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From Family Play to Family Narratives

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Children build relational models out of the history of their interactions with their social environment. As they are growing up, they internalize what they learn in those interactions, extracting invariants and organizing their intersubjective experience according to its repetitive features. These models have been conceptualized for example as "Internal Working Models" (Bowlby, 1969; Bretherton, 1993), or "Schemas-of-being-with" (Stern, 1994). On the one hand, they serve as guides for social interactions, and on the other hand they partly determine the self, the representation children have of who they are in front of other people.

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As we know from a long tradition of research and clinical practice, individual differences in self development arise depending on the quality of the child's relational context. A special emphasis has been put on the mother-child relationship as one of the main factors of influence on the child's social and emotional development. Several interactive processes explaining this influence have been identified, among others, "intuitive parenting" (Papousek & Papousek, 1987), "affect attunement" (Stern, 1985), or "responsiveness", defined as the ability to perceive and to interpret the infant's signals accurately and to respond to them appropriately (Ainsworth, Bell & Stayton, 1974). Based on attachment theory, researchers have, for example, consistently reported the relationships between the mother's "responsiveness" and the security of the infant's attachment behavior as well as the attachment model later built by the child during the preschool years (see Cassidy & Shaver, 1999, for a review). When responsiveness is altered, as it may be when the mother suffers from a psychiatric condition like chronic depression, the child is more likely to experience developmental disturbances or even psychopathological disorders. There is now evidence that the father-child relationship has the same kind of

influence, although with specific outcomes compared to the mother-child relationship (Connell & Goodman, 2002; Lamb, 1982). In general, parenting behavior is an intermediate variable mediating the link between the parents' affective state and the social development of the child (Fauber & Long, 1991).

Family Interactions and Child Development The social environment of the child does not come down to the motherchild relationship. Any dyadic relationship occurs in the context of the family and is also influenced by the quality of relationships within the larger family system (Emery, Fincham & Cumings, 1992). Moreover, the family in itself has an impact on the child's development; every family develops a "culture" regarding the relational world (Bruner, 1990), and when family relationships are discordant (in the case of marital conflict, for example), the child may have emotional problems even if there is no disturbance in each individual mother-child and fatherchild dyad (Katz & Gottman, 1991; McHale & al., 2004). Several processes explaining this influence have been conceptualized: the loss of a sense of "security in the family system" (Davies & al., 2002), which should play the role of a "transitional space", so to speak, between the inside world of the family and the

broader external social world; the cognitive and emotional incongruence stemming from a co-parental conflict in which the child has to cope with contradictory or even paradoxical messages about relationships (McHale & Rasmussen, 1998), and, of course, the long time described triangulation process, in which the child is taken as a "go-between" in her parents' conflict (Minuchin, Rosman & Baker, 1978).

All those processes are specific expressions of more general interrelations between the family and the individuals within it. In a seminal paper, Reiss (1981) described two systems of transmission between the family culture and individuals: the "coordinated practices", which refer to the actual interactions within the family, and the "represented family". which is a system constituted by the set of rules and beliefs shared by the family about relationships. During infancy, as long as the child is in a pre-verbal stage, the family "model" is mainly transmitted through coordinated practices. Then, as the child is growing up and language emerges, the model is also transmitted and negotiated verbally, and narratives become a factor in the transmission of the represented family.

The extent to which the coordinated practices – the enacted relationship - and later narratives about relationships rely on the same underlying processes remains an open question.

Family Interactions During the First Two Years
Several studies have shown the stability of the quality of family interactions throughout the transition to parenthood. Several features of post-partum interactions (like warmth in emotional exchanges, role organization between parents, coparental interactions) are already

present in pre-partum interactions (McHale & al., 2004; Van Egeren, 2003). Our own longitudinal study with non referred families (N=51) has even shown that during pregnancy, in a pretend game with a doll, co-parental interactions are predictive of the family interactions during the child's first two years (Favez & Frascarolo, 2002). This stability has been assessed according to three interactive family variables: "participation", the extent to which all partners are included in the interactions, "cooperation", the extent to which partners are acting together in a coordinated way, and "affect sharing", the extent to which affects are validated and there is an "emotional benevolence" between partners. The interplay between these variables defines the quality of the "family alliance" (Fivaz-Depeursinge & Corboz-Warnery, 1999).

Families were seen in our laboratory at the 5th month of pregnancy, then when the infant was 3-, 9- and 18months old, in various observational situations (like the Lausanne Trilogue Play, Corboz et al., 1993). At each of these time points, most families show what we call a "cooperative alliance": each partner is included in the interaction, turn-taking is observed between partners, and predominant affects are positive. One of the best indicators of the quality of interactions in those families is the ability to repair "false steps". As most of the interaction is regulated by implicit rules, there are from time to time miscoordinations or misunderstandings between the partners - both parents trying to attract the child's attention at the same time when playing with her, for example. This will not be followed by negative affect, as if parents were competing with one another, but will lead to explicit negotiation, or to a quick signal (both parents will laugh briefly) which will mean something like

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"we have done something wrong" and then the interaction will resume.

In some families however, interactions are marked with specific difficulties, like competition between parents ("conflictual alliance") or even exclusion of one of the partners ("disordered alliance"). In those cases, false steps are numerous and may lead to a symmetrical escalation rather than repair, parents will keep on "struggling" to get the child's attention or will even put an end to the play. Affects in those cases are often negative, or, in more covert cases, positive but with a forced tone to them. There might be a negotiation about each others roles, but it ends up in an endless argument, neither parent being satisfied by the result.

We are now completing a follow-up of those families at age 5, exploring two main questions; is the interactive organization (the coordinated practices) of the families still the same? Is the way the family is telling a story about family relationships (the represented family) linked with its interactions? Our preliminary results speak to the stability of early interactions and to an analogy between coordinated practices and the represented family. To illustrate this we will, in this paper, describe the interactions of two contrasted families. When their first born child was 5 years old, they were invited to participate in two observational situations: the first one, a pretend picnic in the lab, is designed to observe family interactions. The second one, the telling of a narrative about an emotional event, is designed to explore the family's representations.

The observation settings The Picnic Game (PNG) The whole family (including any siblings of the child) was invited to engage in a pretend game of having a family picnic: arrival, preparing and having the picnic, playing together if they want, and finally cleaning up. The family interaction was videorecorded in a room equipped with a green carpet representing the grass, a bench, a table, some chairs, dishes in a basket and toys in bags (Frascarolo & Favez, 2005).

Mealtime interactions provide rich opportunities for the observation of family dynamics. Mealtimes involve, by their very nature, the distribution of food, the negotiation of conversation and exchanges of emotional expressions. They set the stage for parents and children to enact their familiar roles within the family. They can also involve stressful situations for families that elicit some kind of co-parenting intervention and emotional expression. For example, parents are faced with children throwing their food, leaving their seats, or announcing with real conviction that they are "all done" after taking two bites of food (Boyum & Parke, 1995; Feiring & Lewis, 1987; Hayden & al., 1998). There are however, some disadvantages to naturalistic observation of mealtimes. such as variation in the number and diversity of courses and practical constraints inherent to the room available for filming the situation. The PNG situation was designed to allow a greater standardization, while leaving all aspects of family organization rituals, limit setting and affect sharing open. The aim is thus to have an ecological assessment of family interactions, close to real life conditions but in a standardized context.

This game is generally perceived by the family as entertaining. We actually present it to the family as a game, inviting them to be creative, to develop the playful aspect of the task. Seven point Likert scales are used to evaluate the game according to several dimensions related to family alliance:

- Richness of configuration: does each family member interact with several different partners, forming different configurations during the game?(participation)
- Autonomy of the child(ren) subsystem: do the children show autonomy? (participation)
- Co-parenting: do parents work together and support each other in their parental tasks? (cooperation)
- Structure of the task: does the game develop according to a narrative curve? (cooperation)
- Limit setting: are the parents lax, authoritarian or authoritative? (cooperation)
- Presence of a moment of marital sharing: is a positive sharing between husband and wife as spouses and not as parents observed? (affect sharing)
- Family warmth: is the emotional atmosphere rich and harmonious? (affect sharing)

The Narrative Trilogue Play (NTP)

In this situation, parents are invited to help the child to tell a story, with little dolls, about a child left with two known caretakers for a week-end during which her parents take time together. Thus the main topic is the separation of the child from her parents, which is known to be an emotionally challenging topic for children of this age. The situation is built in three parts; we first ask the mother to help the child, then the father takes over and finally the three of them tell the story together. Duration of each part is left to the family.

Family narratives reflect how the family gives meaning to the social world. As soon as the child can talk, autobiographical events are shared with her; narratives are co-constructed as a joint activity in the family. The family values (or not) the activity of telling a narrative, the kind of event that is narrated and the emotional tone it is given (Bruner, 1990, Stern, 1994). The official history - what is coconstructed in narratives - might then be more or less close to the lived event - what was "really" experienced. The construction of a narrative is indeed a re-elaboration of a lived event. It organizes the experience according to the constraints of the narrative form: there is an agent, an action, a place, a time. In addition, one core component of autobiographical narratives is the affective evaluation of the experience, which is the narrative's motive (Labov, 1972). Families are not only talking about what happened, but also about how they feel about the event, about the emotional meaning of what happened, and, what is more, they talk about what should have happened - which is one of the ways family narratives regulate social interactions (Fiese & al., 1999). The affective content of narratives is sensitive to the quality of the relationship, as research on dyadic parent-child conversations has shown in the area of attachment (Main & Weston, 1981) or in the recollection of an emotional lived event (Favez, 2003; Oppenheim & al., 1997).

Narratives are transcribed verbatim and coded with the Narrative Evaluation Scales, which assess three levels of the narratives through fivepoint rating scales:

• The family interaction during the narratives (eight scales; e.g. is each member of the family included, is there negotiation about who does what?) (participation and cooperation)

- The structure of the story (six scales; e.g. coherence of the story, chronological order of events) (cooperation)
- The content of the story (eight scales; e.g. mentioning negative or positive affect, elements of action, character's state of mind) (affect sharing)

case Studies

Case 1

Family X is composed of the father, mother, one girl aged 5 years and one girl aged 20 months. They belong to the upper middle socio-economic class. During the first two years, this family was representative of a cooperative alliance, with coordinated interactions and marked with positive affects.

The Picnic game

In Family X, the parents playfully invited the children to pretend they were arriving and choosing a good place. The father took care of the children while the mother was preparing the meal. Before she finished, she stopped and joined them. The father took over the task of preparing the meal from the mother, despite her suggestion they should go on playing for a while before the meal, because, as he said, he was very hungry. This short episode seemed rather confrontational. When the meal was ready, the father invited the others to come. The mother took up the father's proposition. When they were all installed around the table, the father said the mother had prepared a very good meal and listed some dishes. It may have been a kind of reparation for the slight conflict mentioned above. When they were talking about what they were going to drink, the father asked the elder sister if she wanted a glass of wine. She answered "yes". Both parents, simultaneously, leaned forward and repeated in disbelief: "a glass of wine?". This was a moment of coparental togetherness. The elder sister didn't stay long at the table. The father began to insist that she remain at the table and eat a little more but the mother said that playing was a kind of nourishment and the father followed her point. Afterwards, the parents discussed the younger child's interests. A bit later, the mother announced a storm, the father backed this initiative and all of them quickly cleaned up before the coming rain. At one point the mother asked: "Who forgot the raincoats?"A few seconds later the father said: "Wow, all the salad sauce has spilled on the dish basket!" These two assertions sounded confrontational, but the third, "It doesn't matter" said by the mother, calmed things down.

The whole game had a nice narrative curve, demonstrating imagination and fun. Despite some confrontational moments, followed by reparation, the parents validate and even support each other. There is a short moment of sharing at a marital level when the father asks his wife if she is finished with the meal. Moments of co-parental sharing are observed, in particular at the end of the meal, when the parents discussed their youngest daughter's interest in some toys. The general atmosphere was rich and harmonious, rather warm. The children showed little autonomy despite their parents not being overbearing. Few limits were set and they were respected in a flexible way.

The Narrative

The story is started by the father. He immediately establishes an affective topic:

- 1. Father: Mummy and Daddy want to spend a week-end together, like two people in love with each other.
- 2. Child: Yes
- 3. Father: So what are they going to tell their little boy?
- 4. Child: "We want to go", "Three weeks"

- 5. Father: OK, but they first have to explain what they will do
- 6. Child: They want to go like people in love
- 7. Father: Does the little boy know what being in love means?
- 8. Child: Hmmm, yes, hmmm. It means being able to chat together in peace.
- 9. Father: So the little boy says: "Am I going to be alone at home?"
- 10. Child: No, we'll have someone looking after us
- 11. Father: So is the little boy OK with this?
- 12. Child: Yes he is.

Then the mother takes over the theme, explaining what the parents are going to be doing, and introducing a new element: the little boy is with a friend.

- 13. Mother: What do they do (the little boy and his friend) while mummy and daddy are in the mountains?
- 14. Child: Well... they play, they play and they eat
- 15. Mother: So mummy and daddy are chatting ... and they think about their little boy
- 16. Child: Yes
- 17. Mother: Yes, three weeks is a long time

Finally, father, mother and child are taking turns in completing the story:

- 18. Father: The little boy is bored, he says "awouh" my parents are not here
- 19. Mother: Well, we can phone the little boy. Drring drring... 20. Child:....
- 21. Father: He doesn't answer. I think he's crying
- 22. Child: Let him cry (from this moment onward the child is taking the stance of the person in charge of him when the parents are not there). I'll take him on holidays.
- 23. Mother: Oh, OK, so we'll be back in two days
- 24. Child: So I'll come quickly with the car. And I'll fetch the little boy.

25. Father: That's the end of the romantic holidays26. Child: Yes, but they... but they get along really well

This excerpt shows that affective themes can be mentioned and elaborated. The separation is mentioned and is the core of the narrative's "drama". Mother and father are scaffolding the child's narration in turn. Interestingly, the child shows some resistance (20, 22) when the parents are trying to talk about the reunion (18,19), but the mother steps back (23) and then the story can come to an end. The three parts of the situation can be clearly identified.

case 2

Family Y is composed of father, mother, and two girls aged 5 and 3 years old. They belong to the upper middle socioeconomic class. This family showed a lot of covert conflicts during the first two years, with some negative affects in interactions and also a great deal of forced positive affects. They are representative of a "conflictual alliance".

The Picnic game

In Family Y, there is a serious lack of organization. The family stayed in the same place, in the same configuration, from nearly the beginning till the end of the game. They became caught up in conflict about the distribution of the toys between the two sisters. This conflict started between the girls but rapidly became the parents' conflict, father more or less accusing mother of unfair sharing. Busily arguing with each other, they did not even have the picnic and, of course, they did not share positive affects. The older child was sometimes excluded in her distress, and at other times was at the center of attention, but in a rather painful way. A lack of co-parenting was observed, one parent's words not being followed or at least confirmed or validated by the other parent. There is no sharing between the spouses (at a marital level). Indeed, their

discussion is always concerned either with the task or the children, and the emotions expressed are generally negative.

The structure of the task is lacking and virtually only one configuration is observed. Because of the open conflict, the emotional atmosphere is definitely not harmonious. The children's autonomy is poor, the parents intervene often, sometimes in a rather lax way (several threats followed by no action) or, on the contrary, in an authoritarian way.

The Narrative

At the beginning of this task, some negotiation about telling the story is observed

- 1. Father: You have to tell the story
- 2. Child: But I don't know
- 3. Father: So I'll explain about it to you
- 4. Child: No. Those ones are the parents (showing two toys). They are the parents
- 5. Father: OK, so we'll put them here 6. Child: No. I...
- 7. Father: And we will go on our week-end and you'll put them
- 8. Child: No
- 9. Father: Tell me. So tell me the story
- 10. Child: No

Then the mother takes over the negotiations

- 11. Mother: Who is this here?
- 12. Child: No, don't touch them
- 13. Father: Stay seated!
- 14. Mother: Stay seated
- 15. Child: Give me this one and then

I'll give it back to you, OK? Now, I'll count them, one, two, three, four, five, six and then we will put them away.

- 16. Father: Not for the moment
- 17. Mother: You still have to play for a little while
- 18. Child. Oh no

19. Father: Are you not able to play alone?

In this family, the story just cannot begin. There are never-ending negotiations about the role of each member of the family. The child refuses to participate, and almost all the conversation is about the situation itself and not about the narrative concerning the proposed theme. The three-part structure is not respected.

Discussion

The family alliance is made up of three variables: participation, cooperation and affect sharing. Our longitudinal study shows that the quality of the interactive alliance is stable from the pregnancy with the first child through until the child reaches the age of 5. Moreover, as illustrated by the two contrasted cases presented in this paper, the organization of an interaction is related to the way the family – as a whole – tells a narrative about positive and negative relational events.

For Family X, a "good enough" alliance operates as a guide or template to organize interactions at different developmental ages and stages. As participation includes all partners, and cooperation allows smooth turn-taking and a consensual distribution of roles, affects can be shared and regulated in interactions as well as in the co-construction of a story involving potentially negative affects.

On the contrary, for Family Y, participation and cooperation — agreement about who will play and who will do what — in the picnic game are not satisfactory, and unsuccessful negotiations and symmetrical escalation occur frequently. As a consequence, the goal of the play — having fun together — is not reached and being together seems to be more of a challenge.

Those difficulties are the same in the narrative co-construction; what we observe is an inability to co-construct a narrative – this means sharing emotional themes with others proves to be impossible. Congruence is thus observed between the practiced and the represented family (Fiese & al., 1999)

In terms of outcomes, it is worth noting that the families with these interactive difficulties are also the ones who consistently describe their children as having more separation problems and more behavior problems during the preschool years. Although we lack other data about children's adjustment, we know that parents with emotional or relational difficulties tend to report more problems in their children than do other parents (Wildman et.al., 2004).

Our results seem to show an underlying continuity in the development of the family: the style of interaction - the alliance as we defined it - remains the same while manifesting at different levels of interaction and in differing ways at different stages of development. The alliance is thus a model which serves as a template for the family's relational life. We now have to explore the mutual influences between the family alliance and the different dyadic relationships within the family (mother-child, father-child, motherfather as co-parents and as spouses).

In any event, the longitudinal stability that we have observed is a call for early intervention, as interactions in the pre- and immediate post-partum periods are good predictors of the later development of the family.

References

Ainsworth, M., Bell, S., & Stayton, D. (1974). Infant-mother attachment and

social development: Socialisation as a product of reciprocal responsiveness to signals. In M. Richards (Ed.), The integration of a child into a social world (pp. 99-135). Cambridge: University Press.

Bowlby, J. (1969). Attachment and loss. Vol. 1: Attachment. New-York: Basic Books.

Boyum & Parke (1995). The role of family emotional expressiveness in the development of children's social competence. Journal of Marriage and the Family, 57, 593 – 608.

Bretherton, I. (1993). From dialogue to internal working models: The co-construction of self in relationships. In C. Nelson (Ed.), Memory and affect in development (pp. 237-263). Hillsdale, NJ: Lawrence Erlbaum.

Bruner, J. S. (1990). Acts of meaning. Cambridge, MA: Harvard University Press.

Cassidy, J. & Shaver, P. (Eds). (1999).
Handbook of attachment: Theory, research, and clinical applications. New York:
Guilford Press.

Connell, A. & Goodman, S. (2002). The association between psychopathology in fathers versus mothers and children's internalizing and externalizing behavior problems: a meta-analysis. Psychological Bulletin, 128 (5): 746-773.

Corboz-Warnery, A., Fivaz-Depeursinge, E., Gertsch Bettens, C., Favez, N. (1993). Systemic analysis of father-mother-infant interactions: The Lausanne triadic play. Infant Mental Health Journal, 14(4), 298-316.

Davies, P., Forman, E., Rasi, J., & Stevens, K. (2002). Assessing children's emotional security in the interparental relationship: The security in the Interparental Subsystem Scales. Child Development, 73(2), 544-562.

Emery, R., Fincham, F. & Cummings, E. (1992). Parenting in context: Systemic thinking about parental conflict and its

influence on children. Journal of Consulting and Clinical Psychology, 60 (6), 909-912.

Fauber, R. & Long, N. (1991). Children in context: The role of the family in child psychotherapy. Journal of Consulting and Clinical Psychology, 59 (6), 813-820.

Favez, N. (2003). Patterns of maternal affect regulation in the domain of the co-construction of preschooler's autobiographical narratives. In R. Emde, D. Wolf & D. Oppenheim (Eds), Revealing the Inner Worlds of Young Children: The MacArthur Story Stem Battery and Parent-Child Narratives (pp. 302-323). New-York: Oxford University Press.

Favez, N. & Frascarolo, F. July 2002. The nascent family alliance. In E. Fivaz-Depeursinge & J. McHale (Chairs). New evidence for coherence in family dynamics from zero to three. 8th WAIMH Congress, Amsterdam, Holland.

Feiring & Lewis (1987). The ecology of some middle class families at dinner. International Journal of Behavioral Development, 10 (3), 377-390.

Fiese, B. H., Sameroff, A. J., Grotevant, H. D., Wamboldt, F. S., Dickstein, S., & Fravel, D. L. (1999). The stories that families tell: Narrative coherence, narrative interaction, and relationship beliefs.

Monographs of the Society for Research in Child Development, 64 (1, Serial N° 231).

Malden, MA: Blackwell Publishers.

Fivaz-Depeursinge, E. & Corboz-Warnery, A. (1999). The primary triangle. New-York: Basic Books.

Frascarolo, F. & Favez, N. (2005). Une nouvelle situation pour évaluer le fonctionnement familial: le jeu du Pique-Nique. Devenir, 17 (2), 13-17.

Hayden, Schiller, Sameroff, Miller, Keitner & Rasmussen (1998). Levels of family assessment: I. Family, marital, and parentchild interaction. Journal of Family Psychology, 12 (1), 7-22.

Katz, L. & Gottman, J. M. (1991). Marital discord and child outcomes: A social psychophysiological approach. In J. Garber & K. Dodge (Eds.), The development of emotion regulation and dysregulation (pp. 129-155). Cambridge: Cambridge University Press.

Labov, W. (1972). Language in the inner city. Philadelphia: University of Pennsylvania.

Lamb, M. (1982). Parent-infant interaction, attachment, and socioemotional development in infancy. In R. Emde & R. Harmon (Eds.), The development of attachment and affiliative systems (pp. 195-211). New-York; Plenum Press.

McHale, J., & Rasmussen, J. (1998). Coparental and family group-level dynamics during infancy: early family precursors of child and family functioning during preschool. Development and Psychopathology, 10, 39-59.

McHale, J., Kazali, C., Rotman, T., Talbot, J., Carleton, M. & Lieberson, R. (2004). The transition to coparenthood: Parents' prebirth expectations and early coparental adjustment at 3 months postpartum. Development and Psychopathology, 16, 711-733.

Main, M. & Weston, D. (1981). The quality of the toddler's relationship to mother and to father related to conflict behavior and the readiness to establish new relationships. Child Development, 52, 932-940.

Minuchin, S., Rosman, B. & Baker, L. (1978). Psychosomatic families. Cambridge: Harvard University Press.

Oppenheim, D., Nir, A., Warren, S. & Emde, R. (1997). Emotion regulation in mother-child narrative co-construction: Associations with children's narratives and adaptation. Developmental Psychology, 33 (2), 284-294.

Papousek, H. & Papousek, M. (1987). Intuitive parenting. A dialectic counterpart to the infant's integrative competence. In Osofsky J.D. (ed): Handbook of infant development, pp. 669-720, Wiley, New-York

Reiss, D. (1981). The family's construction of reality. Cambridge: Harvard University Press

Stern, D. N. (1985). The interpersonal world of the infant. New York: Plenum Press.

Stern, D. (1994). One way to build a clinically relevant baby. Infant Mental Health Journal, 15(1), 9-25.

Van Egeren, L. (2003). Prebirth predictors of coparenting experiences in early infancy. Infant Mental Health Journal, 24 (3), 278-295.

Wildman, B., Stancin, T., Golden, C., & Yerkey, T. (2004). Maternal distress, child behaviour, and disclosure of psychosocial concerns to a paediatrician. Child: Care, Health and Development, 30(4), 385-394.

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Early Signs of Autism

Findings and Insights from Home Movies Research

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Autism occurs early in life and is usually described as characterized by social, verbal and nonverbal impairments, and rigid repetitive behaviors. Although there have been significant advances in genetic and biomedical research, there is currently no biological marker for autism, therefore screening and diagnosis must be based on behavioral features.

The availability of home movies of infants, made before parents suspected anything unusual about their children's development, can allow us to overcome the lack of studies involving direct observations of infants with autism due to the fact that autism has not yet been diagnosed in infancy.

According to the growing literature, beginning with Massie and Rosenthal's study (1984), retrospective video analysis is an effective tool for looking at the emergence of autism, arriving at an earlier suspicion of autism, and for helping to prepare early screening instruments. Last but not least, working on home movies may enable the development of a video-guide to help parents screen their children for autism, so that they can seek professional help more quickly and this may, at the same time, enhance professionals' ability to recognize autism in the first year of life. Finally it may reduce the delay between parental concern and clinical diagnosis.

This delay indicates that early signs may often be noticed by parents before identification can be made according to normative evaluations of signs and symptoms in behaviors observed clinically, outside the home. In early infancy, when the child is mastering comprehension of surroundings and the use of objects, the signs of autism are not reliably distinguished. They do not differ much from the initial manifestations of some other pathologies of mental development, or from normal variations in temperament and personality or orientation to action and experience. The time discrepancy between parental recognition of signs of autism and professional diagnosis was confirmed by our first research on home movies (Maestro & Muratori, 1999). Given the importance of early intervention to protect the child, and the parents, from negative experiences, a broad framework for adjusting responses to meet the child is indicated at this early stage. This would frame the future development of more targeted and systematic procedures in therapy. Parents could be helped to change their manner of responding, using feedback, possibly with the aid of video recordings in the home. Parents express the need for relief from their "early frustration". and a desire to find "some way of being with their child". They can gain pleasure from methods that increase the sharing of experience.

Research on home movies of children later diagnosed with autism started about 25 years ago with the pioneering work of Massie. No research in this field followed for the next fifteen years and only in the nineties have different groups

reconsidered home movies as a valid and precious tool for the understanding of the early phases of autism. These groups have again taken up this research on the identification of early signs of autism, opening up new possibilities for prospective studies. Even if methodological issues need to be considered, research using home movies has not only already provided much useful information about the early psychopathology of autism, but it has also suggested new areas of research that are currently only very partially explored.

During the last twenty years, research has moved from the search for early pathological signs such as stereotypes (Adrien, 1993), to the identification of the absence of typically developing behaviors, such as pointing, joint attention, responding to name, or verbal language (Osterling, 1994; Baranek, 1991). Attention is turning to a more comprehensive descriptive analysis of the quality and frequency of spontaneous and reactive behaviors in films of infants at home, with a focus on developments in the first year, and comparison to typical development. The findings arising from more recent research such as ours, have opened a new phase which is directed to the study of how competencies, behaviors and symptoms develop in infants with autism who only show the classical clinical picture during the second year of life. This final development of autism seems to be a long term consequence of earlier and softer dysfunctions. It is not surprising that unusual social interaction, imitation, play and non-verbal communication,

to all of which parents are normally highly sensitive, are more reliable indicators of a positive diagnosis of autism before four years than an insistence on sameness and preference for fixed routines. This new phase of research represents a shift from a quantitative to a qualitative study, which aims to improve the understanding of pathways of competency in autism. Utilizing this methodology for the observation of autism during the first year of life, our studies have shed light on abnormal developmental trajectories in infants with autism compared to typical children. We have suggested that the abnormal developmental trajectory for social and non-social attention can prevent joint attention from emerging and we have proposed that joint attention should be considered not only a precursor to later theory of mind development, but also a 'post-cursor' of earlier psychological processes (Maestro & Muratori, 2005).

According to the new knowledge that is emerging on the biological maturation of the brain after birth, it is possible to hypothesize that the fragility of certain competencies does not allow the neurological, experiencedependent system to grow as would happen in typical development. Snyder (2004) has proposed that infantile autism can be largely described as suspended infancy. Considering that autism is difficult to diagnose until well into the second year, it is suggested that autism is a state of retarded concept formation. Infants with autism continue to perceive each scene as a continuous succession of raw details without meaning, a heightened sensitivity to the parts without recognizing the whole. We have found in our latest research (Maestro & Muratori, 2005) that the long attention span for objects is an early behavioral pattern consistent with this hypothesis. A

complementary hypothesis is that concept formation can occur only if objects are captured in a lively social interaction. Outside social interaction, objects become a body of details, and this seems to be the case with autism, where a very early deficit of social attention has come to the surface (Maestro & Muratori, 2002 and 2005). Autism affects how a developing person moves and responds in the environment, the physical one of objects and the interpersonal or social one. It is a 'spectrum' of conditions, all of which disturb the development of interpersonal sympathy and collaborative action.

The specific deficit in ways of responding to social stimuli, the absence of the typical shift of the infant's attention from human beings to objects, which happens at about 3-4 months of age, and the long attention span for objects, can be the very early signs of a deficit of intersubjectivity. They could in the future be identified as important items in a checklist for autism in infants. We can hypothesize that the early social attention deficit, and the deviant coordination between interest in objects and interest in people, has increasingly negative effects on early environmental interactions and in this way contributes to a deviant path of development and of biological maturation of the brain (Schore, 1996).

According to this hypothesis, we can imagine that an early intervention program delivered in the context of a social interaction, and providing compelling social input to the child, could decrease the cumulative effects of the primary deficit in social attention. Therefore we need to evaluate how far the findings of our research dovetail with therapeutic approaches, such as the Developmental, Individual-differences, Relationship-based (DIR) model (Greenspan & Wieder, 1999), that are

specifically designed to enhance the ability of children with autism to engage in social interactions. In this way our findings could enhance the capacity for both early diagnosis and more appropriate and effective treatments targeted at diverting the atypical development of attention in autism, to develop compensatory strategies and to limit the secondary consequences of the earlier dysfunction on the social brain.

The pathway of social and non-social attention assumes an increasingly important place in the developmental psychopathology of autism where one would expect disturbances of the normal dynamic balance between motives for self-directed action and motives for engagement with others.

During the first year of life we should consider different temporal domains of the infants' development as critical targets for early screening and treatment. While in the first six months of life "looking at people" remains a key item, after the first six months the development of some "human being connecting" behaviors (looking, smiling, and vocalizing) may mask the underlying social deficit. At this age we should focus more on behaviors related to the quality of the infant's attention to inanimate objects: items such as "smiling or vocalizing to objects" could be more indicative of a deficit in the infant's ability to discriminate social from non-social contact, and they should be better analyzed. Autistic one-year-olds fail to look at others' faces with attention to their eyes, and they do not smile reactively, or act to attract others' attention or make gestures of pointing and greeting. Their play with parents is both less attentive and less joyful, lacking quick anticipatory reactions to behavior of a teasing kind that babies generally take delight in after about six months.

Moreover, abnormal developmental trajectories for social and non-social attention could help us to understand the relationship between adaptive capacities and symptoms. A correlational analysis between competencies and signs of autism could enable us to point out the reciprocal interference between negative symptoms (i.e. the absence of expected behaviors) and positive symptoms of autism (i.e. abnormal eye contact). Future research should, for example, explore if there is a positive correlation between the appearance of the most represented symptoms and higher non-social attention, or a negative correlation with higher social attention.

Many questions are still open: What can we detect? If autism is only going to become organized during the second year of life, can we only make a diagnosis of vulnerability before this age? May we detect only signs, or can we detect symptoms? Finally, can babies have autism? According to our research we may suggest some ideas about this core question.

First, it is now easier for us to understand why sometimes parents bring their children late to a diagnostic consultation: watching the first year of autism, it is really not easy for clinicians to recognize the disorder, so we may expect that it is also not easy for parents.

Second, in most cases parents are actually right when they speak about the regression of their children. We used to think that they were not able to catch the early signs in the first year of life; now we can state that sometime symptoms of autism develop during the second year of life, revealing autism as an age specific disturbance.

Third, the different forms of onset may be due to the different matches

between the appearance of pathological signs and the absence or disappearance of developmental competencies. We may hypothesize that symptoms are the negative of competencies and that the real problem for prevention programs is not how to detect symptoms but how to recognize difficulties in developing competencies. If we wait for symptoms we will always be late in offering effective prevention. Future studies should take into account these different forms of onset of autism. Whilst quite a number of individuals with autism experience clinical regression, nevertheless, the characteristics of the early development of these subjects are different from individuals who show symptoms during the first months of life. Further research will enhance the possibility of understanding common traits in these different groups. Indeed, while it is clear that for some children autistic symptoms have a late onset, the characteristics of normal behavior and how these children really lose them is still unknown.

Fourth, intersubjectivity is the best way to discriminate typical children from those with autism during the first year of life (Maestro & Muratori, 2001). The social deficit, which is described by DSM-IV as one of the most important criteria for diagnosis, only develops later in time as a secondary evolution of a disturbance of subjectivity and of primary intersubjectivity. From our research, autism seems above all a disorder of intersubjectivity, which means for us the capacity to make use of basic social competence in a real social world.

Fifth, the presence of a period of life where many developmental areas are 'free' of pathology could become an important issue for early interventions whose first target is the precursors of communicative, social and imaginative deficit in autism, and may allow autistic children to improve rapidly in the core symptoms not rigidly stratified by time. The new issue, deriving from these studies of home movies, is how to promote social interaction in a difficult child, and this means moving the focus of therapeutic intervention from prevention to promotion.

No longer is it possible to think that children with autism would develop in a different way with different parents. But children could really develop in a different manner if parents were listened to and helped when they show their concern about their child. Our research has shown that, contrary to the stereotypic portrayal of mothers of children with autism as cold and non-expressive, these mothers appear to be highly flexible and involved. In the future, sequential analysis of interactions in home movies will be better able to describe sequential maternal approach and child responses to these approaches. Our research suggests that children with autism show fewer contingent responses to their mothers than nonautistic children, and that episodes of contingency are a function of the type of approach used by their mothers. Their responses appear more contingent when the intensity of the approach behavior is high, and children with autism appear more engaged in the interaction when their mothers use nonverbal behaviors such as increased proximity and objects in interaction. The study of interaction and of contingency is one of the main targets for future research; in fact, following the Massie work, dyadic interaction in children with autism between birth and 18 months of age, has not been further studied.

The construction of a Grid specifically designed for the screening of autism in the first year of life is probably the most ambitious goal of every

researcher in this field; further work has to be conducted to validate an instrument for the screening of autism at 1 year of age in a larger population sample. Research on home movies is essential to develop the items of a grid which can be validated, to point out its different dimensions and to open up further research to compare results to other diagnostic groups (e.g. mental retardation). Studies of young infants with autism that include a control group of cognitively delayed children without autism are needed to determine the impact of cognitive impairment on the abilities of children with autism and the specificity of autistic processes before one year of age. Thus, up to now, it has been hard to claim that the differences in the infant's attention skills are due to autism per se rather than to primary cognitive impairments. Nevertheless Osterling & Dawson (2002) have recently demonstrated that infants with autism look at others and orient to their names less frequently than infants with mental retardation; and look to objects held by others less frequently than typically developing infants. This recent research indicates that autism can be distinguished from mental retardation and typical development on the basis of social attention by 1 year of age. The specific deficit in the way of responding to social stimuli, the absence of the typical shift of the infant's attention from human beings to objects which happens at about 3-4 months of age, the preference for looking at objects and failure to orient to speech and human faces, could in the future be identified as important items in a checklist for autism in infants.

Further research providing coding of sequential frequencies of the measured behaviors (e.g. how often 'smiling at objects' was followed by 'looking at people') could bolster the argument for developmental

differences that emerge over time and their links with parental behaviors. Among other parental behaviors, solicitations through vocal expressions are probably of seminal importance, and new technology for the analysis of the acoustic spectrum of the mother's voice could provide new insights in research on dyadic interactions. Studies of the vocal expressions of mothers and infants in face-to-face interaction have highlighted the precise temporal and prosodic organization of their utterances and their use of protoconversational rules such as turntaking, repair, overlap, and collaborative completion (Trevarthen & Aitken, 2001). Between two and six months infants are particularly expressive in the vocal register; they actively respond to and initiate vocal engagement with interactive partners. The timing of vocal interaction is organized around the close matching and monitoring of affect by mother and infant, as expressed through acoustic cues such as pitch, loudness, and timbre. Acoustic analysis of some of these features presents an exciting methodological support for understanding the dynamics of anticipation and repair in preverbal communication. The overall temporal structure of vocal interaction has been found to present a high degree of regularity with clear rhythmic features as well as a certain amount of variability.

We have often found in home video sequences that, within a very short time frame, a withdrawn infant may begin a joyful interaction when the parent implements a vocal expression using motherese or infant directed speech. Trevarthen & Aitken (2001) have described this language, specifically and automatically displayed by caregivers when they are in front of a young baby, as characterized by the following: a special musicality, prosodic

intonation, exaggerated intonations, a rhythm similar to the alternating adagio-andante, longer pauses, fewer syllables in each word or phrase, specific articulations and punctuations, hyperarticulation of vowels, elevated fundamental frequency (pitch). It has also been found that mothers have higher affect when addressing their infant. Other research has shown that this infantdirected speech is distinctly different from adult-directed speech in term of heightened pitch, hyperarticulated vowels and affect. The infant is much attracted by this particular kind of speech which plays a fundamental role in attention, communication, affect and language development. Fernald (1990) has described how newborns, while listening to motherese, have increased sucking activity and how their attention level decreases when the pitch decreases. We have also seen in our home videos that children later diagnosed with autism, when confronted with infant-directed speech, focus their attention on the face of the other and have unexpected interactive competencies. Motherese seems to play an important role in creating interactive sequences which are the expression of the organization of cortical and subcortical networks in the early development of the brain.

Our observations on the perception of complex sounds open a new field of research in the study of home movies, focused on the musicality of language and its relation with usual verbal language. It is possible that the shift from attention to motherese, to attention to, and understanding of, ordinary words without musicality, is impaired in these children, characterized by a deep splitting, or non integration, between musicality and language. Once again, our research on social and non-social attention may provide a contribution to this theme. Among the items of our

grid that we have considered are those involving 'vocalizing to objects' and 'vocalizing to persons'. In contrast to healthy children, the pathway for these two items during the first year of life in children with autism shows a lower increase of social vocalizing and a higher increase of vocalizing to objects. This latter behavior seems very specific to these children, who may be interested in the musicality of language but not interested in verbal language.

Observed sequences characterized by joyful interactions in response to motherese suggest that, while motherese can help the child out of his autism, other natural behaviors, even though affectionate and responding with intuitive sympathy to the reduced social feedback of an infant developing autism, are not sufficient to ameliorate the state of abnormal withdrawal in the infant. In fact, the autistic baby does not have the regulatory motive abilities to escape this state, and emergent social behaviors will become further undermined without the specific support resulting from a vivid and marked interaction as in motherese. How can the cycle of negative effects for such an infant, less than one year old, be corrected? Can a different platform of parental support be built on which the infant can develop satisfying play and exploration of shared experiences?

Intersubjective therapies and the use of parental guidance by 'development relationship intervention' to increase sensitivity to a child's motives, show that advances can be achieved (Greenspan, 2005). Trevarthen has suggested that any such approach would need the following features: (1) a child-centered non-judgmental approach (2) close attention to whatever the child is motivated toward, channeling interested and expressive behaviors towards

rhythmic emotional interaction (3) sensitivity to whatever mode of contact the child naturally favors, for instance using gentle physical touch, or vocal exchange, rather than eyecontact (4) an affectionate caregiver, particularly one who has been in contact with the child since birth, who is the best attuned "therapist" for that child.

Emotional "attachment", which is a primary motivating mechanism in any child from birth, responded to by an affectionate parent, provides the foundation for the maturation of the communicative behaviors of intersubjectivity.

References

Adrien J.L. (1993) Blind ratings of early symptoms of autism based upon family home movies. Journal of the American Academy of Child & Adolescent Psychiatry 33: 617-625

Baranek, G.T. (1999) Autism during infancy: a retrospective video analysis of sensory-motor and social behaviours at 9-12 Months of Age. Journal of Autism & Development Disorders 29: 213-224

Fernald, A. (1990) Meaningful melodies in mother's speech to infant. Infant Mental Health Journal, 11, 262-282

Greenspan, S.I. & Wieder, S. (1998) The child with special needs. Reading, MA: Perseus Books

Maestro, S. & Muratori, F. (1999) Study of the onset of autism through home-movies. Psychopatology 32, 292-300

Maestro, S. & Muratori, F. (2001) Early behavioural development in autistic children: the first 2 years of life through home movies. Psychopathology 34, 147-152

Maestro, S. & Muratori, F. (2002) Attentional Skills During the First 6 Months of Age in Autistic Spectrum Disorders. Journal of American Academy of Child and Adolescent Psychiatry 41, 1239-45

Maestro, S. & Muratori, F. (2005) How young children treat objects and people: an empirical study of the first year of life in autism. Child Psychiatry and Human Development 35, 383-96

Massie, H.N. & Rosenthal (1984) Childhood Psychosis in the First Years of Life. New York: McGraw-Hill

Osterling, J. & Dawson, G. (1994) Early recognition of children with autism: A study of first birthday home videotapes. J Autism Dev Disord 24, 247-257

Osterling, J.A., Dawson, G. & Munson, J.A. (2002) Early recognition of 1-year-old infants with autistic spectrum disorder versus mental retardation. Development and Psychopathology 14, 239-251

Schore, A.N. (1996) The experiencedependent maturation of a regulatory system in the orbital prefrontal cortex and the origin of developmental psychopathology. Development and Psychopathology 8, 59-87

Trevarthen, C. & Aitken, K.J. (2001) Infant Intersubjectivity: Research, theory and clinical applications. J Child Psychol Psychiat 1,3-48

Wieder, S. & Greenspan, S.I. (2005) Can children with autism master the core deficits and become empathetic, creative, and reflective? A ten to fifteen year follow-up of a subgroup of children with ASD who received a comprehensive DIR approach. The Journal of Developmental and Learning Disorders 9, 39-61

Early Intervention Services: An Overview of Evidence-based Practice.

By Robin Balbernie

The major review by the American National Research Council (part of the National Academy of Sciences) of many different lines of research carried out on the development of children, summarizes a conservative core of replicated findings over thirty years of evaluating early intervention programs. (Shonkoff & Phillips, 2000: p.342) To paraphrase slightly, and omitting their extensive references, these are as follows:

- Well-designed and successfully implemented interventions can enhance the short-term performance of children living in poverty.
- Such interventions can promote significant short-term gains on standardized cognitive and social measures for young children with developmental delays or disabilities.
- Short-term impacts on the cognitive development of young children living in high-risk environments are greater when the intervention is goal-directed and child-focused in comparison to generic family support programs.
- Measured, short-term impacts on the cognitive and social development of young children with developmental disabilities are greater when the intervention is more structured and focused on the child-caregiver relationship.
- Short-term I.Q. gains associated with high-quality preschool interventions for children living in poverty typically fade out during middle childhood, after the intervention has been completed; however, long-term benefits in higher academic achievement, lower rates of grade retention (repeating a year), and

decreased referral for special education services have been replicated.

- Extended longitudinal investigations into the adolescent and adult years are relatively uncommon but provide documentation of differences between the intervention and control groups for economically disadvantaged children in high school graduation, income, welfare dependence, and criminal behavior.
- Analyses of the economic costs and benefits of early childhood intervention for low-income children have demonstrated medium- and longterm benefits to families as well as savings in public expenditure for special education, welfare assistance, and criminal justice.

In general, there appears to be a relative lack of evidence that wide-scale projects that broadly target a general population have much long-term effect. At the end of a review of American Federal and State interventions such as Head Start, Farran (2000: p.525) finds it disheartening that: "A great deal of money was spent on programs that have not been shown to be more effective than doing nothing at all." This is a reminder that families do not exist in isolation.

Where a child appears to have a disadvantaged start in life the whole context of the baby-parent relationship needs to be taken into account. "Competence is the result of a complex interplay between children with a range of personalities, the variations in their families, and their economic, social, and community resources" (Sameroff, 2000: p.9). There are a large number of therapeutic interventions that have been demonstrated to help the relationship between parent and

infant, but results cannot be sustained in a vacuum. None of the programs reviewed by Farran (2000: p.525): "made any difference to the income, housing conditions, or employment of the parents involved, despite the fact that the families were often chosen because they had extremely low incomes." Exactly the same adverse influences that have impinged on the adult members of the family will probably continue to exert an effect on the child throughout his or her development, making specific predictions difficult unless wider issues (such as standards of education and employment prospects) are also tackled head on. "That is to say, significant medium- and long-term benefits of early childhood intervention may be viewed as a continuing developmental pathway that is contingent on a chain of positive effects that increase the probability of remaining on track" (Shonkoff & Phillips, 2000: p.352) Perhaps it will not be possible to gauge the most important long-term effect of early intervention until follow-up studies are carried out on these infants when they have become parents in turn.

The Components of an Effective Early Intervention Service

Two recent reviews examine what appears to be necessary for early intervention services for high-risk parents and babies if they are to meet the needs of this group (Zero to Three, 1998 18(4); Shonkoff & Phillips, 2000, pps.360-367). The guiding principle of early intervention is that services need to be carefully tailored to their client population, there is no single answer. For instance, findings from a home visiting service for high-risk mothers and babies indicated: "higher-risk mothers benefited more from a mental health curriculum than an educational curriculum whereas lower-risk mothers

benefited more from the educational curriculum than the mental health curriculum" (Berlin, et al., 1998, p.13).

Services can be roughly divided between those that are center-based and those that are delivered in the home. "Center-based services are more likely than home-based programs to target children directly - especially in terms of their cognitive and language development" (Berlin, et al. 1998, p.7). Whereas: "Home-based services, which virtually always include the child's principle caregiver, may be especially well-suited to enhancing parents' well-being and the child-parent relationship" (p.6). Whatever the setting, it is important that services are targeted appropriately, the aim of every provision should be clear. "For young children where development may be compromised by an impoverished, disorganized, or abusive environment ... interventions that are tailored to specific needs have been shown to be more effective in producing desired child and family outcomes than services that provide generic advice and support." (Shonkoff & Phillipps, 2000, p.360) Evidence also supports the principle that proactive programs beginning either during pregnancy or at birth have the greatest and most sustained effect (MacLeod & Nelson, 2000). Such services can be either universal or targeted on an individual basis. The best results are attained with strength-based approaches that focus on parental empowerment and involvement.

The intensity and duration of any intervention are obviously important, but as aspects of quality they are hard to measure. Few researchers have addressed these variables, as there are frequently ethical implications to conducting randomized experimental studies on a vulnerable, clinical, population. However, there are some suggestive data. It has been found that I.Q. scores measured at 36 months increased with the amount of times a child attended a day center, the number of home visits and the frequency with which parents

attended relevant meetings (Ramey, et al., 1992). Greater involvement with helping services, whether in the home or a center, was also associated with higher ratings of the family home environment when the child was one year old, and higher I.Q. scores at age three. Mothers who actively participated in the Prenatal / Early Infancy Project for two years were less likely to abuse their children than those mothers who had only been engaged for nine months. And a follow-up fifteen years later showed an inverse relation between the amount of service received and a number of negative maternal outcomes, including child maltreatment, repeat pregnancy, welfare dependence, substance abuse and brushes with the law (Olds, et al., 1997). Two studies of a home visiting service for infants in families living in poverty, where one used random assignment to set up a treatment and control group, found that weekly visits resulted in higher child development test scores than fortnightly visits, which in turn obtained higher scores than monthly visits (Powell & Grantham-McGregor,

Different approaches to infant mental health interventions.

It appears that well-planned and wellfunded services for babies and parents at risk can redirect a likely developmental pathway along a new, healthier direction. "Programs that combine child-focused educational activities with explicit attention to parent-child interaction patterns and relationship building appear to have the greatest impacts" (Shonkoff & Phillips, 2000: p.379). Whereas: "services that are supported by more modest budgets and are based on generic support, often without a clear delineation of intervention strategies matched directly to measurable objectives, appear to be less effective for families facing significant risk" (ibid). Early intervention can have a differing emphasis on two approaches: the first is prevention (targeting a population, or a family, identified by

risk factor analysis), and the second is treatment (working with referred cases where something has already gone amiss). This is a rather artificial divide, since in practice both goals are compatible with each other within a single program. For example, working with families at risk will inevitably reveal 'hidden' disturbances that need to be referred on to a more specialized therapeutic service. However, conceptualizing early intervention services in this way does provide a framework for examining the results of projects that were set up with different aims and methods.

Preventative services can either be center- or home-based, just as treatment options are either clinic- or home-based as well. An example of a center-based early intervention/ preventative service is the Carolina Abecedarian Project where high-risk children received intensive early education five days a week, beginning at six weeks and ending at five years. Two groups of similar babies were selected, all with mothers who had educational difficulties. The control group, who only received free milk and nappies, were all (except one) eventually assessed as being retarded or of borderline intelligence. In the intervention group all the children tested within the normal range of intelligence by age three; by age 15 they scored significantly higher in general knowledge, reading and mathematics, and only 24% (48% in the control group) needed special education services (Campbell & Ramey, 1994, 1995). Furthermore, (according to the project's website) when the children reached 21 years of age 35% of the intervention group were at college, compared to 14% in the control group; and 65% were in employment compared to 50% in the other group. The children whose mothers had the lowest 1.Q. appeared to gain the most from this intervention, and those who had a follow-up program into elementary school benefited further still. A 20 year research project following the outcome of the Nurse Home Visitation Program is a good example

of a preventative intervention targeting an at risk population in the community. This involved two randomized trials (in Elmira, New York, and Memphis, Tennessee), plus one other which is still in progress (in Denver). The investigators (Olds, et al., 1999, p44) have concluded that: "The program benefits the neediest families (low income unmarried mothers) but provides little benefit to the wider population. Among lowincome unmarried women, the program helps reduce rates of childhood injuries and ingestions that may be associated with child abuse and neglect, and helps mothers defer subsequent pregnancies and move into the workforce. Long-term followup of families in Elmira indicates that nurse-visited mothers were less likely to abuse or neglect their children or to have rapid successive pregnancies. Having fewer children enabled women to find work, become economically self-sufficient, and eventually avoid substance abuse and criminal behavior. The children benefited too. By the time the children were 15 years of age, they had fewer arrests and convictions, smoked and drank less, and had fewer sexual partners." The home visiting began before birth and: "Compared with counterparts randomly assigned to receive comparison services, women who were nurse-visited experienced greater informal and formal social support, smoked fewer cigarettes, had better diets, and exhibited fewer kidney infections by the end of pregnancy" (p.45). By the time their children were four years old the cost of the program was less than the savings that had been made. This intervention: "explicitly promoted sensitive, responsive, and engaged caregiving in the early years of a child's life" (p.48).

The equivalent professionals in the UK are Health Visitors, who have an enormous advantage over home visitors in America as they are universal, 'invisible' and nonstigmatizing. The Solihull Approach has shown that Health Visitors who are trained in this form of reflective practice are able to work more

effectively with children with less complex sleeping, feeding, toileting and behavioral difficulties and so prevent the need to refer them to Child and Adolescent Mental Health Services (Douglas & Ginty, 2001).

A bridge to a purely treatment-based program is provided by the relationship-based intervention for very high risk mothers which has been set up in Los Angeles. This involved a randomized trial to create a similar comparison group who were only given pediatric appointments. These were all mothers who almost invariably would have come to the attention of an infant mental health service, had one been available. The project workers were all mental health professionals with experience in child development and the family systems approach. The primary goal of the intervention was: "to offer the mother the experience of a stable trustworthy relationship that conveys understanding of her situation, and that promotes her sense of selfefficacy through a variety of specific interventions" (Heinicke, et al., 1999: 356). When compared with the control group: "The mothers became more responsive to the needs of their infants and more effectively encouraged their autonomy and task involvement. Moreover, the children in the intervention as opposed to nonintervention group were more secure, autonomous, and task involved on a variety of indices at 12 months" (p. 371). The two groups were compared again when the children were two years old, by which time: "the mothers experiencing the intervention, in comparison with those that did not, also used more appropriate forms of control, and their children responded more positively to these controls. Mothers who did not experience the help of the intervention had significantly more difficulty controlling their child if it was a boy as opposed to a girl. They used the least appropriate methods of control and the boys responded more negatively to these controls" (Heinicke, et al., 2001, p458).

A similar clinical-type intervention was carried out in Holland, the difference being that the risk factor resided in the infant, not in the surrounding family. The aim of the program was to help mothers with infants who demonstrated an irritable temperament, since there is evidence that negative emotionality in babies leads to later behavioral problems. Mothers were helped to respond more to both positive and negative emotions in their child, and at the same time encouraged to show less intrusive behavior and detached lack of involvement. The quality of attachment between parent and child appears to be enhanced by the parent's ability and willingness to be sensitively responsive to their child. This was confirmed by the finding that: "more toddlers whose mothers participated in the intervention were securely attached than there were securely attached control group dyads" (van den Boom, 1995, p1809). At age two years, the mothers in the intervention group still demonstrated a greater responsiveness and involvement with their toddlers. And at three years both parents were more attuned to their child than those in the control group. "Intervention children continued to be more secure in their relationship with their mother, exhibited less behavior problems, and were better able to maintain a positive relationship with the peer than the control group children" (p. 1811). Helping parents respond in a more sensitive, or thoughtful, way to their infants promotes secure attachment.

Depressed mothers are another highrisk group, as when the condition is severe it will interfere with their ability to tune in to their baby's signals and provide a sensitive and emotionally nurturing caregiving environment. Post-natal depression is linked to an increase in insecure attachment in toddlers, behavioral disturbance at home, less creative play and greater levels of disturbed or disruptive behavior at primary school, poor peer relationships, and a decrease in self-control with an increase in aggression. (Cummings & Davies, 1994; Murray,

1997; Sinclair & Murray, 1998; Murray et al., 1999; Zeanah et al., 1997) Direct psychotherapy with depressed mothers has been shown to increase their capacity to recognize emotional expressions, including negative ones, and be more accurate in affective language communication (Free, et al., 1996). Although this could be expected to improve the quality of attachment, this was not measured. However, another study that compared the effect of toddler-parent psychotherapy between two, randomly assigned, groups of mothers with a major depressive disorder found that attachment was improved by the end of treatment. The two groups were further compared with another where the mothers had no mental health problems. "Toddlers of depressed mothers who received TPP evidenced rates of secure attachment that were no different from those of the non-depressed control group following the conclusion of this intervention" (Cicchetti, et al., 1999: 58). These were mothers with a relatively high level of income, education and family support that may well have been: "better able to utilize an insight-oriented mode of therapy than women confronted with a multitude of daily living challenges" (p. 59). The authors of the study go on to speculate that: "as mothers become freed from the 'ghosts from their pasts' their internal working models became more positive and they were increasingly able to focus on the present, including their relationship with their child."

As a contrast, another approach to infant mental health intervention is provided by the technique of Interaction Guidance, which does not rely on insight to bring about change in the parent-baby relationship. This method uses video feedback in order to encourage positive aspects of caregiver-infant interaction, helping parents: "in gaining enjoyment from their child and in developing an understanding of their child's behavior and development through interactive play experience" (McDonough, 1993, p414). This form

of treatment was specifically tailored to reach families over-burdened with multiple risks, and probably exemplifies the strength-based philosophy intrinsic to all infant mental health therapy more than any other approach (McDonough, 2004). It does not explicitly focus on exploring the caregiver's internal representational world of feelings and memories, although such material will be addressed if it arises during the course of work, "This non-intrusive method of family treatment has proven to be especially successful for infants with failure to thrive, regulation disorders, and organic problems. Parents who are either resistant to participating in other forms of psychotherapy, young or inexperienced, or cognitively limited respond positively to this treatment approach" (ibid). Interaction Guidance has also been successfully used to improve sensitivity and decrease the amount of disrupted communication between mothers and babies with feeding problems (Benoit et al., 2001). Video feedback of mothers and infants using a split screen technique, so that both faces can be viewed simultaneously while they play together, has also been shown to be effective in a brief treatment intervention that combines a psychoanalytic approach with an indepth analysis of immediate interactions (Beebe, 2003). Microanalysis of the recorded intercommunication within the excerpt of play reveals patterns of affect regulation that can inform a psychodynamic weaving together of the presenting difficulties, the observed behavior of the dyad and the parent's own early history.

The technique of Interaction Guidance, with its use of video recordings to emphasize responsive and pleasurable mother-infant interactions, can be either clinic- or home-based; and it is sometimes used in conjunction with, rather than as an alternative to, more psychodynamic methods of treatment. A metaanalysis of early, attachment-based, interventions suggests that disorganized attachment is most successfully addressed by using sensitivity-focused feedback (Bakermans-Kranenburg, van Ijzendoorn and Juffer, 2005). Video feedback has also been used successfully to treat mothers suffering from PTSD following a history of violence-related trauma (Schechter, 2004). It was found that the baby's felt-to-be-intolerable distress, or current domestic violence, would trigger past traumatic memories for the mother who then became confused with her current perception of the child. This intervention, over only three visits, was able to significantly reduce the degree of negativity and of distortion of maternal attributions within the relationship.

An example of how different strategies and methods can be applied simultaneously to advantage is a Child-Guidance clinic in Stockholm that uses both Interaction Guidance and infant-parent psychotherapy to help mothers and babies, with the additional provision of three long group sessions each week. They have carried out an in-depth follow-up evaluation of their work. Out of ten randomly chosen mother-infant pairs that were looked at only one had not made considerable progress during treatment (Karlsson & Skagerberg, 1999). A combination of intervention methods appeared to achieve the most gains. Similarly, in the U.K the Sunderland Project within SureStart is an example of where Health Visitors were trained in the use of Patricia Crittenden's "Care Index" and how to apply this to brief video recordings of mother-baby play. This multidisciplinary mixed intervention strategy has clearly been shown to achieve measurable improvements in a high risk population. Svanberg (2005) concludes that: "The process of video-feedback and the support of the health visitor, who in his/her turn was supported and supervised by the parent-infant psychologists, enabled these parents to increase their own sensitivity sufficiently to support their child's development towards a secure

attachment and a more resilient future."

A research project in Geneva has compared the results achieved by brief insight oriented, infant-parent psychotherapy with those attained by the more behaviorist method of video feedback using Interaction Guidance. In the process, both forms of intervention were demonstrated to bring about appreciable, positive changes in the mother-infant relationship. Since the study was carried out on families who had been referred to a Child Guidance clinic it was felt to be unethical to have a control group, although comparisons could be made with a non-clinical but otherwise matched sample. The results of both forms of treatment were evaluated, and: "marked symptom relief was observed in several areas, with the greatest improvements in sleeping, feeding and digestion (i.e. symptoms affecting physiological functions)" (Robert-Tissot, et al., 1996, p105). In general, mothers became less intrusive and infants more co-operative, with maternal sensitivity to the baby's signals increasing after treatment. "The results of the study indicate that brief mother-infant psychotherapies were effective in treating cases consulting for early functional disorders" (p. 108). The only differences between the two approaches were that Interaction Guidance brought about more change in mothers' sensitivity, while psychodynamic therapy had a greater impact on maternal self-esteem. It could be argued that these two different approaches were in fact identical in task, and each improved parental 'reflective function', "A caretaker with a predisposition to see relationships in terms of mental content permits the normal growth of the infant's mental function. His or her mental state anticipated and acted on, the infant will be secure in attachment" (Fonagy, Steele, Steele, Moran and Higgitt, 1991, p214). A gain in reflective function may lie behind all successful interventions that aim to improve the sensitive responsiveness that is seen to be the basis of secure

attachment. A recent research project showed that mothers of preschool children with behavioural and emotional difficulties who participated in a clinical intervention that increased their insightfulness had children whose problems decreased; whereas mothers who did not gain from this had children whose behavior problems increased (Oppenheim, Goldsmith & Koren-Karie, 2004).

In psychodynamic infant-parent psychotherapy the 'patient' is the relationship between baby and caregiver. It is to be expected that this approach would directly affect maternal self-esteem, since emotional difficulties from past relationships are addressed within the context of a new relationship which is secure enough to both withstand and encourage exploration. "The quality of the relationship between therapist and parent is perhaps the more crucial in infant-parent psychotherapy than in any other form of treatment, because it is intended to be a mutative factor in the parent's relationship with his or her child" (Lieberman & Pawl, 1993, p.430). In a study designed to evaluate the effectiveness of infant-parent psychotherapy, which compared an intervention group of mothers and infants with a similar control group, it was found that: "Mothers who formed a strong positive relationship with the intervener tended to be more empathic to their infants at outcome, and their children in turn tended to show less avoidance on reunion" (Lieberman & Pawl, 1993, p. 434). However, the most important treatment variable turned out to be the mother's ability: "to use infant-parent psychotherapy to explore her feelings towards herself and toward her child" (ibid). The two randomly assigned groups of motherinfant dyads where the child had been assessed as demonstrating insecure attachment were further compared with a second control group of securely attached infants and their mothers in order to examine outcomes. Evaluation took place when the child was two years old, after one year of treatment. "The intervention group performed significantly better than the

anxious controls in the outcome measures and was essentially indistinguishable from the control group" (p. 440). Those mothers who became most engaged in the therapeutic process became more actively attuned to their children, who in turn: "showed less anger and avoidance, more security of attachment, and more reciprocal partnership in the negotiation of mother-child conflict" (p. 441).

A final, more recent, example of a wellresearched intervention for parents and infants is the technique of "Watch, Wait and Wonder" used in the Toronto Infant-Parent Program. In this form of infant-parent psychotherapy the parent is encouraged to be more directly involved with their child by engaging in playful interaction that follows the lead of the child. The parent is then invited to explore the feelings and thoughts that were evoked by what he or she observed and experienced in the preceding play session. Allowing the child to be spontaneous can be hard for a parent haunted by "ghosts in the nursery"; and a defensive infant, who is more used to complying to the pattern of available caregiving in order to extract the maximum available sense of felt-security, can be equally stumped. The research project set out to compare the effects of traditional infant-parent psychotherapy (PPT) with Watch, Wait and Wonder. A broad range of outcome measures was applied before and after treatment, and again on follow-up six months later. The majority of children referred to this service were insecurely attached. Both forms of treatment were delivered by highly trained clinicians. It was found that by the end of the intervention the Watch, Wait and Wonder method was associated with a more pronounced move towards secure attachment. The infants in this group also: "exhibited a greater capacity to regulate their emotions with a concomitant increase in cognitive ability" (Cohen, et al., 1999: 445). Their mothers: "reported more satisfaction with parenting than mothers in the PPT group and lower

levels of depression at the end of treatment" (ibid). Both forms of treatment showed similar positive gains. "They were associated with a reduction of presenting problems, improvement in the quality of the mother-child relationship, and reduction in parenting stress" (ibid). However, at the six-month follow-up the two groups were similar on all measures. The Watch, Wait and Wonder group had retained its positive gains while the group receiving parent-infant psychotherapy had 'caught up'. It was concluded that both approaches are helpful, but the effects of Watch, Wait and Wonder came about more quickly.

Conclusion

There is a growing body of evidence that demonstrates how early, targeted and strength-based interventions focusing on relationships can bring about positive changes in the emotional environment of vulnerable babies. As summarized by Professor Fonagy (1998, p.132) in an overview of the field: "early preventative interventions have the potential to improve in the short term the child's health and welfare (including better nutrition, physical health, fewer feeding problems, low-birth-weight babies, accident and emergency room visits, and reduced potential for maltreatment), while the parents can also expect to benefit in significant ways (including educational and work opportunities, better use of services, improved social support, enhanced self-efficacy as parents and improved relationships with their child and partner). In the long term, children may further benefit in critical ways behaviorally (less aggression, distractibility, delinquency), educationally (better attitudes to school, higher achievement) and in terms of social functioning and attitudes (increased pro-social attitudes), while the parents can benefit in terms of employment, education and mental well-being."

If the first two years of life are cradled within secure attachment then the growing child feels good about him or

herself, can appreciate the feelings of others and see their point of view, is able to take full advantage of education and has inherent psychological resiliency to fall back upon in times of stress. At the other end of the spectrum, the infant with disorganized attachment, who has often suffered abuse or neglect, will become the child who cannot trust relationships, who has no empathy for people or respect for social rules, who disrupts, attacks and tries to dominate what may be on offer in both the family and school, and who might well be seriously vulnerable to later mental health problems. And furthermore, most importantly, these patterns of behavior stand a good chance of being passed on to the next generation as the attachment experiences of infancy cut the template for the caregiving behaviors of adulthood. "By failing to understand the cumulative effects of the poisons assaulting our babies in the form of abuse, neglect, and toxic substances, we are participating in our own destruction" (Karr-Morse & Wiley, 1997, p.12). Early intervention within the remit of an infant mental health service is an effective way of beginning to break the cycle of insecure attachment as it takes advantage of both the neurological plasticity of the baby and the fluid dynamics of a family in the process of adapting to a new member. Leave it too late and both the structure of the brain and family interactions become increasingly established and consequently harder to change.

References

Bakermans-Kranenburg, M. J., van ljzendoorn, M. H. & and Juffer, F. (2005) Disorganized infant attachment and preventative interventions: A review and meta-analysis. Infant Mental Health Journal. Vol. 26(3), 191-216

Beebe, B. (2003) Brief mother-infant treatment: psychoanalytically informed video feedback. Infant Mental Health Journal. Vol. 24(1) 24-52

Benoit, D., Madigan, S., Lecce, S., Shea, B., & Goldberg, S. (2001) Atypical maternal

behaviour toward feeding-disordered infants before and after intervention. Infant Mental Health Journal. 22 (6) 611-626.

Berlin, L. J., O'Neil, C. R., & Brooks-Gunn, J. (1998) What makes early intervention programs work? The program, its participants, and their interaction.

Zero to Three. 18 (4) 4-15

van Den Boom, D. (1995) Do first-year intervention effects endure? Follow-up study during toddlerhood of a sample of Dutch irritable infants. Child Development. 66 1789-1816.

Campbell, F. A., & Ramey, C. T. (1994) Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. Child Development. 65 684-698.

Campbell, F. A., & Ramey, C. T. (1995) Cognitive and high-school outcomes for high-risk African-American students at middle adolescence: Positive effects of early intervention. American Educational Research Journal. 32 (4) 743-772.

Cicchetti, D., Toth, S. L., & Rogosch, F. A. (1999) The efficacy of toddler-parent psychotherapy to increase attachment security in offspring of depressed mothers. Attachment & Human Development. 1 (1) 34-66.

Cohen, N. J., Muir, E., Parker, C. J., Brown, M., Lojkasek, M., Muir, R., & Barwick, M. (1999) Watch, Wait and Wonder: Testing the effectiveness of a new approach to mother-infant psychotherapy. Infant Mental Health Journal. 20 (4) 429-451.

Cummings, E. M., & Davies, P. T. (1994) Maternal depression and child development. Journal of Child Psychology and Psychiatry. 35 (1) 73-112.

Douglas, H. & Ginty, M. (2001) The Solihull Approach: changes in health visiting practice. Community Practitioner. 74(6) 222-224.

Farren, D. C. (2000) Another decade of intervention for children who are low income or disabled: What do we know now? pp510-548 in: Shonkoff, J. P. & Meisals, S. J. (Eds) (2000) Handbook of Early

Childhood Intervention, Cambridge: Cambridge University Press.

Fonagy, P. (1998) Prevention, the appropriate target of infant psychotherapy. Infant Mental Health Journal. 19 (2) 124-150.

Fonagy, P., Steele, M., Steele, H., Leigh, T., Kennedy, R., Mattoon, G., & Target, M. (1995) Attachment, the reflective self, and borderline states. pp 233-278 in: Goldberg, S., Muir, R., & Kerr, J. (Eds) (1995) Attachment Theory: Social, Developmental, and Clinical Perspectives. Hillsdale, N. J.: The Analytic Press.

Free, F., Alechina, I., & Zahn-Waxler, C. (1996) Affective language between depressed mothers and their children: The potential impact of psychotherapy.

Journal of the American Academy of Child & Adolescent Psychiatry. 35 (6) 783-790.

Heinicke, C. M., Fineman, N. R., Ruth, G., Recchia, S. L., Guthrie, D., & Rodning, C. (1999) Relationship-based intervention with at-risk mothers: Outcome in the first year of life. Infant Mental Health Journal. 20 (4) 349-374.

Heinicke, C. M., Fineman, N. R., Ponce, V. A., & Guthrie, D. (2001) Relationship-based intervention with at-risk mothers: Outcome in the second year of life. Infant Mental Health Journal. 22 (4) 431-462.

Karlsson, K. & Skagerberg, A. (1999) Experience from the floor of attachment and relationship building. The Signal. 7 (2)

Karr-Morse, R. & Wiley, M. S. (1997) Ghosts From the Nursery: Tracing the Roots of Violence. New York: The Atlantic Monthly Press.

Lieberman, A. F. & Pawl, J. H. (1993) Infant-parent psychotherapy. pp427-442 in: Zeanah, C. H. (Ed) (1993) Handbook of Infant Mental Health. New York: The Guilford Press.

MacLeod, J. & Nelson, C. (2000) Programs for the promotion of family wellness and the prevention of child maltreatment: A meta-analytic review. Child Abuse and Neglect. 24 (9) 1127-1149

McDonough, S. (1993) Interaction guidance: Understanding and treating early infant-caregiver relationship disturbances. pp 414-426 in: Zeanah, C. H. (Ed) (1993) Handbook of Infant Mental Health. New York: The Guilford Press.

McDonough, S. (2004) Interaction guidance: promoting and nurturing the caregiving relationship. pp. 79-96 In: Sameroff, A. J., McDonough, S. C. & Rosenblum, K. L. (Eds) (2004) Treating Parent-Infant Relationship Problems: Strategies for Intervention. New York: The Guilford Press.

Murray, L. (1997) Postpartum depression and child development. Psychological Medicine. 27 253-260.

Murray, L., Sinclair, D., Cooper, P., Ducournau, P., & Turner, P. (1999) The socioemotional development of 5-year old children of postnatally depressed mothers. Journal of Child Psychology and Psychiatry. 40 (8): 1259-1271

Olds, D. L., Eckenrode, J. J., Henderson, C. R., Kitzman, H., Powers, J., Cole, R., Sidora, P., Morris, L. M., Pettitt, L. M., & Luckey, D. (1997) Long-term effects of home visitation on maternal life course and child abuse and neglect: Fifteen year follow-up of a randomized trial. Journal of the American Medical Association. 278 (8) 637-643.

Olds, D. L., Henderson, C. R., Kitzman, H. J., Eckenrode, J. J., Cole, R. E., & Tatelbaum, R. C. (1999) Prenatal and infancy home visitation by nurses: Recent findings. The Future of Children. 9 (1) 44-65.

Oppenheim, D. Goldsmith, D. & Koren-Karie, N. (2004) Maternal insightfulness and preschoolers' emotion and behaviour problems: Reciprocal influences in a therapeutic preschool program. Infant Mental Health Journal. 25(4), 352-367.

Powell, C. & Grantham-McGregor, S. (1998) Home visiting of varying frequency and child development. Pediatrics. 84 157-164

Ramey, C. T., Bryant, D. M., Wasik, B. H., Sparling, J. J., Fendt, K. H., & La Vange, L. M. (1992) Infant health and development program for low birth weight, premature infants: Program elements, family participation, and child intelligence. Pediatrics. 89 454-465.

Robert-Tissot, C., Cramer, B., Stern, D. S., Serpa, S. R., Bachmann, J. P., Palacio-Espasa, F., Knauer, D., De Muralt, M., Bernay, C., & Mendiguren, G. (1996) Outcome evaluation in brief mother-infant psychotherapies: Report on 75 cases. Infant Mental Health Journal. 17 (2) 97-

Sameroff, A. (2000) Ecological perspectives on developmental risk. pp1-33 in: Osofsky, J. D. & Fitzgerald, H. E. (Eds) (2000) WAIMH Handbook of Infant Mental Health, Vol. 4: Infant Mental Health in Groups at High Risk.

New York: John Wiley & Sons.

Schechter, D. S. (2004) How post-traumatic stress affects mothers' perceptions of their babies: A brief video feedback intervention makes a difference. Zero to Three. Vol. 24(3) 43-49

Shonkoff, J. P. & Phillips, D. A. (Eds) (2000) From Neurons to Neighbourhoods: The Science of Early Childhood Development. Washington D. C.: National Academy Press.

Sinclair, D. & Murray, L. (1998) The effect of postnatal depression on children's adjustment to school. British Journal of Psychiatry. 172 58-63

Svanberg, P. O. G. (2005) Promoting attachment security in primary prevention using video-feedback: The Sunderland Infant Programme. Infant Mental Health Journal. Submitted.

Zeanah, C. H., Boris, N. W., & Larrieu, J. A. (1997) Infant development and developmental risk: A review of the past ten years. Journal of the American Academy of Child and Adolescent Psychiatry. 32, 165-178

Ready, Set, Grow! Passport: A Community-Based Family Support Program

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In 1997, the Children's Environmental Index ranked 219 cities based on children's quality of life. Flint, MI, is a major metropolitan area in Genesee County, and its rank of 213 was due to the area's disproportionately high rate of teen births, children living in poverty, high school dropouts, infant mortality, poor air quality, and crime. For example, the Michigan Department of Community Health infant mortality statistics indicated that Genesee County had the 3rd highest rate of infant mortality in Michigan.

In response to these needs, in March of 1997, members from the community were asked to engage in public discussion about how to substantially increase the quality of life for Flint's children and families. They discussed ways to provide greater access to community resources for all families in the Flint metropolitan area. Initial support for the public forums was provided by Dr. Roy Peterson and Polly Sheppard from Mott Children's Health Center. As the conversations became increasingly more focused, the concept of a "Passport" for all children gradually emerged as the focal strategy to guide program development. The Passport concept developed in Georgia and Wisconsin and adapted to the Flint community provides a "passport" that contains resources available in the community and the means to access the resources, as well as a tracking system designed to determine whether

families were successfully served. The overarching goal for the Ready, Set, Grow! Passport (Sheppard, 1998) program was to assure that all children had the necessary health, developmental and cognitive skills, and emotional/behavioral regulation necessary to be ready for school.

In November of 1997 the committee met to discuss desired outcomes for the community and gaps in services for this at-risk population. Eight critical goals were identified at that meeting: 1. Decrease infant morbidity and mortality, 2. Provide for earlier detection of developmental delays, 3.Increase children's readiness to learn, 4. Provide medical and dental homes for all children, 5. Increase the number of children entering school with complete immunizations, 6. Provide parents with a baseline of information on early childhood development and parenting, 7. Develop home/school partnerships from birth, and 8. Provide every child with sufficient food, safe and adequate shelter, and clothing.

Furthermore, public discussions crystallized foundational issues that needed to be addressed in order to achieve the eight critical goals. The first issue was that a mechanism to easily link families to available services did not exist in the community. Although the committee identified patches of services throughout the county, there was no mechanism to stitch the patches into an integrated quilt connecting services and providing transition from one service to another (Sheppard,

1998). Second, these discussions led to the conclusion that most of the available services operated primarily from a deficit model. Little had been done to focus resources to prevent problems before they surfaced and to maximize children's potential. The third key issue related to defining the target population. The community committee concluded that if Passport was going to work, every family in Genesee County with a pregnancy or new infant must be eligible to be a member of Passport. Eventually, a Passport member was defined as any family that contacted the Passport office, regardless of whether they ultimately began using Passport as a vehicle for receiving community services.

Based upon these key goals and community needs, the committee decided that Genesee County needed a program that would provide families with young children education and advocacy rather than direct services. The program would include prevention activities and connections to services designed to increase maternal and child health and enhance school and learning readiness. Access to needed services and full community involvement would be key program features.

With start-up funds provided by Mott Children's Health Center, the Passport Initiative hired two full-time employees, and implementation of the Passport Program was underway. In 1998, 1,067 families contacted the Passport office and became members. Funding from the three local hospitals

and 21 school districts in Genesee County was solicited and received. A key aspect of funding was a commitment to program evaluation, using a participatory model that allowed continuous feedback to the RSG! Passport program staff, especially during the implementation phase. The evaluation team consisted of Cassandra Joubert, Sc.D. and Libby Richards from Mott Children's Health Center; Janet Barnfeather, R.N., Ph.D., from the University of Michigan, Flint; Polly Sheppard, from RSG! Passport, and Hiram Fitzgerald, Ph.D., from Michigan State University, and eventually, University Outreach and Engagement at Michigan State University was engaged to provide continuous program evaluation.

Passport Enrollment Process and Member Benefits

The Passport Program is an open membership program. All Genesee County parents have the opportunity to enroll in the program. Most families enroll at physician's offices, local hospitals, or at various community fairs. Enrollment forms are also available at schools, libraries, and businesses frequented by parents such as Babies-R-Us. At last count, the Passport Program had 45 distribution sites and continually seeks to expand the number and diversity of access point, in an effort to reach all potential enrollees.

Families that enroll in Passport receive information about child development and parenting, case advocacy to help them obtain needed services in the community, and incentives for participating in activities that promote the positive social, emotional, cognitive and physical development of their child.

Information and Education A resource manual is issued to all Passport members. This booklet, which is both a record-keeping and educational tool for caregivers, is given to every family at the time of enrollment. The guide includes a timetable for prenatal care, well-baby check ups, and immunizations, and suggestions of activities for parents and their infants at different developmental stages. The recordkeeping portion of the resource guide is intended to make it simple and convenient for parents to record the child's health history, photos, and fingerprints. Parents who enroll in Passport also receive quarterly newsletters that contain material on child development, parenting and community resources.

case Advocacy

Passport members receive case management services in two ways. Members may initiate contact by calling the office to voice family needs or concerns. Once family needs are identified, the family is provided with the needed linkages and advocacy. The Passport office either calls the agencies to arrange the delivery of services or gives the member an agency contact name and phone number. In addition, members receive annual "family comfort check calls". These telephone calls are initiated by Passport staff in order to identify family needs, make referrals to appropriate community agencies, and to determine whether past needs were satisfied. The Comfort Check Call Questionnaire includes a series of questions concerning 1) the child and/ or pregnant mother's health, availability and usage of health care services, 2) the family's program usage and 3) a simple developmental screening. There are separate forms for pre and post birth.

Incentives

An incentive system was developed as a way to encourage caregivers to do things that will promote the emotional and physical health of their child. The incentive program consists of Care Credit Cards and Kid Cash. The Care Credit Cards are included in the Resource manual, and are cards with checklists that the family completes to identify their engagement in specific ageappropriate activities with their child. Some of the activities are self-report, such as "participate in cultural events with your child", while other activities require verification by a health professional. When a member fills out the Care Credit Card and mails it to the Passport office, Passport staff mails the caregiver the appropriate amount of Kid Cash earned. Activities vary in their value and in their frequency of use. Kid Cash refers to coupons that can be redeemed at local businesses for services or products that have been donated by the merchants. Each merchant determines the amount and type of discount that will be provided.

Evaluation Design

Program evaluation involves the use of social research procedures to systematically investigate the effectiveness of community-based intervention programs (Rossi, Freeman, & Lipsey, 1999). According to Rossi, Freeman & Lipsey (1999), four questions must be answered in determining the effectiveness of a program: 1. Is the intervention reaching its target population? 2. How well is the intervention being implemented? 3. How much does the program cost? 4. What are the benefits of the programs and do these benefits of the program outweigh the costs of the program?

The process of answering these questions is not static; it is a dynamic,

multi-faceted process (Gabriel, 2000). The evaluators work in concert with community members to define the questions and establish evaluation plans. As those plans are carried out, new issues and questions are identified and addressed. Program evaluators provide feedback to the community about program strengths and weaknesses. The community then responds to the new issues and feedback by making adjustments in program policy and delivery. The community and evaluators must readdress the evaluation plans, ensuring programmatic changes are reflected in the evaluation model. This dynamic process allows for greater community empowerment (Bartunek, Foster-Fishman, & Keys, 1996): the community is able to use evaluation feedback to strengthen service delivery and the impact these services have on community members. Local ownership is thus enhanced (Butterfoss, Goodman, & Wandersman, 1993). Because of the heavy reliance on community participation in developing an evaluation model that is based on the program's plan of action to produce desired outcomes, the approach is both participatory and theory-based (Green & McAllister, 1998).

In the evaluation of Passport, we have organized a model based on the examination of three types of outcomes: process outcomes, community outcomes, and individual outcomes. Data sources include data collected by Passport on the enrollment form, during comfort check calls, incoming calls made by members, care credit cards mailed in by members, critical events within the community, committee profiles, and community funding profiles. In addition to the data collected by Passport, Michigan State University collected population level data and

data from small sub-studies of the evaluation. These data will enable us to more effectively evaluate individual outcomes. Sub-studies involving random samples of Passport families are being designed to examine the impact Passport is having on child school readiness, child health, and parent knowledge of child development.

Process outcomes

The evaluation of process outcomes allows for the understanding of how well the community implemented the intervention. With this knowledge, we can understand how and why aspects of the program fail or succeed (Harachi, Abbott, Catalano, Haggerty, & Fleming, 1999). In determining the components of process evaluation, one must identify the program/ intervention plan. For the Passport Initiative, there are three items on the "to do" list: reach a representative sample of families with young children in Genesee County (enrollment indicators), provide a core set of services to these families (service indicators), and actively engage the community in the effort to provide these services to families (community involvement indicators).

Community outcomes
Community outcomes are evaluated
by the collection and analysis of
population indicators of child health.
Population data concerning child
health are being collected by
Michigan State University in order to
examine changes in child health trends
over a fifteen-year period. Data are
being collected to cover the period
from five years before to ten years
after the inception of the Passport
Program (1993-2008).

These data will be used to track changes in the health of the children of Genesee County. Any changes identified will not be due to the Passport Program, but due to changes in the community. Since Passport is a community wide initiative, the Initiative's potential to change the lives of children in the community is due to the collaboration of the community. This means that all agencies and businesses collaborating to better serve families may be related with the changes being measured.

Current Research Findings for Process Outcomes

The findings reported here are based on preliminary analyses of process outcomes from data collected by Passport and Michigan State University.

Enrollment Outcomes
Since January 1, 1998, 8,039 children have been enrolled in Passport. There are two areas of concern for the evaluation of the effectiveness of Passport's ability to enroll families in need: pre/post natal enrollment and enrollee demographics.

Pre/Post Natal Enrollment. It is important for Passport to enroll families as early as possible so the program is able to have the largest impact on the family. Ideally, families would be enrolled as soon as the mother discovers she is pregnant so the program can assist the family with prenatal care and planning for the arrival of the infant. However, only 50% of families (N=3,683) are enrolled before the birth of the child.

Enrollee Demographics. Three aspects of enrollee demographics are covered in this section: family demographics, child demographics, and health demographics. Family demographics include information concerning the relationship of the caregiver to the child, number of

children in a family enrolled in the program, the mother's age at time of birth, and the mother's and father's education level. Child demographics include information concerning the ethnicity and age of the child. Health demographics include information concerning the identification of insurance and health care provider for the child.

Family Demographics. The majority of caregivers who enroll Passport children are mothers (88.8%) or mothers and fathers (8.6%). Only 1.2% of children were enrolled in Passport by their fathers (N=91). The mean age of mothers at the time of the child's birth was 24.6 years. The minimum and maximum reported age of mother at the time of birth was 12 and 58 years. The age at time of birth for mothers most frequently reported was 20 years. Also, Passport has enrolled 601 (8%) teenage mothers under the age of 18 years. The level of education was assessed for mothers and fathers of Passport infants. The average level of education for Passport mothers was completion of high school. Twenty-seven percent (27%) of mothers had not completed high school at the time the child was enrolled in Passport. It is important to note that the level of education for Passport mothers is not proportionate to Genesee County residents. A disproportionate amount of Passport members have only a high school diploma or its equivalency (40.5% of Passport members versus 33% of county residents) or have only completed 9th through the 11th grade (24% of Passport members versus 17% of county residents). A disproportionate amount of county residents have completed some college (30% of county residents versus 22% of Passport members) and have less than a 9th grade level of

education (7% of county residents versus 2.7% of Passport members).

Child Demographics. The majority of the infants enrolled in Passport are either Caucasian (50.9%) or African American (38.4%). The 1999 estimates from the 1990 US Census Data indicate that approximately 77% of the county residents are Caucasian and 21% are African American. According to these data, Passport has enrolled proportionally more African Americans and other minorities than Caucasians.

Health Care Demographics.
Approximately 27% of families do not identify a physician and 21% of families do not identify an insurance provider at the time of enrollment. Of those who do identify an insurance provider, 48% identify Medicaid (government provided health insurance for families who have a low level of income).

Service Outcomes

It is important to understand the quality of services Passport is providing to its members and how much members utilize those services. The quantitative data currently available concerning the utilization of Passport by members applies to the use of the educational materials and the family and program initiated support phone calls.

Educational Materials.
The majority of caregivers reported using the educational materials.
Approximately 72% of families reported using the Resource Guide; 75% of families reported using the newsletters, and 44% of families reported using Kid Cash/Care Credit Cards. Of those who used the educational materials, the vast majority found the materials either

somewhat or very helpful. Only 3% of families did not find the Resource Guide helpful; 6% of families did not find the newsletters helpful, and none of families reported that the Kid Cash were not helpful. It should also be noted that a large percentage of families found the Kid Cash to be very helpful (88%). When demographic variables were correlated with use of the educational materials, it was found that families with higher levels of education and white families were significantly more likely to report reading the newsletter. There were no significant correlations between demographic variables and use of the resource guide or use of the incentive system.

Support Phone Calls.

The percentage of families who reported using Passport referral/ support services was not as large as those using the educational materials. Forty percent of families reported calling the Passport office for help in dealing with a family problem, and 64% of families reported having received at least one Comfort Check Call. Of those families who either called the office for help or received a Comfort Check Call, most reported feeling the support services were very helpful: 70% for Call-Ins and 68% for Comfort Check Calls. When demographic variables were correlated with use of the support phone calls, it was found that white families were significantly less likely to call the office for help with family problems than non-white families.

Community Involvement Outcomes. There are three areas of focus for the evaluation of community involvement: business participation in the incentive program, involvement of community members in the steering committees, and community funding.

Incentive Program Involvement
Currently, 28 area businesses provide
support by offering discounts on
merchandise in exchange for
"vouchers" earned by Passport
members for achieving program goals.

Committee Membership
For the two steering committees, there has been continuity in the area of attendance. Approximately twenty
Community Advisory Committee members participate in bi-monthly meetings. For the Leadership
Committee, 15-20 of the 22 invitees attended on a regular basis. Although there is some turnover in committee membership, the majority of members have been involved since the inception of the program.

Community Funding

Passport has been and continues to be a community-based program. The funding it receives is from community organizations such as the hospitals, local school districts, local insurance providers and community agencies and foundations. The vast majority of funding agencies have funded the program multiple years.

CONCLUSIONS

The Passport Program has tenaciously tackled the enormous challenge of creating a community collaborative to provide information and support to all families in the county. Based on the results of the preliminary evaluation of process outcomes, the Initiative has done an excellent job of enrolling members, providing services to its members, and maintaining community engagement in the effort.

Areas of enrollment that require more attention include enrolling more members prior to the birth of the child and enrolling more mothers with less than a 9th grade level of education. For service delivery, the Initiative is working to develop methods to engage more of the high-risk sample and families with low reading levels. Given the current findings concerning the lower numbers of families receiving Comfort Check Calls, it seems that despite the large frequency of attempts being made to reach families, many families have still not been contacted. There are two reasons for families not being reached. First, many of the families' are transient. Tracking these families has been an issue that many agencies in Genesee County must deal with. Second, the caseload is overwhelming for a staff of three Comfort Check Call Specialists. And, as the number of families enrolled in Passport grows, so will the caseload of the Comfort Check Call specialists.

It is also evident that although reaching Passport families through the Comfort Check Calls is a great challenge, it is a very important method of ensuring families concerns and problems are being addressed. Results from previously completed focus groups conducted with Passport members provide evidence that families highly value regular contact by the Comfort Check Specialists. If the Passport Program is to sufficiently meet its goal of providing families with case advocacy, more Comfort Check Specialists must be hired.

Finally, Passport's effort to involve the community in this initiative has remained strong. The committee members continue to attend regular meetings, providing valuable input and direction to the initiative. Longstanding community based funding continues, and each year, new

business members contribute to the incentive system.

REFERENCES

Bartunek, J. M., Foster-Fishman, P. G., & Keys, C. B. (1996). Using collaborative advocacy to foster intergroup cooperation: A joint insider-outsider investigation. Human Relations, 49(6), 701-733.

Butterfoss, F., Goodman, R., & Wandersman, A. (1993). Community coalitions for prevention and health promotion. Health Education Research, 8(3), 315-330.

Gabriel, R. M. (2000). Methodological challenges in evaluating community partnerships and coalitions: Still crazy after all these years. Journal of Community Psychology, 28(3), 339-352.

Green, B.L. & McAllister, C. (1998). Theory-based, participatory evaluation: A powerful tool for evaluating family support programs. Zero to Three, 18(4), 30-36.

Harachi, T. W., Abbott, R. D., Catalano, R. F., Haggerty, K. P., & Fleming, C. B. (1999). Opening the black box: Using process evaluation measures to assess implementation and theory building. American Journal of Community Psychology, 27(5),711-731.

Rossi, P. H., Freeman, H. E., & Lipsey, M. W. (1999). Evaluation: A systematic approach. Thousand Oaks, CA: Sage Publications.

Sheppard, P. (May 1998). Genesee County's "Healthy Start" Promise: A "ready, set, grow" passport for school readiness. Mott Children's Health Center, Flint, MI.

Conference Reports

AIMH (UK)'s 2004 AGM

AIMH (UK)'s 2004 AGM was followed by the Annual Lecture, which this year was a fascinating account by husband and wife team Professors Philip A. Cowan and Carolyn Pape Cowan on "The Central Role of Couple Relationships in Children's Emotional Development".

Based at the University of California at Berkeley, these two clinical psychologists have been working for twenty years on two main studies designed to explore three family transitions: a couple becoming parents; parents becoming a family and schoolchildren and their families. Together with a staff made up of students, developmental psychologists and Family Counselors, the Cowans set out to study two sets of 100 couples. The first group, transition to parenthood, was studied from pre-pregnancy and pregnancy onwards, up to the age of their child starting primary school (between 3.5 years and 5.5 years). The second group was studied from this point of transition (4.5 years) onwards. This is ongoing with the child's age now 14.5 years. Part of the study included the offer of some brief interventions to a randomly selected group of parents in order to help them (and crucially also hopefully their children) with their development in this period of transition. The Cowans maintain that the state of the couple relationship is a crucial determining factor in the health, well-being and resilience of their children as they undertake transitions themselves.

They outlined five developmental tasks for new parents:

Reshaping one's identity and inner balance

- 2. Reconsidering intergenerational relationships with parents and kin
- 3. Establishing a relationship with baby.
- 4. Coping with pressures from outside the family
- 5. Reorganizing the couple relationship.

Carolyn Cowan described the first study in a lively and accessible way. 100 selected couples were interviewed from pregnancy onwards and also completed questionnaires. The hypothesis was that transitions create challenges which spur family processes into action and both create conditions for growth but can also increase the risks of dysfunction in a family. Both studies therefore also set out to provide opportunities for preventive intervention, on the basis that during periods of transition couples may be more open to help. family processes may appear more transparently and couples may be more ready to change. The aspects of family life which are highlighted are summarized thus:

- 1. For the individual:
- The sense of self identity and self esteem symptoms of distress, depression and anxiety
- 2. The relationship between the parents:
- · Role arrangements, who does what?
- · Caring and closeness
- · Conflict and co-operation
- · Problem solving skills
- 3. Parent child relationships
- · Ideas about parenting
- Parenting styles: authoritative, authoritarian, permissive
- · Parenting stress
- 4. Three-Generational patterns
- · Family of origin relationships
- · Attachments past and present

- 5. Life Stress/Social support
- Work/study
- · Kin, friends and co-workers
- Daycare

An interesting aspect that the offered interventions highlighted was that the clientele for this kind of help have not presented because they feel they are "in trouble" or "feel crazy", but despite this they feel they are able to use the interventions they are offered. The Cowans suggest that this positive experience also means that at later periods of crisis couples may feel more hopeful about asking for help.

Carolyn Cowan told the interesting personal anecdote that as a couple, the Cowans had watched with consternation the massive divorce rate amongst their contemporaries, friends and colleagues with small children. This had indicated to them from personal experience how vulnerable couples are at this period in their lives. She quoted the statistic that out of their sample of a so called "normal" advantaged group of couples, one third were clinically depressed, suffered from alcoholism or illness or job loss during their children's formative years. She asked us to imagine what the corresponding percentage might be for so called "disadvantaged" families.

Couples' Groups were offered to randomly selected groups to see if, when longitudinally surveyed, these interventions had made a difference. A large number of questions were asked as part of the surveys in order to determine what the pathways were to optimal well-being. One key question was about role allocation: the "who does what?" question. Observations were also carried out using videos during home visits where the couple were asked to choose two problems; a parenting issue and a

marital issue and in two ten minute periods (which were videotaped), to see how much headway could be made in resolving these problems.

The Cowans created a 'pie-chart' which was designed to show the list of roles the parents assigned to themselves and the amount of time or amount of space each was felt to occupy in the total 'pie'. This then charted how much these aspects of their total identity altered over time with the advent of their role as parents. In anticipating parenthood, the couples focused a great deal on the things they didn't want to do or be like, but also on a wish to recover or establish closeness again with their parents. In many cases it seemed that couples had been working on this for the whole of their lives.

Many couples were facing the challenge of co-parenting. In effect what was found to prevail despite ideologies of 'the new egalitarianism' was what the Cowans defined as a 'slightly modified traditionalism'. They found that the transition to parenthood accentuated gender differences, mothers often becoming significantly more depressed. By the time their first child was three, 15% of couples were separating or divorcing, that is, one third of all divorces in an entire lifespan are already underway at this time.

Couple Group Intervention

This group intervention continued for four months. The aim was to help couples become the parents and partners they wanted to be. It emerged that the key task here was to work on recognizing the parenting patterns that derived from the couples' families of origin. It seemed helpful for this to be heard both by the partner and by others so that the group offered a space to reflect in the midst of what otherwise felt hectic and precipitate. As Carolyn Cowan defined it, "a sense of rush that mitigates against people being able to

'put the pieces together'". The group also seemed to model a helpful capacity to tolerate differences in view and opinion. This group intervention was experienced as helpful and the following outcomes could be observed: Fathers were more psychologically involved with their infants. Mothers could also think of themselves as students or workers as well as mothers. Mothers were happier with the 'who does what?' question. There were no separations within this group in the first three years. The couple's satisfaction with their marriage stayed stable, and they felt more positive in comparison to the control group to whom no intervention was offered. It was recognized as vital to catch couples early enough in the pregnancy in order to offer help before they become enveloped in the reality of parenthood.

When children entered school at six it seemed that the best predictor of the child's success or difficulty in making this transition was the quality of the parental relationship. Observing these findings led to the design of the second study - schoolchildren and their families. Couples were recruited who had 4 year olds who would be making the transition to primary school, and the Couples' Group intervention was offered again.

Taking their information from interviews, questionnaires, observations of the couples and of family interaction, and teachers' ratings as well as tested ratings for every child, the study found that there was a high level of predictability. Teachers' reports showed that where parents were more effective at doing challenging tasks with their children and more effective in working on their problems as a couple, their children were correspondingly doing better academically, doing better socially with other children and having fewer behavioral problems.

The ongoing deterioration of the couple relationship, referred to by the Cowans as the 'extended slide', is shown to be in process not just around the transition to parenthood but continues up to the age 14 (where the study is currently). They ask the question," why should it matter that couples are happy?" and answer it by describing the significant impact parental well-being has been shown to have on children's emotional wellbeing. As part of the study, children were videotaped interacting with puppets with a researcher. The researcher speaks through the puppet "I feel good about myself, How do you feel about yourself?" leading on to "When my parents fight I feel it is my problem, its because of me" and then asks the child how he or she feels when his parents fight. The more resilient children were able to reply that they felt it was their parents' problem.

The exploration of the parenting styles of the couples in study two showed that authoritative styles, which are characterized as offering warmth and structure but with respect for autonomy, led to better social functioning than authoritarian styles, which were characterized as cold, angry and over-protective. The study also found that the father's attitude can make a difference independent of the state of mind of the mother. Couples who could be observed to escalate conflict out of control in front of the child and could not regulate themselves emotionally, led to disturbed, poorly functioning children. Daughters who blame themselves for their parents' fights often become depressed later on, and fatherdaughter relationships suffer, especially when the father is dissatisfied with his marital relationship.

Describing the adult attachment interview (AAI) and defining health as "having workable strategies for dealing with emotional connections,"

the Cowans found that an insecure attachment is a good predictor of marital conflict. As part of the research, together with colleagues, they then created a version of the Adult Attachment Interview which they named the Couple Attachment Interview. Interestingly, even in cases where the parents were mothers and single parents, it emerged that the narrative the mother had of the prebirth relationship with the baby's father could have a positive impact on the quality of her relationship with her child. This demonstrates that the "internal picture" or representation of the relationship with the father has lasting resonance even if the father is no longer around.

The study found that 80% of couples rated as secure on the AAI were rated as secure on the CAI. However 20% of those rated insecure on the AAI were rated as secure on the CAI. They suggested that the way in which the couple both contribute to the nature of couple conflict could allow for change and modification of each other's state of mind, leading to the formation of new, more helpful internal working models, depending on the combination of attachment status. For example, a securely attached father with an insecurely attached mother can provide an emotional buffer which enhances the quality of the couple relationship and hence of the capacity for good parenting.

In Study Two, the interventions were offered in three forms, with correspondingly different outcomes:

- 1. A couple focused group. This intervention explored any issue raised, such as putting Johnny to bed, but from the perspective of "what was the implication for the couple of what happened?"
- 2. A parenting focused group. This focused on parenting issues only.
- 3. Brief consultations.

The results indicated that where the focus was simply on strategies for parenting, while the parenting improved, the marriage did not necessarily do so. However, where the focus was on the impact on the couple and the marriage, not only did the parenting improve but also the marriage and the child's well-being showed improvement.

In summary, the message that the Cowans conveyed very vividly and convincingly was that focusing on the well-being of the couple may also significantly help the long term well-being of the child.

After the talk there were a number of questions from the audience, asking if anyone left or dropped out of the studies, if the interventions were offered in a way that meant they were properly random? It emerged that in Study One almost no-one left and babies also attended the groups as families grew. In Study Two there was more mobility in the 100 couples. A question about the numbers involved in the study and the potential need for hundreds of couples in order to substantiate these important claims was answered by Philip Cowan. He suggested that over this period of 20 years they had wanted the study to be as open as possible and allow things to vary both in the control and in the intervention groups to see if, over time, statistically significant effects emerged. He was hoping this would in turn lead to further, larger studies to substantiate these claims, for example a study of 8,000 married and unmarried couples which is planned. He felt the research to date showed that the causal link is demonstrable: "when we change how the marriage is going, people can do parenting better."

It was also suggested by a member of the audience that the participants in the study could report on their own perceptions about the impact of the work on their capacities. The Cowans commented that it was found that, through the interventions, couples felt less alone and felt helped to name, and then to fulfill, some of their hopes for how they wanted their relationships and their families to be. The Cowans also stressed that where parenting groups, such as Webster Stratton, get pushed so strongly in the USA, something significant is missing. They emphasized that it is really important to press for inclusion of both men and women in such groups, and that workers running these groups need to be aware that improvements in the couple relationship have such an impact on the couples' children. This affirms the importance of the couple and allows a model of helping that brings real-life issues to be explored. Workers are encouraged not to 'teach the answers' but to help couples explore their existing models asking 'what have you tried?' Couples thus develop their own strategies and skills as partners. The Cowans also felt that this message could have an impact on the practice of a range of therapists involved in trying to help individuals in families by focusing attention on the couple relationship in order to facilitate children's capacity for adaptation.

This brief overview of a complex lecture cannot do justice to the detailed study with which we were presented. For further information I suggest you read the Cowans' book: "When Partners become Parents: the Big Life Change for Couples" (Lawrence Erlbaum 2000).

Miranda Passey

AIMH (UK)8th Annual Lecture 23rd April 2005

The Mansion House on Clifton Down in Bristol was the impressive setting for the Annual Lecture this year and there was not a spare seat to be had! The reason for this was almost certainly the fact that the invited

speaker, Sue Gerhardt, has become known through the interest aroused by her beautifully written book 'Why Love Matters, How Affection Shapes a Baby's Brain'. The combination of speaker, subject-matter and venue (and very appetizing lunch!) created a genial and stimulating atmosphere throughout the day. It was clear from comments made by many members present that it had been a highly successful AIMH event.

As 'Why Love Matters' is a book well known to many readers I will not try to summarize everything Sue said, but rather to draw out some of the main points she discussed in her lecture and which seemed to form the focus of the ensuing discussion. I have used her own words when it has seemed particularly important to convey precisely her meaning.

She began by telling us that her book was originally called 'Why Babies Matter' because she wanted to put babies at the forefront of government policy. The language of policy documents - recommending 'support', 'advice' and 'parenting skills' conjure up a very rational universe where the assumption is that the right information is all that is needed to help adults parent their children. 'But handouts, advice, phone lines and techniques are not enough - we are creatures who learn through emotions and through our relationships with others.'

Sue described the parent/infant psychotherapy work engaged in at Oxpip as essentially regulatory of the parents' emotions. Oxpip's experience is that within every parent who struggles to manage their baby, there is almost always a deprived, poorly regulated child. Regulation matters most when the baby or parent is under stress. One discussion point was the possible over-emphasis on depression itself as interfering in the parent/child interaction, rather than on the fact that mothers who are depressed are often

not able to regulate their baby well. If parents are not able to manage their own impulses or are not able to regulate themselves well, then they will almost inevitably pass on their regulatory problems to their children.

Babies pick up emotional strategies. By the age of one year, a toddler has already worked out how to handle himself in response to the adults around. The capacity to 'mentalize', as Peter Fonagy calls the process of identifying and talking about your own feelings and recognizing others' feelings, is established in the first years of life. Sue Gerhardt valued psychotherapy as a way of reworking this 'mentalization'.

In recent years several authors and speakers have outlined the importance of understanding baby brain development. Sue Gerhardt built on this and made links between this and the work of biochemists, psychotherapists, neuroscientists and psychiatrists. This allowed new emphases to emerge. For instance: by age three years, infants have 90% of their adult brain in place. If the part of the brain which organizes emotional response (the amygdala) is affected by too much stress or adversity in the womb or in the first year of life, then this affects the development of theory of mind in the infant, whereas damage to the amygdala in adulthood does not do so. Loving physical touch, which leads to positive arousal, is vital to the growth and protection of the part of the brain involved in recognizing social cues, developing foresight and having consideration for others. This part of the brain is the pre-frontal cortex. It is vital to keep a baby's stress within manageable limits, since the child's stress response is being 'set' during this period (Sue likens this to a 'thermostat'). This seems to be such an important point, vital for understanding some of the more disturbed young children we are all meeting in our various agencies, i.e. stress for a baby is mostly about not

getting a response, or not getting an appropriate response. If parents are not able to tune into their baby during this period and keep them calm, they may develop a hypersensitive stress response which means they may grow up much more prone to over-react to stress and produce too much cortisol. Too much of the stress hormone cortisol at an early age is toxic to the developing systems of the brain and can, in particular, affect the growth of the pre-frontal cortex, as well as damaging the development of the hippocampus which is involved in memory.

An issue raised in discussion was whether any level of cortisol is unhelpful to an infant or whether there is an optimal level which can be productive. The consensus seemed to be that it is chronicity that is very damaging - or when it gets 'fixed' at a certain level (the 'thermostat' image). The good news is that laughter, music and, yes, chocolate (!) can 'mop up' the cortisol. Sue's contribution to the debate about baby brain development highlights the fact that if things don't go well the infant's biochemical responses can be affected e.g. dopamine and norepinephrine are involved in the attention problems of ADHD and serotonin problems are involved in depression and in aggression. The whole of this central limbic system can end up irritable with an amygdala that is easily tripped into action by small stresses.

One point I found particularly helpful was the way Sue spoke about serious child neglect and abuse being secondary to the absence of a relationship system between a parent and infant. In this situation a parent and infant have not formed a working emotional system, the parent does not have accurate understanding of the baby's capacities and the infant has therefore not come into focus as a person with emotional needs and feelings. This seems to me to be a particularly helpful insight and

certainly supports my own experience as a practitioner of parent-infant psychotherapy. I found myself thinking of the numbers of young children whose parents present as believing them to have 'something wrong with them'. Sue's comments rang true, 'the parent who doesn't have an accurate view of their baby's capacities can't regulate the baby, because he or she can't do it for himself.'

An issue which preoccupies many practitioners is that of recovery and repair if the infant's early experiences have had an adverse influence on brain function. The more primitive parts of the brain (i.e., the amygdala and the hypothalamus) are not as plastic as the cortex. Sue's comments in this respect are particularly helpful—"the only option then is to build up soothing and calming capacities that address the primitive brain and not just the more verbal and conscious parts of the brain".

Psychotherapy is a process which attempts to do both, to work with emotional relationships and their regulation through verbal and nonverbal means. Learning to regulate better doesn't happen in the abstract, but through active and positive relationships that perhaps re-work some of the early regulatory processes. Again, we don't yet know if psychotherapy can actually change people's brain structures, but I suspect the research is coming!

Sue spent the afternoon of the AIMH Annual Conference talking about the repercussions of a sensitized and poorly developed brain for adult mental health. In one example, between 75% and 92% of adults with Borderline Personality Disorder were emotionally neglected in infancy. Sue described these individuals thus, 'they struggle to keep their emotional balance because they have a poor capacity to soothe themselves and to manage their emotions, particularly in close relationships.'

If individuals have experienced intense early stress as babies then the likelihood is that they will easily fall back into a primitive, baby level of functioning when under stress as adults. Little things which go wrong can trigger a painful feeling of neglect which then overwhelms the individual. 'This is the person who may suddenly flip into a state of road rage or destruction of relationships - they just can't care about the other person when they are in the grip of an amygdala storm'.

As the hippocampus, which involves memory, is also damaged by early stress this may make the individual prone to dissociate or fail to link experiences so they don't learn from experience. Another example, already well-known to some readers, describes many of the children and adults we work with - 'just as kittens who don't get the chance to use their eyes at a crucial moment will have impaired vision, so too humans who are not related to with empathy at a crucial developmental moment may have impaired empathy. Various brain capacities develop in a particular order and timing may be important.'

In contrast to the adults with Borderline Personality Disorder, who may have experienced chronic stress leading to hyper-excitable left amygdalas, Sue described individuals with anti-social personalities as probably having a 'switched off' or down-regulated stress response to avoid the constant wear and tear on the system.

Most of us are probably already familiar with the link between maternal depression and certain childhood behaviors. There are various explanations for this but Sue also suggested that, if infants have lived with depressed mothers, then their left pre-frontal cortex may not have developed so well, which will leave them with less ability to manage negative feelings.

This all points to the need to intervene early and Sue's view is that the best time to intervene is during the **pregnancy** when parents can be more receptive to thinking about their own and their infant's emotional needs. She emphasized that antenatal anxiety can be a greater predictor of future problems in the parent/child relationship than postnatal depression. There is a correlation between maternal antenatal anxiety and children's behavior problems at age 4 years.

In the (shorter) afternoon session, Sue gave a case-study and used the information she had earlier given us to argue for early intervention by specialist parent/infant psychotherapists, who put the development of the regulatory parent-child relationship at the center of their work. She argued for 'layers of intervention' involving midwives, health visitors, Sure Start workers, social workers and also independently run centers like Oxpip (where she herself works).

Sue concluded by challenging the membership of AIMH to take on a more visible campaigning role for these 'layers of services'. Sue's lecture (and of course her book) has contributed to inspire us to respond to the wider challenge of developing integrated, comprehensive early interventions for families with young children. Many of us left the day in Bristol more determined than ever to do just that.

Sue Brough Child Psychotherapist



Literature Monitor

BOOKS

Berlin, L.J. et al. (Eds.) (2005)

Enhancing Early Attachments.

Guilford Press. ISBN: 1572309962

Synthesizing the latest theory, research, and practices related to supporting early attachments, this volume provides a unique window into the major treatment and prevention approaches available today. Chapters address the theoretical and empirical bases of attachment interventions; explore the effects of attachment-related trauma and how they can be ameliorated; and describe a range of exemplary programs operating at the individual, family, and community levels. Throughout, expert authors consider cross-cutting issues such as the core components of effective services and appropriate outcome measures for attachment interventions. Also discussed are policy implications, including how programs to enhance early child-caregiver relationships fit into broader health, social service, and early education systems.

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- 4 Ziv Attachment-Based Intervention Programs: Implications for attachment Theory and Research;

- 5 Putnam The Developmental Neurobiology of Attachment: Lessons from Child Abuse Research:
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Atkinson, L & Goldberg, S (2004) Attachment issues in psychopathology and intervention (Erlbaum)

ARTICLES

Elizabeth J. Corwin E.J. et al. (2005) The impact of fatigue on the development of postpartum depression. *JOGNN*, 34: 577-586 *Background*: Previous research suggests early postpartum fatigue (PPF) plays a significant role in the development of postpartum depression (PPD). Predicting risk for PPD via early identification of PPF may provide opportunity for intervention.

Objective: To replicate and extend previous studies concerning the impact of PPF on symptoms of PPD and to describe the relationships among PPF, PPD, and other variables using the theory of unpleasant symptoms.

Results: Significant correlations were obtained between PPF and symptoms of PPD on Days 7, 14, and 28, with Day 14 PPF levels predicting future development of PPD symptoms in 10 of 11 women. Perceived stress, but not cortisol, was also correlated with symptoms of PPD on Days 7, 14, and 28. Women with a history of

depression had elevated depression scores compared to women without, but no variable was as effective at predicting PPD as PPF.

Conclusions: Fatigue by Day 14 postpartum was the most predictive variable for symptoms of PPD on Day 28 in this population. E-mail: corwin.56 @osu.edu.

Dennis, C-L. (2005) Psychosocial and psychological interventions for prevention of postnatal depression: systematic review. BMJ, 331:15

Grossman, K. et al. (2002) 'The uniqueness of the child-father attachment relationship: Father's sensitive and challenging play as a pivotal variable in a 16-year longitudinal study.' Social Development vol. 11

This longitudinal study of 44 families from northern Germany set out to explore fathers' as compared to mothers' specific contribution to their children's attachment representations at ages 6, 10 and 16 years. In an effort to pin down the variables that affect infant-father attachment and to study their longitudinal impact, if any, this study added a new assessment. the sensitive and challenging interactive play scale (SCIP) for the parents. The SCIP scale is designed to test parental "sensitivity, support and gentle challenges of their child's exploratory play activity" in normal, distress-free situations as opposed to the Strange situation procedure which examines children's coping strategies when dealing with separation from parents. The authors have interpreted the results to demonstrate that both mothers and fathers make important and unique contributions to the emotional security of their children. The fact that infant-mother attachment (as assessed at 12 months through the SSP) and fathers' SCIP scores (as assessed between the ages of 2 to 6 years) were both significantly related to children's emotional security at 6,10 and 16 years means

that both factors together are providing the building blocks of the children's emotional development.

Pisacane, A. et al.(2005) 'A controlled trail of the father's role in breastfeeding promotion.' Pediatrics; 116:494-8

Although doctors and midwives are unanimous that breast is best, the efficacy of most interventions to promote breast feeding is disappointingly slight. Perhaps the interventions need to be targeted more widely. A randomized controlled trial in Italy found that teaching fathers how to prevent and manage the most common lactation difficulties nearly doubled rates of successful breast feeding of infants at 6 and 12 months. On-line at: www.pediatrics.org/cgi/content/full/116/4/e494

Ramchandani, Pet al. (2005), Paternal depression in the postnatal period and child development: a prospective population study. *The Lancet* 365: 2201-2205

Our findings indicate that children of fathers who have depression during the postnatal period are at increased risk of behavioral problems at age 3.5 years, even after maternal depression and other factors had been controlled for. The increased risk associated with depression in fathers during the infant's early months also remains after controlling for later paternal depression, suggesting that paternal depression in the early months of a child's life might be a particular risk factor for adverse development. Our findings further indicate that the association between paternal depression and child behavior problems is stronger in boys than in girls. This notion warrants further investigation.

Ruiz-Pelaez, J. G. et al. (2004) Kangaroo Mother Care, an example to follow from developing countries. BMJ 329: 1179-1181. Ryan D, Milis L, Misri N. (2005) Depression during pregnancy. Canadian Family Physician Aug. 51: 1087-93

Conclusion: Early detection of depression during pregnancy is critical because depression can adversely affect birth outcomes and neonatal health and, if left untreated, can persist after the birth. Untreated postpartum depression can impair mother-infant attachments and have cognitive, emotional, and behavioral consequences for children.

Shaw, D.S., Lacourse, E., & Nagin, D.S. (2005) Developmental trajectories of conduct problems and hyperactivity from ages 2 to 10. Journal of Child Psychology and Psychiatry, 46 (9): 931-942

Conclusions: The findings extend previous research with older children with hyperactivity problems and/or conduct problems, highlighting the effects of proximal family and child risk factors that are identifiable in the first two years of children's lives and associated with trajectories of disruptive behavior.

Senior, R., Barnes, J., Emberson, J.R. & Golding, J. (2005) Early experiences and their relationship to maternal eating disorder symptoms, both lifetime and during pregnancy. *British Journal of Psychiatry* 187: 268-273.

Zeanah, P.D., Stafford, B. & Zeanah, C.H. (July 2005) Clinical interventions to enhance infant mental health: A selective review. Download from www.healthychild.ucla.edu





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