Non-Organic Failure to Thrive:
A Community Services Survey

by

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Chapter I

Introduction

The most recent information regarding non-organic failure to thrive (FTT) is that this condition is viewed by some child care experts as a type of child abuse/neglect. It can be viewed as a physical symptom of emotional maltreatment (Hill, 1975; H.E.W., 1979). However, it is interesting to note that most pediatric literature refers to non-organic FTT as a syndrome unto itself, rather than as part of the spectrum of child abuse/neglect. It is somewhat of a vague concept in that pediatric textbooks do not share one common definition. Pediatric journal literature most frequently define the condition as: infants below one year of age who show growth retardation with or without associated developmental deficits, with a usual placement in the lower third percentile on normal growth charts (Fogurt, Allen & Lelchuck, 1969; Mitchell, Garrel & Greenberg, 1980). This condition can be said to be defined by default because a collorary component to failure to thrive, the organic type, is clearly defined whereas non-organic is not. One exception to this is the Diagnostic and Statistical Manual of Mental Disorders (D.S.M. III, 1980) which defines non-organic FTT as "Reactive Attachment Disorder of Infancy" (page 59). Further, the D.S.M. III lists specific characteristics including age of onset, developmental signs, and physical characteristics. Not all of these behavioral signs and characteristics are supported by research findings, however.

Because of the lack of consistent information, a valid approach to studying non-organic FTT is from an epidemiological perspective. The purpose of epidemiology is to diagnose and measure health problems of the population by using the epidemiological method to supply the information. This method examines three components: agent, host, and environment, and their commonalities and relationships. The host is the organism which harbors the disease, the agent causes (in interaction with the host and environment) the disease, and the environment is that which surrounds the host and agent including social institutions as well as physical and biological environments (Mausner & Bahn, 1974; Last, 1980; Kirkham, 1980). The epidemiological triad can be viewed in terms of non-organic FTT as the host - infant, agent-caretaker, and environment - including agencies that the infant and caregiver might encounter.

A simple, single solution cannot successfully deal with a complex health problem, although a change in any of the components will alter the existing equilibrium. It is important to recognize and analyze each component of the triad so that the solutions are comprehensive (Mausner & Bahn, 1974; Kirkham, 1980). In this way, the complex nature of non-organic FTT is taken into account.

In addition to viewing the phenomenon from an epidemiological perspective, FTT can be viewed from a conceptual perspective. Dickhoff & James (1968) have defined four levels of theory develop-

ment; factor isolating, factor relating, situation relating, and situation producing. Factor isolating theory describes what is, or what exists. This can be considered as stage one in the epidemiological process of analyzing the non-organic FTT triad. The variables among each component must be identified and described before they can be tested for relationships between them.

A very important issue related to the study of non-organic FTT, especially in regard to the environment or agency component, is that of casefinding. Casefinding involves recognition and identification of high risk cases of conditions of which little is known about them. One such condition is non-organic FTT. Non-organic FTT infants and their families are seen by child care professionals both in private practice as well as child care agencies such as clinics and hospitals. Like all forms of child abuse/neglect, the population of non-organic FTT infants is difficult to identify. Guthrie (1975) believes some of the reasons for this are due to the public and professionals' reluctance to admit to the existence of child abuse/neglect and to the lack of interest in biosocially oriented health care in most physicians' training. He also believes that most private practitioners place maintaining the integrity of the family unit above the needs of the child. Eberling (1975) believes casefinding is difficult because both the public and professionals believe parental rights take precedence over the rights of children. Biases, prejudices, and values all become involved as well, because child abuse/

neglect is an emotional subject.

As will be noted from the review of literature and conceptual framework, considerable work has been done to identify factors important to the host - infant and agent - caretaker components of the non-organic FTT triad. However, very little can be found in the literature regarding child care agencies who deal with non-organic FTT infants and their families. The focus of this study is these agencies.

Statement of the Research Problem

There appears to be significant deficits in both casefinding and treating a potentially high risk group of very young children whose families span all geographic, ethnic, and socio-economic groups. Two questions are raised: Are non-organic FTT infants and their families being identified in the Portland, Oregon, metropolitan area; and, What is the scope of interventions being offered to these infants and their families? This study addresses these two research questions.

The purpose of this study is to identify the magnitude of reported non-organic FTT in a large northwestern metropolitan area, to describe the disposition alternatives offered, and to examine the outcome of these alternatives.

Significance of the Problem

One of the most significant issues regarding non-organic FTT is the lack of sufficient behavioral indicators for differential diagnosis. Therefore, there are no established screening procedures

for casefinding. Thus casefinding, or the lack of it, differs from agency to agency within census tracts as well as nationally.

The reported incidence of non-organic FTT across the nation differs from area to area. The variability of incidence may be due in part to the lack of systematic data gathering. Various authors report between one and five percent of all hospital admissions for children are diagnosed as FTT (English, 1978; Davies, 1979). Prior to 1977, most studies indicated that organic FTT was found in 60-80% of the FTT cases. However, the most recent studies indicate that non-organic FTT is much more likely to be the case than had been previously recognized (Mitchel, et al, 1980).

Gardner (1978) and Sills (1978) speak to this discrepancy by noting that only recently has a psychosocial assessment become an integral part of the differential diagnosis process. Thus, it appears likely that non-organic FTT has been frequently misdiagnosed. The variance in reported incidence may be partly a function of the misdiagnosis of non-organic FTT cases.

Even when behavioral manifestations of non-organic FTT are present, casefinding and diagnosis may not occur because of the lack of consistent conceptualization of the problem. There are no commonly shared diagnostic criteria, no established norms for the reporting and recording of observed data, and finally, attitudes and values of professionals may inhibit both case-finding

and reporting.

It is imperative that the host-agent diad receive prompt treatment because infants with non-organic FTT may later demonstrate emotional and intellectual retardation as well as retarded height (Powel, Brasel, & Blizzard, 1976; Levine, 1978). Even with intervention, these infants are at risk for the development of behavioral disturbances such as sleeping and/or eating problems, and psychosis (English, 1978). Therefore, it becomes extremely important to help agency personnel to understand, identify, and treat these children. Early diagnosis and treatment may allow the physical, emotional, and intellectual potential of these children to be realized. Finally, there is very little literature on screening, case-finding, disposition, recording and concept development of this condition. The present study addressess all of these issues.

Chapter II

Review of the Literature

The following is a critical review of the literature related to the current study and includes discussion of two major areas: the environment and host - agent perspectives. Environmental perspectives include organizations that are involved in casefinding: treatment and referral of non-organic FTT, factors that impede instituting protocols, such as the lack of adequate conceptualization of the problem, attitudes of professionals, establishment of management information systems, and which professionals should be involved. Host - agent perspectives include characteristics of the host (infant), characteristics of the agent (caregiver), and the interaction of these two factors.

Environmental (Agency) Perspectives

No literature could be found that discussed specific roles agencies are expected to take regarding the identification and treatment of non-organic FTT. Information that is available consists only of general guidelines.

Casefinding

Although there is no information regarding specific agency protocol for non-organic FTT programs, according to the National Center of Child Abuse (H.E.W., 1979), there are three requirements for a successful child abuse/neglect detection and evaluation system for child care agencies: personnel, agency policies/ procedures, and laboratory facilities. Hospitals and clinics

need a hospital/clinic based contact person to act as a coordinator and liaison person for all child abuse/neglect cases in each setting. Laboratory facilities are needed for diagnostic workups. All hospitals and clinics need policies and procedures, preferably written, defining child abuse/neglect that requires mandatory reporting and involvement of an agency contact person. These policies should include diagnosis and disposition and/or treatment protocols as well. Inasmuch as the definitions of abuse/neglect are state decisions, personnel need to make themselves aware of the legal issues particular to the state involved.

Deterrents to Casefinding

Factors that may prevent or impede the establishment of the protocols regarding casefinding discussed in the preceding paragraph are lack of adequate conceptualization of the problem, attitudes and values of professionals, lack of systematic data collection and information retrieval, and conflicts and lack of clarity regarding which professionals should be involved.

Currently, infant FTT is conceptualized as an interactional problem between the host/agent diad which may prevent the host (infant) from attaining normal growth and development. Many states then regard the interactional problem as one of neglect, which in these states constitutes a neglect/abuse issue subject to legal reporting (Guthrie, 1975). Moreover, at the present

time, organic FTT is separated from non-organic FTT by physical development. According to both established and recent reports, children below one year of age who show growth retardation with or without associated developmental deficits, are presently diagnosed as failure to thrive infants. These infants who do not demonstrate an organic reason for this growth failure are identified in pediatric journal literature as non-organic FTT. This differentiation is made by the infants' placement in the lower third percentile on normal growth charts (Fogurt, et al., 1969; Mitchell, et al, 1980). No literature could be found that examines this issue from a concept development point of view. The current research with normal infants by Barnard (1981) should help to clarify conceptual issues.

Professional attitudes may also be a deterrent in both conceptualization and casefinding. According to Guthrie (1975), neglect and abuse of children by parents and caretakers is known to occur in all socio-economic groups in our society. The relative dearth of reported cases may occur because professionals are "biased" by the family address. An infant from a prestigious or at least middle class neighborhood may be admitted to a hospital as a result of an illness of unknown etiology rather than non-organic FTT. In contrast, an infant from a poor urban neighborhood would be labeled "suspected neglect." In addition, health-care providers may not recognize the existence of the problem. According to Guthrie (1975),

> The nature of the professional training of physicians--with emphasis on the physical aspects of disease, diagnosis, and management--has contributed to disinterest in or disregard for the entire spectrum of bio-socially oriented health care. Ignorance of the content of the state mandatory reporting statutes and of the mechanisms required for intervention is an additional burden for physicians. Anxiety regarding the legal implications of "being involved" by reporting a case of child neglect or abuse may not be lessened by the stronger language being incorporated into more recent reporting statutes; however, the punishment for not reporting becomes a greater burden (page 24).

No literature could be found regarding specific guidelines for reporting beyond the mandatory legal requirements pertaining to child abuse in general. Technological advances in management information systems have not been incorporated into this area of health care policies and procedures.

Treatment Issues

As stated earlier, non-organic FTT may have serious consequences for infants well into adult life. When the condition is recognized, treatment becomes imperative.

Early research into treatment suggests that the provision

of a hygienic environment with adequate food is not sufficient to prevent this condition. The most important ingredient was found to be interpersonal contact (Silver & Finkelstein, 1967). Recent literature also demonstrates that permanent removal of the child from his/her home may cause serious harm to the child's psyche and personality (Blumber, 1979).

It is now generally agreed that for optimum treatment to occur, the child and his/her parents must be treated as a whole by an interdisciplinary team. The team should consist of a pediatrician, psychiatrist, child psychiatrist, nurse, and social worker (English, 1978; Blumbers, 1979). These professionals can offer each family member medical and psychological support and guidance as well as any specific training which might be needed due to the child's special temperament or the mother's special nurturant difficulties. Depending on the individual family, treatment alternatives would include therapeutic day care, day care, and/or foster care for the infant. Treatment alternatives for the parents or caregivers include individual psychotherapy, marital therapy, group therapy, and parent education. Supportive family services might include community health nurse referral, homemaker services, parent aides, crisis nurseries, and employment and training programs (H.E.W., 1979).

Blumbers (1979) cites a very effective approach where a number of families live together in a structured treatment program. The parents are provided with an opportunity to be parented themselves, while also learning parenting techniques for their child. They are offered group support by peers in a non-threatening atmosphere. Although these types of facilities report 60-80% success rates, they are very expensive and therefore uncommon.

Professional Involvement

Recent Health, Education, and Welfare guidelines (1979) recommend that a variety of health professionals can be involved in FTT. However, they stop short of recommending specific roles for specific professionals. Thus, current models in health care agencies can be regarded as multidisciplinary, interdisciplinary, and unitary, depending on agency organizational structure, in which physicians, nurses, and social workers are the primary caregivers.

Nurses of several role specialties are often involved in assessment, treatment, and research involving non-organic FTT infants and their families. Observation is one very important method of assessing caretaking patterns and mother-infant interaction (Jenkins & Westhus, 1981). For example, the post-partum nurse could observe the new mother's style of feeding and verbal interaction, while family nurse

practitioners could observe the infant's style of temperament and mother's expectations for her infant's behavior. If the infant's temperament and mother's expectations are not congruent, this may lead to a continuous source of stress within the family (Millor, 1981).

To promote the most healthy mother-infant interaction, intervention must begin prenatally (Jenkins & Wasthus, 1981). This could include the nurse being involved in educational programs on birthing, parenting, and child development.

Mental health nurses may be involved in the psychosocial, developmental, and behavioral evaluation/assessment of the parents (Swinger & Sandler, 1977). Mental health nurses might also be involved in psychotherapy with the parents as individuals or as couples to facilitate the sense of control over their own lives. As the stresses in the lives of parents are alleviated, they will be better able to fulfill their roles as parents (Gross & Gross, 1977).

Finally, research in the area of how infant temperaments interact with styles of parenting responses to result in the clinical picture of non-organic FTT is lacking (Cameron, 1978). This is an area appropriate for collaborative research involving nurses in psychiatric/mental health, maternal-child health, and adult health.

Host-Agent Perspectives

There are two types of FTT, organic and non-organic. The organic dysfunctions associated with FTT include but are not limited to: inadequate lactation in breast feedings mothers (Magnus & Frantz, 1979; Stanway, 1979; Whichelow, 1979; Davies, 1979; Levi, 1979); gastrointes-

tinal dysfunctions (Levy & Bauer, 1978); congenital heart diseases (Ehlers, 1978); endocrine dysfunctions (Abrams, 1978); and renal disorders (Friedman & Lewy, 1978).

Host (Infant) Considerations

Despite the many physical causes of FTT that have been identified, some infants demonstrate abnormal growth, at or below the third percentile, which is not associated with any organic dysfunction (Fogurt et al, 1969; English, 1978; Mitchel et al, 1980).

Numerous authors cite the investigations by Spitz in the 1940's on institutionalized infants as the beginning of the identification of an emotional etiology for FTT (Fogurt et al, 1969; Levine, 1978; English, 1978; Gordon & Jameson, 1979). These studies focused on infants who, due to institutionalization, were deprived of the handling that was thought to be a primary factor that contributed to nurturance. Not only did these infants fail to thrive, they also demonstrated on follow-up an inability to attain warm, loving personalities (English, 1978; Levine, 1978). During the late 1950's research began to be carried out in homes. As a result of researching FTT, both institutional and home environments, an important conclusion was reached; not all babies received nurturance just because they came from a "home" with parents.

Most infants with non-organic FTT show symptoms in the first year of life, usually by six months. These infants have been described as having some of the following behavioral characteristics: fearfulness and irritability, apathy and withdrawn, preference for social distance and inanimate objects, peculiar difficulties in feeding behavior, slowed

developmental progress, and occasional vomiting and/or diarrhea (English, 1978; Blumbers, 1979; Gordon & Jameson, 1979; Rosenn, Loeb & Jura, 1980).

Physiological Mechanism of Action. As the condition of non-organic FTT is demonstrated physiologically, one must question the mechanism whereby emotional factors cause, or facilitate, these physical manifestations. Research in this area does exist, and in fact, it has given further support to an emotional etiology for FTT.

One hypothesis is that stimuli coming from the emotional centers in the limbic cortex system reach the hypothalmus. In the area of the hypothalmus lies the pituitary which secretes growth hormone. The emotional stimuli experienced by a non-organic FTT infant is thought to suppress the secretion of growth hormone, thereby causing a failure to grow normally (English, 1978; Abrams, 1978; Gordon & Jameson, 1979).

Support for this hypothesis is found in the research which has documented that most non-organic FTT infants have low growth hormone levels but do not grow when given the hormones. However, when the infants are taken out of their home environments, the endocrine abnormalities disappear and the infants do grow (English, 1978; Abrams, 1978).

Agent (Caregiver) Considerations

Early investigations of mothers of infants with non-organic FTT described these mothers as demonstrating a high degree of dependency. Their intellectual functioning was found to be impaired by significant emotional disorders such as depression, anxiety, and suicidal ideation. These findings led investigators to assume maternal deprivation was the

cause of non-organic FTT (Fogurt et al, 1969; English, 1978).

Non-organic FTT parents were also described in the early research as unstable, immature, of low income, alcoholic, and experiencing frequent marital discord (Powell et al, 1967; Fogurt et al, 1969). These findings led investigators to conclude that environmental deprivation was a major component in the causation of non-organic FTT.

More recent, better controlled studies indicate that the parents of non-organic FTT infants come from all social spheres and all environments. The mothers do not demonstrate a significantly greater number of psychiatric disorders than control mothers, and often the parents have raised at least one child successfully (English, 1978; Blumbers, 1979).

Host-Infant Agent-Caretaker Interaction

Although there is disagreement as to the precise psychological conflicts which result in the clinical picture of non-organic FTT, the best evidence to date indicates a disturbance in the maternal-child interaction. This view suggests that the infant is an active participant within the interaction. This perspective also takes into account recent research on infants which has demonstrated widely differing temperments among infants (English, 1978; Gordon & Jameson, 1979).

Chess, Thomas, Birch, Hertzig, and Korn (1956) performed a longitudinal study of personality development. They found that infants display temperaments ranging from easily adaptable with a positive mood to infants who adapt very slowly and have a predominantly negative mood.

Non-organic FTT infants have been noted to display difficult and

sometimes disturbed feeding behavior. This requires great tolerance and patience on the part of mothers. While non-organic FTT infants' mothers are noted to be less likely to kiss, caress, touch, or cuddle their children than other mothers (English, 1978), this tolerance and patience may be difficult to provide because these nurturing behaviors tend to be given during feeding times.

Combining the characteristics of differing infants' temperaments, the non-organic FTT infant's feeding difficulties, and the mother's difficulties with nurturant behaviors, it becomes apparent that at least two variables must interact to facilitate the development of non-organic FTT.

A promising area of research is that being done by Dr. Katherine Barnard, at the University of Washington, regarding variables in normal mother-infant interaction. Variables such as maternal education, maternal age, life change, and father involvement are being related to infant development (Barnard, 1981). The research is presently being conducted on "normal" mothers and infants, and has yet to be applied to non-organic FTT infants and their caregivers. This research is extremely important in theory development as it starts at the factor isolating and relating levels.

Summary of the Review of the Literature

Little is known regarding the roles agencies should play in identifying and treating non-organic FTT infants and their families. What information there is, exists in the form of general guidelines and comes from child abuse/neglect literature. Deterrents to the development of protocols in these areas are due to a variety of issues which include

inadequate conceptualization of the problem and lack of knowledge regarding which professionals, and in what roles, should be involved.

The most recent research suggests that non-organic FTT is caused by a disturbance in the maternal - infant interaction. As research is presently being conducted on the "normal" mother infant interaction process, the precise conflicts operating in the non-organic FTT mother - infant interaction process have yet to be identified.

Conceptual Framework

According to Newman (1979) a conceptual framework is a group of concepts which when taken together describe the focus of inquiry. The purpose of the conceptual framework is to direct the questions one asks by providing this focus.

Dickoff & James (1968) define theory as a "conceptual framework invented for some purpose." (page 198) They have defined four levels of theory; factor isolating, factor relating, situation relating, and situation producing. Factor isolating theory describes what is, or what exists. Descriptive research is one method for this level of theory development (O'Toole, 1981). This type of investigation is appropriate when the focus of inquiry is such that variables involved must be identified and described before they can be tested for relationships among them. It is the belief of this author that present knowledge regarding non-organic FTT is at the factor isolating stage of theory development.

One approach to conceptualizing non-organic FTT is from an epidemiologic focus. The purpose of epidemiology is to diagnose and measure

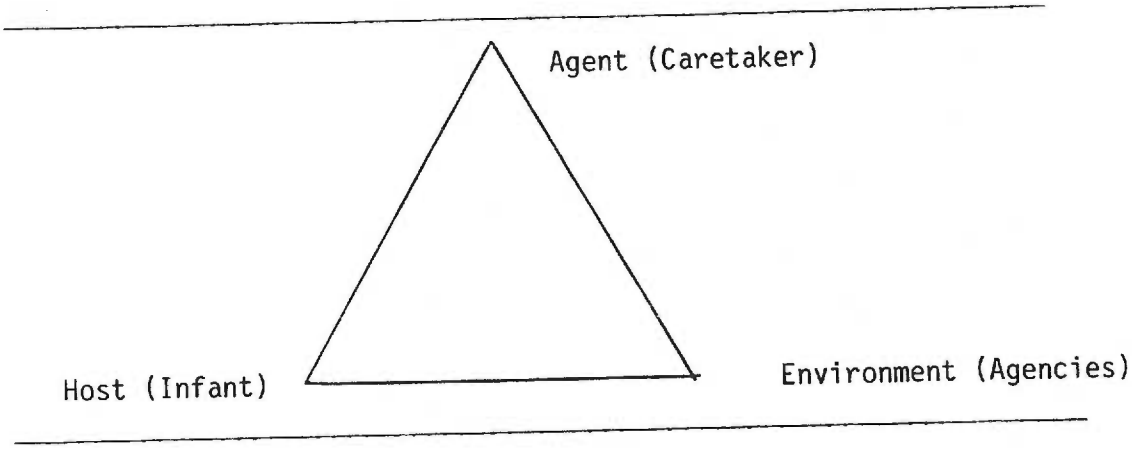
health problems of the population by using the epidemiological method to supply information. This method examines three components; agent, host, and environment, and their commonalities and relationships (Last, 1980; Kirkham, 1980). The epidemiological triad can be viewed in terms of non-organic FTT as the agent - (caretaker), host - (infant), and environment - (agencies) that the infant and caregiver might encounter. Figure 1 depicts the epidemiological triad regarding non-organic FTT.

A simple, single solution cannot successfully deal with a complex health problem. It is important to recognize and analyze each component of the triad, so that the solutions are comprehensive (Kirkham, 1980).

Two specific concepts are important in understanding the agent - (caretaker) and host - (infant) components in this triad. These concepts are role, specifically professional and parental roles, and intimate interaction between agent and host, specifically attachment.

According to Sarbin (1968) the term role was originally borrowed from the theater. A role denoted conduct which was specific to one particular part or position. The term role is presently conceptualized as referring to expect and actual behaviors, motives, and sentiments associated with a position/status in relation

Figure 1. Epidemiological triad applied to non-organic FTT



to and interacting with other positions/status. In this conceptualization, the status/position refers to an individual's location in some system of interaction, and role is the behavior which reflects the motives, sentiments, or goals operating in a given situation (Gordon, 1966; Hadley, 1967; Meleis, 1975; Hardy, 1978).

An individual learns and performs a role through socialization and enculturation. Role development includes the processes of imitation, observation of models, coaching, teaching, identification, conditioning, and reinforcement. As this is an interactional process, all roles are learned in pairs of systems. As one learns one's role, the role of the relevent other is also being learned (Hadley, 1967; Sarbin, 1968; Hardy, 1978).

An individual learns one's role in a variety of ways. Not only do his/her parents and mentors serve as models to be observed, imitated and/or identified with, but media presentations of role behavior abound.

The individual learns his/her role in interaction with other relevant role performers as well. Role performance is partially defined by the reciprocal expectations of the interacting role performers. In the family, individual role behaviors are modified as a result of interactions among family members (Millor, 1981).

Any interaction consists of the role performer and the audience, who influence the role enactment and may be internalized images or the physical presence of a person the performer values, or the other person engaged in the interaction. By providing approval, acceptance, tolerance, and/or rejection of another's role enactment, the audience

conveys their role expectations (Sarbin, 1968; Millor, 1981).

Based on current literature, of particular significance in this study is the parental role. The parent responds to an infant cue. How quickly the parent responds, and how he/she responds depends on the parents' definition of the cue and selecting a parent role skill which is congruent with his/her expectations of appropriate behavior in the situation. The child's temperament influences the clarity of his/her cues and the quality of his/her responsiveness to the parent role skill. Whether parents provide or withdraw their nurturance may be influenced by the parent's interpretation of the reciprocity of the interactions (Millor, 1981).

For example, a mother hears her infant crying. This mother interprets the cry as the need for closeness. She believes that it is important for her to attend to this need quickly, and picks the infant up, cuddling him/her closely. The infant immediately stops crying, and begins cooing to the mother. One role skill has just been performed and will likely be repeated in the same or a similar situation.

There are many difficulties faced in the acquisition and performance of role behavior. In the social system, such as the family, the role relationships are highly interdependent. Problems in role skill enactment or acquisition of one member will greatly influence the behavior of the other members of the family.

It is important for a social system, such as the family and the health care system, to share congruent role definitions. If role

definitions and expectations are not supported and shared by the members of a system, personal and interpersonal problems of role performance may occur (Meleis, 1975). For example, spouses may not agree on appropriate parental role expectations. Another relevant example in this study regards varying opinions among child care professionals as to the cause of failure to thrive. Where role obligations are vague, difficult, or conflicting, a condition of role stress/conflict may exist (Hardy, 1978).

As can be noted, role learning and performance is a complex process which is influenced by one's own expectations of the role, the role expectations of others, and the models that are available to the role performer. Various role problems are possible in social systems as interdependent as the family and the health care system. The stresses and strains associated with inappropriate and/or incongruent role definitions may have a negative influence on the mother - infant interaction process and in the carrying out of professional responsibilities.

The second concept important in the agent - caretaker and host - infant components of the non-organic FTT triad is attachment. Since the syndrome is believed to be based on the interaction between parent and child, attachment can be viewed in terms of parental attachment to child, and child attachment to parent.

John Bowlby first initiated and defined attachment as the affectional tie that one person forms to another and that endures over time (Ainsworth, 1973). He believed that parental care behavior and recip-

rocal behaviors in the young function as biological safeguards to sustain the infant during infancy (Bowlby, 1969).

According to Bowlby (1969) there are four stages necessary for the infant to progress through before he/she can form attachment. These stages are sequential but overlapping. For the first two to three months, the infant brings the mother or mother figure close by using his/her proximity and contact-promoting behaviors. Between two and six months, the infant is able to discriminate clearly between familiar persons and responds differently to each. At six months to two years, the child actively initiates behavior to bring contact from the person to whom he/she has attached. Finally, the infant begins to attend to some of the factors that influence the mother's behavior, and tries ways to change his/her behavior.

The infant uses a variety of mechanisms to promote proximity with the attachment figure. The infant uses eye contact, vocal sounds, and rooting and sucking reflexes to orient himself/herself to the mother figure as well as to promote and maintain contact. The infant also utilizes grasping, embracing, smiling, and vocalizing to signal his mother and bring her to him/her (Bowlby, 1969; Ainsworth, 1973).

The attachment of the mother to her infant is the second part of the process of attachment.

Klaus & Kennell (1976) define maternal attachment in terms of bonding theory. The hypothesis is that human mothers engage in a species specific sequence of behaviors when first meeting their newborns; this is a brief sensitive period in which bonding between the

mother and infant occurs. The sequence characteristics include touching, massaging, stroking, and palm contact of the infant's trunk. If contact and interaction between the mother and infant during this time does not occur, bonding will not take place and attachment will never be formed.

Although this theory is very popular, there is strong criticism of adopting the theory of bonding as a theoretical base for practice and research.

According to Tulman (1981) the concept of bonding has its origin in imprinting theory which was originally tested on birds, and later adapted to the study of maternal behavior of mammals. Tulman believes the assumptions that human maternal behavior is analogous to mammalian maternal behavior, and therefore assuming humans have species specific critical times to bind, may not be accurate, as it has not been experimentally proven. Small sample sizes and unclear operational measures of bonding research are cited in support of the inappropriateness of a general acceptance of bonding theory. The investigation of acknowledged predelivery influences on bonding, such as the mother's care as a child and the family and husband's relationship with the mother, have not been developed. Finally, bonding, and therefore attachment, is seen by Klaus & Kennel as an all or nothing phenomena. It occurs during the critical time period or not at all. Tulman believes this appears to make impossible maternal attachment to adopted children or to mothers and infants temporarily separated at birth because of prematurity or illness.

One alternate explanation of maternal attachment can be seen as developing from the interaction between the mother and infant. This view takes into account the research cited regarding individual infant temperaments, as well as the work done by Bowlby which demonstrates the active nature of the infant in the maternal-infant interaction. This alternative bonding hypothesis is that behavior is presented to one of the individuals causing a response in the other. The first individual is then stimulated to respond to this new stimuli. As behavior develops into a pattern, responses are modified and shaped by the reciprocal nature of the exchange. If either the mother or the infant cannot modify their behavior in response to the other, a conflict, or disharmony, will result (Brazelton, 1963; 1970; Brazelton, Kowlowski & Main, 1974).

Other alternative explanations of maternal attachment which have been formulated include partly defining the capacity for attachment in terms of how adequately the new mother was mothered by her own mother (Deutsch, 1945); the prerequisite for attachment being a role transition which includes such processes as role play and fantasy (Rubin, 1967); the importance of the woman's self concept in ability and/or capacity to form attachment (Clark & Affonso, 1976): attachment being a function of mother 'claiming' her infant, which involves intellectual and physical processes (Rubin, 1961; 1963).

According to Tulman (1981), all of the maternal attachment theories presented require further investigation, both from an intrinsic nature, as well as their impact on delivery of nursing care to

parents and infants. Thus it appears that maternal attachment may be a complex phenomena involving many different processes that could include most, if not all, of the hypotheses cited. However, it seems necessary at this time to include bonding as a theoretical construct, even though knowledge is incomplete.

Definition of Terms

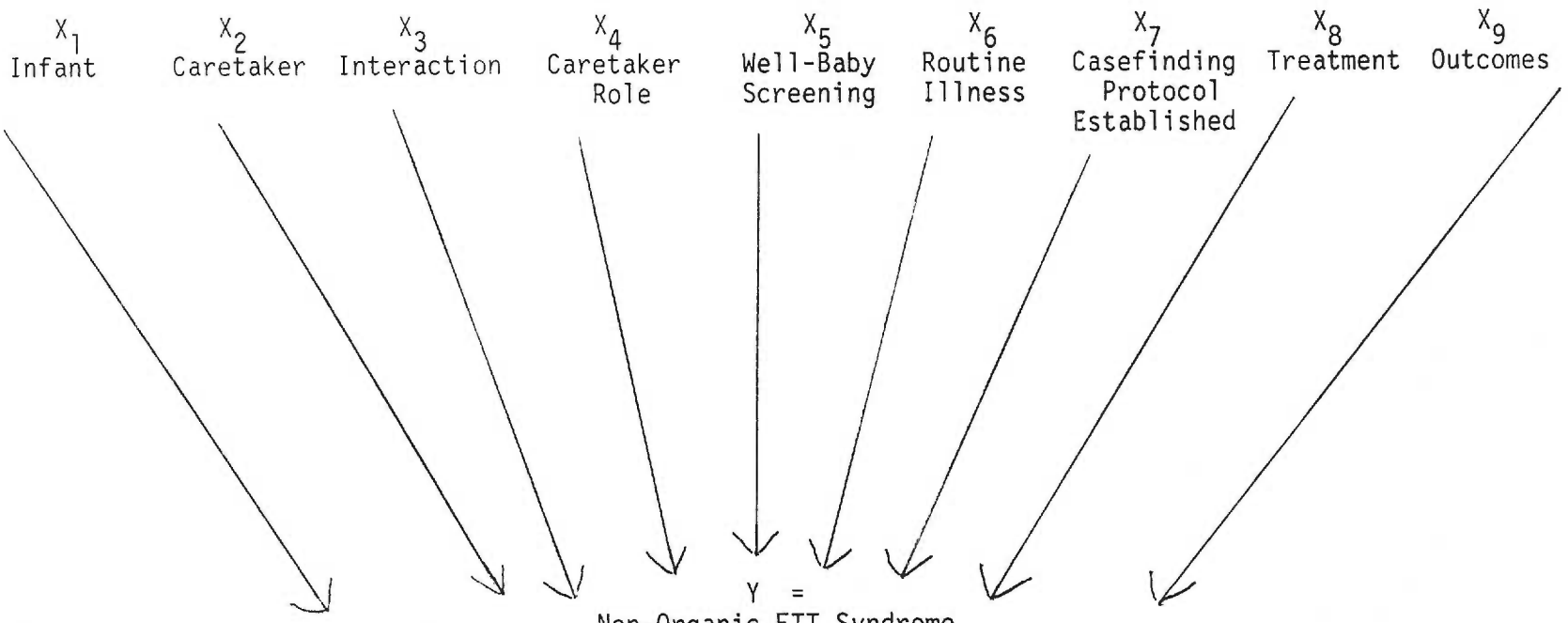
a) Non-organic FTT - For the purposes of this study, non-organic failure to thrive is defined as a condition in which an infant one year of age or under, who in the absence of organic dysfunction, falls at or below the third percentile on normal growth charts.

b) Treatment Outcome - For the purposes of this study, treatment outcome is defined in terms of: 1) Success - reinstatement of normal growth and development, and 2) Failure - continued FTT or other parent-child difficulties such as child abuse.

Summary

Based on the review of literature and conceptual framework, Figure 2 illustrates the variables needing to be isolated and described at our present level of knowledge regarding non-organic FTT.

Figure 2. Inventory of Related Factors (Newman, 1979)



$X_1 + X_3$ = host factors

$X_2 + X_3 + X_4$ = agent factors

$X_5 + X_6 + X_7 + X_8 + X_9$ = environment factors

Chapter III

Method

Research Design

A descriptive survey design was used for this study. As stated in the review of literature, many issues regarding non-organic FTT syndrome have not yet been investigated. These issues include documentation of the magnitude of the problem, identification of case finding methods, and examination of child care agencies and the health care providers' conceptualization of this syndrome. For these reasons, a descriptive design is the most appropriate method to begin to answer these questions and identify more specific areas for further study.

The major limitation of a descriptive design is its inability to infer cause and effect relationships (Polit & Hungler, 1978). The current state of knowledge regarding non-organic FTT does not lend itself to a cause-effect level of inquiry.

Subjects

The subjects of this study are public and private child care agencies in a large Northwestern metropolitan area who are likely to receive these children. The agencies are general hospitals, outpatient clinics, and other public service programs that encounter non-organic FTT infants and their families.

Sampling

It was not possible to obtain a random sample of these child care agencies because of the limited known number of agencies in the catchment area involved. Rather, the sample consisted of health care agen-

cies known to treat children. Thus, this sample might be considered a population. A number of agencies contacted refer their infants and families to other agencies due to lack of pediatric inpatient facilities. Within these agencies, typically one person was identified as most knowledgable in the area, and were designated the contact person. Anonymity was insured as the names of the agencies and contact persons was not recorded.

Instrument

The study was developed to obtain the following information:

1) The magnitude of agency-reported non-organic FTT in the metropolitan area study setting.

2) The amount of agreement among child care agencies as to the definition of non-organic FTT.

3) The percentage of cases which are identified as non-organic versus organic FTT.

4) The level of general agreement among child care agencies as to the cause of non-organic FTT.

5) The types of treatment suggested/offered to families with a non-organic FTT infant, including costs.

6) The outcomes of the treatment presently being offered to these families.

7) Identification of those areas which require further study.

A review of the literature demonstrated there were no standardized questionnaires appropriate for obtaining the desired information. Therefore, a structured questionnaire composed of questions specifically

designed to obtain this information was developed by the investigator.

The questionnaire consists of two parts. (See Appendix A.) Part A describes the type of agency contacted, primary source of funding, title of respondent, length of employment with present agency, and whether an official information system has been developed to maintain records and statistics. Part B of the questionnaire asks for the respondent's perception of the cause of non-organic FTT based on his/her contact with FTT, the treatment offered or suggested by the respondent's agency, the estimated treatment cost, and the outcome of those treatments suggested or offered.

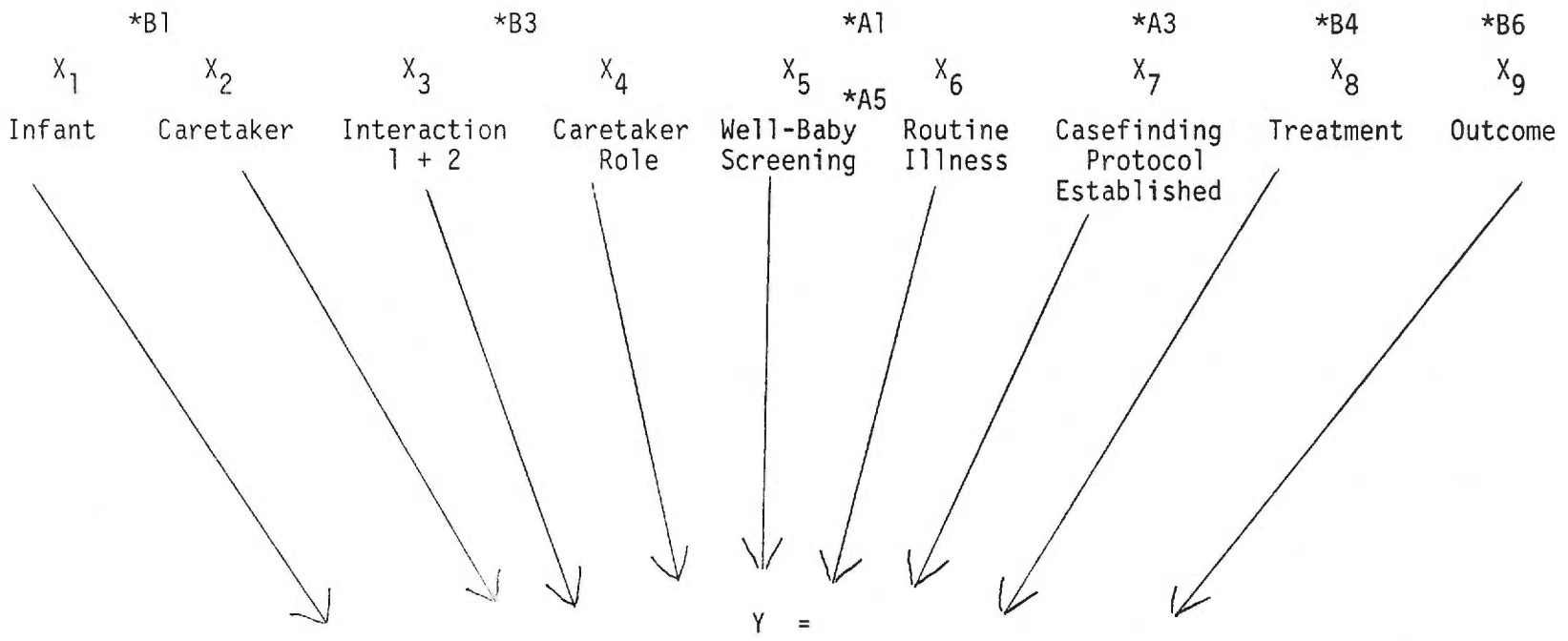
Figure 3 illustrates the relationship of the questionnaire to the variables identified in the review of literature and conceptual framework.

The questionnaire was pilot tested prior to instituting the formal study. Face validity was established by the pilot test process. Conceptual validity was established by the concept review. Inter-rater reliability was not an issue. Test-retest reliability has not been accounted for.

Human Subjects

This study qualified under Exemption Three of the H.E.W. guidelines for expedited review. A formal introduction was read to each informant which included explanation of the study and method to ensure confidentiality. (Appendix B)

Figure 3. Inventory of related factors - relationship to questionnaire.



*Questionnaire Number

$X_1 + X_3 =$ host factors

$X_2 + X_3 + X_4 =$ agent factors

$X_5 + X_6 + X_7 + X_8 + X_9 =$ environment factors

Procedure

Data were gathered by telephone survey for several reasons. During a random check of the sample, a potential high refusal rate became apparent by the use of personal interview during working hours. There was willingness, however, to give information by phone.

The telephone survey is viewed as a valid research method. It typically produces higher response rates than mail surveys, allows the use of open ended questions, and controls contamination by others (Dillman, 1978).

The data were gathered within a 15 day period to assure that time of measurement would not contaminate results. As stated, a contact person was named by each agency participating in the study. The investigator made appointments with each of these designated persons.

Analysis

The goal of the analysis was to identify the extent to which case finding needs are being met, the type of treatment offered to non-organic FTT infants and families, and identify possible barriers to these families acquiring services. It is expected that this information can be used directly to recommend changes in services offered, program planning, and inservice education.

Data were analyzed primarily by descriptive statistics. Comparisons were made between private and public agencies. Additional non-parametric statistics were not appropriate due to small sample size and the nominal nature of the data. Rather case studies were more relevant to the study design and first level theory development.

Chapter IV

Results

The first study question asked was: Are non-organic FTT infants and their families being identified in a large Northwestern metropolitan area?

Thirteen agencies in a large Northwestern metropolitan catchment area that might encounter non-organic FTT infants and their families were contacted by the investigator. Of these thirteen agencies, four were hospitals that had no in-patient pediatric units, nor outpatient pediatric departments. These hospitals referred non-organic FTT infants to three other hospitals and/or pediatric outpatient departments that were included in the study. Nine child care agencies were found by the investigator to be primarily responsible for failure to thrive infants in the study setting. Table 1 describes the demographic data for the study sample.

Contact Persons

It was expected that there was a contact person in each of 13 agencies because of H.E.W. protocols thought to be operational. Therefore, as each agency was contacted, information was sought from the designated "contact person."

The process of identifying contact persons at the various agencies was difficult and sometimes very frustrating. It was routine to be

Table 1

Demographic Data for the Study Sample Agencies

Funding	Hospital	Clinic	Inpatient	Governmental
Private				
Public		1		1
Primarily Private	3	2	1	
Primarily Public		1		
Total	3	4	1	1

referred to three or four different individuals within one agency before someone who thought themselves knowledgeable of the numbers and care of non-organic FTT infants in their system was found. At two agencies, the individual the investigator was referred to was quite surprised that he/she had been singled out as "contact person" by his/her co-workers. When individuals finally identified themselves as appropriate to interview, it was rarely due to a special interest in, or most frequent contact with, non-organic FTT infants. Most frequently, it was the informant's title that appeared to be the relevant factor in their identification, i.e., Chief of Pediatrics or Pediatric Nurse Coordinator. Table 2 depicts the demographic data of contact persons.

Seven of the nine agency contact persons reported that their responsibilities included diagnosis and casefinding of non-organic FTT. Five of the nine agency informants reported their responsibilities included treatment of known cases. Three informants reported their responsibilities involved both diagnosis and casefinding, and treatment of known cases of non-organic FTT. Two informants reported their duties included treatment of known cases only.

All contact persons had been employed by their agencies longer than six months. All contact persons reported that their agency did not have a systematic method for casefinding and record keeping. Therefore, precise numbers could not always be given.

Table 2

Professional Distribution of the Agency Contact Persons

*Agency Number	R.N.	M.D.	M.S.W.	Other
1		X		
2		X		
3	X			
4		X		
5		X		
6	X			
7	X			
8			X	
9	X			
Total	4	4	1	0

*I.D. number randomly assigned by the investigator.

Defining Non-Organic FTT

The majority of agencies contacted did not report a specific definition of the condition of non-organic FTT. Only one informant defined non-organic FTT in terms of exact measurements on normal height and weight growth charts. Two informants had no agency definition, but instead relied on other agencies for the diagnosis of non-organic FTT. All other agencies defined non-organic FTT in general terms related to alteration of growth and/or development without physiological cause.

Number of Cases

An attempt was made by the investigator to establish the number of cases identified and recorded in the study setting from April 1, 1981 to April 1, 1982.

An extremely wide variation in the number of non-organic FTT cases was reported by agencies in the study setting. Two agency informants reported no cases in the past year, whereas another agency reported 100 cases. Six agency informants could not relate exact numbers of cases seen at their agencies due to lack of systematic record keeping.

Two agency informants indicated that 50% of all the FTT cases seen in the past year were non-organic in nature. Two other agencies reported that "most all" of the FTT cases they had seen were non-organic. The remaining five agency informants could not estimate the percentage of non-organic versus organic FTT.

Etiology Beliefs Among Informants

All agency informants reported that they believe that non-organic

FTT is caused in part by some problem in the caregiver - infant interaction. Statements the informants made to validate their beliefs were: 1) very young parents report difficulties feeding their infants, 2) first time parents, when asked, do not appear to understand how to perform adequate stimulation of the infant, 3) absence of parent - child bonding as evidenced by professional judgment, and 4) infants who might have special needs, such as cleft palate, but the parents have not received adequate instruction to deal with these needs.

Five of the nine agency informants thought that multiple psychosocial factors might be responsible for interfering with the parents' abilities to nurture their infants. One agency informant singled out some mothers' special problems as "inadequate love on the mother's part."

Disposition Alternatives

The second study question was: What is the scope of interventions being offered to non-organic FTT infants and their families?

The disposition alternatives offered to families with a non-organic FTT infant are also varied. None of the agencies contacted reported specific treatment protocols.

The disposition alternatives most frequently suggested were: parenting classes (five agencies); provider education and guidance (four agencies); Children's Protective Service referral (four agencies); Community Health Nurse referral (two agencies); social service home visit (two agencies); and therapeutic day care for infant - caregiver joint treatment (two agencies). One agency offered mental health referral for evaluation and/or treatment.

Cost of Treatment

Of the nine agency informants contacted, only one had any idea of an approximate monetary cost of the disposition alternatives suggested by their agency. It was estimated that a hospital stay for a diagnostic medical work-up for the infant was $750.00; three months of a pediatric outpatient clinic follow-up was $120.00; and twice weekly community health nurse visits for three months was $480.00. This estimate, which includes basic service only, totals $1,350.00.

One agency informant reported not knowing actual monetary cost, but thought that the manpower cost would be extremely large. That is, if one considers all the various agencies and services that might be required to treat one family, the manpower time/cost would be very high.

Follow-up

Two agency informants were able to report estimates of the degree of success of the disposition alternatives offered to non-organic FTT infants and their families. One agency reported that 50% of the families were compliant with recommendations. Of these compliant families, 50% were thought to have arrested the FTT problem. A small percentage of clients were thought to have worsened. This was evidenced by continued decrease in infant weight. This informant stated that in his experience these children were basically ignored in most clinics; therefore, continuity of care is absent. At this agency, 25% of the families with a non-organic FTT infant were judged to be helped by the disposition alternatives offered to them.

At another agency it was reported that approximately 10% of these

children are likely to be child abuse victims. This same agency speculated that when the diagnosis is made before the age of six months, about 50% of the cases resolve, and the other 50% continue with FTT .

The other seven agencies were unable to estimate results due to lack of tracking methods, diversity of follow-up clinics/agencies, or a complete lack of follow-up routines and record keeping.

Two case examples will be presented which reflect the variation in identification and understanding of non-organic FTT infants among these child care agencies.

Case One

"Agency One" is primarily funded by public funds. The contact person has responsibilities which include diagnosis and casefinding of non-organic FTT as well as treatment of known cases, and spends an average of one hour/per day with these cases. Infants are diagnosed FTT when they "fall at or below the third percentile on normal height and/or weight growth charts." A medical work-up follows, to rule out an organic basis for the growth failure. If no organic etiology is found, a diagnosis of non-organic FTT is made. Depending on the severity of the growth failure, this work-up is either done as an outpatient or in the hospital.

The respondent stated, "There are complex psychosocial factors responsible for this condition - which is a problem between the infant and the mother or caretaker - but we haven't as yet clearly identified what all is involved." The respondent suggests a variety of treatment alternatives depending on the individual infant and family. The respon-

dent offers education and guidance to the parents regarding feeding and stimulation issues. Parenting classes and therapeutic day care may be suggested depending on the level of knowledge of the parents. Community Health Nurse Referral and/or Children's Protective Service referral may be offered depending on the severity of the social and/or psychological issues involved.

Ideally, this agency likes to follow these infants and families long term, as treating this condition is viewed by the respondent as, "Part of the prevention aspect of child abuse." However, there are no established protocols for follow-up.

Case Two

"Agency Two" is primarily funded by private funds. The contact person has responsibilities which include diagnosis and casefinding of non-organic FTT as well as treatment of known cases. The respondent was unable to estimate the amount of time spent with these cases stating, "We have really nice people here, so we don't see much of this." Another informant at the same agency stated, "I have trouble convincing the doctors that this condition even exists. They refuse to believe that psychosocial factors could cause the problem."

There is no agency diagnostic protocol, the infant is judged to be non-organic FTT when there is, "an alteration in normal growth and development without an organic reason." This is believed to be caused by, "Something wrong between the mother and her infant; inadequate love on the mother's part."

"Agency Two" offers provider support and guidance and occasional

social service involvement depending on the severity of social problems.

As can be noted, there are few similarities between case study agencies one and two regarding the conceptualization of non-organic FTT. Both, however, do define non-organic FTT in the same general terms of an alteration in normal growth and development without organic basis, which is in response to a disturbance in the mother - infant interaction process.

The main issues demonstrated by these case studies are: 1) lack of the use of consistent diagnostic criteria, 2) differing conceptualizations of the complexity of the factors which might be responsible for the development of this condition, 3) variability of disposition alternatives which might prove useful in dealing with the problem, and 4) differing attitudes towards this condition which may be held by professionals.

Chapter V

Discussion

As can be noted from the data, it is impossible to make a definitive statement as to the number of non-organic FTT infants reported by child care agencies in the metropolitan area designated as the study setting. Much of the information given was from the respondents' memories, as no statistics were kept by these agencies. Records are not being maintained in some agencies regarding this problem. To gain exact figures, access to medical records would be required, and in most hospital cases each pediatric chart that had an admitting diagnosis of abnormal height or weight would need to be examined.

The actual number of agency-reported non-organic cases may be rather sizable. This conclusion is based on the fact that one hospital alone reports over 100 cases each year.

Four main issues evolved through data analysis: 1) lack of knowledge about non-organic FTT, 2) lack of coordination of services, 3) inconsistent outcomes resulting from referral or disposition, and 4) inconsistency of findings within pediatric literature.

The first issue is what appears to be a lack of knowledge about non-organic FTT. The investigator believes this is partly demonstrated by the wide variation in the number of cases reported by various agencies. It is incongruent that one agency reports 100 cases per year while two reported no cases at all in the last year. Perhaps recognition of the condition rather than actual numbers is a factor that accounts for reported case variability.

The statements presented in Case Two by agency professionals regarding the identification of non-organic FTT infants appear to reflect a basic lack of knowledge, and possible denial, concerning the frequency of non-organic FTT and the types of families in which it occurs. The statements also reflect the biases, values, and attitudes among different professionals as to the conceptualization of the syndrome.

The disposition alternatives which agencies are presently offering to these families may also demonstrate a lack of knowledge regarding the most effective methods cited in the literature. No agencies report a team approach to this problem, nor use the specific protocols recommended by H.E.W. Families may or may not receive the services of a pediatrician, psychiatrist, child psychiatrist, nurse or social worker. Furthermore, the services do not appear to be coordinated, i.e. referral is made with no follow-up or central responsibility maintained.

The lack of coordination of services is the second issue suggested by the data. As a result, families may face the problem of having to deal with many different systems. For example, a family may go to two to three different agencies for treatment, as well as to agree to home visits by one or two professionals. Unless communication between the various agencies and professionals is continuous and frequent, it would be difficult to evaluate how a family is progressing. Much more detrimental is the possibility the family may get 'lost in the shuffle.' This investigator believes that the lack of coordination and diversity of disposition strategies is reflected in the

poor follow-up statistics of these agencies.

The third issue to be discussed is disposition outcomes reported by the child care agencies. As stated, only two agency informants thought they could accurately estimate the degree of success of the disposition alternatives offered or suggested by their agencies. These statements cannot be applied to the entire sample; however, one of the agencies involved reported the highest number of cases seen per year. One agency reported 50% out of 100 cases improved. Another agency estimated a 25% (of unknown number) rate of improvement. It would seem that the rate of improvement is likely to be a subjective process since there is no consistent agreement regarding what constitutes the condition. Neither are there precise protocols against which progress can be accurately judged.

At this time it is impossible to evaluate reasons for what are termed 'low success rates.' However, one may speculate that contributing factors might include the type of alternatives offered, the lack of a comprehensive team approach, and the lack of coordination of services. One may also speculate that the monetary cost of even the most basic care might be perceived as a treatment restriction to some families.

Finally, the areas of agreement between the literature and study findings are discussed. The data from this study corroborate with published information in three areas. First, the lack of formal, commonly shared, diagnostic criteria in the conceptualization of this syndrome became apparent during the literature search. Results from this study confirm this problem. Only one study agency defined this

condition by the use of strict measurement on height and/or weight growth charts.

The second area of agreement between the pediatric literature and study results is the general absence of defining non-organic FTT in terms of a child neglect issue that H.E.W. guidelines recommend. It is impossible at this time to identify the specific reasons for this; however, one may speculate that included might be the issues mentioned earlier in the review of literature regarding public and professional attitudes toward child abuse/neglect in general. Only one contact person spoke about non-organic FTT in terms of child abuse/neglect; this respondent viewed non-organic FTT as a "potentially pre-abuse situation."

Both of these issues may be partly responsible for the lack of protocols regarding identification of these cases such as are delineated by the Department of Health, Education, and Welfare (1979). (See Appendix C for the H.E.W. protocol guidelines).

The area of public consciousness raising is beyond the scope of this paper. However, the study data do indicate that the agency personnel in the study setting are in need of education regarding national protocol guidelines. An appropriate method would be the use of professional education programs including staff development/inservice at child-care agencies.

Study Limitations

The major limitation of this study is that due to small sample size the results cannot be generalized to child care agencies outside

the study setting.

Recommendations for Future Study/Practice

1) Using the same metropolitan area as the current study, a hospital and clinic chart review would reveal "missed" cases which might help to establish prevalence of non-organic FTT.

2) A survey of private pediatricians is needed in order to determine whether attitudes regarding socio-economic status of clients hinders diagnosis of FTT.

3) A random sampling of specific families with a non-organic FTT infant to be followed from identification through a one year follow-up period. Information to be gathered would include number of agencies and professionals involved in treatment, types of treatment strategies used, cost of treatment, and outcome.

4) Development of a task force from members of child care agencies in the area to explore coordination of services and development of professional education programs, including staff development, to increase recognition and thereby treatment of non-organic FTT infants and their families.

5) Agency consultation with management information systems to establish computerized baseline data and information retrieval.

6) Continued research of normal developmental processes to determine whether the third percentile will continue to be an accurate diagnostic indicator.

Conclusions

The first research question asked was: Are non-organic FTT infants

being recognized in the study setting? This study focused on case-finding of non-organic FTT in child care agencies of one major U.S. metropolitan area. The first study question could not be answered completely. Some of the agencies in the study sample were hospitals without pediatric inpatient or outpatient clinics; thus, the major entry of non-organic FTT infants into their systems was through their emergency rooms. Some infants had been seriously ill due to their FTT; however, others were seen in emergency rooms for other illnesses. FTT was found as a result of caretaker help-seeking behavior for the primary illness. It was not possible to identify how many infants came to the child care agencies severely ill resulting from FTT during the past year. This important factor might influence perceptions of etiology and disposition.

Three agencies in the study were outpatient pediatric clinics. Some of the infants came to these clinics in response to illness, others came to the clinics as part of well - baby routine examinations. Again, it is impossible at this time to identify how many infants belong to each group, and the effects on perceptions of etiology and disposition.

Due to the lack of record keeping systems, it is impossible to make definitive comparisons among the agencies as to whether differences in sources of funding affected agency program goals. While one primarily publically funded agency did report the most cases in the last year, this was also the only agency where one individual had responsibility as a 'coordinator' of care while these infants were in the

agency system. Rather than lack of funds being a primary factor, it appeared to be the designation of primary responsibility which influenced the ability of contact persons to give answers of any specificity.

The second research question was: What is the scope of interventions being offered to non-organic FTT infants and their families in the study setting? This study was designed to limit its scope to child care agencies. There are many infants under the care of private pediatricians as well. Thus, the findings are limited to only a part of the whole picture. The findings from this study can be used as a basis from which to compare other service provider groups such as private pediatricians.

Finally, an epidemiological approach was taken since the concept is inadequately defined. An effort was made to identify and isolate important variables to aid in understanding of this problem.

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Appendix A

Telephone Survey Form

Part A - General Information

1) Is your agency funded primarily by private or public funds?
   public_____ primarily public_____
   private_____ Primarily private_____

2) What is your profession?
   R.N._____ M.S.W._____
   M.D._____ Other_____(please specify)

3) Do you have a system developed for casefinding and record keeping?
   yes_____ no_____

4) How long have you been employed by your agency?
   under six months_____
   seven to twelve months_____

5) Do your responsibilities include any of the following:
   diagnosis and casefinding of non-organic FTT ____yes, ____no
   treatment of known cases _____yes, _____no

Part B - Non-organic FTT

1) How does your agency define the diagnosis of non-organic FTT?
   protocol_____ no protocol_____
   additional comments by contact person

2) How many cases of FTT does your agency have contact within a year?
   organic_____ non-organic_____
   unknown_____

3) What does your agency believe is the cause of non-organic FTT?
   mother infant interaction problem____mentioned/not mentioned
   environmental deprivation_____
   mental illness of one or both caregivers_____
   unknown_____
   other

4) What type of treatment does your agency suggest/offer to families with a non-organic FTT infant?
provider education and guidance____mentioned/not mentioned
community health nurse referral____
children's protective service referral____
therapeutic day care____
mental health referral____
additional key informant comments

5) What is the estimated cost of this treatment?

6) Of the non-organic FTT cases that are seen, what are the results of treatment offerred/suggested?
reinstatement of normal growth and development____mentioned/
continued FTT____not mentioned
other parent child problems, such as child abuse____
other_____
unknown____
additional key informant comments

Appendix B

Informed Consent

My name is Suzanne Noel. I am a Master's Degree Candidate at the Oregon Health Sciences University School of Nursing in Psychiatric/ Mental Health Nursing. I am conducting a telephone community survey concerning child care agencies' contact with non-organic FTT infants and their families, and would like to interview you regarding the agency you are associated with.

The interview takes approximately 30 minutes. I would be glad to schedule an appointment time for you if it is not convenient at this time.

The information you give will be completely confidential as I am assigning a letter to each agency, and your name will not be recorded. You may refuse to be interviewed, and you can withdraw your information at any time.

At completion of the study, a copy of the study can be found at the Oregon Health Sciences University library.

Appendix C

RESOURCES AND POLICIES NEEDED BY DIFFERENT HEALTH CARE FACILITIES

Resources and Policies	Types of Health Care Facilities		
	Type I. Clinic or ER with no Pediatric Ward	Type II. Small to Moderate Pediatric Ward	Type III. Pediatric Referral Hospital
Personnel			
1. Hospital-based CA/N contact person	X	X	X
2. Social worker (Child Welfare and/or hospital)	X	X	X
3. Primary pediatrician or family practitioner	X	X	X
4. Pediatrician who can provide consultation	X	X	
5. Pediatric consultant who can serve as expert witness			X
6. Gynecological consultant who can serve as expert witness			X
7. Child Protection Team (hospital based)			X
Laboratory and X-ray Facilities			
1. Radiological bone survey	X	X	X
2. Bleeding tests	X	X	X
Legal Policies and Procedures			
1. The legal definition of CA/N in the State of _____	X	X	X
2. Hospital policy on reporting and investigation of all cases of suspected CA/N	X	X	X
3. Reporting CA/N by phone and obtaining emergency Child Welfare services	X	X	X

CA/N = Child Abuse and/or Neglect
CPT = Child Protection Team
ER = Emergency Room

Resources and Policies	Types of Health Care Facilities Type I. Clinic or ER with no Pediatric Ward	Type II. Small to Moderate Pediatric Ward	Type III. Pediatric Referral Hospital
Legal Policies and Procedures (Cont.)			
4. Reporting CA/N in writing	X	X	X
5. Police or Health Holds	X	X	X
6. Court-ordered treatment when parents refuse to consent	X	X	X
Emergency Room Protocols			
1. Nursing protocol for ER management of CA/N	X	X	X
2. Medical protocols for ER management of physical abuse	X	X	X
3. ER telephone consultation around CA/N diagnosis or management	X	X	
4. Transfer of CA/N case to hospital with additional services	X	X	
5. Incoming telephone calls about CA/N	X	X	X
Other Medical Protocols for CA/N			
1. Hospitalized cases of physical abuse		X	X
2. Sexual abuse	X	X	X
3. Failure to thrive secondary to nutritional deprivation		X	X
4. Newborn nursery -- identification of and intervention with high-risk families		X	X
Child Protection Team Protocols			
1. CPT members -- phone numbers for consultation			X
2. CPT meetings -- guidelines for mandatory team review			X
3. CPT intake data checklist			X

Personnel

Even if the hospital has no CPT, child abuse is a multidisciplinary problem that requires the input of several individuals. All hospitals need at least a hospital-based CA/N contact person, a social worker, and a primary physician. A Type III hospital should also have a CPT.

Hospital-Based CA/N Contact Person

To make a hospital/clinic child abuse system work, it is critical to designate a full-time hospital clinic employee as the contact or liaison person for CA/N cases in that setting. This person should receive all reports of suspected CA/N, collect any additional data needed to make these reports complete, refer these reports to the Child Protective Service (CPS) agency,[1] provide feedback to the reporting physician from that agency, and carry out any other legal obligations of the hospital in these CA/N cases. Without such a person, the hospital and clinic objectives in CA/N cases usually will be carried out in a very inconsistent manner.

In most hospitals, the professional designated to this role will be a hospital social worker. The missing data on most CA/N cases is social data. Therefore, it is appropriate that a social worker be involved at the hospital level. Also, this person needs to work closely with the social workers in the local CPS agency. It is fortunate that the Joint Commission on Accreditation of Hospitals requires that each hospital have at least one social worker on its staff.

If a social worker does not function in this capacity in a Type I clinic or emergency room, the head nurse can be designated that child abuse contact person. In a Type II hospital, the pediatric ward head nurse or nursing supervisor can be so designated. In a Type III hospital, the CPT social worker will fulfill this role, unless the volume of patients requires that the team have an additional person who is the CPT coordinator.

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[1] The Child Protection Services (Child Welfare or Department of Social Services in some States) is the State agency mandated to receive reports of suspected CA/N, investigate these reports, and provide necessary intervention.
(H.E.W., 1979)

Abstract

Infants below one year of age, who in the absence of any organic illness fall at or below the third percentile on normal growth and development charts, are presently diagnosed as non-organic failure to thrive. This syndrome is believed to be caused by a disturbance in the caretaker-infant interaction process. The magnitude of this syndrome is presently unknown. Also unknown is if there is general agreement among child care agencies as to definition of the syndrome, cause, and the treatment being offered at this time. This study examines these questions in child care agencies in the Portland, Oregon, metropolitan area.

The study is a descriptive survey design. The subjects are child care agencies likely to receive these children and include hospitals, outpatient clinics, and other public service programs. A structured telephone interview was conducted to gather the data. Data was analyzed by descriptive statistics.

The results of the study indicated that there appears to be a lack of knowledge among the agencies surveyed as to the kinds of families in which non-organic failure to thrive occurs, and treatment strategies which are identified in the literature as most appropriate. It is impossible to identify the magnitude of agency reported non-organic failure to thrive due to lack of agency casefinding protocols and record keeping systems.