present would help parents meet and share experience with other parents and reduce feelings of isolation and self-doubt. It is important that groups are open and that participants feel free to join once or as much as needed.

Ideally such groups would be co-facilitated with one person assigned specifically to the babies, their needs and facilitating safety. Such groups could last for an hour. We have seen that effective ways of communicating about groups could be through the display of posters, giving presentations to the relevant professionals and potential patients.
Again, as in all perinatal work, keeping an open, non-expert or judgmental approach is key. Feeling held and being seen are the key dynamics.

The group work would need to accommodate soothing, spontaneous joint movement and promote bonding and attachment. It would specifically allow for shared movement with other families which could foster a sense of community support and greatly enhance parental mental health. Therapists will resonate with and amplify the individuals or group movement (quality, rhythm, affective content) which generates the feeling of being seen by parents themselves, therapist and others in the group.

We have seen how relevant the use of a non-strict chacian model can be in this workframe:

-Opening circle: There would be a quick verbal check in time for mothers, fathers and babies with babies being welcomed in the group with a hello song. Guided warm-up might include dyadic and group movement, with the main objective of body-awareness (gently mobilising different body parts), breath and rhythms. After focusing on parental warm-up, the focus would slowly move to the child. There would be time to engage in relational interactions such as passing objects, mirroring movements. Babies could be in arms or in portable chairs, joining in at times. We have seen as well as how, for babies, it essential to offer activities that are relevant to their ages and level of development. There would be time for interaction and observation of babies and of the inter-relationship through shape effort and flow qualities.

-Development: During this stage, themes that emerged previously could be developed using props or music. It is also important here that the therapist reduces her intervention mainly by providing containment for the participants so that free participants so that free association, thematic work and improvisational-type dance and speech could take place. This draws from Batcup (2004) who gave examples of using peek-a-boo to explore separation, pushing with feet to explore weight, talking about things people like or don't like in objects or in the room to explore good/bad and ambivalence, exploring different planes in space (low/middle/high) etc..

-End: A transition in movement for a couple of minutes is useful before taking time to process verbally. This would be a moment to further develop psychological links that parents can make and clarify and verbalise what movement was expressing or what came up, for example worries, feelings of inadequacy, of exhaustion, of not being good enough, restrictions and transitions towards a life as new parents etc…

V. Outline for further investigation: Hypothesis

In the context of the global sanitary crisis and COVID 19 restrictions it has not been possible for the author to investigate further the following hypothesis. There was no possibility to offer groups either in a freelance or within the author's maternity ward position, and family work was not very welcomed. During most periods of 2020 fathers were simply not welcomed for medical appointments during the pregnancy and hardly welcomed either during birthing and the hospital stay. Many psychotherapists and psychologists have raised concerns at the lack of consideration for fathers and the possible consequences on the family.

However we believe the following hypothesis would need to be further investigated.

We have seen how the expertise of DMT would greatly qualify dance movement therapists to work in the perinatal field and how enriching the work with the knowledge of psychodynamic work could help further deepen DMT work.
We saw how little quantitative as well as quantitative studies exist in DMT about perinatality and none about the prevention of mood disorders.
We have seen how the period of late pregnancy and the first 40 days is an essential moment to protect from the development of mood disorders for parents of both sexes.

After an extensive literature review and a development project proposal we can draw the following hypothesis that would need to be investigated further. This would follow a mixed experimental research methodology with both quantitative and qualitative datas.

General hypothesis: Offering a model of intervention as described in the previous chapter would help prevent and reduce the importance of mood disorders and future consequences for the child.

- *Work hypothesis 1*: The combination of family specific DMT intervention and DMT group work during pregnancy and the immediate postpartum is effective in preventing depression and anxiety in the postpartum.
- *Work hypothesis 2*: Preventive (pregnancy and immediate postpartum) DMT work is more effective than DMT work starting after the first few weeks.

These hypothesis could be tested following this research plan:

Participants would be families that would start participating in the surveying in the second trimester of pregnancy. Both mother and father would be considered individually as well as as a family. A number of 20 families would be a minimum to be able to draw significant findings.

Participants would complete (pre and post study)
- An anxiety scale (such as the Hamilton anxiety scale)
-A depression scale (such as the beck depression inventory)

-There would be a movement observation such as some elements of the KMP pre and post study.
-There would also be individual interviews pre and post study.

They would be divided into (Variables)

-Group A: Families that would only have Family interventions

-Group B: Families that would only attend DMT group work.

-Group C: Families that would attend to both

-Control group that would not benefit from any DMT interventions.

There could also be an observation of whether any conclusions may be drawn for the relevance of DMT for fathers and for mothers.

VI. Conclusion and limits

In the present research we had an extensive overview of what exists in the psychotherapeutic world and more specifically in DMT during pregnancy and until the child is one year old. We have shown some common methods and outlook on what the work can look like. We have also seen how relevant DMT work is for this moment of life and how it should be further developed by DMTS and incorporated in the perinatal mental health prevention and psychotherapeutic work.

We talked about most of the normal and pathological ways in which pregnancy can happen and finds its cause: psychodynamic factors, anterior psychological vulnerability, environmental stress factors, personal history factors. It would also be good to add here that cultural factors should be greatly taken into account, especially in the case of migrant mothers, as being in a foreign country can increase the risk of psychopathology. It seems important for the therapist to have in mind how much the language and cultural representation of pregnancy should be taken into account in the prevention and the care of migrant women.

We have specifically looked at how DMT could help prevent anxiety and depression for both mothers and fathers. We believe this aspect of the work with fathers needs to be further investigated in general in the psychotherapy world and in DMT. In times of changes in the men and women family investment and equilibrium it is essential that such support would be readily available and that public health campaigns regarding mental health postpartum risks would target both women and men. Knowledge of such difficulties by the general public would help lift the taboo and shame linked to postpartum mood disorder. This would ensure that if help is available, mothers and fathers would actually feel that there is no shame in needing help at this time of life and that becoming a parent isn't as easy or obvious or wonderful as it often is presented.

We see the possibility that there would be some resistance from fathers attending such workshops or therapeutic work but we see mentalities changing quickly and the more the invitation will exist the more the resistance will lessen. Adapting psychotherapeutic intervention

hours would be a step for dads to be present and DMT work at home, as we have seen, could be a way to involve fathers.

It feels very important that DMT work would be available from freelance DMTs working but also in community care centers, GP practices, maternity wards or any general medical place where pregnant women will attend. Loman (2016) underlined how KMP work has been mainly used with high functioning families and we agree with that that it could be used as a diagnostic tool to help identify parents for whom it is difficult to use fetal movement notation. She suggested that these families would help extra support in training in parenting skills.

Finally, the context of global pandemic affects greatly psychotherapeutic work in the perinatal field. The specificity of online work in the perinatal field needs to be given much more thought as to how DMT can support future and new parents staying connected to their bodies in the context of so many restrictions. Also, in many countries, the global COVID 19 pandemic has meant fathers are not welcomed anymore along with their partners during medical appointments etc… It is essential as DMT to think of creative ways to keep all minds and bodies of the family present in the process of becoming parents.

References

Abel, S. & Leclercq, S. (2017). Autres approches thérapeutiques en périnatalité : cas particulier de la musicothérapie. Dans : Nine M.-C. Glangeaud-Freudenthal éd., *Accueillir les pères en périnatalité: Cahier Marcé n° 7* (pp. 221-226). Toulouse, France: ERES.

Anderon-Frazier, B. (2020) *The Integration of a Dance/Movement Therapy Practice for Midwifery and Pregnant Women.* Expressive Therapies Capstone Theses. 292. https://digitalcommons.lesley.edu/expressive_theses/292

Ainsworth, M. and Bowlby, J. (1965). *Child Care and the Growth of Love*. London: Penguin Books.

Amighi et al. (1999). *The meaning of movement : developmental and clinical perspectives of the Kestenberg Movement Profile*. Routledge: London.

Batcup, D. (2004). DMT with mothers and babies. *e-motion* Vol. XIV No 8 Summer pp5-12. Extracted on 01th March 2020 from http://www.admt.org.uk/documents/04Summer.pdf

Bell, J. (1984). Family therapy in motion: Observing, assessing, and changing the family dance. In P. Lewis (Ed.), *Theoretical approaches in dance movement therapy*, Vol. 2. (pp 101-144). Dubuque: Kendall/Hunt.

Bick, E. (1968). The experience of the skin in early object-relations. *International journal of psychoanalysis*, 49, 484-486.

Birklein, S. B. & Sossin K. M. (2006). Nonverbal indices of stress in parent-child dyads: implications for individual and interpersonal affect regulation and intergenerational

transmission in *Advances in Dance/movement therapy*. Koch, S.C and Bräuninger, I. Logos Verlag. Berlin.

Boland, C. (2012). *Moving towards attachment*, MFA dissertation, Mills College. Extracted on 01th March 2020 from https://pqdtopen.proquest.com/doc/1018708584.html?FMT=AI

Beebe, B. (2003). Brief Mother-infant treatment: Psychoanalytically informed video feedback. *Infant Mental Health Journal*, 24 (1), 24-52

Buist, A., Minto, B., Szego, K., Samhuel, M., Shawyer, L., & O'Connor, L. (2004). Mother-baby psychiatric units in Australia - the Victorian experience. *Archives of women's mental health*, *7*(1), 81–87.

Bydlowski, M. (2001). Le « mandat transgénérationnel » selon Serge Lebovici. *Spirale*, no 17(1), 23-25.

Bydlowski, M. (2005). *La dette de vie : Itinéraire psychanalytique de la maternité*. Paris : Presses universitaires de France.

Bydlowski, M. (2008). Les dépressions maternelles en question. *Le Carnet PSY*, 129(7), 38-44.

Chabert, C. (2008). L'enfant triste. *Le Carnet PSY*, 128(6), 31-37.

Capron, L. E., Glover, V., Pearson, R. M., Evans, J., O'Connor, T. G., Stein, A., Murphy, S. E., & Ramchandani, P. G. (2015). Associations of maternal and paternal antenatal mood with offspring anxiety disorder at age 18 years. *Journal of affective disorders*, *187*, 20–26.

Carbonell Bejerano, M.R. (2007). *Danza movimiento terapia, herramienta de apoyo durante el embarazo*, Dissertation, Masters of dance movement therapy, Universidad Autónoma de Barcelona.

Celebi, M. (2017). Weaving the cradle, facilitating groups to promote attunement and bonding between parents, their babies and toddlers. London: Jessica Kingsley publishers.

Chaiklin, H. ed. (1975). *Marian Chace. Her papers.* USA: ADTA.

Cohier-Rahban, V. (2007). Le psychologue en libéral : périnatalité et déplacement à domicile. *Dialogue*, 175(1), 129-147.

Cox, J., Holden J. M, Sagivsky I. (1987). "Detection of postnatal depression, developments of the ten items Edinburgh Postnatal Depression Scale", *British journal Psychiatry*, 150.702-786.

Cox, J. L. (1989). Postnatal depression: a serious and neglected postpartum complication. *Bailliere's clinical obstetrics and gynaecology*, *3*(4), 839–855.

Cuevas Lacson, F. (2020). Embodied attunement : a dance/movement therapy approach to working with couples in *Body, movement and dance in psychotherapy*, 15, 1.

Davé, S., Petersen, I., Sherr, L., & Nazareth, I. (2010). Incidence of maternal and paternal depression in primary care : a cohort study using a primary care database. *Archives of pediatrics & adolescent medicine*, *164*(11), 1038–1044.

Decherf, G., Darchis, É., Knera, L. (2003). Souffrances dans la famille. Les thérapies familiales aujourd'hui, Paris, In Press.

Delassus, J.M (2008). *Le corps du désir, psychanalyse de la grossesse.* Paris : Dunod.

Delion, P. (2001). Préface. Dans : Michel Dugnat éd., *Observer un bébé avec attention* (pp. 7-10). Toulouse, France: ERES.

Dikmen Yildiz, P., Ayers, S., & Phillips, L. (2017). The prevalence of post-traumatic stress disorder in pregnancy and after birth: A systematic review and meta-analysis. *Journal of Affective Disorders, 208*, 634–645.

Doonan, Frances & Bräuninger, Iris. (2015). Making space for the both of us: How dance movement therapy enhances mother-infant attachment and experience. *Body, Movement and Dance in Psychotherapy*. 10. 1-16.

Dulicai, D. (1977). Nonverbal assessment of family systems: A preliminary study. *Art Psychotherapy, 4*(2), 55–62

Lévèque, F., Labénère, M., Mairey, F., Anicet, M. & Dugnat, M. (2006). Un « soin piscine » dans une unité de traitement de la relation précoce mère-bébé. *Spirale*, 1(1), 129-143.

Fédida, P. (2003). Des bienfaits de la dépression. Éloge de la psychothérapie, Paris, Odile Jacob.

Frank, R. and La Barre F. (2010). *The first year and the rest of your life; Movement, development and psychotherapeutic change*, New York: Routledge.

Fraiberg, S., Adelson, E., Shapiro, V. (1975). Ghosts in the nursery. A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child & Adolescent Psychiatr*y,14(3), 387-421.

Fraiberg, S. (1980). *Clinical Studies in Infant Mental Health. The First Year of Life*, New York, Basic Books.

Garret-Cloanec, N., Pernel A-S. (2010). Un soin psychique au bebe, ça n'existe pas? Et pourquoi pas!, *L'information psychiatrique*, vol. 86, n.10.

Geissmann, C. and Houzel, D. (2000). *L'enfant, ses parents et le psychanalyste.* Paris: Bayard compact.

Giallo, R., D'Esposito, F., Cooklin, A., Christensen, D., & Nicholson, J. M. (2014). Factors associated with trajectories of psychological distress for Australian fathers across the early parenting period. *Social psychiatry and psychiatric epidemiology*, *49*(12), 1961–1971.

Giallo, R., D'Esposito, F., Cooklin, A., Mensah, F., Lucas, N., Wade, C., & Nicholson, J. M. (2013). Psychosocial risk factors associated with fathers' mental health in the postnatal period: results from a population-based study. *Social psychiatry and psychiatric epidemiology*, *48*(4), 563–573.

Glangeaud-Freudenthal, N. & Gressier, F. (2017). L'évolution de la place donnée aux pères en recherche sur la santé mentale périnatale. Dans : Nine M.-C. Glangeaud-Freudenthal éd., *Accueillir les pères en périnatalité: Cahier Marcé n° 7* (pp. 165-172). Toulouse, France: ERES.

Green, A. (1983). *Narcissismes de vie, narcissismes de mort*, Paris, Ed. de Minuit.

Gressier, F., Shadili, G., Glangeaud-Freudenthal, N. & Chambry, J. (2017). Influence de la relation père-bébé sur le développement psychoaffectif de l'enfant et de l'adolescent. Dans : Nine M.-C. Glangeaud-Freudenthal éd., *Accueillir les pères en périnatalité: Cahier Marcé n° 7*. 189-196. Toulouse, France: ERES.

Gressier, F. & Sutter-Dallay, A. (2017). La dépression périnatale paternelle. Dans : Nine M.-C. Glangeaud-Freudenthal éd., *Accueillir les pères en périnatalité: Cahier Marcé n° 7*. 173-180. Toulouse, France: ERES.

Helfer, R. E. (1987). The perinatal period, a window of opportunity for enhancing parent-infant communication: an approach to prevention. *Child abuse & neglect*, *11*(4), 565–579.

Herrin, D. C. (2001). *A survey of dance/movement therapists and the effects of pregnancy on their clinical experiences*, thesis presented for Degree Master of Art, Hahnemann university. Extracted on 01th March 2020 from http://dspace.library.drexel.edu/bitstream/1860/2650/1/Herrin,%20Denick.pdf

Houzel, D. (1999). *Les enjeux de la parentalité. Questions d'enfance.* Paris.

Jerak, T., Vidrih, A., & Žvelc, G. (2018). The experience of attunement and misattunement in dance movement therapy workshops*.The Arts in Psychotherapy* 60, 55-62.

Kaufman, G. (2017). *Postpartum Depression: A Dance/Movement Therapy Moment*, ADTA Video content.
Extracted on 01th March 2020 from https://www.youtube.com/watch?v=dGhdwId-ydM

Kestenberg, J. S., Marcus, H., Robbins, E., Berlowe, J., & Buelte, A. (1971). Development of the young child as expressed through bodily movement. I. *Journal of the American Psychoanalytic Association*, *19*(4), 746–764.

Klein, M. (1928). Les stades précoces du conflit œdipien, dans Essais de psychanalyse, trad. fr. M. Derrida, Paris, Payot, coll. Sciences de l'homme, (1987).

Klein, M. (1968). Essais de psychanalyse, Paris, Payot.

Kumar, R., Robson, K. M., & Smith, A. M. (1984). Development of a self-administered questionnaire to measure maternal adjustment and maternal attitudes during pregnancy and after delivery. Journal of psychosomatic research, 28(1), 43–51.

Lamunière, M.C. (1989) Soutien psychothérapeutique de la relation mère/enfant à domicile, *Dialogue*, 4e trimestre, 91-108.

Lafuente, M.J. (1995). *Hijos en camino*. Barcelona: Ceac.

Lamour, M. (2013). *La paternalité et ses troubles*, Bruxelles, Fédération Wallonie-Bruxelles.

Leach, L. S., Poyser, C., Cooklin, A. R., & Giallo, R. (2016). Prevalence and course of anxiety disorders (and symptom levels) in men across the perinatal period: A systematic review. Journal of affective disorders, 190, 675–686.

Lebovici S., Weil-Halpern F.,(1989). *Psychopathologie du bébé*, PUF.

Lebovici, S. (1994), La pratique des psychothérapies mère bébé. *Psychiatrie de l'enfant*, 37, 2, 415-427.

Loman, S. (1994). Attuning to the foetus and the young child: approaches from Dance/movement therapy. *Zero to three*, pp.20-26, vol15 n.1 august-september Issue.

Loman, S. (1998). Employing a developmental model of movement in dance movement therapy with young children and their families. *American Journal of Dance therapy.* vol. 20, N2, Fall/Winter.

Loman, S. (2007). The KMP and pregnancy: developing early empathy through notating fetal movement. In: Koch S.C. and Bender S. (ed) *Movement analysis-Bewegungsanalyse*, Logos verlag, Berlin.

Loughlin, E. (2008). *Intuitive mothering Program: dance therapy at the Infant Clinic*. Online publication of Parent Infant Research Institute. Extracted on 20th April 2012 http://www.piri.org.au/gallery/newsletterjuly-sept08.pdf

Loughlin, E. (2009). Intuitive mothering: Developing and evaluating a dance therapy model for mothers with postnatal depression and their vulnerable infants, Dance therapy collections N°3, DTAA, 70-85.

Lundy, H. and Mc Guffin, P. (2005). Using Dance/Movement Therapy to Augment the Effectiveness of Therapeutic Holding with Children. *Journal of Child and Adolescent Psychiatric Nursing*, 18: 135–145.

Matthey, S., Barnett, B., Howie, P., & Kavanagh, D. J. (2003). Diagnosing postpartum depression in mothers and fathers: whatever happened to anxiety?. *Journal of affective disorders*, *74*(2), 139–147.

Marzano, M. (2007). *Dictionnaire du corps*. Paris: PUF.

Meekiums, B. (1991). Dance movement therapy with mothers and young children at risk of abuse. *The Arts in Psychotherapy* 18, 3, 223-230.

Meekums, B. (1992). The love bugs. Dance movement therapy in a family service unit. In Payne H. (ed.) *Dance movement therapy: theory and practice*. Bruner Routledge. London.

Missonier, S. (2003). *La consultation thérapeutique périnatale.* Paris : Eres.

Missonnier, S. (2004). L'empathie dans les consultations thérapeutiques parents/bébé : l'héritage de Serge Lebovici. *Revue française de psychanalyse*, vol. 68(3), 929-946.

Missonnier, S. (2017). Le groupe de parole des apprentis papas : entre dépressivité et dépression. Dans : Nine M.-C. Glangeaud-Freudenthal éd., *Accueillir les pères en périnatalité: Cahier Marcé n° 7* (pp. 197-216). Toulouse, France: ERES.

Morales-Huet, M. (1997). Les psychothérapies mère-bébé à domicile. Traitements de dyades mère-enfant à risque et inaccessible aux soins en institution, in Guedeney, A., Lebovici S., *Interventions psychothérapeutiques parents-jeunes enfants*, Paris, Masson, p. 83-103.

Morisseau, L. (2001). Les psychothérapies psychanalytiques mère-bébé. *Champs psychosomatique*, 23, 85-100.

Moreau A., (1996). *Dépressions paternelles. Formes actuelles de la psychopathologie de la paternité.* Mémoire de DEA de psychopathologie, Université Paris 7, UFR Sciences humaines et cliniques.

Murphy, J. (1998). Nonverbal interventions with infants and their parents. *American Journal of Dance Therapy*, Vol. 20 , Number 1, 37-54.

Murray, L., Cooper, P.J. (1997). Effects of postnatal depression on infant development, *Arch Dis Child*, 77:, 99-101.

Murray, L. (2001). Influence de la communication mère-bébé sur le développement psychologique de l'enfant. Dans : Michel Dugnat éd., *Troubles relationnels père-mère/bébé : quels soins* (pp. 39-56). Toulouse, France: ERES.

Ogden, P. (2006). Trauma and the body, W.W. Norton & Company .

Ostrov, K. (1981). A movement approach to the study of infant/caregiver communication during infant psychotherapy. *American Journal of Dance Therapy*. 4. 25-41.

Panhofer, H. (2005). "Come back, come back!": Apegos rotos y sus implicaciones clínicas en Danza Movimiento Terapia. En H. Panhofer (comp). *El cuerpo en psicoterapia. Teoría y práctica de la Danza Movimiento Terapia*. Barcelona: Editorial Gedisa. S.A.

Paulson, J. F., & Bazemore, S. D. (2010). Prenatal and postpartum depression in fathers and its association with maternal depression: a meta-analysis. *JAMA*, *303*(19), 1961–1969.

Piontelli, A. (1992). *From Foetus to child. An observational and psychoanalytic study*. Routledge. London and New York.

Pitt, B. (1968). "Atypical" depression following childbirth. *The British journal of psychiatry : the journal of mental science*, *114*(516), 1325–1335.

Racamier, P.C., Sens, C., Carretier, L.,(1961). La mère et l'enfant dans les psychoses du postpartum, *L'évolution psychiatrique*, vol. 26, 4, 525-557.

Racamier, P.C. (1989). La psychanalyse sans divan in *De la psychiatrie à la psychanalyse* , PUF.

Ramchandani, P. G., Stein, A., O'Connor, T. G., Heron, J., Murray, L., & Evans, J. (2008). Depression in men in the postnatal period and later child psychopathology: a population cohort study. Journal of the American Academy of Child and Adolescent Psychiatry, 47(4), 390–398.

Ramchandani, P. G., Domoney, J., Sethna, V., Psychogiou, L., Vlachos, H., & Murray, L. (2013). Do early father-infant interactions predict the onset of externalising behaviours in young children? Findings from a longitudinal cohort study. *Journal of child psychology and psychiatry, and allied disciplines*, *54*(1), 56–64.

Reck, C., Struben, K., Backenstrass, M., Stefenelli, U., Reinig, K., Fuchs, T., Sohn, C., & Mundt, C. (2008). Prevalence, onset and comorbidity of postpartum anxiety and depressive disorders. *Acta psychiatrica Scandinavica*, *118*(6), 459–468.

Reck, C., Stehle, E., Reinig, K., & Mundt, C. (2009). Maternity blues as a predictor of DSM-IV depression and anxiety disorders in the first three months postpartum. *Journal of affective disorders*, *113*(1-2), 77–87.

Rochette-Guglielmi, J. (2009 A). 40 jours. Dans : Patrick Ben Soussan éd., *Cent mots pour les bébés d'aujourd'hui* (pp. 256-261). Toulouse, France: ERES.

Rochette-Guglielmi, J. (2009 B). Travail des traces en post-partum immédiat : le blues des quarante jours. Dans : Patrick Ayoun éd., *Les traces de l'archaïque* (pp. 61-116). Toulouse, France: ERES.

Rova, M. & Haddow, S. (2017). Moving bodies, Dance movement psychotherapy groups for mothers and babies in inpatient and oupatient perinatal mental health services. in Celebi. M (ed.) *Weaving the cradle.* Singing Dragons. London and Philadephia.

Sansone, A. (2004). *Mothers, babies and their body language*. London: Karnac books.

Schauder C., Noël R., Construction et co-construction de la paternalité « Pendant que ma femme porte dans son ventre un bébé, je fais pousser un papa dans ma tête » , dans : Nine M.-C. Glangeaud-Freudenthal éd., *Accueillir les pères en périnatalité. Cahier Marcé n° 7.* Toulouse, ERES, La vie de l'enfant, 2017, p. 101-110.

Sherbourne, V. (2001). *Developmental movement for children*. London: Worth publishing.

Sossin, K.M. (1999). The KMP and infant-parent psychotherapy, in Kestenberg Amighi I. *The meaning of movement: Developmental and clinical perspectives of the Kestenberg movement profile.* pp. 191-209. New York: Routledge.

Sossin, K.M. (2007). History and future of the Kestenberg movement profile. In: Koch S.C. and Bender S. (ed) *Movement analysis-Bewegungsanalyse*, Logos verlag, Berlin.

Spitz, R.A. (1945). Hospitalism—An Inquiry Into the Genesis of Psychiatric Conditions in Early Childhood. Psychoanalytic Study of the Child, 1, 53-74.

Stern, D. (1985). *The interpersonal world of the infant.* New York: Basic Books.

Stone, K. (2009) Dance therapy for postpartum depression. Blog article. https://postpartumprogress.com/dance-therapy-for-postpartum-depression

Storey, A. E., Walsh, C. J., Quinton, R. L., & Wynne-Edwards, K. E. (2000). Hormonal correlates of paternal responsiveness in new and expectant fathers. Evolution and human behavior : official journal of the Human Behavior and Evolution Society, 21(2), 79–95.

Tortora, S. (1994). Join my dance: The unique movement style of each infant and toddler can invite communication, expression and intervention. *Zero to three*, vol 15 n.1 august-september Issue.

Tortora, S. (2005). *The dancing dialogue*. New York: Paul H. Brookes publications.

Tortora, S. (2010). Ways of seeing: An early childhood integrated therapeutic approach for parents and babies, *Clinical Social Work Journal*, 38, 37-50.

Tortora, S. (2014). Dance/Movement Therapy: Embodied Parenting. ADTA online video publication. Extracted on 01th March 2020 from https://www.youtube.com/watch?v=uIzZvyqPz3s .

Treefoot, A. (2008). Moving Together: Enhancing Early Attachment using Dance Movement Therapy. In partial fulfilment of the requirements of the Master of Arts in Arts Therapy Whitecliffe College of Arts. Extracted on 01th March 2020 from https://www.pdffiller.com/jsfiller-desk14/?projectId=410534437#e5812e2353c94c7b9dc0d95036242a0c

Trevarten, C. & Fresquez, C. , (2015). Sharing human movement for well-being: Research on communication in infancy and applications in dance movement psychotherapy in *Body Movement and Dance in Psychotherapy* 10(4):1-17.

Tronick, E. Z., & Weinberg, M. K. (1997). Depressed mothers and infants: Failure to form dyadic states of consciousness. In Murray, L. & Cooper, P.J. (Eds.), *Postpartum depression and child development* (p. 54–81). Guilford Press.

Vasconcellos, D. (2003). Devenir père : crise identitaire. Recherche pilote. *Devenir*, vol. 15, n° 2, p. 1991-20

Venable, E. T. (1994). *Dance movement therapy with an adolescent mother; A case study*, Master's thesis Emily T. Venable, Hahnemann University. Extracted on 01th March 2020 from http://idea.library.drexel.edu/bitstream/1860/1107/1/2006173022.pdf

Vermes, K. (2011). The corporeal turn: an interdisciplinary reader, by Maxine Sheets-Johnstone, *Body, Movement and Dance in Psychotherapy*, 6:3, 259-263.

Vlismas, W., & Bowes, J. (1999). First-time mother's use of music and movement with their young infants: The impact of a teaching program. *Early Child Development and Care*, *159*(1), 43-51.

Vlismas, W., Malloch, S., & Burnham, D. (2013). The effects of music and movement on mother-infant interactions. *Early Child Development and Care, 183*(11), 1669–1688.

Wilson, M. (2020). "Creating Attunement in Utero: Dance/Movement Therapy for Women Who Are Incarcerated While Pregnant". *Expressive Therapies Capstone Theses*. 330. https://digitalcommons.lesley.edu/expressive_theses/330 extracted 04/06/20.

Winnicott, D.W. (1965). *The maturational processes and the facilitating environment*, London: Hogarth.

Winnicott, D.W. (1971). *La consultation thérapeutique et l'enfant*, Gallimard, Coll. TEL, Paris.

Winnicott, D.W., (1956). La préoccupation maternelle primaire, in *De la pédiatrie à la psychanalyse,* Payot, « Petite Bibliothèque Payot », Paris, 1975, 168-174.

Winnicott, D. W. (2000). *La crainte de l'effondrement et autres situations cliniques*, Paris, Gallimard.

Yelland, J., Sutherland, G., & Brown, S. J. (2010). Postpartum anxiety, depression and social health: findings from a population-based survey of Australian women. *BMC public health*, *10*, 771.

Zhou, J., Ko, J. Y., Haight, S. C., & Tong, V. T. (2019). Treatment of Substance Use Disorders Among Women of Reproductive Age by Depression and Anxiety Disorder Status, 2008-2014. *Journal of women's health (2002)*, *28*(8), 1068–1076.

Web resources

American Dance therapy association. What is dance movement therapy, **https://adta.memberclicks.net/what-is-dancemovement-therapy**; extracted 20/01/21.

American psychology association. Postpartum depression. https://www.apa.org/pi/women/resources/reports/postpartum-depression, extracted 19/01/21.

Debray, R. (2010). Consultations et traitement de dyade mere/bebe ou de la triade pere/mere/bebe. http://www.spp.asso.fr/Library Extracted 02/04/2012.

Verreault, N. (2016). La dépression du postpartum. https://naitreetgrandir.com/fr/etape/0_12_mois/viefamille/fiche.aspx?doc=ik-naitre-grandir-maman-depression-postpartum-babyblue#:~:text=Les%20%C3%A9tudes%20rapportent%20que%20la,cas%20d'une%20d%C3%A9pression%20l%C3%A9g%C3%A8re. Extracted 19/01/21.

Tortora, S. Pregnancy wellness. https://www.suzitortora.com/pregnancy-wellness, extracted 20/01/21.

World health organization . Maternal perinatal health. https://www.who.int/maternal_child_adolescent/topics/maternal/maternal_perinatal/en/. extracted 19/01/21.

Annexes

Table 3: Extensive version of table 2: *DMT work with parents and babies aged up to 1 year old* (by the author)

Authors and Program, description and context	**Aims, concepts and practical tools named by the author**	**Study result/observation**
Kestenberg, Loman and Sossin (Loman, 2016, Sossin, 1999, Kestenberg, 1970) KMP as tool for formulation and therapeutic interve	Focus on non-verbal communication to support developmental steps with the use of creative and practical solutions, helping to demystify the issues. These newly-founded interactions help promote healthy attachment. Influenced by psychoanalytic theory and attachment theory. Aims to: - Create continuity between pregnancy and postpartum - Support child development and help through its growing phases and developmental crisis (sleep issues, frustration, separations etc…). -Help parents know their children better through information - Help parents build better communication with them. - Encourage parents to soothe their child and redirect the aggressive behaviors into satisfying and creative outlets. -Exploring alternative ways to hold babies (tendency to hold baby the way parents were held themselves as babies (Kestenberg and Buelte, 1977) lessens defensiveness and encourages flexibility amongst parents. First year: -Sucking (taking in nourishment, exploring the word through the mouth, soothing themselves through sucking) -Biting rhythms (teething starting around 6 months. New sensations of pain where	

ntion and preven tion	there was pleasure; start biting to alleviate pain then rhythms spreads through the body; sharp rocking back and forth, tapping, head banging) (Kestenberg Amighi et al. 1999); Discovering horizontal plane: rolling over, pushing up on all fours, sitting up, crawling. Children at that age need to establish trust in their caregivers and the predictable environment that is becoming familiar to them. Parents need to understand non-verbal signs and attune both their muscular rhythms and breathing rhythms flow to the child's. Beginning of a relationship of **mutuality and adjustment** to meet the child's need for nurturing, soothing, holding and support which will lead to a secure attachment. (Beebe, 2005; Stern, 1995, La Barre and Frank, 2011). KMP can provide techniques to soothe babies such as: -Supportive holding techniques, providing physical containment (=security, boundaries, formation of body image) -Matching the child's muscle tension through rhythmic rocking -Using deep breathing rhythms to create a feeling of dynamic support -Using equal intensity of both voice and movement equal to the child's in order to convey a feeling of presence to the child -Exploring alternative ways to hold a child as there is an intergenerational transmission of body qualities and of the way adults were themselves held as babies (Kestenberg and Buelte, 1977) ("Ghosts in the nursery" exist in kinesthetic modalities too"p196, Sossin). These techniques heighten feelings of competence and identification with the baby These will help caregivers when feeling overwhelmed with baby's crying and having difficulty soothing it. KMP as coping strategy Biting others, pulling hair etc.. can be redirected to games, pulling a doll's hair, tearing paper, banging on a drum, offering a biting ball… KMP: Addressing the non-verbal patterns of attunement, clashing, matching and mismatching, along with patterns contributing to and reflective of reciprocity, mutuality, sensitivity and attachment. KMP: -constitutional and maturational factors -regulatory processes	

	-range of available affects -mutual interaction patterns Attunement and clashing in dyad (Kestenberg, 1975) -Complete attunement -One-sided attunement (amongst babies of depressed mother for example) -Functioning for the other -Partial attunement -Selective attunement -Generalized clashing -Partial clashing -Selective clashing Ex: Can matching in timing but not inflow adjustment or space. Ex: Mother shrinking/narrowing saying baby is "entitled" and not letting him grow and widen: help her breathe with her child, smile in response to each other, hand game to gain confidence in herself and her child. Also follow child flow adjustment, indirect attention. KMP diagrams showing in which area dyads match or don't. Ex: Sharing flow tension patterns =empathy Clashing in shape flow patterns (ex: mother hollowing and child bulging= no trust, no predictability) Exploring effort factors in breathing with and providing support to the baby May share certain manners of defending but not relating **Video-taping can be useful; each partner's profile + interaction** **Therapists may use the interpretative value of KMP in addition to verbal techniques =helps parents see themselves in a better light** Shared patterns= harmony Support attachment in the making: Kestenberg (1975) "1. The more complete the attunement between maternal and infantile characteristics (sensory thresholds, modes of perception, preferred motor rhythm, specific frustration tolerance, modes of tension rise, and preferred tension reduction modes), the more truly symbiotic the relationship. 2. The more disparate and desynchronized the maternal and infantile characteristics, the more we can expect early clashing and later conflict.	

	3. The road to normality is difficult to assess because it consists of both clashes and attunements in a complicated quantitative, qualitative, sequential relationship (Kestenberg, 1975, p. 160). **Definition of empathy, Kestenberg (1985a):** The "capacity to know another person's inner feelings, based on sensory experiences. Empathy utilises attunement in tension flow, which is based on kinesthetic identification with the tension changes of another person"(Kestenberg, 1975, p. 162). Feeling of resonance = what allows the baby to follow the parent's lead in altering the tension flow patterns. Clashes/Attunement/clashes attunement: one partner follows the other "reinstatement of harmony creates a feeling of sameness that is an intrinsic aspect of empathy"(Kestenberg, 1975, p.141). **Clashes are more difficult to repair with significant depression.** Also describes "tension spots" (body parts remaining in high states of tension) and "dead spots" (body parts that have lost elasticity, remaining in neutral flow. These inhibit transmission of tension flow, but in a mutual exchange, babies can help relax the mother and animate dead spots. Attunement in tension flow is also a vehicle for recognition of affect in others. **Definition of trust, Kestenberg (1985a):** "Shape flow creates trust in the environment. It is the most effective vehicle for relatedness to others… (it) has many functions that are all programmed for interaction" (p143). 'The transmission of tension flows helps us to experience the nuanced feelings tones that go with breathing; the transmission of shape flow allows us to interpret these feelings and develop trust in ourselves and others." (p.144). An infant expects discomfort to be followed by comfort. Discomfort that is experienced for too long leads to a loss of trust. -Bipolar shape flow attributes= reflects dimensional factors modulating intake, output and expansiveness in relation to the environment. -Unipolar shape low attributes =serves attraction/approach to agreeable and repulsion/withdrawal from noxious stimuli.	
James M. Murphy	Aims to: -Improve communication between parents and babies. Workshops based on learning-by doing way of teachings Use of guided activities in ten parenting skills areas.	Parents feedback: -Changed some of their ways of caring for their babies

(1998), DMT, US Groups for mother, fathers and babies under one year old.	Participants recruited by word of mouth. 4 or 5 families per group. Often people who have themselves been in personal therapy before. More for well-functioning families than to treat troubled babies or families. Variety structured agenda (over 10 sessions): ● Sensory awareness ○ 1. Touching skill- The touch of health and healing ○ 2. Observing skill- Seeing more than is expected ○ 3. Hearing skills- Sounds in baby's world ● Parents interactions with baby: ○ 4. Playing skills-just for fun ○ 5. Communication skills- "Talking" without language ○ 6. Negotiating skills-my way or baby's way ● Providing care: ○ 7. Feeding skills- Hungry and full ○ 8. Sleeping skills-the rhythms of sleep ○ 9.Nurturing skills-Loving my baby ● Assessing dependence/independence ○ 10. Growing skills-Watching my baby grow. Teaching methods and techniques: ● Parent's attention to sequences ● Parents exploration of extremes in movement ● Focusing on one sense at a time ● Use of videotape and audio tape replay ● Parent's imitating baby ● Observing the baby with the other parent ● Role-playing ● Observing other babies interactions with their baby ● Learning from other parents in the workshop ● Exchanging babies ● Leader's observations of the group	-Increased their ability to articulate their understanding of baby's language -increased awareness of non-verbal interactions with baby -increased options in parenting -resolved some parents-infants conflicts -Increasedinteraction with their baby -increased the adaptation of their parenting to the specific needs of their unique baby at this stage of development.
Dawn Batcup (2004), DMT, UK. DMT groups, 6	Facilitating the exploration of the whole range of emotions, sharing thoughts and feelings that are difficult to acknowledge in a psychotherapeutic context through the use of creativity and non-verbal expression. Working with mothers and their babie in order to explore, better understand and develop this relationship. Framework: The DMT plus a nurse (to attend to babies and avoid sentimentality towards the children and envious relationships; 1 hour	Description of sessions; Good attendance levels and positive feedback from mothers. Difficulty with a psychiatric client group as thoughts

weeks, mother and baby inpatient unit (with varied mental health conditions) Constant supervision and uncertainty as whether the child might come home) Babies **under 8 months old.**	a week; Communicated by posters and presentations to both clients and nurses. Clinical supervision. Having an open, non-expert or judgmental approach, referring to infant observation literature. Interventions at time using therapeutic movement (Sherbourne, 1990) for babies safety (ex: helping repositioning). Influenced by Laban's movement analysis system for mothers ("in and out of focus"). Sometimes used baby's movement to inspire the group (used in infant psychotherapy). Use of music and props. Used a non-strict Chacian (in Chaiklin, 1975) model: -Beginning "warm up": Brief verbal interaction; 15 minutes warm up: 7 minutes for the mother to find ways of using movement in an exploratory way (client-led or -inspired, uses a client's movement to create a warm up) Babies, carried or in portable chairs, joining in sometimes, copying. Slowly changing the mother's focus from themselves, to the child. 7 minutes of interaction and observation of babies. Observation of the inter-relationship through the shape effort and flow qualities (Laban). Ex: massage/wrap themselves, then their baby. -Middle: Reduced therapist intervention and space for "free association/improvisation type of movements and words". Themes if the process is stuck. Around 15 minutes. (ex: peek-a-boo to explore separation; baby pushing with his feet to explore weight; mentioning something they like or don't like in the room to work on, naming good/bad; exploring low/middle/high plans, standing on one's feet, support mother's need) -End: in movement for 5 minutes and verbal process for 10 minutes: describing their movement experience in words and finding psychological links and meaning in what happened and what was felt. (ex: thematic of restrictions in new parent life). Themes that emerged: holding, attachment and separation, support, worries about not being "good enough mothers", dependency and neediness.	or acts of harming the baby might be a real risk or have taken place. More focus from the author towards the mother than babies,a case of "mothering the mothers".

Intuitive mothering, a group of infants and mothers with postpartum depression . Lasts 8 weeks. Hospital outpatient psychology group program. Child age from **7-9 months at start.**	Aims: Promoting mother-infant responsiveness Framework: One DMT plus one assistant Builds on what the mothers do **naturally** with their infants and also on each mother's wish to **enjoy** being with her baby -*Shared somatic partnership* noted for the mother in terms of Weight, Pace, Flow and use of space and direction (Laban) and for the child as use of toys and gestures towards the mother -*Neurobiological aspects of intuitive learning* (encouraging parents to trust their intuition) -*Liminal space*: a space on the border of everyday life, heightening the experience -*Contribution of play:* Important for both the child and the mother (endorphins, access to memories) use of toys and objects that provoke interest for the child[2], moving and dancing in a circle, in line and other forms. Moving to quieter music= experiencing a more internal somatic sense of herself while tuning to the infant and see what rhythms suit them both. -*What did you notice about your baby today?*	-Reduction in parental stress, maternal depression and anxiety (even 9-11 months after the program) -Improvement in mother-infant interaction that will allow for the child to develop social and emotional interchanges -Increase in mutual play and more confidence within 2 to 4 weeks. Limits of the study: No control group

[2] "Large squat cylinders to look through at each other, hanging stripey hoops to toss to each other, see-through silver thread scarves in which to hide and be discovered, textured fly swatters for joining peek-a-boo, small feather dusters to tickle each other's toes, bell balls to roll between each other, a long length of rainbow chiffon to explore the colours together, sand buckets for joint drumming and other noises."

Doonan F. and Bräuninger I. (2015) DMT, UK, Andorra Research study with mother and babies groups in Andorra and the uk. Age group ranging from 3 to 16 months old.	Support physical, social and emotional space with her baby How to respond to mother and babies needs based on attachment theory, developmental movement and DMT research. Identical training for the 2 DMTS, group structures, props and music in both countries. 45 minute sessions. Structure: -Circle around the parachute, singing the "hello" song to welcome each baby. -Check in/warm up to music (rubbing feet, hand, belly, face, tapping the floor and body with feet or hands). -Objects exploration under parachute -Baby observation and movement led by mother using mirroring and matching. -Free dance for mothers and babies around the room -Checkout and goodbye ritual	Quantitative study on impact on mother's affect (Positive affect negative affect schedule questionnaire) Qualitative evaluation of the elements most valued by mother-infants dyads. (Open questions) *Response to mother:* For dyads with babies under 6 months, results show the most pleasurable activities are rolling, rocking and twisting as well as increased eye contact For dyads of babies 8-9 months mirroring and moving together were most pleasurable. Between 8-14 months babies had fluctuating interests. *Response to the group:* 0 to 9 months babies were interested in and reacting to other

		babies, some increased their usual interest. *Babies interest to the outside world :* Under 6 months: Interest in toys increases with age. Music and mirrors were interesting for some. Motivational factors and benefits: -Social interaction for both mums and babies -Fun -Opportunities to learn about attunement (half noted some improvement) -Some noted a lasting impact of the attunement exercises -Imitation between children -Group recommended by all participants Points to improve: -Larger group -Explaining why things are done An increase in positive affects and a decrease of negative affects

		was also noted. Moving and dancing with baby was found to be the most enjoyable part of the session All mothers would recommend it to other mothers. Conclusions: Improves relational space (close to potential space) as well as physical space. Limits: No control group Would be useful to measure intersubjectivity and attachment pre/post group as well as compare DMT and movement and music groups.
Ruth Price in Celebi M. (2017), DMT, UK Community care contex	Therapeutic movement and meeting group Open group (4 to 14 babies) Free of charge Involved fathers who were encouraged by the mothers even more than the group leader. Even grandparents joined from time to time. Aim: Make space for both parents and baby and to enhance pleasurable experiences. Flyers, a website and invitation cards sent to health visitors. Facebook group. Word of mouth. Music, movement, props and rhythm. Chacian model: Check in/Physical warm up/expressive movement/winding down/check out	Author noted fathers were more physically involved than mothers. Feedback from parents: positive impact on the relationship with the baby and with each other. Appreciated slowing down and reflecting on how

t, first time parents, Age 0-12 months	Objectives: -Soothing: Movement helped parents to slow down, identify and experiment with rhythms that soothed their child. -Attunement supports attachment: role of therapist to nurture and structure the group, using her ability to attune and to create connections. Author used movement observation (KMP and Laban).	things actually were. Own needs of soothing or stimulation were met in the process. Although it wasn't the author's original intention, the group created a community and some parents became close friends thus reducing isolation. Limits: done voluntarily
Marina Rova In Celebi M. (2017), DMT Individual and group work in a Mother and baby inpatient psychiatric unit	Explore feelings and diverse stories of isolation, guilt and love. Supporting mother's interaction with their babies whilst attending to subtle nuances of non-verbal communication Creating opportunity for spontaneous joint movement and promotes bonding and attachment Movement prop (such as a giant stretchy cloth), art material, musical instruments and a selection of recorded music. Chacian group structure: -Opening circle: check in of mothers and babies. -Babies welcomed in the group with a hello song. -Guided warm up: dyadic and group movement Objective: Awareness of own and baby's bodies, breath and rhythms. Mobilising different body parts Engaging in relational interactions such as passing objects, exploring partner work and mirroring movements. -Development: Themes as they emerged in the here and now (ex:"I don't know how to play"). Utilising a giant stretchy cloth to rock babies. Core aim: *feeling safe* (feeling held to hold the baby) and *being seen* : through movement synchronicity (moving together) and mirroring (echoing each other). Therapist resonates and amplifies the client's	The author describes a case study of a mother who doesn't speak english and is very depressed and shows how through movement and sound she starts opening up.

	movement (quality, rhythm, affective content) which supports feelings seen by herself, therapist and others in the group.	
Sarah Haddow In Celebi M. (2017) DMT, UK Patients transitioning from acute inpatient ward to community mental health settings 10 week long group programs	Supporting mothers, babies and families affected by postpartum depression Create a space: Blankets on the floor, pillows, colourful fabric, disco lights, bubbles and small musical instruments. No chairs to be close to each other at ground level. -Trust as essential element: creating a safe space -support recovery -Grow sense of self worth Using body scan: helped to check in Movements of connection with babies and other mothers	