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Supporting appropriate parenting practices

A preventive approach of infant maltreatment in a community context [1]

Summary

Child maltreatment may be defined in terms of parenting practices that are either potentially harmful towards or actually harmful to the child's optimum development. It is, by definition, an interactional issue and one of the products of severe global interactional disturbances in the family relational matrix. Moreover, (a) the view of parenting practices as a continuum from competent to incompetent practices, and that parenting behaviors mix both adequate and inappropriate practices, and (b) the trend to develop and strengthen the positive aspects, compensatory factors, for preventing the occurrence of child maltreatment, provided anchor points to design the 'Mother-child Psychological Support Program'. This program is aimed at decreasing the risk of maltreatment by promoting appropriate parenting practices. The rationale for this preventive approach to infant maltreatment, on an individual basis, in a community context and some of its more relevant results on two specific areas: the risk of abuse and the developmental quotient, are presented.

There is a substantial agreement and consensus among professionals and researchers of child maltreatment about the necessity of focussing our efforts on 'prevention'. The concept of prevention presents itself as a problematic issue to define, not only on a theoretical basis but also on a practical level, as the debate in the context of the Concerted Action for the Prevention of Child Abuse in Europe (CAPCAE, 19981) has recently demonstrated. However, we may consider here prevention in its simplest meaning, as the actions that can be taken to prevent the 'identified condition' from occurring. This is what is called primary prevention in the tripartite classification, that has the pursued objectives by the actions as criteria, (Caplan, 1964, Mann, 1978). Those criteria are closely related to the assumptions sustained by the public and mental health fields where they have been applied to other areas (McMillan, et al. 1994).

Since the 1980s, some etiological models in the child maltreatment field have included not only risk factors, but also compensatory factors, that may buffer, in some ways, the

adverse effects of those risk factors and consequently, decrease the risk of maltreatment (e.g. Belsky, 1980; Cicchetti & Rizley, 1981; Wolfe, 1987). In the same vein, some authors (e.g. Helfer, 1982), pointed out the benefits of focussing primary prevention strategies on developing and strengthening the positive aspects (protective or compensatory factors), rather than directly addressing the negative ones (risk factors).

The key issue, however, for this approach that emphasises compensatory factors for preventing the occurrence of child maltreatment, is to determine how 'child maltreatment' can be operatively defined. First of all, child maltreatment (ill-treatment) is, by definition, an interactional issue (Cerezo, 1997a; Kadushin, 1981) and one of the products of severe global interactional disturbances in the family relational matrix (Cerezo, 1992). In this relational matrix, the child's normal development takes place through the accomplishment of his/her developmental task (for a review, see Cerezo, 1995). Thus, metaphorically, maltreatment may be considered as the visible part of an iceberg, which is supported by dysfunctional and risky parental child-rearing practices, and consequently it may be described in terms of inappropriate or incompetent socialisation practices and the course they follow (Wolfe, 1987, 1991). This view provides us with a real anchor point for the design of prevention and treatment strategies.

This first approach leads us, in a closer analysis, to consider parenting practices as a continuum from adequate and competent, to deviant or incompetent practices. The former are 'appropriate' because they promote the child's developing competence, while the latter are 'inappropriate or deviant' because they threaten or damage the child's optimum development. Accordingly, parenting behaviors mix adequate practices and, sometimes, inappropriate practices. Child maltreatment happens when either a process of recurrent episodes or an isolated action of parental (or substitute) abusive and neglected behaviors threatened the child's physical and/or psychological integrity and his/her development of competence. In other words, when those parenting actions are responsible for significant harm to children.

Two important implications derive from the previous considerations. First, maltreating parents still have some good or acceptable practices that can be used for rehabilitation purposes, and the parents 'in general' can display practices that may be changed to prevent them for becoming abusers. Therefore, child maltreatment is a phenomenon about which we still have a poor, and probably, distorted knowledge, because most of our current information, about risk factors for instance, is being provided by our studies conducted with *cases* of child maltreatment, that is, those children known by the system (Cerezo, 1997b). These so called 'cases' are mainly detected by Social Services, the most common input to the system and consequently, there are good reasons to think that cases' profile is rather the profile of social services users than of maltreated children and their parent population (Cerezo, Bronchal & Dolz, 1998). In other words, cases are not necessarily representative of the phenomenon. Therefore, if we want to approach the phenomenon, instead of limiting ourselves to specific 'risk groups' there is a need for designing *strategies addressed to the entire community*. Additionally, this broad strategy can avoid the additional problems that prediction of a low-frequency event, such as child maltreatment, implies due to the low efficiency of predictive models in this case, and the associated social stigmatisation for the selected subjects (Dingwall, 1989, Corby, 1996). Second,

maltreatment occurs when the parenting practices with a given child are crossing a certain threshold and affect the child's competence development, and this threshold depends on interplaying factors such as the child's age, gender, the nature and pattern of the abusive or neglected parenting practices, the appraisal that the child, as a victim, does of the situation (Finkelhor & Kendall-Tacket, 1997), etc. As maltreatment is an interactional issue, it may be assumed that although the threshold may move within a certain range, it is mainly an individual matter that needs *to be addressed on an individual bases.*

Finally, infancy is probably the most crucial period for a human being and where incompetent parenting practices may have a most adverse effect on the child because of their fragility and vulnerability in a context of absolute dependency. Thus, the period from birth to five years of age is the one of highest risk for maltreatment having fatal consequences, and the risk is even higher during the first two years of life (Browne & Lynch, 1995). In fact, 60% of fatal abuse and 50% of victims with permanent damage, mainly brain damage, are registered among the children under two years old (Newberger, 1982; cited by Hansen, Conaway & Christopher, 1990). Likewise, the average age for fatal abuse is 2,8 (AAPC, 1988). Moreover, the overall figures for fatal cases may be underestimated because, particularly in infants, death due to harmful, abusive or neglectful parenting practices can be mistakenly classified as deaths from natural causes or accidents due to vague death certificate description because maltreatment is not suspected (Cerezo, 1997c). Therefore, on the one hand, infancy as a target population for child maltreatment prevention fits one of the most outstanding strategies in primary prevention approaches: to apply specific actions to population sectors that are more vulnerable to the problem that it is intended to prevent (Bloom, 1968). On the other hand, the transition to parenthood is considered by some researchers as a stressful transitional event that is relevant enough to require psychological support (Auerbach, 1986; Felner, Rowlinson & Terre, 1986). Because it is a process that affects the couple relationship, particularly when the new-born is the first child, the newness of the situation requires important and quick adjustments to daily life which may cause conflicts that interfere with appropriate parenting.

The purpose of this paper was twofold. First, to present the rationale for designing preventive approaches to infant maltreatment on an individual basis in a community context. Second, to show how that rationale can be developed into a concrete response such as 'Mother-child Psychological Support' program, and some of its more relevant results.

Rationale for designing a preventive approach to infant maltreatment

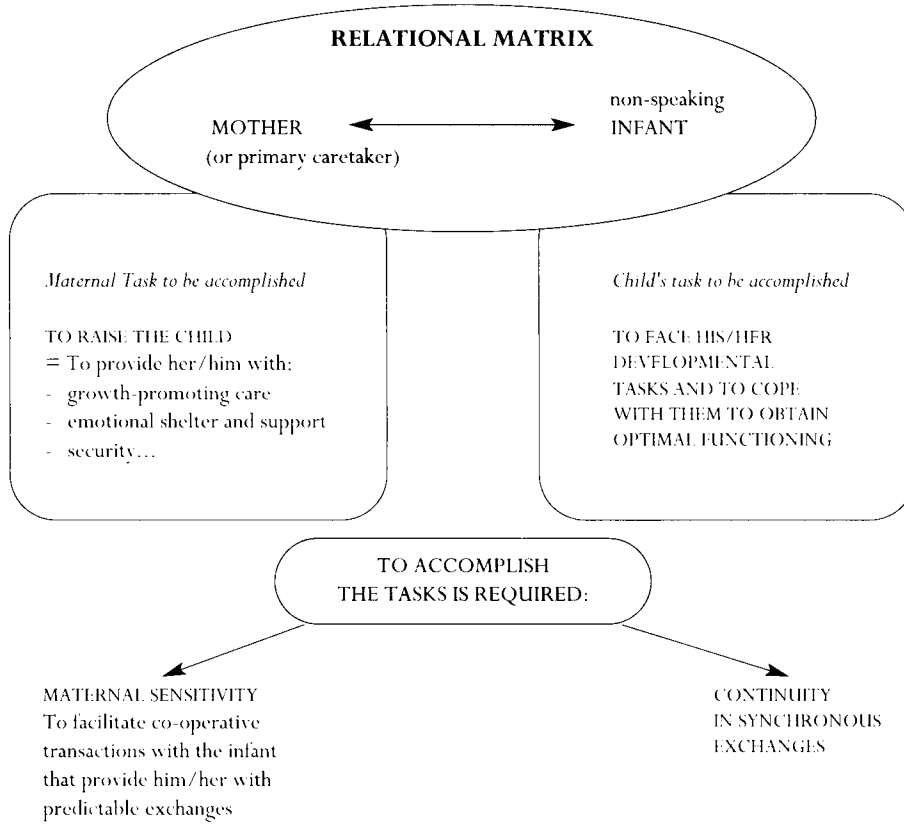
There are substantial theoretical background and empirical findings that, properly analysed and reviewed, can provide us with guidelines for designing approaches to prevent infant ill-maltreatment. Here, three important topics will be briefly covered to illustrate the main points on which the 'Mother-child Psychological Support Program' is based: the relational matrix and the child's developmental tasks, what we know about the impact of maltreatment in the first two years of life and its implication for the child's later life, and parenting practices involved in this period of the baby's life.

The relational matrix and the infant's developmental tasks

Each human being is born with a unique combination of characteristics (physical, temperamental, etc.) that will affect both growth and experience. The environment where the infant is born is also an unique combination of persons and circumstances. However, all of that is concrete in a dynamic way within a 'relational matrix' between the baby and 'other', the primary caretaker, in whose haven the interaction, on which the relationship is generated, develops (Cerezo, 1996). Not only aspects of physical health but also the support and encouragement of the optimal development of a child's competencies in socio-cognitive, emotional and behavioral domains take place primarily in this 'relational matrix' which initially pivots around a child's primary caregiver, parents or their substitutes, but then progressively, around other significant elements that are later incorporated (teachers, classmates, friends, etc.). The baby, through his/her repeated experiences of interaction within his 'little big world', gradually develops working models about the 'other', the 'world' and 'self' in the relational context. Thus, according to his/her interactional experiences the baby develops expectations about the available and the predictable that others and the world are to provide him with the comfort and security that he needs, and about himself as capable of being successful in his initiatives to get predictable and satisfactory outcomes. It can be said that from a developmental perspective, socialisation processes start within the relational matrix and through them the human being obtains the resources to connect with the other, with the world and with herself/himself. With this background the child approaches other future relational circles (Cerezo, 1995).

Taking a closer look, we find a non-speaking baby in the first year of life and a caregiver who has to learn quickly, sometimes under stressful circumstances, how to make sense of her non-speaking baby's signals and messages. Within this relational matrix, the mother, or primary caretaker, faces an important task to be accomplished that is to raise the child, that means to provide her/his with: growth-promoting care, guidance, emotional shelter and support, security, etc. On the other hand, the child has also an important task to accomplish: to face his/her developmental tasks and to cope with them to obtain optimal functioning. In this context, the caregiver needs to be sensitive, to facilitate co-operative transactions with the infant that provide him/her with predictable exchanges, and the baby needs social continuity through synchronous exchanges (Wahler, 1994) that allows him/her to develop adequate working models and interaction routines to accomplish his/her developmental tasks (see diagram 1).

The conceptualisation of parenthood as a task implies that the performance of the task may be analysed in terms of competency and lack of competency (Cerezo, 1990). 'Competency' from a Latin word 'competere' means that one thing is going to encounter other thing, that something is adequate to something; it implies two things by definition, so it is relational. There are parental competent practices because they are adequate to promote the child's development and incompetent or deviant practices because they are threatening or in fact damaging the child's development. It is an interesting point that this job of parenthood requires high doses of flexibility to the child's changing needs. In fact, what is considered as very appropriate maternal practice for a one-year old baby, can be very inappropriate if applied in the same way in the child's second year.



The appropriate performance of parenthood requires sensitivity, a complex construct that involves emotional, cognitive and behavioral dimensions. However, in very operative terms, to be sensitive as a caretaker means to be attuned to children's needs, to be able to read babies' often subtle cues and respond to then properly, to maintain synchronous exchanges with them (Cerezo, Pons-Salvador, Dolz, 1995). All these expressions point at the interactional nature of this meeting between two human beings, one who has to face his/her socialisation and the other who has to provide him/her with the physical and psychological support needed to go through the socialisation process. Moreover, this meeting has to be in harmony with a sort of rhythm that allows the child to climb the steps of his/her development staircase by obtaining the valued outcomes of emotional security, behavioral independence and social competence (Cerezo, 1995).

The stage-salient issues or developmental tasks that are characteristic of child development provide an anchor point to follow the path for a given child and analyse in what ways the tasks are being accomplished or, on the contrary, they are not appropriately promoted in the primary relational matrix. Briefly, it can be pointed out that in the first two years of life, the

two developmental issues that are most important are the development of attachment and the process of autonomy and self-development. More specifically, in the first 12 months the baby faces the modulation of arousal, his/her physiological regulation, the formation of secure attachment relationship with primary caregiver, and the differentiation and integration of emotional reactions. During the second year of life, the child faces the increasing awareness of the self as a distinct entity, the exploration of the environment, regulation and control of emotional reactions. The toddler also develops problem solving and mastery motivation, capacity to delay gratification and to tolerate frustration, awareness of standards and the language and communicative skills (Cicchetti & Schneider-Rosen, 1986).

The implications of this framework for a primary prevention program of infant ill-treatment provide us with clear guidelines. The strategy is to detect, on an individual basis, both, parental competent practices, to support them, and risky or inappropriate practices, to help the parents to modify those practices. In this way, the child's welfare and the adequate progress in the development of his/her competencies can be traced.

Impact of maltreatment in the first two years of life

Psychological research has shown very consistent relationships between parenting quality and parent-child interaction and the level of the child's functioning (i.e. Jacob, 1987; Maccoby & Martin, 1983). Therefore, parenting behaviors that are inappropriate to a baby's needs negatively affect the development of the child competencies in emotional, socio-cognitive and behavioral domains. For instance, mothers who are persistently cold and inaccessible to their babies, or parents who manifest hostility, simply have unrealistic expectations for their children, favor dysfunctional relationships that damage the child is psychological maturation processes. This damage is manifested in different facets of psychological functioning: lack of trust in human relationships, withdrawn and isolating behavior, distorted perception and coding of social signs, or coercive behaviors (for a review, see Cerezo, 1995). Thus, those children whose development depends on or is supported by incompetent, risky or harmful parenting practices are victims of maltreatment. It is remarkable that these victims are not only harmed during a fundamental period of their lives, during their formation and construction as a psychological being, but they are also harmed by the very person (or persons) on which their development totally depends, physically as well as affectively.

One of the obvious effects of maltreatment is the actual death of the victim, which is much more likely in young children. The remaining victims can be considered survivors of maltreatment. Because maltreatment does not comprise a homogenous category of harmful parenting actions or omissions, but rather each case is made up of a different combinations of harmful parenting practices, in order to trace the effect of maltreatment it is necessary to consider the overall parenting practices involved in the case (Cerezo, 1995; Cerezo, 1997c). Besides, the duration of these situations is a relevant factor as well. Therefore, the impact of these harmful parenting practices and their duration is the harm that the victim suffers, a harm that, in turn, manifests itself or develops in different ways depending on the developmental moment and the victim's characteristics (Cerezo, 1998b; Finkelhor & Kandell-Tacket, 1996). The impact is

also dynamic (Briere,1992) and manifests itself in different domains of psychological functioning. We will focus on the empirical data that indicates the impact of inappropriate parenting practices on the two most important developmental milestone in the baby's life: the development of attachment and the process of differentiation and self.

Attachment

The development of attachment is one of the most outstanding developmental tasks in the first year of life. The infant, through crying or complaints, caused by different factors such as pain, discomfort, hunger, noises, or being alone, is seeking mother's proximity and contact (Bowlby, 1969). The 'predictable' result for the baby's attachment behavior is to be successful in getting his/her caregiver's attention which provides the baby with comfort and security. Abuse, physical or emotional, and neglect interrupts the opportunity of providing the baby with the psychological safety and predictability that s/he needs. According to attachment theories, these children will develop an insecure attachment (Crittenden & Ainsworth, 1989; Crittenden, 1992), that can be assessed with the Strange Situation Test developed by Ainsworth, Blehar, Waters & Wall (1978). This test is a laboratory procedure that is expected to observe and assess the infant-mother relationship, via the infant's behavioral organisation in the context of the heightened-attachment experience.

The development of insecure attachment may be considered as an index of mother-child dysfunctional relationship, because findings show that some maternal interaction styles are more likely to be found as antecedents of particular attachment patterns. Four categories are currently used to classify the type of the child's quality attachment, one, B, for the secure type; and three for insecure attachment: A: anxious/avoidant; C: anxious/ambivalent, and D: disorganised

One of the studies that best illustrates the impact of child maltreatment on development of attachment, is the Project carried out in Harvard by Cicchetti. It's a longitudinal research, to study the developmental consequences of child abuse and neglect. Carlson, et al. (1989) compared two groups: 22 abusive (physically and emotionally) mothers vs. 21 non-abusive mothers and classified their 12 month old children according to the four categories of attachment. All the families were characterised by a medium-low socio-economic status. The authors reported that 82% of the maltreated children were classified as group D, and only 13% of maltreated children were classified as type B versus 53% from the comparison group. These differences, between the proportions, were statistically significant.

The excellent and classical review of Youngblade and Belsky (1990) of 11 studies that involved more than 900 children, concerning attachment of maltreated children, showed an outstanding consistency among results. Maltreated children, matched in age and socio-economic status with non-maltreated children, were significantly more likely to be classified as insecurely attached than their counterparts. This concordance is much more relevant when we see that cross-sectional and longitudinal studies were included, the ages ranged from 12 to 24 months. As well as that a modified and the original version of Ainsworth's procedure were used. Likewise, there was also agreement when the four categories were considered together.

Summing up, maltreated babies that grow up in childrearing contexts that are characterised by insensitive care and asynchrony with the baby's needs, because that care is either overstimulating and intrusive or underinvolved and unavailable, are more likely to fail in one of the most important developmental tasks, that is the development of secure attachment. The insecurely attached children's anxiety, activates conflicts between their seeking of proximity and contact with their mother and their tendency to avoid her because of previous adverse experiences that make her unpredictable. This consistent relationship, between child infant abuse and insecure attachment, supported by empirical research in recent years opened up a new way for preventing child abuse.

The differentiation between self and others

During the second year of life we see the emergence of a gradual process of differentiation between self and others, that is thought to be influenced by the infant's relationship with the caregiver. An emerging awareness of one's capabilities, goals, activities, feelings and actions is believed to be facilitated by the security of this early relationship.

Consequently, another area where we can study the consequences of early maltreatment is the development of self-differentiation in these children. The indices most frequently used to assess the cognitive and emotional facets of the self are: the visual self-recognition through the mirror-and-rouge paradigm and the quality of the child's affective responses to his/her mirror image. The presence of visual self-recognition is inferred from the infant touching his/her nose while simultaneously watching him/herself in the mirror. Some studies reported that maltreated toddlers are more likely to show neutral or even negative reactions to their mirror images than non-maltreated toddlers (Lewis, Sullivan, Stanger & Weiss, 1989). However, low socio-economic status sometimes is over-represented in the samples and it is difficult to disentangle the differential effect of these factors (i.e. Schneider-Rosen & Cicchetti, 1991).

Other aspects regarding the differentiation processes include independent engagement of tasks and emerging autonomy. These aspects were examined in the Mother-Child Interaction Research Project at the University of Minnesota, initiated in 1975 and conducted by Egeland. This is a well-known prospective, longitudinal study of 267 first time mothers and their children, who at the time of enrolment in the study, were considered 'at risk' of maltreatment due to economic disadvantage. From the original sample, 96 women were maltreating (physically abusive, hostile/verbally abusive, psychologically unavailable, and neglectful) their children at 2 years of age. Maltreated children were compared with their non-maltreated counterparts in a series of tool-using problem-solving tasks designed to capture those behaviors. Children were rated on the following dimensions: enthusiasm, dependency, non-compliance, anger, frustration toward the mother, coping, and persistence. All maltreated children, compared with the control group, showed significantly less enthusiasm, more oppositional behavior and more anger and frustration. Particularly poor was the coping strategies with frustration displayed by neglected children and children whose mothers were psychologically unavailable (Pianta, Egeland & Erickson, 1989).

To sum up, research points out that maltreatment affects the differentiation processes mainly in the emotional aspect related to the self and to emerging autonomy and coping strategies with frustration.

Parenting practices

Mother's (or other primary caretaker's) insensitivity is the basis of many maternal inappropriate practices, such as: being over-stimulating in a intrusive way that does not respect her child's pace or the turn-taking rhythm, or unresponsive to her child's search of proximity and contact, or inconsistent to the baby's approaches, or overtly rejecting the child in her way of manipulating and approaching to him/her (Isabella & Belsky, 1991). Thus, there are parenting practices that can be traced as noxious and harmful for the baby and therefore can be detected and modified in the relational context. However, to pursue these goals it is helpful to focus on the factors that are related to maternal insensitivity considering the different domains. Thus, lack of information about the child's needs and skills leads to misattribution, distorted perception and unrealistic expectations about child's behavior (cognitive area); lack of child management skills leads to prolonging the conflicts or even to create them (behavioral area); and high stress and lack of supportive relationships lead to permanent or temporarily lowered tolerance to demanding situations like child-rearing (emotional and social area).

All of these areas may be addressed in a prevention program to promote competent practices among mothers. There are also particular aspects that need attention, like teaching the parents adequate strategies for providing a safe environment, supervising the baby and protecting him/her from avoidable injuries, to teach how to manage the usual precipitants of abusive parenting, like crying, problems in feeding time, in bedtime, sleep patterns, and when the child walks, the tantrums and the oppositional behavior. Parent education and training in a supportive and personalised format must help these women (or primary caretakers) to cope with their new maternal role, providing them with the knowledge, skills, and emotional and social support needed for effective and healthy mothering.

'Mother-child Psychological Support' program, and some results.

Design and overall description

Based on the aforementioned theoretical basis, which integrates findings from different research areas, the program was designed by the first author in 1989. It is offered as a free service to the entire community and is funded by the Town Council, where the program is operating from and the Regional and Central Administration, by means of a contract with the University of Valencia, Spain, to which the team that applied the program and the director belongs. Currently, the program is included in the network of sites concerted with the University of Valencia for providing practices to the final year students of Psychology.

The program is addressed to all mothers and fathers of babies aged between 3 and 18 months to avoid the problems of selecting groups by risk factors or other characteristic, as was pointed out earlier. This strategy is feasible because in this community about 200 children are

born each year; the community of 20,000 people, approximately, located a few kilometres from a large city and is mostly made up of immigrants. The range of age was also justified by the special vulnerability of infants and the stress associated to the parenthood transition process.

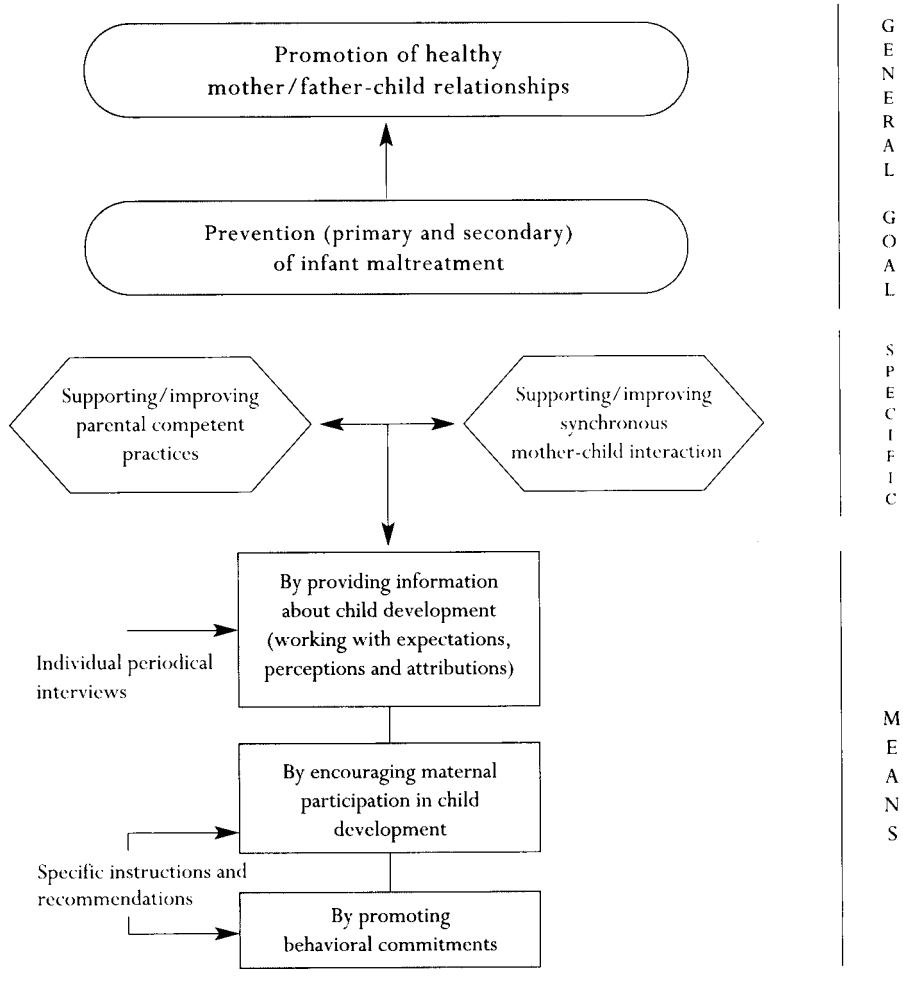
The program consists of 6 visits scheduled for each dyad on a periodic basis till the baby is 18 month old. The program is located in the Health Centre, where Paediatrician and Vaccination offices are also located, this facilitates co-ordination and mutual referrals. The visits are scheduled according to immunisation planning at 3, 5, 7, 12, 15 and 18 months. Being located in the same centre as Vaccination planning is a strategy recommended by WHO for special programs because immunisation programs reach almost the entire population in developed countries, and thus the availability for more marginal people is higher. The results of a pilot study about the program that compared the risk of people who participated in the program in 1990, people who did not participate and were interviewed at home, and people who were interviewed in the Vaccination office showed that the risk of people who did not participate was similar to the people interviewed in the Vaccination program, and higher than the participants' risk (Cantero, 1992). Consequently, after this pilot edition of the program which was located in Social Services offices, the program was translated to the Vaccination Office.

At each visit a developmental exam is done, the mother is asked several questions about how her child was doing from the last visit, if the father is present, both answer the questions, mother (and father) are required to play for a few minutes with the child to assess the quality of the mother-(father)-child interaction, and finally the mother (father) and the child go through a consultation with a member of the team. In this consultation, the interviewer explores all the possible conflict areas considering the information of the intake-interview and the data of the developmental exam, the main focus is on the child's developmental progress and what is expected, and other important issues are also addressed like the mother's attribution to the child's changes and behaviors (how does she perceive her child, how easy or difficult is his/her childrearing, stress factors that can interfere with childrearing, her emotional state, how she reacts to the typical childrearing problems, etc.) the information of her interactional pattern is also considered to indicate changes and modelling in the room, if necessary. If the two parents are present, their agreement and disagreement about their perception of these issues is also assessed.

The first visit includes filling some of questionnaires and an intake interview, where some information that can be analysed in terms of risk factors is included. Some instruments were designed for the purpose of the program, as well as other standardised instruments such as Child Abuse Potential Inventory (CAPI; Milner, 1986) and Parental Sense of Competence (PSOC Gibaud-Wallston & Wandersman, 1978; Johnston & Mash, 1989) are included. During the fifth visit the Strange Situation is applied to assess the quality of the attachment and it is used as an index of the child's socio-emotional development, the mother receives a brief summary afterwards, and also some post-assessment is carried out. Then, it is in the last visit with all the information during the entire period and the results of coding the attachment when the team decides if the mother and child must be followed for a longer period because there is either still a risk that needs to be decreased, or the situation has changed and new factors arise

that need to be addressed, other possibilities according to the situation may be considered such as refering the case to some other service or specific program for older children. Overall, each year between 20% and 25% of the participants in the program present some factors of risky parenting practices and consequently they receive a more detailed attention within the program. For instance, the consulting that takes place in each visit can last from ten minutes, if nothing relevant is found, to one hour if there is some work to do with the maternal interaction patterns, her attributions, expectations, or some special stress factors are happening like a couple rupture process, or adolescent single mothering, etc.

Mother-child psychological support program for babies aged 0 to 18 months old



Goals and means

The general goal is to promote physically and psychologically healthy and safe mother-child socialisation practices and relationships, through preventing maladjusted interactions in the child-rearing context. Because these maladjusted interactions may be abusive in the way of solving the conflicts and precipitate violent parental behavior towards the child or they may involve a neglectful parental behavior. A healthy and safe mother-child relationship implies synchronous interaction with the baby and competent practices (see diagram 2 at page 52).

To achieve this goal, several areas are explored with the mother (father): conflict issues (feeding, sleep, etc.), relationship problems, attributions, expectations about babies in general and about their baby in particular, ability of being sensitive to the child's needs, personal problems, marital problems, emotional state, and they become specific goals for each dyad.
To assess the progress in the achievement of the goals several means are used. Thus, (a) the risk profile and the situation in which the child-rearing takes place is assessed with instruments designed on an ad hoc basis; (b) the child's development is examined in five areas, fine motor behavior, gross motor behavior, adaptive behavior, language and social behavior, an overall Developmental Quotient (DQ) and specific DQ are obtained; in our experience DQ discrepancies between areas point out that parental practices that can be improved, for instance an 8 month old child who is doing well, according to his age in all areas except in gross motor behavior, usually is due to spending all his time sitting down usually in his chair and the mother does not pay enough attention to him. It should be pointed out that the developmental assessment make the mother more aware of her child's competence and how her baby is affected by the environment; the situation allows for a demonstration of face to face interaction with the baby and what kind of activities may be appropriate; (c) the patterns of interaction are assessed in at least three visits distributed between the first and the second semester, the video is coded by using a coding system 'Códigos de Interacción Temprana Madre-Hijo' (CITMI) Early Mother-Child Interaction Codes (Trenado, Bronchal & Cerezo, 1997) that allows for the scoring of the interaction sequentially in real time; (d) the development of attachment as an index of socio-emotional development through the Strange Situation (Ainsworth et al. 1978); (e) the parenting practices and their evolution are explored in each interview and contrasted with the rest of the information; (f) Child Abuse Potential score (CAPI, Milner, 1986), only the physical abuse scale, and Parental Sense of Competence score (PSOC, Gibaud-Wallston & Wandersman, 1978; Johnston & Mash, 1989) are also registered at the beginning of the program and at the end as complementary information.

The work with the mothers (or primary caretakers) is carried out on an individual basis. The interview about the results of the child's developmental exam turns into a training session when it is required by the case. We have information to check whether or not the child is accomplishing his/her developmental goals in the 18 months, the quality of the attachment, and information regarding the quality of the interaction with his/her primary caretaker, and how the child interacts with other people and objects as well. Consequently, it is feasible to guide the caretaker on a real basis that is specifically tailored to her child. Moreover, the

maternal report about her usual reactions to common child rearing problems, and about external factors that may interfere with the child rearing (unemployment, family crisis, etc.) plus her perception of the child and the attribution about the causes of the child's misbehavior, and her interaction style with her baby, sensitive or insensitive, by being either intrusive or uninvolved, are all important clues to develop a preventive intervention with a given dyad.

Some results

A program such as the 'Mother-child psychological support program' that has assessed more than 900 babies up to now, is a complex intervention in real life which makes it difficult to be assessed as a whole. In fact, it is a difficult task to translate the program objectives into research objectives that imply a tailored intervention to each dyad/triad (Medway, 1989; Owen & Mulvihil, 1994). An additional obstacle for methodologically appropriate assessment of programs like this one, is the difficulty of using an adequate control group for comparison. Although, it is absolutely necessary to test whether or not the goals are being achieved, on a global basis, it is also true for the program purposes, because the goal is to prevent each dyad (or triad) from using harmful parenting practices, whenever a participant dyad (or triad) is found to require a longer schedule of attention, the program offers them subsequent appointments. Here, we will present some selected and illustrative results on two specific areas on which the program can test its effects: the risk of abuse, and the developmental quotient (Cerezo, Cantero & Alhambra, 1997; Cerezo, 1998a).

The risk of maltreatment

The program is aimed at decreasing the risk of maltreatment by promoting appropriate parenting practices. Therefore, one facet to be assessed is the evolution of risk within the dyad. There are several indicators, but the two more directly related are the score in the Mother-Child Relationship Questionnaire-revised, (Cuestionario de relaciones materno-infantiles-revisado, CRMI-R; Cerezo, Cantero, Alhambra & Dolz, 1994) whose counterpart adapted to older children is the Maternal Habits Questionnaire (Cuestionario de Hábitos Maternos, CHM), and the score on the Child Abuse Potential Inventory, physical abuse scale (Milner, 1986).

The CRMI-R questionnaire, usually administered in an interview setting, includes two sections, the first one is dedicated to exploring the status of the dyad in terms of twelve risk factors that may be considered as structural or fixed like prematurity, single motherhood, early mother-infant separation, etc.. The second part is aimed at exploring functional (relational) factors like maternal habits and usual responses to common problematic situations. General caring behaviors with the baby in terms of hygienic care (bath and diapers), and health care (feeding schedules, paediatrician control, etc) are included in this section, as well.

A study was conducted with 138 dyads, randomly selected who participated in the program and their pre-post scores in CRMI-R (and CHM), on three items regarding responses to sleeping problems, crying and feeding (Dolz, Pons & Cerezo, 1996). For instance, 'when your baby cries at night, what do you do?' (a) Feel very nervous, (b) You hold and comfort your

baby until s/he stops, (c) You find out why s/he is crying, (d) You get very upset with him/her. These items were scorable from 0 (no risk) to 2 (high risk). The results showed that at the end of the program, the number of dyads who scored 0 increased and those with higher scores decreased and these differences were statistically significant (chi-square = 18.5; g.l. = 4; $p<.001$).

Cerezo, Cantero & Alhambra (1997) carried out a study with those babies whose participation in the program was equal or higher than three visits and had the post score through the CHM (Cuestionario de Hábitos Maternos). Sixty-four babies fulfilled those criteria and their potential abusive CRMI-R pre score compared with the entire pool of participants' score showed no significant differences. This indicated that the babies who met the criteria were not specially different from the large group. The pre-post comparison analyses on the maternal habit factor showed an statistically significant decrease by the end of the program ($F(1,126)=9.73$, $p<.005$).

Child Abuse Potential, CAP's score, has also been used as a way of estimating the effects of the program in terms of risk factors. From a random sample of 107 participants with pre- and post score on the Child Abuse Potential Inventory (scale of physical abuse) were selected those subjects whose pre-score was higher than 166, the cut-off point for non-clinical population. A total of 19.63% subjects from the large group fulfil this criterion. The average pre-score for this group was 212.76 (sd=37.03), close to the 215 cut-off point for clinical population, which decreased to 166.76 (sd=57.49) in the post-assessment. The differences between pre-test and post-test were statistically significant ($t20= 3.45$; $p<.005$) (Cerezo, 1998a). Although the group analyses may be encouraging, it should be emphasised that the interest of our program is focussed on each dyad, so those cases that do not display the expected changes by the end of the program, are followed and, if necessary, referred to other services to prevent them, on a primary basis or, by early detection, on secondary basis, from harmful parenting practices. Nevertheless, in methodological terms the main shortcoming of these aforementioned group results is the lack of a control group for comparison purposes.

The developmental quotient

As mentioned, finding adequate controls' is an important problem with programs that are addressed to the entire community. However, when a program, such as our program with a fixed calendar of visits, starts to operate, there is a unique opportunity to design a study that fulfils the methodological requirements for control groups. Thus, because the program is available for children from 0 to 18 months, when the program starts children within that range of age start their participation. Thus, those children that are already 18 months old can only participate once, children who are 15 months can only go twice, etc.. From these children, grouped by their age and number of visits, subjects can be randomly selected to form groups to be compared with their counterparts, also randomly selected from those that started the program when they were 2 or 3 months and keep their participation until the end. To complete a design like this, two years are needed.

Following this rationale, a study was conducted to test the effect of the program on the developmental quotient (DQ) as an indirect indicator of the mother's (or primary caretaker's) involvement in the child's development (Cerezo, Dolz, Cantero, forthcoming). Because in the program the mothers received specific instructions about how to play and stimulate their children as a way to promote sensitive interaction, and these mothers were monitored in the subsequent visits, it was hypothesised in an exploratory way that a higher participation in the program, in terms of number of visits, would be associated with a higher DQ.

Previous findings about how development can be affected by early intervention programs addressed to the entire community, showed moderate increases that sometimes were maintained in the follow-up (Olds, Henderson, Chamberlain & Tatelbaum, 1986; Wolfe, Edwards, Manion & Koverola, 1988), and sometimes did not (Madden, O'Hara & Levenstein, 1984). However, in contrast with the Mother-child psychological support program, all these studies, used home visitors and consequently, they can only be considered as partial antecedents (for a review, see Wekerle & Wolfe, 1993). The previous findings more directly relevant to the Programs were reported by Cerezo, Cantero & Alhambra (1997). The study involved 386 babies and was conducted with those babies that participated in the pilot phase, of the Mother-child psychological support program; in that phase the program finished when the child was 12 months old and a follow-up visit was scheduled at 18 months. The children who participated with at least three visits and also have a follow-up assessment six months later (Group P) were compared on their pre-, post (at 12 months), and follow-up (at 18 months) DQ with the pre-score obtained by the rest of the children who started the program (Group G), and two other control groups: children who were assessed by the first time when they were 12 months (Group C12), and children that were 18 months old in their first assessment (Group C18). Analyses showed that Group P and G were similar in their pre-score DQ, no significant differences, and Group P, at 12 months obtained a higher DQ than Group C12, the differences were statistically significant ($p<.0005$). Moreover, at the follow-up assessment, Group P showed higher DQ than Group C18, however the differences were marginally significant ($F(1,74) = 3.6$; $p=.06$). Analyses on DQ by areas, found that the fine motor area showed the highest pre-post change; this area is related to the instructions that mothers receive about how to play face to face with their babies by using their hands and little things. According to these results, the program seemed to increase the DQ and this increase was moderately maintained six months later, however the differences with the control group were only statistically marginal.

The study conducted by Cerezo, Dolz & Cantero, (forthcoming) involved 240 children. 120 were distributed in 6 experimental groups, according to their participation level (from 1 to 6 visits/sessions) and 120 composed the other 6 comparison groups. Thus, each group had 10 boys and 10 girls. Regarding SES, 80% of the families were classified as low (no parent worked) or low-medium (one parent employed in an unqualified job).

The analyses showed effects of both main factors: 'group' and 'level of participation' on overall DQ. Specifically, the statistically significant differences between the experimental and control groups started in the level 4, or fourth visit. In other words, at 12 months, at 15 months and at 18 months.

Conclusions

Several conclusions may be summarised.

Firstly, the important distinction between the phenomenon of maltreatment and 'cases' of maltreatment leads us to make the point that it is necessary to approach to phenomenon as the main starting point in trying to prevent abuse. A program such as the Mother-child psychological support, addressed to the entire community, shows that is feasible.

Secondly, infant maltreatment can be defined in terms of parenting practices that are either potentially harmful towards or actually harmful to the child's optimum development. Consequently, actions can be designed to modified incompetent parenting practices and promote appropriate ones.

Thirdly, to know what practices are being used with a given child requires work on an individual and longitudinal basis. This is the appropriate way to detect, for a given child, parenting practices that are risky, threatening or, in fact, damaging the child, and how to prevent those practices.

Fourthly, the program carried out at the University of Valencia, based on these guidelines, has demonstrated effects in those aspects that have been studied to date. The risk and the abuse potential decreased, and the child development increased. The results about the reduction in the risk of maltreatment on average can very tentatively be attributed to the program, because there were no comparison groups. However, the routine assessment and the interviews during the visits provide us with specific information that help us to focus on problematic areas, to reduce conflict and to promote better coping with the parenting role, dyad by dyad. On the other hand, the higher DQ of the participants may be attributed to the effect of the program because these studies included well matched control groups. DQ increments must be considered as an indirect indicator of the higher mother's involvement and awareness of her baby's development, because to improve DQ is not by itself a program goal.

Finally, to assess a program like Mother-child psychological support, that is carried out in a community context is a challenge. Several studies are being carried out, currently, about important aspects like the role played by the intervention on dysfunctional or risky dyadic interaction and how this affects the development of attachment. The most important obstacle for the studies' design is to obtain appropriate groups for comparison purposes. However, while the assessment work should be done and it is an endless task, we believe that to support appropriate parenting practices in the very beginning of the relationship, with a non intrusive and co-operative approach, is an important and feasible way to work on the prevention of infant maltreatment.

Note

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