Video-feedback intervention to promote maternal sensitivity in high risk mothers

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Highlights of the presentation

• Maternal sensitivity
  – Relevance to the early mother-infant relationship
  – A model of the mother-infant relationship

• Video-feedback intervention (VFI)
  – What is VFI?
  – Why use VFI?
  – When to use VFI?
  – How to do a VFI?

• Video observation
MATERNAL SENSITIVITY

Definition

Mother’s ability to perceive and interpret accurately her baby’s signals and, given this understanding, respond to them appropriately and promptly.

Thus, maternal sensitivity has 4 essential components:
1. Awareness of the signals
2. Accurate interpretation of the signals
3. Appropriate response to signals
4. Prompt response to signals

(Ainsworth et al., 1978)
Importance of sensitivity

Maternal sensitivity influences infant’s attachment security which is related to social and cognitive development.

More specifically:
1. Confidence in oneself
2. Social and adaptation capacities
3. Language skills

Factors influencing sensitivity

Stams et al., 2002; Sroufe et al., 2005
A model of mother-infant relationship

**Sensibility**
- Knowledge of infant development
- Making acquaintance
- Feeling responsible for the infant’s development
- Security of the environment

**Commitment**
- Mutual affect
- Emotional regulation
- Quality of physical contact
- Physical contact during distress

**Discovery**
- Quality of the verbal exchange

**Communication**
- Observation
- Improvement

**Physical Proximity**

In sum,

- Maternal sensitivity is crucial to the establishment of a secure relationship with the infant
- Maternal sensitivity can be:
  - Observed
  - Improved

(Bell, 2002)
VIDEO-FEEDBACK INTERVENTION

What is video-feedback intervention (VFI)?

• A behavioral intervention aimed at promoting sensitivity and a secure attachment
• Watching and discussing a videotaped interaction of the parent and the infant
• Short-term intervention
• Capitalizes on the strengths of the parent-infant dyad to promote sensitive interactions

Juffer et al., 2008
Why use VFI?

- To practice observational skills
- To discuss relationship issues with the parent
- Evidence base data that VFI enhances sensitivity and attachment security

VFI studies

**Moss et al., 2011**
- RCT with 67 mothers (28 IG and 26 CG) in maltreating families
- IG – 8 home visits with VFI
- Improvement in parental sensitiviy and child attachment security and reduction in child disorganization

**Klein Velderman et al., 2008**
- Case study and process evaluation
- 4 VPI and 4 parenting brochures
- Mother : Increase of 2 scale points on the *Ainsworth sensitivity scales*, satisfaction with the approach, time consuming
- Home visitor : higher estimation of the potential for change
### VFI studies

**Bakermans-Kranenburg et al., 2003**
- Meta-analyses of sensitivity and attachment intervention on 81 studies (including 7,636 families)
- Short-term interventions, using videofeedback are effective to enhance sensitivity and attachment security

**Backermans-Kranenburg et al., 2008**
- Quasi-experimental study with 81 insecure mothers with temperamentally reactive infants (CG, 2 IG)
- Mothers in both intervention groups were more sensitive than mothers in CG.
- No effect on attachment security

### VFI studies

**Van Zeijl et al., 2006**
- RCT with 237 families (IG = 120, CG = 117) with 1- to 3- year-old with behavior problems
- VFI was effective in enhancing maternal attitudes toward sensitivity and sensitive discipline

**Woolley et al., 2008**
- RCT with 80 mothers (IG = 40, CG = 40) with postpartum eating disorders and their 4- to 6- month old infant.
- Reduction in conflictual mother-infant interactions during mealtime
When to use VFI?

- To **promote** positive parent-infant interaction
- To **enhance** sensitive behavior in high-risk families
- To **change** parental behavior in child protection situation

(Bell et al., 2011; Moss et al., 2011)

How to do a VFI?

![Diagram of VFI process]

1. Pre-video
2. Video
3. Follow-up
4. Video feedback
5. Preparation for feedback
Pre video

- Conditions
  - Solid knowledge base on mother-infant attachment
  - Supportive relationship between nurse and mother

- Introduction to the mother
  - *Something we can do that will help us see with much more precision little Jacob’s development*

Video

- 30 minutes of daily situations at the home

- Nurse is not actively involved with the mother and infant during filming

- Mothers are encouraged to relate to their infant the way they normally do
Preparation for feedback

• Appreciate mother-infant interactions
  – Sensitivity in the 5 components of the mother-infant relationship

• Identify suitable fragments to review with the mother in accordance with the goal of enhancing sensitivity
  – Positive and successful interactions

Video feedback

• Look at the video for a first time
  – Talk about how most mothers feel awkward to see themselves on video

• Present the goal to the mother:
  – *Now let’s look at the video together and see what we can do to help Jacob with his development*
Video feedback

- Still the video to focus on positive and successful interactions
  - *See how Jacob reacted with a smile when you looked attentively at his play*

- Stick to the goal
  - Showing to the mother that she is able to react in a sensitive way to her infant
  - Let the mother be her own model for intervention

Follow-up

- Repeat 4 to 6 times

- Give information on sensitivity and attachment security
VIDEOS

MARY AND ETHAN
A model of mother-infant relationship

**SENSITIVITY**
- Mom knows stages of development
- Position for eye contact
- Equipment for the bath
- Physical stimulation (pour water on his body)
- Security of the baby (level of water)
- Mom seems comfortable, available, happy
- Level of stimulation adapted

**COMMUNICATION**
- Touches her baby
- Face to face
- Positive eye contact
- High verbal interaction (talks a lot)
- Voice tone (smooth, calm)
- Attentive to the baby’s behavior
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**EMOTIONAL CONTACT**
- Positive affect between mom and baby
- Mom maintain these positive affect in interaction

**DISCOVERY**
- Mom seems comfortable, available, happy
- Level of stimulation adapted

**COMMITMENT**
- Positive affect between mom and baby
- Mom maintain these positive affect in interaction

**PHYSICAL PROXIMITY**
- Touches her baby
- Face to face
- Positive eye contact

**SUE AND LILY**
A model of mother-infant relationship

**SENSITIVITY**
- Touches her baby
- Lack of warmth in touch
- Baby has a poor eye contact

**DISCOVERY**
- Mom's expectations are not adjusted to the child's stage of development
- Secure (safety)
- Physically available
- Poor stimulation (mainly in play)

**COMMITMENT**
- Mom: positive but worried, seems irritable
- Baby: fussy, neutral affect, doesn't smile

**COMMUNICATION**
- Talks to her baby
- Varied voice tone
- Poor and little content adjustment
- No verbal communication attempt from the baby
- Touches her baby
- Lack of warmth in touch
- Baby has a poor eye contact

**PHYSICAL PROXIMITY**
- Secure (safety)
- Physically available
- Poor stimulation (mainly in play)

**EMOTIONAL CONTACT**
- Mom positive but worried, seems irritable
- Baby: fussy, neutral affect, doesn't smile
Conclusion

• There is growing evidence that VFI is an effective strategy to enhance maternal sensitivity that nurses can integrate in their practice with childbearing families, particularly dyads at risk for attachment problems