

Abstract

Infant directed singing is an ancient, universal and universally recognized form of care taking that has survived industrialization and urbanization and is recognized across cultures and music systems. The mutuality during singing between mother and infant may further serve to ensure infant survival. This singing allows for improvisation, thereby enabling expression, emotional release, relaxation and soothing for singer and child.

Pregnant and parenting teens face a multitude of challenges and want to be good parents. They require help to meet their own basic needs and develop an understanding of their child's needs and the parenting skills to meet those needs. Some may need to learn how to sing to their children, what to sing to their children, and why.

The Lullaby Group was conceived to provide age-appropriate music experiences for infants and young children and to promote parental self-expression, relaxation and self-soothing, to facilitate attachment and bonding between parents and children and to enhance parental self-esteem through music interaction with their infants and children. This writing describes the pilot of a Lullaby Group in an inner city centre for pregnant and parenting teens.

Introduction

In addition to the adversity of poverty and new motherhood, pregnant and parenting teens face the additional challenge of adolescence. This writing describes their needs and characteristics of infant directed song as rationales for developing the Lullaby Group. The group and its evaluation are described. Implications for future applications are discussed.

Pregnant and Parenting Teens

Teen mothers characteristically have histories of poverty, family problems (including jail, suicide, mental illness and substance misuse), and physical and/or sexual abuse. They have increased health risks due to smoking, alcohol and other chronic problems. Their higher scores of persecutory ideas (i.e., feeling victimized by family, friends, educational or welfare systems) are grounded in reality. Forty percent of teen mothers have severe psychological problems. Increased stressors affect them, their babies, and their relationships with their babies. (Osofsky et al, 1993)

Children of teen mothers have greater risk of low birth weight and developing physical, cognitive, social, emotional problems and are less likely to succeed later in school (Fulton & Factor, 1993; Rakic, 1996; McCain & Mustard, 1999; Doherty, 1997). Increased postnatal risk means that babies spend the most

critical period of their lives under significantly enhanced risk, physically, medically, emotionally and cognitively. Postpartum adversity lasts many years and is responsible for enhanced longterm risk to both mother and child (Acheson, 1998; Barker, 1997; Power & Hertzman, 1999).

The development of attachment patterns, affect regulation, language and cognition are described in terms of "windows of opportunity" during the crucial early years after birth. The brain develops according to the quantity and quality of the stimuli it receives. Good nutrition, nurturing and responsive caregiving before and during these first years of life plus good early child development programs improve the outcomes for all children's learning, behaviour, and physical and mental health throughout life (McCain & Mustard, 1999). Dollars spent on early intervention and education are far more effective than dollars spent at any other time in a person's life (Cleveland & Krashinsky, 1997).

The social context is the cause of many problems for these young mothers, who lack the resources and fundamental lifeskills necessary for the demands they face. Teen mothers also lack a sense of control of their bodies. These feelings of loss of control are exacerbated by the rules for obtaining and maintaining social assistance benefits.

Infant Directed Song

The hearing capacity of newborns is acute and well developed (Klaus & Klaus 1998). They have good incentive to listen: The acoustic environment of the infant is musically rich (Trehub, 2002; Trehub, 1999; Trehub, 1996). Speech to infants has been called "motherese" (Fernald, 1991) because of its musical qualities. This infant directed speech from parents, other care-takers and children has a higher pitch, slower rate and is more melodic as compared to adult directed speech and speech to older children.

For their part, infants are particularly responsive to musical elements. They prefer singing even to sing-song, motherese speech (Trehub, 2002). Recent studies of music perception in infancy demonstrate that their processing of musical or music-like patterns is similar to that of adults (Trehub 2000). Music processing similarities between infants with limited exposure to music and adults with many years of exposure point to biological foundations for this ability. The favourable consequences of singing to infants (e.g., infant's cry reduction, sleep induction, positive affect) contribute to infant well-being while promoting the likelihood of continued activity of the singer. This mutuality during music between mother and infant may further serve to ensure to infant survival (Trehub, 2001; Dissanayake 2000a).

It is not surprising that "the practice of singing to infants and many details of form and style are rooted in ancient traditions that have survived industrialization and

urbanization" (Trehub & Trainor 1998, p.43). Infant directed singing is an important, universal and universally recognizable form of caretaking that is recognized across cultures and music systems (Trehub et al. 1993a,b,c). This special genre of music for children consists of two song types: lullabies and play songs.

Lullabies are quiet, intimate songs sung to soothe the listener and induce sleep. They are structurally, perceptually and functionally distinct from non-lullabies (Trehub & Trainor 1998; Trehub et al. 1993a,b; Unyk et. al. 1992). Lullabies are characterized by:

a slow tempo

restricted set of pitches and narrow pitch range

simple, repeated pitch contours

rhythmic character linked to rocking and/or swaying

repetitive nonsense syllables

tranquil images, terms of endearment or diminutives

humming

considerable improvisation

indefinite song length

(Trehub & Schellenberg 1995; Trehub & Trainor 1998)

Lullabies have been discussed in terms of function (Hawes 1974). Lullabies function as work song, love song, incantation, emotional release and self-expression (Trehub & Trainor 1998). Infants enjoy lullabies more than adult songs or even play songs (Trehub 2000).

Play songs are songs to arouse and/or amuse infants and children. They are lively and exuberant in contrast to the soothing, quiet of lullabies (Trehub & Trainor 1998). Compared to lullabies, play songs have faster tempo, wider pitch range, greater animation and contain referential gestures. Whereas rhythm in lullabies capture those of swaying and rocking, rhythm in play songs capture the rhythm of the text. The words of play songs are more important than those of the lullaby and often have a didactic component; they are a vehicle for teaching and enculturation. The same play song melody is often used for multiple texts (e.g., "Twinkle, Twinkle," "Baa, Baa Black Sheep" and the "ABC" song, or "This Old Man" and the "Barney" song). Singing playsongs begins later in infancy than lullabies and continues longer, until the child's own song repertoire is in place (Suliteanu in Trehub & Trainor 1998).

With the exception of North America and Europe where playsongs dominate, lullabies are the more common song form in infancy. Trehub & Trainor (1998) posit this is because young children sleep with their mothers in most other world cultures. Interviews conducted with Canadian mothers (Trehub 1999) showed they learn songs from recordings and television, which feature mostly playsongs.

Self-Expression, Relaxation and Self-Soothing

Lullabies allow for improvisation, thereby enabling self-expression and an outlet for emotional release. The deep, regular breathing necessary to sustain vocalization during song increases vital capacity and maximizes oxygenation, relaxation and can also decrease the perception of pain. Singing anything has a soothing effect. Singing lullabies, with their characteristic simplicity, repetition, slow tempo and gentle images further ensures relaxation.

Trehub & Unyk (1991) claim that lullaby singing as a part of care-taking children would not have persisted across centuries and continents without good effects. Recent studies (Trehub, 2001) of infant salivary cortisol as a measure of changes in arousal (i.e., alertness or sleepiness) following their mother's singing provide concrete and measurable evidence of what has been known by lullaby singers throughout the ages. The capacity of lullabies to soothe the singer as well as the listener (Hawes 1974; Trehub & Trainor 1998) may also have contributed further to the survival of lullaby singing.

Attachment and Bonding

Dissanayake (1992) proposes that the arts, as a way to "make things special," serve as enabling mechanisms for other activities more directly related to survival. Singing is mutually enjoyed by singer and listener, fosters communion between the nurturer and the nurtured (Trehub & Trainor 1998), and thereby enhances affiliation and the child's likelihood for sustained care and survival. Dissanayake (2000a) describes mutuality as "a kind of taproot formed in the elemental loam of the mother-infant relationship" (p. 69). Being a baby means wanting such mutuality and to participate in patterned, multimodal, emotionally communicative improvisations.

Music functions to preserve this mother-infant relationship in the mother's absence. Lullabies and play songs may function as transitional objects in early childhood (Rogers 1990; Garfias 1990). Lullabies and play songs come to evoke a child's feelings for mother, allowing the child to recreate the feeling of being with her even in her absence. Garfias (1990) refers to the lullaby as a "convenient metaphor for all of the earliest communications to the new infant from those already established members of its society" (p. 101); these ideally include associations with comfort, warmth, security and protection.

Infant Directed Song and Parental Self-Esteem

Singing to infants affects arousal by inducing sleep and also eliciting interaction. Infants attend more to mother's singing voice than spoken voice (Trehub 1999). In an experimental setting, infants display more visual regard for their mothers' videotaped singing compared to speaking (Trehub, 2002). I believe this occurs naturally, but has not been studied. If so, this increased looking has the potential to enhance the mother's self-esteem and promote a positive self-concept of herself as a parent.

The Lullaby Group

Rationale

Based on what is known about parenting teens and their children, infant directed song and the musical responsiveness of infants, the "Lullaby Group," was conceived and piloted as a means of addressing the needs of parents, infants and children in an inner city centre. Lullabies and play songs were seen as ways of providing teen parents with skills and empowerment in a non-threatening spirit of belonging and fun.

Goals

1. Provide opportunities for increased self-esteem for parents;
2. Provide a means of self-soothing for parents;
3. Promote and facilitate bonding and interaction between parents and children by modeling music interaction with babies and children;
4. Provide relaxation in support of breast-feeding for parents and infants; and
5. Provide age-appropriate sensory/cognitive stimulation and/or soothing for infants and children through lullabies, play songs and stories.

Description

Live music (voice and classical guitar) was provided in the nursery one afternoon a week from January to June 2000 by an accredited music therapist. The duration of the music varied from 45 minutes to 2 hours. The group was attended by pregnant teens and teen parents (average age, 17) infants, toddlers and preschool children (age birth to 4 years).

The focus of the music provided in the nursery was three-fold and not mutually exclusive: the teens, the infants, and the preschoolers. The focus of the music was directed to where the greatest need was perceived to be in any given moment (e.g., crying infants, rambunctious children). The fluidity of live music and its ability to make contact across distance was useful in the large rectangular shape of the nursery. There were times when the music was directed to the preschoolers while I was sitting with the parents and infants; similarly, there were occasions when songs and stories were directed to the parents and/or infants while I was sitting with the children.

Infant songs consisted of lullabies and simple, improvised melodies accompanied by guitar. They were intended to induce sleep, provide quiet and calm and elicit infant vocal play and interaction. Songs directed to the children consisted of play songs, ballads (story songs) and stories intended for fun, learning (e.g., language development, social interaction, fine and gross motor control) and self-expression. Songs for parents were intended to provide relaxation, enjoyment and interaction, and were also suitable for use with their infants and children.

Books of song lyrics were provided during the group to encourage parents and staff to sing along. The books contained songs that were most familiar and easiest to read and sing. Songs were added to the books as they were requested. A larger lyric collection was brought each week by the music therapist. Teens were welcome to photocopy songs from any of these song collections.

Therapist Observation

Live music in the nursery provided a calm, soothing presence, playfulness, interaction and a sense of cohesion and belonging. The lullabies served to promote sleep. Improvised melodies accompanied by guitar elicited vocal play with infants. On one occasion, an infant was distracted from her hunger distress by vocal play while her lunch was being prepared and heated. Parents expressed surprise and delight to watch their infants engaged in music.

Parents were encouraged, but not pressured, to sing along. Sometimes they sang with enthusiasm and staff and volunteers joined in. At other times, the music therapist's singing provided a quiet background for conversation. New song material was sometimes introduced during these times.

Live music, while appealing and enjoyable, can also be threatening. The music therapist strove to maintain a very low profile and let the music establish the relationship. The collection of parent evaluation towards the end of the pilot served to facilitate dialogue and connection with the parents. The songs requested by the end of the group showed a desire by parents to sing for their own self-expression and enjoyment.

Play songs were sung with the older, pre-school children. Sometimes an informal music circle occurred with staff and volunteer support. Parents were less likely to join this activity but always watched and many did sing along. This was very enjoyable for staff, children and the music therapist. Stories were also provided and were particularly enjoyed by one pre-school child. Sometimes there were no older children or these children were engrossed in other activity and chose not to engage in music.

Parent Observations (Evaluation form, Appendix 1.)

What Parents Liked: *"I like the music when the babies are crying."*

Parents generally liked the music. Specifically, they cited liking belonging, inclusion and that the music was relaxing, calming and soothing. One parent liked the variety and that the children liked it.

What Parents Didn't Like: *"Sometimes it gets annoying because it's so slow and it puts you to sleep."*

Two parents stated they didn't like "some of the songs" but didn't say which ones. One parent wants more songs in the book, one didn't like the time of day the group took place and another didn't like when it is too crowded.

What Parents Noticed about Themselves: *"Is that I can sing so beautifully and that my son enjoys when I sing. I love to hear my voice now that I know I can sing."*

Many parents noticed feeling quiet, relaxation, enjoyment and calm. One remembered a lot of songs. One parent said, "I caught myself singing along," seemingly in spite of herself.

What Parents Noticed about Their Children: *"He enjoys it. He pays more attention to me when I sing. I sing to him all the time now. He is used to it now when he goes to sleep and he won't go to sleep until I sing to him (7 mos.)."*

Parents noticed their children's responses to music. These responses ranged from settling and sleeping to increased arousal (e.g., looking, getting excited and perking up). One parent noticed that her baby "watches our mouths and listens to us."

Parents' Comments and Suggestions: *"I like to sing to her (2 mos., 7 days). It makes her calm and she doesn't cry. I got to learn more songs I didn't know."*

Suggestions were made for familiar songs as well as more song variety, including songs of different ethnic origins (specifically French). One parent said the group should continue. Another said the time of day for the group was good.

Synthesis of Staff Observations (Evaluation form, Appendix 2)

Often the parents appear to be re-living missed experiences from their childhood; Sometimes they are embarrassed to see adults being "silly" and it's good for them to be encouraged to let go and "play."

Staff expressed appreciation of the flexibility of live music to be able to go with the flow of what is happening in the moment, the participatory (versus performance) focus of the music, and the casual "low pressure" atmosphere. Suggestions were made for more variety and that the group wasn't long enough. Staff noticed they felt relaxed and sometimes energetic, and that the room was calmed down after lunch. Comments were made about the parents singing, the children being soothed, and that the music times "help parents to connect with each other." Suggestions were made for current songs and song choices coming from parents.

Evaluation Summary

Observations from parents, staff and the music therapist indicate the Lullaby Group appeared to achieve its intended goals. Further to these goals, the presence of live music in the nursery served to facilitate group cohesion by providing opportunities for all to participate in a shared experience, actively or

passively, as they chose. An ambiance of quiet and calm or laughter and fun was generated in response to the needs of the moment. What emerged towards the end of the life of the group was the parents' enthusiasm and expressed desire for song material for themselves, for their own self-expression and emotional release.

Discussion and Implications

Teen mothers need tools to support the integrity of their intentions. They deserve respect for their decision to become parents. And they require tools to enable them to fulfill their responsibilities as parents. (Jessie's Centre, 1999) Hopefully, the Lullaby Group has contributed, in some small measure, to this end.

The target of intervention for the Lullaby Group pilot was the teens, the infant and/or the older preschool children. Interventions directed specifically to the mother-infant relationship itself might more effectively enhance mental health outcomes. Lojkasek et al (1994) describes four such models of intervention as supportive, development and relational guidance, psychotherapy and infant-led psychotherapy. Of these four, infant-led psychotherapy, based on the Tavistock "infant observation" method (Muir et al, 1999; Cohen et al, 1999), is well suited to music therapy infant directed song and improvisation. Applications of music therapy intervention for infant mental health—i.e., aimed directly at the parent-child relationship—have yet to be explored.

The target of music therapy intervention for early education intervention has been preschool aged children (Standley & Hughes, 1996; Standley & Hughes, 1997; Register, 2001). What might the outcomes be with earlier intervention during infancy? The possibilities for music therapy with infants are rich in potential. Similar to Winslow's (1986) work with women experiencing high-risk pregnancies, music therapy with pregnant women (Allison, 1994; Browning, 2001; Rykov, 2000) takes on unique characteristics when applied to adolescents.

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