

Infant and Toddler Group Care at the Mother's Work Place*

직장내 탁아프로그램 개발을 위한 기초연구

- 영·유아를 중심으로 -

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한국은 급속도로 산업화해감에 따라서 점점 더 많은 어머니들이 가정 밖에서 일하고 있다. 이러한 경향은 앞으로 계속될 전망이다, 이에 따른 어머니 부재시의 영·유아 양육문제가 크게 대두되고 있다.

이 영 (1986 a, 1986 b)의 연구에서 조사된 결과를 토대로 볼 때 자녀를 가진 여성의 취업율은 훨씬 높아질 것으로 전망되며, 이에 따라 자녀관리문제에 대한 대안이 시급히 요청되고 있다.

그러나, 현재 기존 제도하에 있는 시설로써는 취업모의 요구에는 물론 유아를 위한 프로그램의 기본적인 수준에도 미치지 못하고 있다. 따라서, 여성인력의 활용과 변화하는 가족 구조에 맞추기 위한 제도적인 대안 마련이 시급하다. 가정 외의 자녀양육에 대해서는 다양한 선택의 여지를 둘 것이 권장되고 있으며 (Beck, 1982), 국내에서도 대안책이 논의되어 왔는데 (한국여성개발원, 1984), 본 논문에서는 특히 직장내 탁아소를 하나의 대안으로 제시했다.

여성 종사자가 많은 직장에서 부터 우선적으로 직장내 혹은 직장 근처에 탁아소를 설치함으로써 여성이 직장에 더욱 충실할 수 있고 능력을 마음껏 발휘할 수 있도록 함과 동시에 건전한 2세 교육에 이바지할 수 있으리라 본다. 특히, 3세 이하의 영·유아를 대상으로 하는 다양한 프로그램 개발이 절대적으로 시급한 현 시점에서 3세이하의 영·유아를 위한 직장내 탁아 프로그램 운영을 위한 대안적 모형을 제시하고자 했다.

대안적 모형 연구에서 취업모의 자녀양육지원제도에 관한 국제적 추세와 외국의 대표적인 모형에 관한 문헌조사를 통해 한국의 실정에 맞는 모형을 제시하였다.

취업모의 자녀양육을 지원하기 위한 시설과 제도에서 가장 중요시되어야 할 개념은 무엇보다도 질적 수준이다. 질적 수준에서는 인적 환경의 측면으로 교사의 자질, 교사(양육자) 대 아동의 비율, 아동과 교사간의 상호작용의 질이 고려되었고, 물리적 환경 및 교육프로그램의 철학적 배경 및 건강·위생 측면이 가장 핵심적인 측면이 가장 핵심적인 측면으로서 고려되었다.

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I. Introduction

The unparalleled, rapid industrialization of Korea has brought accelerated economic and social changes in its wake. These changes have particularly impacted the role and status of women. In the past, women traditionally stayed in the home and looked after household affairs and the education of the children. In recent times, however, the number of women who enter the job market has increased year by year. For instance, the Korean Economic Planning Board (KEPB) reported that the ratio of women employees was 40% in 1984. This represents a steady growth since 1960, when the proportion was only 27% (KEPB, 1984, 1960).

In 1984, the proportion of women employees who were working mothers was 61% (KEPB, 1984). This trend is likely to continue into the future. Lee (1986) surveyed both male and female college students regarding their intentions for the woman to work after marriage. She found that 76% of the male students would expect their wives to continue to work after marriage and 97%² of the women would themselves expect to continue to work after marriage. Of these, 65% of the women want to combine a career with childrearing. This contrasts with the men, of whom only 24% expect their future spouses to continue to work while the children are young. Nevertheless, the trend is clear; women expect to combine work outside the home with child rearing.

In a survey of 322 professional working mothers in 4 Korean cities, Lee (1986) found that almost all of them would use day care if facilities were available. Day care at the work site was the preferred mode at 42% while 21% preferred family day care. The majority expressed a preference for quality programs with educational components rather than mere

custodial care.

In response to the expressed needs described above, this paper concentrates on a model program for work site child care for children under 3 years of age. At the present time, many 4- and 5-year-olds are accommodated in private and public nursery schools and kindergartens and in the ubiquitous Saemaul Nursery Schools. Very few three-year-olds are to be found in the Saemaul Nursery Schools (Tieszen & Lee, 1985). However, the law governing the Saemaul preschool program has provision for the threes. If this were widely implemented, a greater service would be available for working mothers. Family day care is also an expressed need of working mothers, but model programs in this category have been described elsewhere (KWDI, 1984).

The focus of this paper is on infant and toddler group care. The areas discussed here are the human environment, administration, program, and the physical plant.

II. The Human Environment

The human environment constitutes the most important aspect of the child care center. The human environment consists of the staff, the children, and their parents. The parents may or may not be deeply involved in the program of the center, but they must be considered because they are the ones who have the ultimate responsibility for the youngsters. On the other hand, because it is the staff and the children who spend large blocks of time at the center, they are the ones whom we will mainly discuss in this section.

1. The Children

The importance of the maternal bond in early childhood has long been recognized by such researchers as Bowlby (1969), Ainsworth (1969), and others. This brings into question

the advisability of prolonged maternal separation in such situations as residential child care (orphanages and babies homes) and day care for children of working mothers. Rutter (1981) discusses the detrimental effects of residential care; however, in the case of day care, detrimental effects are less prevalent.

It is true that the early study by Blehar (1974) found qualitative disturbances in the mother-child relationships of day care children 2 and 3 years of age. This was attributed to the disruptive effects of daily separations. However, there were serious problems in the design of the Blehar study, since the quality of the mother-child relationship before the day care experience was not controlled.

Subsequent research with better design shows that detrimental effects are indeed possible but generally, no differences between home reared and day care children can be found while some positive effects can be attributed to the day care experience. The quality of the day care experience differentiates between detrimental and positive effects of the experience.

It is particularly important for the under threes to have quality in day care. Rutter (1981) sites two needs of the under threes that are different from those of older preschoolers. First, the under threes are less able to interact with peers and are consequently more dependent on adults. Thus, they require a higher staff-child ratio than the older children. He reports that Kagan, Kearsley, and Zelano (1978) recommend that no caretaker should be responsible for more than three infants. Furthermore, Stallings and Porter (1980) suggest that it is better not to mix toddlers with either babies or older preschoolers. This is because toddlers tend to lose caregiver attention in a mixed-age group. Second, the under-threes are at an age when

parent-child attachments are forming, strengthening, and becoming more secure. This means that these children are likely to be more clinging and dependent on their parents than older preschoolers.

This prompted Rutter (1981) to recommend that for under threes it may be more desirable for child care to be provided by a relative, friend, or neighbor, either in that person's home or the home of the child. That is, infants and toddlers should be cared for by someone they know in a familiar setting and in the company of not more than one or two other children of similar age. However, many families may not have that option. It is for these families that good group care is needed.

Several studies have shown that the effects of day care is more marked, more persistent, and somewhat different in content in boys than in girls. Moskowitz, Schwarz, and Corsini (1977) found that day care boys functioned more independently in their mother's presence; Partnoy and Simmons (1978) found that boys cried more and showed more resistance and avoidance of strangers than girls; and Moore (1975) found that the personality differences that followed day care were more marked and consistent in boys. While such sex differences are not conclusive, it is probable that they will prove to be valid and meaningful.

Ordinal position and temperament are also likely to differentiate between children who thrive on day care and those for whom the experience may be less beneficial. Children's prior experience with separation and variable characteristics of their families will also affect their ability to benefit from the day care experience. Family characteristics are discussed below. In any case, day care policy and program must be aware of the possible differential effects on different children and their families.

2. The Staff

While all aspects of the child care environment are important, without adequate, well-trained, well-functioning and dedicated staff, the center cannot provide a good experience for the children. Thus, the qualifications of the staff and the staff-child ratio are extremely important.

The following staff are generally found in quality center-based child care: a director, head teacher(s), teachers, and assistant teachers. Depending on the size of the center, there may also be an assistant director, consulting resource persons, and volunteers. These staff members are those who come into direct and continuing contact with the children. There may also be other staff who have less direct contact with the children, such as the janitor, gardener, cook, cleaning lady, chauffeur, etc.

It cannot be over-emphasized that positive staff-child relationships are required on the part of the entire staff, but we are most concerned here with the teaching and care-giving staff, as they have the most direct contact with the children. Each person on the staff should be qualified through training, experience, and personal qualities for the age group with which he or she works (Minnesota, 1977).

Qualifications of Directors. Directors are persons who are responsible for the administration of the program. Thus, they must be mature persons with administrative and supervisory experience and training. It is desirable for directors to have the qualifications of a head teacher, but if that is lacking, they must acquire knowledge of program, staff relationships, and day care operations. For centers of less than 40 children, the director may also serve as a head teacher.

Qualifications of Head Teachers. The qualifications for head teachers are similar to those for teachers except that they must have more experience and more training. That is, a high school graduate would need to have another year of experience (total of 3 years experience) and one more course in early childhood education or child development for a total of 4 courses.

A head teacher may be a person with an associates degree (전문대 졸업생) in early childhood education or a related field, such as psychology, mental health, child development, social work, or elementary education. She must have had at least 4 courses in early education and 2 years experience in infant/toddler day care.

Qualifications of Teachers. Only mature persons who love children should be teachers in a child care center. The age, education, and experience of teachers is also important. In the state of Massachusetts, a teacher must be at least 21 years of age. In both Massachusetts and Minnesota, the requirements for experience are tied to the educational level of the teacher. The composite picture of these requirements can be seen in Table 1.

Assistant Teachers. Assistant teachers, whether they are paid or volunteer staff, must be at least 16 years of age and work under the direct supervision of a teacher or head teacher at all times.

Staff Training. In order to maintain quality care for children, it is important to provide ongoing programs for staff training. These are generally of two types: (1) inservice training on the job, and (2) professional training programs. An average of at least 2 hours of training per month is recommended.

Table 1. Qualifications of Day Care Teachers Providing Care to Infants and Toddlers

Basic Training	Experience	Additional Training
High School Graduate	State of Minnesota: 2 years (3,120 hours) as assistant teacher of which 3 months (480 hours) is in toddler/infant programs	3 courses or 90 hours in child development
High School Graduate, or 21 years of age	State of Massachusetts: 9 months half-time day care experience of which 6 months is in toddler/infant programs	1 course in early childhood education
Associate* or bachelor's degree in child development or nursery school education	State of Minnesota: (no additional requirements)	(no additional require- ments)
Associate or bachelor's degree in early education or related field such as psychology, child develop- ment, social work, or	State of Massachusetts: At least 3 months half-time supervised experience in infant/toddler day care	At least one course in early childhood education

* A.A.: Associate of Arts degree, awarded to graduates of a 2 year college program.

Axelrod, Schwartz, Weinstein, and Bush (1982) described an interesting mobile training program for directors of day care. The program covered 6 areas in the state of Michigan and included such subject matter as business, finance, personnel, and program. They produced a Preschool and Child Care Administration Kit for use in this program.

3. Age of Children, Grouping, and Adult/Child Ratio

The age of the children, their grouping, and the adult/child ratio are closely tied to each other. Smith and Spence(1980) pointed out, the ratio is not important in and of itself, but the ratio plus the number of children in a group is significant. That is, adding caregivers to groups of children over 20 is not beneficial.

Grouping by age is required in many programs. Particularly, infants, toddlers, and preschoolers are grouped and provided with separate programs. Infants in day care are generally defined as 6 weeks to 15 months

of age. Toddlers are 16-36 months of age. After this, groupings are by years of age (3-year-olds, 4-year-olds, 5-year-olds), and children are labeled as preschoolers. Mixed age groups of preschoolers have some educational advantages, but when younger children are with older children, the adult/child ratio and group size appropriate to the youngest child pertains.

The U.S. National Day Care Study (NDCS, 1979) conducted a 4 year investigation of quality in day care. The results indicate that group size should never be higher than double the maximum adult/child ratio. For example, for 3-, 4-, and 5-year-olds, the adult/child ratio of 1:7 was found to yield good results in terms of child development and cost effectiveness, especially with well-trained staff. For this age group, then, the highest number of children in a single group would be 14. Accounting for absences, however, the enrollment could be 16-18, with average attendance at 14.

For infants and toddlers, however, the adult/child ratio should be no more than 1:5

(NDCS, 1979). Since the group size should be limited to twice the maximum number of children per caregiver, this would result in a maximum group size of 10 for infants and toddlers.

4. The Parents

While it is mainly staff and children who spend many hours at the center each day, the parents are a very important ingredient. Parents have major responsibility for the child. Whatever child care arrangements are made by working mothers, it is important that family life is enhanced. Rutter (1981) warns that families need to plan quality time together. If both parents and children are so tired at the end of a long day that they cannot interact with each other in a positive way, then the arrangements may not be advisable.

Work site day care has several advantages in regard to parent-child interactions. For one thing, they can travel to the work site together, and parents can be with their child over the noon hour. This prolongs the time that parents and children can have quality time together.

Harrell and Ridley (1975) found that maternal job satisfaction was positively related with satisfaction with substitute care. They also found that work satisfaction was positively related with quality of mother-child interaction. Both of these results have implications for work site day care. If mothers are satisfied with substitute care, they will like their work better. This, in turn, should please the employers. Also, if mothers are happy at work, they are likely to have better interactions with their children. As Rutter (1981) states, a happy mother is likely to be a better mother.

Parents should be encouraged to participate in the child care program. This can be done

in several ways: (1) parents can be encouraged to visit the center while the child is there, (2) parents' suggestions can be solicited, and (3) reports to the parents are made at least once every 6 months in writing (once every 3 months for infants). Medical problems are reported to parents as they arise. Parents are also encouraged to report medical problems concerning the child and others in the home as they arise.

III. Administration

Administration constitutes another important dimension of child care. Several levels of administration can be identified: (1) government policies regarding child care for working mothers, (2) the relation of the center to the sponsoring agency (in this case, the work place), and (3) the internal administration of the center itself.

1. Government Policy and Administration

Government policy and regulation is essential to sound child care practice. The standards set forth in the Massachusetts (1978) regulations, for instance, cover such matters as, (1) sound administration by qualified persons, (2) staff (numbers and experience), (3) variety of age-appropriate activities, (4) ability to provide basic physical care of the children, (5) ability to meet emergency health needs of the children, (6) parent involvement, and (7) safety (fire safety, etc.). They called on a task force of 50 professionals to set up these regulations.

Another important administrative matter is the enforcement of regulations and procedures. The agency responsible for enforcement should consist of individuals who themselves are trained in early childhood education and/or child development and have experience in

early childhood education or day care.

2. The Work Site and the Child Care Center

Employers with a large percentage of women employees—such as hospitals and garment factories—have realized the importance of child care. They find that such services reduce absenteeism and improve the productivity of the workers (Kagan & Glennon, 1982; Phillips, 1984). They also report that some employees in larger metropolitan areas have been successful in persuading groups of small businesses to sponsor child care facilities in the downtown areas of their cities.

Some states allow a sizeable tax credit for corporations when they plan, construct, renovate, or establish child care facilities for use by the children of the corporation's employees. Such incentives are likely to increase the interest of business and industry in providing this service for their employees (Kagan & Glennon, 1982). Verzaro-Lawrence, LeBlanc, and Hernnon (1982) outlined specific ways in which tax credits apply to child care.

Work site day care can also be provided as a service to employees in much the same way as health insurance. Some options would be to make financial donations to facilitate child care planning and for the costs involved in starting a center. Employers could provide a staff member who would assist employees in locating suitable child care. A voucher system could be implemented in which the employees would be issued a certificate worth a specified amount toward fees for child care (Verzaro-Lawrence, et al., 1982).

3. Center Administration

Effective center administration is dependent on a clear statement of purpose, policies relating to the children, the staff, the child care program, health and nutrition, and the physical

plant. It is particularly important to keep records of each child and staff member in individual files. The children's records should include the following information upon intake: (1) name, date of admission, and place and date of birth; (2) the parents' names, address, and phone numbers (both home and business); (3) the name, address, and phone number of a person to contact when the parent is not available, and (4) the child's sex, height, weight, etc. After this, dated periodic progress reports should be placed in the file. Medical records of the child's health should include health when enrolled, physical exams, immunizations, and medications.

Effective personnel policies include such items as staff selection, salary, career ladders, and evaluation and updating staff responsibility. Staff selection, of course, takes place within the guidelines for qualifications of teachers and caregivers, remembering that staff with specialized training and education are better able to facilitate positive learning and socialization of the young child (Smith & Spence, 1980).

Perry (1982) suggests that salaries be determined by first conducting a survey in the area to determine average salaries. After the survey has been conducted, the administrators have to decide whether to offer the average salaries or to offer a higher salary in order to attract better qualified personnel.

Another way to attract better qualified personnel is to offer career ladders. This is one of the ways in which work site child care is in a better position to offer career satisfaction than other types of child care (Perry, 1982).

Evaluating and updating staff responsibilities are carried out on a regular basis. This is facilitated by job descriptions for each person on the staff. Furthermore, such procedures facilitate a clear understanding between

administration and the staff about the work situation and responsibilities. This includes the responsibilities of the employer to the employee as well as the responsibilities of the employee in relation to his or her work. Personnel policies include statements regarding the criteria for hiring, suspension, dismissal, and for handling complaints. Since inservice training is part of the program of the center, such matters need to be discussed with the staff when they are employed (Massachusetts, 1978; Minnesota, 1977).

4. Program

Considerations regarding program have to do with such matters as philosophy of program, hours of operation, the daily schedule, educational activities, the way in which adults relate to children (including discipline), and health and nutrition.

Philosophy. It is very important for each center to determine its philosophy for the child care program. This will lead to program goals and objectives. Program philosophy also influences decisions about curriculum, equipment, and facilities (Perry, 1982).

A major purpose of work site child care is the provision of a service to employees who are working mothers. The program philosophy should include a statement of the way and the extent to which the child care program should serve parents.

The philosophy of a child care center should also include child development principles and should also be responsive to the values of the parents who will be using the center services. Philosophy of program includes a number of dimensions which have been outlined by Fein and Clarke-Stewart (1973). There are some areas of general agreement between programs: all agree that education is worth-

while, that children should enjoy the program and experience success in it, and that the child must be motivated in order to learn. In other ways, programs are quite different from each other.

The three main approaches to the conception of the child include the maturational, interactional, and environmental approaches. Rousseau, Gesell, and Freud exemplify the maturational extreme, and Skinner, Engelmann, and Bushnell emphasize environmental approaches. Piaget, Weikert, Nimnicht, Montessori, and the British infant schools emphasize the interactional approach.

Programs also vary in emphases on process or content. That is, if the emphasis is on process, then it is the learning child that is emphasized, as in the programs of Nimnicht and the British infant schools. Engelmann's program is perhaps at the other extreme, with emphasis on knowledge.

Another dimension in program philosophy has to do with the aspect of development that is emphasized. Traditional nursery schools and the psychoanalytic nursery schools emphasize social-emotional development. In the Head Start program, a number of schools emphasized language and/or cognitive development while Montessori's emphasis was on perceptual development. Schools which emphasize the development of the "whole child" include Bank Street and the British infant schools: i.e. they include physical, cognitive, language, social, and emotional development in their curriculum.

Hours of Operation. Work site child care needs to be responsive to the need of working mothers, particularly in regard to hours of operation. Morrison (1980) suggests that some settings need to provide 24 hour care. This doesn't mean that any one child is in care for 24 hours, but rather, that the service is available for the entire time any working

mother may be on duty. A 24 hour system would be applied to hospital, where nurses and doctors on duty any time of the day or night could be working mothers. In a school setting where night classes are offered, operation would be modified to 18 hours or whatever hours would be applicable to the particular setting in question.

Daily Schedule, Education Activities, and Adult-Child Interaction. A daily schedule which ensures continuity and stability for children should be posted and followed with some flexibility. The program of educational activities is what differentiates custodial from quality or developmental child care. Such a program for infants and toddlers should be based on a responsive environment; that is, appropriate objects the child can manipulate, adult-child interaction, and child-child interaction.

Perhaps one of the most salient features of quality child care is the dimension of adult-child interaction. In quality child care, the staff is warm and friendly to the children. There is a relatively small number of adults with which any one child would interact. This permits continuing reciprocal relationships for each child. These adults provide support for the child to learn to control his behavior and encouragement to explore and learn from his environment. While the adult interacts with warmth and expressiveness, he or she also gives the child freedom to explore the environment on his own (Huntington, Provence, & Parker, undated).

It is very important that child care workers learn to observe and record the behavior of children. This helps to know how the child is developing and also provides material for planning program. Beller, Laewen, and Stahnke (1981) have worked out a developmental profile for recording the behavior of individual child-

ren. Willis and Ricciuti (1975) suggest a daily information sheet as a way of recording infant behavior.

Health and Nutrition. All group child care must provide and maintain an active program for the protection of the health of children and their caregivers. A center oriented toward families includes the health of parents and other family members in its concern (Huntington, et al.). A written health care policy is highly recommended. It should cover matters to do with illness, emergency care, accidents, first-aid, and exclusion of sick children (Massachusetts, 1978; Minnesota, 1977). This statement must be posted near a telephone which will be used for making emergency calls.

Details to be included in such a statement include the name and telephone number of the physician or nurse available for emergencies and consultation, telephone numbers of the fire department, police station, and ambulance service; procedures to be followed in case of illness or emergency; procedures for using first-aid equipment; procedures to be followed in case of fire; plan for dispensing medications, including records of the administration of prescribed medicine; care of mildly ill children at the center; identification of children's allergies; etc. Minimum first-aid supplies include band-aids, sterile bandages, adhesive tape, magnifying glass, tweezers, soap, water, etc.

Cleanliness is a major preventive measure and must be encouraged. Particularly, in the case of infants and toddlers, toys and play equipment must be washed with detergent and water, rinsed, and then sterilized with a clorax and water solution once a day. A similar procedure must be followed twice daily for areas where diapers and soiled clothing are changed.

Children in group care are particularly susceptible to communicable diseases. Without strict cleanliness and sterilization such as those outlined by Highberger and Boynton (1983), many children will be very sick and others mildly ill. Cleanliness pertains not only to the diaper changing area but also to the caregiver's hands and the children's hands. The use of liquid soap, rinsing, and paper towels is highly recommended. Drying washed and sterilized diaper changing areas in the

sunlight whenever possible is an excellent procedure. Cleanlines responsibilities may be shared. Highberger and Boynton recommend a checklist so that weekly, bi-weekly, and daily cleaning procedures can be ensured (Figure 1).

Day care centers must provide adequate and nutritious meals and snacks appropriate for the ages and needs of the children. Menus should be posted in advance so that parents can use the information for planning the other

Figure 1. Sanitation checklist*

Staff member completing task will initial each day.

	Mon.	Thes.	Wed.	Thurs.	Frid.	
	/	/	/	/	/	1. Remove plastic toys (rattles, etc.) from playroom, rinse in cold water, place in dishwasher (or wash in detergent, rinse with clean water, and wipe with bleach solution).
	/	/	/	/	/	2. Wash, rinse, and wipe changing table with disinfectant twice daily.
						3. Change crib sheets and blankets weekly
						4. Wash, rinse, and wipe crib bars, gates, and strollers with bleach solution.
						5. Wash, rinse, and wipe crib mattresses with disinfectant weekly.

*From R. Highberger, & M. Boynton (1983). Preventing illness in infant/toddler day care. *Young Children*, 38 (3), p.7.

meals. Menus should be planned with the use of a dietetic guide. Snacks also are to be nutritious. Children who have particularly long hours at the center should be provided with two meals per day plus snacks.

Food preparation must be clean, wholesome, free from spoilage, and safe for human consumption. The kitchen must be very clean. Adequate refrigeration is important. Washing and sanitizing bottles, utensils, and dishes

is essential. Persons responsible for the foods and snack preparation must be healthy and clean. They should wash their hands frequently with liquid soap.

Sleep, rest, and quiet activity must be provided for the children. Particularly, children in care for more than 4 hours must have a time for extended rest and/or sleep. The cribs for infants must be washed and sterilized at least once a week. Mats for toddlers must

be washed and sterilized on a regular basis.

V. Physical Plant, Facilities, and Equipment

The physical plant refers to the building and grounds and their location. Thoughtful planning of the physical plant, facilities, and equipment is essential in order to bring about an environment that is healthful and conducive to the growth and development of children. The child care center should be beneficial to both the children and the adults in it (Gardner, undated).

The location of child care facilities must be where there is a good water supply, sewage disposal, fire protection, and freedom from air and noise pollution. Employer-sponsored child care may be located near the parents' work place, but this is not the only option. In some cases, a better location might be geographically separate from the sponsoring company (Perry, 1982).

While a day care facility may be located in a multiple story building, the facility for infants and toddlers must be on the first floor (Minnesota, 1977). This is necessary for rapid evacuation in case of fire.

The size of the facility depends on the number of children to be accommodated by the program. No facility should have more than 60-75 children (Perry, 1982). Space includes primary activity space and all other space. Primary activity space refers to the area which is used exclusively for children's activities during the time of day that they are in attendance. The recommended primary indoor space per child is 35 ft² (0.98 p'yong) for toddlers and preschoolers (Morrison, 1980) and 20 ft² (0.56 p'yong) for infants (Perry, 1982). While 35 ft² is the absolute minimum, Perry (1982) reports that 40-42 square feet of usable primary space will prevent many problems.

Additional space of 18-20 square feet per child is required for secondary caregiving activities, such as eating, food preparation, diapering, toileting, and napping. Additional space for staff areas and circulation (hallways) are also needed. This all adds up to a minimum of 75 ft² (2.11 p'yong) per child for indoor space. Ideal space, however, would be 100 ft² (2.81 p'yong) per child (Perry, 1982).

Outdoor playground space should also be at least 74 ft² (2.11 p'yong) per child. Again, this refers to space which is actually used by the child. Infant care centers also are in need of outdoor space, since the children need to have direct sunlight and fresh air on a daily basis (Huntington, et al., undated).

All facilities should contribute to health and safety. The floors must be covered with a washable crackfree, splinter-free surface, and they must be kept very clean. Since these young children have a distinct tendency to put everything in their mouths, no lead paint should be used in the center.

Steam and hot water pipes must be protected, and hot running water should not exceed 48.8°C. Electric outlets and electric cords must be out of reach of children. There must also be sufficient space, accessible to children, for each child to store clothing and other personal items. The interior of the building must be clean and maintained free of rodents and insects. Competent fumigation should take place when children are not on the premises. Window guards, guards for stairwells, and guards across basement windows are essential (Massachusetts, 1978). Indoor window and stairwell guards must be washable (Highberger & Boynton, 1983).

Toilets and/or training chairs and wash-basins must be provided for the toddlers and older infants. Four training chairs are recommended for a facility serving 10-12 toddlers and 15 infants (Huntington, et al., undated).

Furnishings for use by adults rather than children include kitchen equipment (sink and refrigerator are mandatory) and office equipment (desk, file cabinets, etc.). A clock on a wall of each room is very helpful.

Equipment and Supplies. Appendix I contains a list of recommended equipment and supplies for a facility serving infants and toddlers (from Huntington, et al., undated). Selection from this list should reflect the age and development of the children as well as program philosophy and administration.

VI. Summary

Korea is a rapidly industrializing nation. As a consequence, more mothers are working outside the home. This trend is likely to continue into the future and raises the problem of infant-toddler care during the mother's working hours.

Considering that Korea is making such rapid economic advances, quality care for children of working mothers is not only desirable but affordable as well. Variety in options for child care is recommended by Beck (1982). Some of the alternatives in child care have been discussed elsewhere (KWDI, 1984). This paper, thus, concentrated on center-based, worksite child care.

Because the human environment is the most important aspect of the center, qualified staff and a low ratio of children per staff member is vital. Philosophy of program and its actualization ensures that the children have a worthwhile experience at the center. The physical plant houses the center and includes provision for space, materials, and equipment for staff and child use in carrying out the program. Adequate health protection is a critical factor in infant-toddler group care programs.

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Appendix I

Recommended Equipment and Supplies

1. Basic Furnishings
 - (1) Refrigerator
 - (2) Strollers
 - (3) Carpets
 - (4) Wall Clocks
 - (5) Garment Racks
 - (6) Desk
 - (7) File Cabinets
 - (8) Shelves & Boxes (for children's clothings)
 - (9) Safety Gates
 - (10) Floor Cushions
 - (11) Record Player and/or Tape Recorder
 - (12) Auto Harp
 - (13) Foam pads (use under indoor climbing equipment)
 - (14) Cribs and Mattresses
 - (15) Playpens
 - (16) Training Chairs
 - (17) Baby Walkers
 - (18) Play and Mealtime Tables
 - (19) Screens and Room Dividers
 - (20) Storage for toys, etc.
 - (21) Book Display Stands
 - (22) Lockers
2. Linens and Supplies
 - (1) Mattress Pads
 - (2) Crib Sheets
 - (3) Crib Blankets
 - (4) Small Lightweight Blankets
 - (5) Towels
3. Toys for Large Muscle Activities
 - (1) Various Large Blocks
 - (2) Doll Carriage
 - (3) Doll Bed
 - (4) Rocking Horses
 - (5) Rocking Boat
 - (6) Indoor Gym Set
 - (7) Scooters
 - (8) Wagons
 - (9) Tricycles
 - (10) Water Play Tubs and Toys
 - (11) Play Trucks & Cars
 - (12) Pull & Push Toys
4. Toys for Small Muscle Activities
 - (1) Puzzles
 - (2) Stacking blocks
 - (3) Prism
 - (4) Cloth Balls
 - (5) Soft Tennis Balls
 - (6) Cloth Foam Blocks
 - (7) Sound & Action Blocks
 - (8) Roly Polys
 - (9) Dolls
5. Crib Toys
 - (1) Mobiles
 - (2) Rattles
 - (3) Teethers
 - (4) Squeeze Toys
 - (5) Clutch Balls
 - (6) Packets and Pockets
6. Outdoor Equipment
 - (1) Garden Umbrella
 - (2) Sand Boxes

- (3) Swings with Bucket Seats
- (4) Swing with Canvas Seats
- (5) Gym Set
- (6) Outdoor Storage Unit

7. Books (cloth and hard paper)
8. Phonograph Records
9. Posters and Wall Hangings

10. Household Items Used as Toys (boxes, kitchen utensils, old shoes, etc.)
11. Health Supplies
12. Uniforms (cheerful uniforms and a blue lab coat for each assistant)
13. Miscellaneous (additional play equipment appropriate for each age group)