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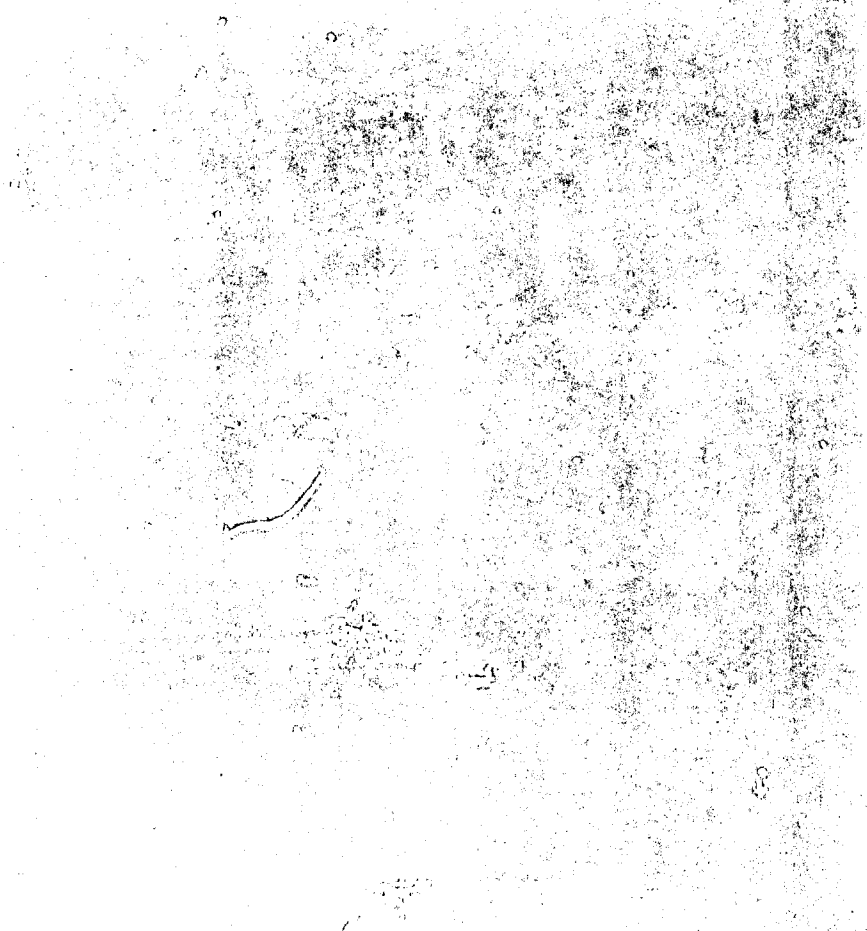
A Study To Determine The Needs For Standards In Army Day Care Centers



A STUDY TO DETERMINE THE NEED FOR STANDARDS IN ARMY DAY CARE CENTERS

Submitted by

Mary Margaret Morris

Captain, Army Nurse Corps

to

the Faculty of the University of North Carolina, School of Public Health, in partial fulfillment of the requirements for the degree of Master of Public Health

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Approved by:

Ruth W. Hay

Adviser

MARY MARGARET MORRIS. A Study to Determine the Need for Standards in Army Day Centers. (Under the direction of RUTH W. HAY.)

This study was originally designed to identify problem areas and hazards in the operation of Army day care centers and to determine if there is a need for more explicit Army standards. It grew from a 1952 investigation of primarily civilian centers by the Child Welfare League of America. The 1952 study included eight military installations, at which conditions were found to be substandard. A Children's Bureau consultant said problems of a post nursery are often unlike those of civilian centers. Except by choice, a military center is not subject to civilian standards set up by its locality or state. The civilian consultant thinks standards for Army facilities should suit the conditions of a military post.

It was decided to make the present study a preliminary survey of standards of health and safety existing in Army day care centers and to assess the need for establishing general standards and guides for them. A questionnaire was prepared from recommendations in manuals on day care centers from four states, a city, and the Child Welfare League of America, plus the new Manual for Army Health Nurses.

This study's survey population includes United States and overseas military installations with health nurses. Of fifty-seven questionnaires mailed to nurses, forty-one were returned. Those not replying received a post card asking if they had a day nursery and its daily attendance. Response from the two sources was ninety-eight percent.

In the analysis of results, the centers were classified into four groups on the basis of attainment of professional standards by constituting a demerit score consisting of a sum of demerits on about 150 items on the questionnaire.

On the basis of demerit distribution, the centers were classified into four groups:

A	10 Best centers	20 through 31 demerits
B	9 Good centers	33 through 37 demerits
C	10 Fair centers	38 through 45 demerits
D	12 Poor centers	49 and over demerits

Large differences between the centers exist. The better centers tend toward high standards on all items. The poorer centers failed to maintain standards on the health and safety practices which should be easily maintained.

It is not immediately possible to conclude that introducing formal standards would improve the situation. Many additional considerations should be investigated. However, the study revealed difficulties that might be involved in setting standards.

First, day care centers are not integral parts of military establishments. They are primarily a voluntary enterprise for a particular need. An operational manual would not have the status of a military directive. Compliance would depend on the authority and support given the administrator.

Many differences in the various centers would have to be considered in setting up standards.

Many respondents expressed the need for standards in the centers. If having formal recommendations would mean better operating standards, the effort to prepare such a report would seem well justified.

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INTRODUCTION

This study was designed to determine the need for standards in Day Care Centers on military installations. A brief history of Army Health Nursing Service is intended to expand on and give a deeper appreciation of this problem.

The introduction of a health nurse in her role on the Preventive Medicine Team has been very recent in the history of the Army. Many problems encountered by the Army Health Nurse have arisen because this is a new program and a new specialty. Another factor affecting the progress of this program has been the continuous change in Army personnel in this field. (44:61)*

"The role of a community visiting nurse has long been accepted as an essential activity relating to good community health." (42:463) In the Army this phase of community health service had not been stressed prior to World War II, since the number of dependents have been relatively small and consisted chiefly of dependents of officers and senior ranking enlisted men. Prior to the advent of Army Health Nurses, the preventive medicine officer assumed responsibilities for health guidance to families only when time and facilities were available. With the onset of World War II most of the families of military personnel lived in civilian communities, and the responsibility for their health service became the responsibility of the community in which they resided.

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*The first number in parenthesis refers to the number of the reference in the bibliography; the number following the colon refers to the page in the reference.

After the war, there was a shifting of dependent families of military personnel from civilian communities to military installations. There was a marked increase in the number of dependents, particularly in the lower ranks and age groups. The military doctors did not have the time to give guidance, which increased the need for medical care, a condition that in many instances could have been prevented. Dependents of military personnel residing on an Army post were given little if any health instructions. The lack of family health services was detrimental to the morale and efficiency and created an impression on neighboring civilian communities that was not in accord with the widely advertised benefits of the Army as a career. (42:563)

The first Army Health Nursing program was organized in February, 1949, at Fort Devens, Mass. In 1950, the Army was authorized to procure health nurses. The growth of the service was slow during the Korean conflict. (44:61) At the present time, however, such programs are functioning at 57 military installations in the United States and in other countries where the Army is located. The first chief health nurse was assigned in the fall of 1955 to the Office of the Surgeon General, Preventive Medicine Division as Chief of the Health Nursing Branch. One of her major efforts was in compiling a Manual for Army Health Nurses, which was published in November, 1959. The purpose of this publication is to present basic and fundamental concepts of the program. This manual lists minimum standards that should be maintained by Army day nurseries. The relevant section on this subject is contained in the Appendix. It is designed to assist the health nurse in

performing her nursing activities as well as to interpret to other individuals the health program and the results that may be expected. (21:3)

In 1952, a consultant from the Child Welfare League of America made a survey of day nurseries on military installations and defense areas. The League is the agency for establishing standards in the field of children's care.

The Children's Bureau, a section of the U. S. Department of Health, Education and Welfare, cooperated with the League in conferring with the officials of the Defense Department. Miss Anna Rosenberg, who at that time was the Assistant Secretary of Defense submitted a memorandum on "Community Day Care of Children on Military Installations" to the Secretaries of the Army, Navy and Air Force. This memorandum reads, in part:

> A problem of increasing importance in recent years is the need for community day care facilities (day nurseries) for children of personnel of the Armed Forces. This need arises from:
>
> (a) Many mothers, particularly the wives of enlisted men, are working to supplement the family income. In some cases they are being urged to work to meet the personnel needs of military installations.
>
> (b) Trips to clinics and for shopping make real demands on the time of young mothers.
>
> (c) Obtaining assistance of domestic servants or baby sitters has become increasingly difficult.
>
> On many military installations, day care facilities have been provided to meet this growing need. Recently, at the invitation of officials of public and private agencies, a representative of the Child Welfare League of America, which is affiliated with the United Community Defense Services, Inc.,

visited eight day care centers located on military reservations. It was the opinion of this representative that, in most instances, the facilities of programs fell short of accepted standards for the day care of children, extending in some cases to actual danger to the children. It was also the opinion of this representative that, unquestionably, the personnel involved were doing their best, but it is felt that many of the conditions noted existed merely through lack of knowledge of what was proper under the circumstances.

Among the principal shortcomings noted were:

(a) Failure to maintain registration; for example, the names of children or minimum information concerning them or their parents.

(b) Failure to place children in appropriate age groups for activities.

(c) Individual groups of children for play were too large.

(d) Inadequate refrigeration, protection, or preparation of food.

(e) Inadequate sanitary facilities and inadequate supervision by medical services.

(f) Babies accepted with no provision for the individual care necessary for infants.

(g) Attendants with inadequate training, and no provision for in-service education for the staff.

(h) Inadequate indoor space for recreational games.

(i) Inadequate financial backing.

As a result of the visits of its representative, the Child Welfare League concluded that this preliminary survey indicated a need for expert advice and assistance relative to the conduct of these day care centers on military installations. (45:1-2)

The Children's Bureau points out a number of problems found in military day care centers that are not generally encountered in those operated for civilian use. Among these are:

1. All of the children have their fathers in the family.

2. There are (usually) no grandmothers or other available relatives.

3. There are peculiar difficulties in shopping at commissaries in that frequently children are not allowed to accompany mothers, and long periods of time are consumed.

4. There are many social occasions in which all mothers must participate (night hours, etc.) so that there cannot be the usual interchange with neighbors. Sometimes the status or promotion of men depends on their wives' participation in Post affairs.

The Bureau also explains that:

> Although a particular state may have excellent standards for day care, a military post would not be subject to the state standards unless it chose to abide by them. State or local groups cannot operate on a military post or on any other Federal property activity except by invitation. Unless there is an Army Regulation regarding standards for day care centers, there will be no state requirement for maintenance of standards. It seems feasible to develop standards which will be particularly applicable to the Post centers. Such standards should be developed according to the peculiar needs of such centers. General standards might easily be adapted in order that the application will be practical. (30:2)

The trend toward larger families, in both military and civilian homes continues. Where possible housing for military families is furnished on the post. When this is not possible the families live in communities nearby. This situation creates a greater demand on all post facilities including day care centers. (2:37)

The establishment, maintenance and requirements of a day care center on each military installation is the responsibility of the post commander. He in turn delegates his authority in these matters to representatives such as the post surgeon, post engineer, safety director, special service officer, women's club, or other designated

individuals or groups. The local standards and policies depend upon these people.

These centers for child care, where operated in cooperation with the Army Health Nurse and other members of the Preventive Medicine team, can do much to contribute to overall health for the entire post. (31:175)

HISTORY

As is the case with many modern institutions, the history of centers for the care of children dates back many centuries. Even before the time of Christ, Plato, the noted Greek philosopher, described a community nursery, or child care center as a proper part of an ideal state. (19:2)

Day Nursery

According to some sources the first day nursery was started in Switzerland some two centuries ago by Jean Friedrich Oberlin, a minister. This was a beginning of a slow growth of nursery schools for working mothers. The widespread growth of day nurseries is associated with the growth of the factory system.

In 1802 a day nursery was started in Detwold, Germany, the first of a series. It was not until 1826 that a definite philosophy for child care centers was formalized. At this time Friedrich Froebel, in his book the Education of Man brought out the importance of the early training of children. According to Froebel,

> It is highly pernicious to consider the stages of human development - infant, child, boy or girl, youth or maiden, man or woman, old man or matron - as really distinct, and not, as life shows them, as continuous in themselves in unbroken transitions; highly pernicious to consider the boy or child as something wholly different from the youth or man, and as something so distinct that the common foundation (human being) is seen but vaguely in the idea and word, and scarcely at all considered in life and for life. (46:99)

Froebel is known as the "father of the Kindergarten," but in theory and practice he includes principles and age groups that are broader than the kindergarten age.

In 1838 the first day nursery was established in Russia, but few existed prior to the Russian Revolution. Since then, as Russia has embarked on the huge industrial program, day nurseries have kept pace with industrial development. Russian day nurseries have maintained fairly high standards and emphasis has been placed on both the education and care of young children. (5:28)

The establishment of day nurseries in France began in the middle of the last century. By 1912 day nurseries were functioning throughout the country. The early movement in France was led by Firman Marbeau, who was concerned with the high infant mortality, particularly of the children of working mothers. (Beer: 29)

Generally speaking the day nursery movement is approximately a century old and developed simultaneously in all parts of the civilized world to meet the various needs in each country. (5:29-35)

There are conflicting claims as to the first day nursery in the United States. Evidence shows that in 1838 Mrs. Joseph Hale opened a day nursery in Boston for children of seamen wives and widows who were employed. The Nursery and Child's Hospital in New York City opened such a center in 1854 for the children of working mothers who had been patients in the hospital. The first day nursery in Philadelphia was established in 1863.

Nursery Schools

The world's first nursery school is generally accredited to Robert Owen who founded such a school at New Harmony, Indiana in 1820. (5:36) Little interest was shown in this movement either here or abroad until the early part of the twentieth century when two outstanding leaders in nursery education, Margaret McMillan and Grace Owen begun to push this movement in England. In 1918 nursery schools in England were given official recognition by the Fisher Education Act.

In 1919 and 1920, teachers who had worked with Miss McMillan and Miss Owen were invited to this country to demonstrate the English methods of nursery school education. This led to the establishment of such schools at Columbia University and Merrill-Palmer School of Motherhood and Home Training. Also at this time small groups of children were accepted for studies at the Yale-Psycho Clinic and the New York Bureau of Educational Experiments. From these early beginnings, mostly in academic centers the nursery school program has spread throughout the United States. (19:2-4)

This movement in the United States was given a boost during the depression years by the federal government. At this time, Work Project Administration nursery schools were established by the government to give employment to the school teachers. These nursery schools were not intended to be day care centers, although many working mothers used them as such. (5:39)

Day Care Centers

Nursery schools were the immediate forerunners of day care centers. This brought in a new concept in child care programs as working mothers were employed the entire day. The nursery school was set up on a school basis and not on a working day basis. Also, nursery schools operated nine months out of the year and working mothers were on a year round basis. This clearly indicated the need for a child care center that would operate beyond the scope of a nursery school. From this need there evolved the present day care center. (5:39)

With the advent of World War II the Federal Work Agency, which administered the Lanham Act to provide for defense housing and public works, obtained a more liberal interpretation of the act. This permitted the allocation of funds to communities under the Lanham Act for facilities and services for the first wartime child care centers. The program began in mid-1942 and terminated with the end of the war. (51:8)

Today the day care center plays a vital role as a social agency as an increasing number of mothers make use of this service, whether employed or for other reasons. (5:178)

As the scope and influence of day care centers grow, various agencies have come into being to assist such organizations on standards and guidance. In this area the three best known agencies are the Children's Bureau, the Child Welfare League of America, and the National Association of Nursery Education. The first of these is a federal agency and the other two are private, voluntary agencies. For the past forty years the Child Welfare League of America's major responsibility has been that of establishing standards.

PHILOSOPHY

It is now the accepted fact that sound personality development depends on healthy growth in infancy and early childhood. This places more emphasis on family relationship and on the emotional needs of children. Because of this many parents as well as professional people realize that young children could be harmed as much by the less obvious emotional hazards in daytime care as by the more recognized hazards to their health and safety. (36:8)

> From this experience a new philosophy was evolved. Day care programs are marked by a wider and deeper knowledge of children; by recognition of the interdependence of the child's physical, intellectual, spiritual and emotional life; and by awareness of the interrelationship of the child, his family, and the day care center. (13:3)

An awareness of children's needs on which a program may be based is essential to a sound operation. Generally speaking, there are four principles:

1. The security of being wanted and loved; and a recognition of each child as a distinct personality with his own individual needs.
2. Responsible supervision and physical care.
3. Protection from anxiety and fear while he is learning to handle his problems.
4. A chance to explore and experiment, to play with other children, and to develop responsibility through group experience. (13:2)

The ideal way to fulfill all of these needs is through a qualified staff representing the professional fields of education, social welfare and health. (13:1)

Both foster family day care and group day care should be available in a community. The former is day care in a home where children are cared for by a day care foster mother. This should always be available for children under three and for those over three years of age for whom this individualized service is desirable. (13:1) It is advantageous for a child in this age group for bodily needs to be met consistently by one person instead of by a series of people. (16:1)

There is often confusion in use of the terms day nursery, nursery school, and day care centers. Generally speaking, a day nursery offers custodial care; a nursery school is concerned with educational activities; a day care center may combine the two above activities depending upon its organization. (5:22-23) Day care centers may be available under a variety of names: nursery school, day nursery, day care center, play group etc., however, in this study they will be referred to as day care centers. (13:3) In the Manual for Army Health Nurses, these centers are referred to as day nurseries.

> Day care is not a substitute for the home. It does not supersede parental responsibilities and relationships. The goal of day care service is to help parents retain and carry out their parental rights and responsibilities at the same time it supplements for children the care of guidance of their parents for certain hours of the day. (13:1)

The well-being of the children is not only a concern of the parents but of the entire community. The community has a stake because the future paths of society depends upon the healthy development, physically, mentally and emotionally, of the children today. (13:3)

By 1957, forty-three states required some form of a license to operate day care centers. In most of these the authority to issue such licenses rests solely with the State Department of Welfare. In others, this is delegated to the State Department of Health, State Education Departments and in some states two of the above agencies may act jointly to issue licenses. There is no consistent pattern for issuing licenses. Also, there was no consistent definition of what operation in this field should be licensed. (36:8)

The process of licensing day care centers is considered an aid to those responsible for the care of children, and in maintaining and improving the quality of such care. (36:18)

In some states certain standards must be met before licenses are issued. In other states standards are recommended without legal authority. These recommended standards, however, are not without value as most centers strive to meet them. (36:12-13)

Modern day care centers in order to be of most value to children must make definite provisions to fulfill the physical, social, emotional, and intellectual requirements of the child. The center should have adequate space, both indoors and out, for physical exercises. Space also must be provided for quiet play. Equipment and play materials that help stimulate and guide a child's development are essential.

The social needs of children are not to be overlooked. They should be given opportunity and guidance in learning to give and take and to work and play together in harmony. The shy child needs to be taught and to develop self confidence, while the agressive child

needs to learn to consider the rights of others. It is desirable that materials be provided for the child that will stimulate his curiosity and purposeful manipulation. The environment should be such as to encourage expression both through language activities and the use of constructive material.

It is essential that the child's health be protected and promoted through proper nutrition and by the fostering of good habits of eating, sleeping, elimination, and through programs of preventive and corrective treatment. (27:18-19)

Buildings housing day care centers should meet all fire and sanitation laws. The location, size and arrangement are important factors in planning the program, to be offered. (16:42)

The basis for the present concern with evaluation and codification throughout the country is for the better protection of children through meeting their daily care needs. (7:39)

STATEMENT OF THE RESEARCH PROBLEM

To assess the recommendations of the Child Welfare League of America, other official agencies, and the recently published Manual for Army Health Nurses relating to the needs for standards in Army day care centers.

Purpose

The study is to collect and analyze data which would serve to (1) make a preliminary survey of the standards of health and safety currently practiced in Army day care centers (2) assess the need for establishing general standards and guides for the operation of such centers.

Objectives

1. To establish which areas of operation in day care centers are in need of better standards and procedures.

2. To identify problems, difficulties and dangers inherent in any attempt to set up standards in these areas.

DEFINITION OF TERMS

Army Health Nurse is a registered nurse who is a commissioned officer in the Army Nurse Corps and who has had additional education and experience in public health.

Preventive Medicine Officer is an officer of the Medical Corps with special training and experience in preventive medicine, and public health. His responsibilities are similar to those of a civilian health officer. (21:9)

Post Surgeon of a military post is responsible for all medical activities of military personnel in a military community. (21:8) The activities often include dependents of military personnel and civilian employees of the Army.

Preventive Medicine Team includes a preventive medicine officer, a sanitary engineer or sanitarian, one or more Army Health Nurses and preventive medicine specialist. (21:10) The preventive medicine service of a military community is comparable to the official public health department of a civilian community. (21:8)

Community includes the entire population of the military installation. (46-8) The terms military installation, army post or community are synonymous.

Dependents are family members of military personnel.

Day Care Center or day nursery may be defined as an establishment where children receive care for part or all of the day while not in custody of a parent. This includes a nursery school if housed in the same building as the day nursery. (21:41)

METHODOLOGY

The method or approach of this study includes a review of literature on the problem, the research design and measurement instrument, discussion of the survey sample population, the analysis of the information and conclusion including recommendations.

Review of the Literature

The writer has found no studies or surveys of military installation made since 1952 when the Child Welfare League of American made the survey of defense areas. Mrs. Rosensberg's memorandum dated 1 November 1952 and a letter from the Children's Bureau were the only sources of information for pertinant facts. The Child Welfare League of America was unable to give any information on this survey. However it was helpful in supplying references on the subject.

The review of the literature in this area uncovered extensive general information, but only some was specifically relevant to the practices and procedures of Army day care centers. The literature placed repeated emphasis on the need for planning, preparation, and coordination in order to insure that day care centers operate safely, smoothly and efficiently.

The general literature pointed out that day care for children away from their home was required for a number of reasons. Among these were: working mothers, illness in the home, a father alone maintaining a family unit, lack of adequate housing and play space and a need for educational experience.

The Research Design

This is a descriptive study which was primarily designed to identify the area in which day care centers are not meeting the minimum standards as recommended by the Committee on Standards for Day Care Service. The responses to the questionnaire were to determine problem areas and similarities of policies.

The instrument of research was a structured questionnaire. An attempt was made to measure the variables by direct assessment. A questionnaire was the only available means of securing information necessary for this comprehensive study.

The questionnaire was constructed after reviewing numerous minimum requirements and/or desirable standards of day care centers of various states. The original questionnaire was subjected to review by selected persons to determine if it was inclusive, clear, and would furnish the desired information needed for this study.

The following persons reviewed the questionnaire: Chief, Army Health Nursing Branch; a Professor of Research Methodology; an Instructor in Research Methodology; a Professor of Biostatistics; a Professor of Sanitary Engineering, one civilian public health nurse and another student Army Health Nurse. Revisions were made following the review.

Pretesting was done at one civilian day care center, in order not to utilize any of the installations where Army Health Nurses were assigned.

The questionnaire, as finally revised and used, is included in the Appendix. Where appropriate, the total number of various answers

and alternatives to questions have been written into the questionnaire, to provide an over-all picture of the responses obtained.

Survey Population

The revised questionnaire was mailed to the list of persons presently engaged in health nursing. This list was obtained from the Office of the Surgeon General, Washington, D. C.

Letters stating the purpose of the questionnaire were sent to fifty-seven (57) Army installations. Thirty-four of these were located in the continental United States and twenty-three were in overseas areas. This included every installation where Army Health Nurses were assigned. Each nurse was asked to have an interview with the day care supervisor to complete the questionnaire. To compute the more technical aspects such as lighting, floor and play areas, it was suggested that the preventive medicine officer, post engineer or safety director be consulted. A self-addressed stamped envelope was included for the convenience of the respondent.

A second letter was sent to those persons who did not reply promptly. For those who did not answer the second letter, a self-addressed post card was sent. The card asked for specific information in an attempt to determine the number of post nurseries and to establish the number of children receiving care in such centers. There was a ninety-eight (98) percent response from the two sources.

The analysis of the responses to these post cards will be given later, in connection with the report on the size of those centers which did respond to the questionnaire.

CLASSIFICATION OF DAY CARE CENTERS

The present study serves to raise the issue of such standards as they might affect the operation of day care centers. In analyzing the results, it was desired to classify the centers into four groups on the basis of over-all attainment of professional standards. On each of the several hundred items in the questionnaire, it was possible to make a rough classification as to whether a standard had been met or not. To get an over-all rating it was necessary to "add" or total these pieces of information. Many of the items on the questionnaire did not seem important enough to contribute to the over-all picture of the standards of the centers, and some items were of too much importance not to be given added weight.

To deal with these considerations, a demerit rating was given to each center, consisting of the sum of demerits from 145 out of 280 items in the questionnaire, or about half of all the items. Further, eighteen of these items were assumed to be of double importance. A failure to achieve professional standards on these items was scored with two demerits. Items selected for this double demerit treatment were those on which professional organizations have placed special emphasis. There is a large degree of arbitrariness in this whole procedure, but any alternative procedure would have been just as arbitrary. Consideration was given to using fewer items in constructing the demerit score, but this would have a certain disadvantage, in that the few items used would have disproportionated the effect determining which of the four groups the center would be classified.

If an item is given so much importance that it determines whether a center is to be classified as A, B, C, or D, then we cannot turn the argument around and describe the center in terms of this item. To give a trivial example of what is at issue, if one defined a center as grade A solely on the basis of its ratio of children to attendants, we could not then argue that all grade A centers had better records of providing adequate attendants for the children in their charge. To avoid the possibility of this sort of thing, a large number of items were used in compiling the demerit rating, so no one item would predominate. Specifically, there were eighteen items for which double demerits were scored, and 127 items given single demerit points, for a total possible demerit score of 145 points. The largest score actually made by a center was seventy-four demerit points.

On the basis of the distribution of demerits the centers were classified into four groups:

A	10 Best centers	20 through 31 demerits
B	9 Good centers	33 through 37 demerits
C	10 Fair centers	38 through 45 demerits
D	12 Poor centers	49 and over demerits

The attempt was made to make all groups equal in size, but the natural break of the distribution of demerits was also taken into account, so that the four groups vary slightly from being equal in size, as indicated above.

ANALYSIS AND INTERPRETATION OF DATA

The questionnaires indicated centers primarily provided baby sitting service. Only three of the forty-one did not have this as a primary purpose: two provided services only for working mothers and one served only mothers in the hospital or clinic, keeping babies by the day or by the month. Five centers mentioned organized nursery or kindergarten education as a primary function. As for quality, the better centers were those which provided for working mothers. Seven of the ten grade A centers took this as one of their primary purposes, and only four of the twelve grade D centers had this as a primary purpose.

As to who was eligible, all centers served military dependents, of course. The better centers, in addition, tended to provide services for dependents of civilian employees and guests, but fewer than half of the grade D centers offered this service to guests. The probable re reasons for the restricted service of grade D centers will become apparent later.

The distribution of minimum and maximum ages for admitting children are given in Table I. Ten of the forty-one centers admit children two months of age or younger. Two that admit children one month of age are grade C centers, but otherwise all classes of centers have about the same standards as to minimum age requirement. All centers admit children who are as old as eighteen months, and the average minimum age of admission is four months.

The maximum age of admission is about nine years, and here again there are no differences between the four groups.

TABLE I

MINIMUM AND MAXIMUM AGES OF CHILDREN

ACCEPTED AT DAY CARE CENTERS

Minimum	
Age	Number of Centers
1 month	2
6 weeks	3
2 months	5
3 months	14
4 months	3
6 months	13
18 months	1
Total	41

Maximum	
Age	Number of Centers
5 years	1
6	3
8	3
9	6
10	15
11	2
12	9
No limit	2
Total	41

Preadmission physical examinations are required at only seven centers. At one center it is compulsory for all children, and the other six require it for some children only, two for boarders, four for nursery school children. In five of the fourteen centers overseas immunizations are not compulsory. Certain immunizations are required before going overseas and since it is the military sponsor's responsibility to keep the immunizations up-to-date it may not be felt necessary to check up on the children at the centers.

Similarly, dental examination is compulsory at one center and encouraged at two others. The compulsory feature is in operation at a

center which has a nursery school in conjunction with the center, and in fact, physical examinations are compulsory at all of the nursery schools.

There was a very strong tendency for the better centers to have compulsory immunizations practice, and for the grade D centers to place such immunizations on only permissive basis. Only one of the nursery school centers require the basic immunizations before admission.

Routine procedures for revaccination and booster innoculations are in effect in only one-third of the centers, the numbers increasing from two in the grade A centers to six in the grade D centers.

Seven items of emergency care practices at the centers were explored in Section I, D. Four of these items, questions 2, 3, 4 and 7 in the questionnaire, were the subject of definite recommendations. In five centers, it was reported that children were not screened for symptoms of communicable disease (question 3), and in four centers, isolation and notification of parents does not follow the appearance or symptoms of illness in children (question 4). Two of the centers did not have emergency first aid supplies (question 7), and one center did not require parents to leave their telephone numbers or addresses (question 2). However, standards on these four items were better maintained than on the other items of this section. In total on all of the items, grade A, B and C centers each collected about sixteen demerits, and grade D centers twice as many, indicating that emergency care practices are fairly well maintained at all but the poorest centers.

Health records are kept as a matter of routine in only five centers, and four of these are grade A centers, and of the ten which keep

immunization records, six are in grade A, indicating that only the better centers keep health records on the children in their charge. Most centers do not require pre-admission dental examination, although four centers have follow-up plans when work seems to be indicated.

Section III of the questionnaire examined the staff qualification practices of the center. Annual chest x-rays for all staff were recommended in the Army manual. Six of the centers do not have such examinations, and four of these six are grade D centers. Blood tests are required by twenty-one centers, and again this includes most of the better centers. Immunizations are required in twenty-seven centers for smallpox, and in twenty-three centers for polio and typhoid. See Table II.

TABLE II

REQUIREMENTS OF VARIOUS HEALTH EXAMINATION PROCEDURES FOR STAFF, BY GRADE OF CENTERS

Procedure	Number Requiring Procedure	Not Requiring Procedure			
		A (10)	B (9)	C (10)	D (12)
Chest x-ray	34	0	0	2	4
Blood Test	21	1	3	7	6
Smallpox Vaccination	27	2	2	3	6
Polio Immunization	23	3	4	5	6
Typhoid Immunization	23	2	2	4	5

The better grade centers have a better record in requiring these health practices of their staff members.

Standards as to professional qualifications of staff members vary widely, and are related to the grade of the centers. See Table III. Eleven of the centers required that the supervisor be a registered nurse, five of these being grade A centers. The lower grade centers tended to adopt more general qualifications, such as that the supervisor be mature, experienced, and like children. Only a general statement of this nature is made in the Army manual as to qualifications expected of a supervisor, and so the unusual situation arises that the poorer centers meet the stated standards more frequently than do the better centers. Staff qualifications will and should vary, depending on local circumstances. A small center taking only older children will have very different supervisory needs than a large fully equipped center which admits children of all ages. For staff positions below that of supervisor, there was, as might be expected, less insistence on professional training and more on personal qualities of the staff members.

Minimum age standards for the staff tended to be more in evidence in the grade A centers, but they were also less restrictive. Only two of the grade A centers had no minimum standards, compared with ten of the grade C centers. However, the standards which the grade A centers set were nominal, averaging 19.4 years, while the two grade D centers with standards set them at twenty-one and twenty-four years. Maximum age standards for staff again were more evident in grade A centers. Six of them had upper age standards whereas there were no upper age standards in the twelve grade D centers. Upper age standards for staff averaged fifty-six years.

TABLE III

QUALIFICATIONS OF SUPERVISOR AND ASSISTANT SUPERVISOR

AT DAY CARE CENTERS, BY GRADE OF CENTERS

Qualification	Supervisor					Assistant Supervisor				
	A (10)	B (9)	C (10)	D (12)	Total No.	A (10)	B (9)	C (10)	D (12)	Total No.
Registered Nurse	5	2	2	2	11	0	1	0	0	1
Licensed Practical Nurse	0	0	2	0	2	0	0	2	0	2
Prior Experience with Children	6	5	4	5	20	7	5	2	3	17
Mature Person likes Children	2	3	4	6	15	2	3	4	7	16
Special Education in Child Care	0	4	0	1	5	1	1	0	0	2
Mother and Baby Care Course	0	1	1	0	2	0	0	0	1	1
Home Care of the Sick Course	0	0	2	0	2	1	1	0	0	2
First Aid Course	1	1	2	0	4	1	1	1	0	3
Teacher	0	2	0	0	2	0	0	0	0	0
Interested in Position	0	0	0	2	2	0	0	0	2	2
Administrative Custodian	0	1	0	0	1	0	0	0	0	0
No Answer	0	0	1	0	1	2	2	5	2	11

Selection of supervisors is shared by the advisory board in three-quarters of the A, B and C centers but by a smaller fraction, seven of the twelve, of the grade D centers. Selection of attendants rests for the most part with the supervisor, as expected, but in fourteen centers the advisory board is also given some share in making the decision.

Once hired, the in-service training of employees seems largely neglected. Only seven of the centers reported organized training programs. Four of these were grade A centers, and only one was a grade D center. However, some planning and teaching activity apparently does go on in half of the centers (question D, 2), and the twenty centers reporting such activities mentioned a total of eighty-seven professional skills, involving ten different categories of skills, involved in such programs.

In all but nine centers, the duties of various assignments are written and available to employees. None of these nine centers rated grade A, and four of them are grade D.

As for duties, five centers, all grade D, reported that children at the center were not at all times under supervision. Constant supervision is one feature recommended in the Army Technical Manual. Standards as to the desirable ratio of attendants to children are much needed. For children under two years of age, the Army manual recommends a ratio of one attendant for five children. Only four centers achieve this standard for children under one year, and only one center achieves this for children between one and two years. For children of over two,

the Army standards of one attendant for ten children is achieved by nearly two-thirds of the centers. Specifically, twenty-two centers meet the standards with respect to children from two to four, sixteen meet the standards for children from four to six, and twelve meet the standards for school age children. Nine centers, eight of them grade D, have no standards at all for ratio of children to attendants.

The answer to the question on average daily attendance at the day care centers and nursery schools is summarized in the table below.

TABLE IV

AVERAGE DAILY ATTENDANCE AT DAY CARE CENTERS,

BY GRADE OF CENTER

Size Group	Grade A (10)	B (9)	C (10)	D (12)
0 - 25	1	0	2	5
25 - 50	2	3	3	4
50 - 75	0	4	2	1
75 - 100	6	2	2	2
Over 100	1 (160)	0	1 (230)	0

Evidently the large centers are the better ones, with the exception of one very large center which is grade C. In addition to the 2881 children in the day care centers covered by this study an additional 293 were in nursery schools housed in the day care centers.

To give a check on the size of the centers from which questionnaires had not been returned, a postcard was sent to all non-respondents, asking the average daily attendance of the center. Of the seven respondents to the post cards four centers had less than twenty average daily attendance, two centers had an average of one hundred or more children, and another center did not include the attendance, making a total for the non-respondent centers of 296 children.

In total, from respondent and non-respondent centers, it appears that the average attendance at Army day care centers, including the nursery schools located in the center, is 3174 children. Since the present study was focused only on day nurseries rather than nursery schools, this figure on daily attendance would be increased if it included nursery and kindergarten schools not associated with day care centers.

The average daily attendance does not tell the whole story. Attendance higher than average was experienced on the average about one hundred (100) days a year, and on such days the attendance was about fifty (50) percent above the normal. The smaller centers tended to have wider fluctuations from day to day in numbers of children than the larger centers. Further, the above figures do not include the children attending nursery schools, with a total attendance of 293 children.

Section IV of the questionnaire investigated the operational procedures in effect at the centers, and here the differences between the better and the poorer centers become apparent. Supervision of the centers was less organized at the poorer centers. A center defined

as being under-supervised is one with less than two of the five representatives mentioned in question A involved in the supervision of the center. Then, five centers would fall into this class, and all of these centers are grade D. All of the grade A, B and C centers have nearly complete representation from four of these five offices, although one-third of them exclude the safety officer from the supervision procedure.

Similarly, seven of the centers in the study reported that they did not have an advisory board, and four of these are grade D. However, it should be reported that two of the centers without advisory boards are grade A, indicating that a board is not absolutely essential for a good operation. Partly because of this absence of a board, only eleven centers reported a preventive medicine officer on the board, and only fifteen had the Army health nurse working through a board.

Under Section V on environmental features, the physical facilities were reported as deficient in some centers. The centers were located for the most part on the ground floor. Three centers occupied both first and second floors, and one occupied basement and first floor. In addition, one grade A center was located on the second floor, and one grade D center, about which further comments will be made in connection with fire hazards, was situated in the basement.

Three-fifths of the centers reported that they were located adjacent to a main highway or street. The Army manual recommends that the center be located away from heavy vehicular traffic. Four

questions on structural features of the building were asked, covering windows, screens, leaks and washable interiors. Four centers, all grade D, admitted to having inferior facilities on all of these items. Floor coverings were usually linoleum or asphalt.

Half of the buildings were made of wood rather than brick or concrete, and one wood center did not have a fire plan. Only eighteen centers admitted to having a fire plan. One of the centers was located in a basement. The respondent reported that although a fire plan was in effect, the fire escape arrangements for the center were in her judgement seriously inadequate. Further, fourteen of the respondents said that practice fire drills were not carried out. Another eight respondents declined to answer this question, which means that probably half of these centers do not carry out practice fire drills. Again it was the grade C and D centers that had the poorer record. Ramps outside the fire door were noted by only twelve respondents and a direct telephone line to the fire department by only twenty-two. Higher standards in this area are immediately needed for the safety of the children.

The same situation prevails with regard to physical space. Twenty-two centers have no regulations concerning maximum crowding of children, and many centers do not have separate facilities for children under and over eighteen months of age. Six centers, five of them grade D, have no separation for play, and thirteen centers, eight of them grade D, have no separation for toilet use. Recommendations on all of these items are contained in the Manual for Army Health Nurses.

The same manual mentions thirty-five square feet per child as being generally accepted as the standard requirement. Twenty-three centers, including ten of the twelve grade D centers, fail to achieve this standard. Similarly fifteen centers do not have two feet of floor space between each bed or cot.

Lighting standards of twenty foot candles in the playroom and bedroom are not maintained by thirteen centers, eight of which are grade D. Adequate window space is reported by thirty-three centers.

Heating is provided in seventeen centers by the central steam plant; although gas, oil and coal furnaces are used. Thermostatic controls operate in only sixty percent of the buildings (question 4) and only one-third of the rooms are equipped with thermometers (question 6). Nine of the twenty-six respondents to this question noted that protective screens and coverings were not placed around heaters, radiators and fireplaces.

The Army manual standards of one lavatory and one commode for each ten (10) children is achieved by only one-third of the centers. If the standards were lowered to one commode for each fifteen children, perhaps three-quarters would pass the standards, but eight of the centers have only one lavatory and commode to twenty-five children. Seven centers do not provide hot and cold water in the lavatory, and sixteen centers do not provide separate toilet facilities for staff members.

Drinking water is available in all centers but only twenty-eight have drinking fountains, and in only thirteen cases does the height correspond to the child's needs or steps are available. Of these centers

without drinking fountains, most have disposable paper cups, but two centers, one C and one D, have neither fountains nor paper cups, and presumably a common cup is in use in these situations.

Play areas for the children are usually adjacent to the center and enclosed. Three centers had inadequate outdoor play areas. Two grade C centers did not have their play area enclosed, and another center did not have its play area adjacent to the building. The playground is not well graded and drained in thirteen centers, seven of them grade D. Minimum play area of seventy-five square feet per child is described in the Army manual as "accepted standard for such a play area." Sixteen centers do not achieve this standard, and again the better centers have a better record. Similarly each of the outdoor safety precautions mentioned in questions 6, 7 and 8 of this section are not achieved by about six centers, predominantly those with grade D ratings.

The indoor safety precautions which are covered in section K are not uniformly achieved by all centers, but failure does not seem to relate closely to quality grade. The only surprising feature is the admission by ten respondents, nine of them grade C and D, in item nine that poisons and flammable products are not prohibited from the building. Further, one grade D center admitted that medications were within reach of the children.

The control of food and sanitation procedures is very important in a day care center. Some of the issues have been covered in connection with refuse disposal. Different centers have quite different practices.

Four serve no food and six serve only refreshments. For the rest, sixteen serve one meal a day, ten serve two meals, and one serves three meals. Meals are usually prepared by an attendant, although six grade A and B centers have a special cook. In eight cases, seven of them grade C and D, the persons handling food are not subject to post food handler regulations.

Separate refrigeration for milk and formulas is not available in twelve centers, and in eighteen centers there is no thermometer in the refrigerator. Both of these items are closely related to the grade of the center.

Adequate kitchen equipment is recommended in the Army manual. Twelve centers, nine of them grade C or D, do not have a storeroom for non-perishable foods, and eleven do not have closed storage for utensils, dishes and cooking supplies. Six of them do not have the kitchen and dining area separate.

Only nine centers, seven of them grade A or B, have mechanical dishwashing facilities. Others do the dishes by hand. Ten of these meet the accepted standards of either rinsing more than once or using chemicals, but six rinse only once and do not use chemicals. A few centers which serve only refreshments use disposable items.

The questions on eating standards for children reveal that lower grade centers do not maintain as high standards. Five centers, four of them grade D, do not have chairs and table of a size appropriate to the child. Seven centers, six of them grade C or D,do not have adequate space between children at table (question 7). This crowding

probably occurs in part because staggered meal periods are in effect in grade A and B centers (eight cases) rather than C and D centers (three cases).

Section VII of the questionnaire investigated certain aspects of the daily schedule and care of the children. The day was much more highly organized in the grade A centers. All of them had definitely scheduled times for rest, play, eating and toilet. By contrast, scheduling in the lower grade centers was increasingly lax. Of the grade D centers, three had no rest schedule, four had no play or eating timetable, and six had no regular toilet schedule for the children.

Handwashing procedures were not routine before meals in three centers and after toilet visits in two centers. Five centers give the older children opportunity to brush their teeth after meals.

Half of the centers have separate facilities for children who are in the process of being toilet trained, with the better centers more likely to provide such facilities.

Diapers are supplied in the better centers, by the center itself or through the use of disposable diapers. Five centers, all grade C or D, depend on diaper service or parents to provide diapers. Dirty diapers when laundered by the center are handled by attendants and soaked in a disinfectant which always precedes the washing. When the diapers are not laundered at the center there is a tendency not to rinse the diapers before it is placed in a paper or plastic bag. Many respondents did not fill in this section, thus leaving the impression that practices were not uniform and depended in part on the attendants. Dirty diapers are usually stored in a bag or pail near the child's bed,

and the cleaning of diaper pails is usually done by the attendant and occasionally by the housekeeper or janitor.

Practices with respect to bed linen and clothing (section D) showed sharp quality differences. In a few cases grade D centers admitted that separate cribs were not available for all children (question 1), that mattresses did not have waterproof covers (question 3) and that bed linen was not changed after each child (question 5). In eleven cases, five of them grade D, cribs and beds were not cleaned and washed between children (question 4); in seven cases, six of them grade D, there were not sufficient beds for naps during the day or for evening hours (question 2); in six cases, four of them grade D, the children's clothing was not kept separately (question 7). Blankets were changed after each child used the bed in only one-third of the centers. No pillows were used in the cribs, and the linen was changed at least once a week. Two grade C centers used cribs which were not equipped with side rails.

Facilities for rest periods were much less adequate in the poorer centers. In twelve centers, eleven of them grade C or D, older and younger children took their naps in the same room. Fourteen centers, ten of them grade C or D, did not have definite rest hours for all children. In most centers there were two rest periods a day for children under three years of age.

Play periods outdoors are compulsory, weather permitting, in thirty-two centers, and toddlers are permitted outdoors in twenty-nine centers. Playpens for toddlers are allowed im thirty-one centers, but nine centers do not permit this. Dividing play activities into age

groups is carried on in twenty-five centers, but sixteen other centers, thirteen of them grade C or D, do not have facilities or staff for divided play activities.

Seven centers covering all grades reported that children were given medication when requested and provided by parents.

The relationship of over-all grade quality of the center to its specific rating on any particular item has appeared time and again through the above analysis.

The suspicion arises that this might be due to hypercritical attitudes on the part of the respondents, rather than to genuine differences in the centers themselves. Part of this suspicion can be allayed by reference to answers to the last question. Here an opportunity was given to suggest improvements through an open ended question. Any over-critical attitudes should be reflected in responses to these items. The number of respondents offering specific comments in answer to this question did increase with grade, three being grade A, four grade B, five grade C, and seven grade D. Some increase of this nature should be expected, if only because respondents at poor centers see more room for improvement. However, the absence of over-critical attitudes is indicated by the fact that it was respondents at grade A centers who made the most suggestions for improvement, on the average.

This seems to suggest that the better centers are, if anything, more critical of the situation and more aware of what needs to be done to maintain standards. This attitude reflects a strong administrative drive in the better centers, and it may well be that this drive is the reason why these centers are superior.

Some of the comments were very general in nature, stating only that standards were needed. Here again the poorer centers can be expected to be more aware of the needs for standards, and of the nine general comments of this nature, one was from a grade A center, two from grade B, and three each from grade C and D centers.

CONCLUSIONS

The superficial conclusion which emerges from the analysis of the data in this study is that standards in some centers are far below what should reasonably be expected. Standards of health and welfare of the children are not adequately safeguarded in these centers.

It is not immediately possible to say that introducing formal standards would improve the situation. There are many intervening considerations that have to be taken into account, and the investigation of these has not been included in the scope of this study. However, the study does throw some light on the possible difficulties that might be involved in setting standards in this area.

In the first place, day care centers are not an integral part of the military establishment. They are primarily a voluntary enterprise that has developed to meet a particular need. A manual of operating procedures would not have the status of a military directive, and compliance would depend on the authority and support given the administrator. This study seems to indicate that, to some extent, failure to achieve health standards is not due to ignorance of proper health procedures but to the lack of support of the establishment and maintenance of good basic health procedures. The evidence for this conclusion is that failure of the centers to apply good health practices does not occur just in areas peculiar to day care centers. Instead, some of the shortcomings occur in areas of health practices not specifically related to day care centers, for example, improper garbage and refuse disposal,

and the rinsing of soiled diapers immediately after changing. These demonstrate inconsistencies in good health practices.

Army day care centers take a variety of forms. These vary from a center that is purely for baby sitting purpose to a more elaborate plant with a nursery school. Variation in the attendance require different amounts of space and number of staff. All of these differences would have to be taken into account in setting up standards relevant to all circumstances.

In spite of all the foregoing objections, many respondents to the questionnaire noted the need for standards. Standards are essential, not only for the private use of the administrator, but in enlisting the cooperation and help of other persons in the maintenance and improvement of standards in the center.

High standards of health and safety in the Army day care centers cannot be maintained without continuous effort. Standards can be kept up only by a ceaseless guard against the tendency to cut corners, do things the easy way, and to ignore bad practices. In some Army centers, this attempt to maintain standards is successful.

In other centers the fight to maintain standards is not being won. If formal recommendations and suggestions for better operation of the centers would help the personnel to achieve and maintain better standards, the effort necessary to prepare such a report would seem well justified.

BIBLIOGRAPHY

1. Allen, Clara M. Day Care Centers for School Children. New York: Child Welfare League of America, 1947. 80 pp. (Pamphlet).

2. Allen, Gertrude F. "The Increasing Needs of Outpatient Services," Army Health Nursing: Selected Papers from 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U.S. Government Printing Office, 1958, p. 29-40.

3. Applebaum, Stella B. Working Wives and Mothers, New York: Public Affairs Committee, Inc., No. 188, 1952, 32 pp. (Pamphlet).

4. Baltimore County Board of Health. Day Nursery Regulations. (Mimeographed). Baltimore: 1945, 9 pp.

5. Beer, Ethel S. Working Mothers and the Day Nursery. New York: Whiteside and Morrow Co., 1957, 189 pp.

6. Buckman, Wilma, Helan Gofman and George H. Schade, "Nursery School," Reprint, American Medical Association Journal of Diseases of Children (September 1957), 94:258-263.

7. Cauman, Judith. "Problems and Methods of Evaluating Programs for Day Care Service," Six Papers on Child Welfare Problems, New York: Child Welfare League of America, 1953. pp. 31-39.

8. Child Welfare League of America. A Check List for Safety in Day Care Centers. New York: Child Welfare League of America, December, 1955. 8 pp. (Pamphlet).

9. Child Welfare League of America. Daytime Care: A Partnership of Three Professions. New York: Child Welfare League of America, 1946. 31 pp. (Pamphlet).

10. Child Welfare League of America. A Statement of Principles and Policies on Administration of Voluntary and Public Welfare Agencies. New York: Child Welfare League of America, 1958. 16 pp. (Pamphlet).

11. Child Welfare League of America. Check List for Community Planning for Day Care. New York: Child Welfare League of America, Revised 1957. 6 pp. (Pamphlet).

12. Child Welfare League of America. Guide to the Operation of Group Day Care Organization, Lebanon, Pennsylvania: Sower Printing Company, 1953. (Pamphlet).

13. Child Welfare League of America. Guide to the Operation of Group Day Care Programs. New York: Child Welfare League of America, 1956. 70 pp. (Pamphlet).

14. Child Welfare League of America. Recommendations on Personnel Practices in Day Nurseries. (Mimeographed). New York: Child Welfare League of America, Inc. Revised September, 1957. 10 pp.

15. Child Welfare League of America. Recommendations on Record Forms for Day Care Agencies. New York: Child Welfare League of America, May, 1952. 15 pp. (Pamphlet).

16. Child Welfare League of America. Standards for Day Care Centers. (Mimeographed Preliminary Draft) New York: Child Welfare League of America, September, 1959.

17. Child Welfare League of America. Standards Project. New York: Child Welfare League of America, October, 1955. (Pamphlet).

18. Child Welfare League of America. What About the Child Under Three Who Needs Day Care? (Mimeographed). New York: Child Welfare League of America, 3 pp.

19. Davis, Mary Dabney and Rowna Hansen. "Nursery Schools," U. S. Bureau of Education Bulletin 1932, No. 9. Washington: U. S. Government Printing Office, 1933. 92 pp.

20. Department of the Army. Army Health Nursing Service, Army Regulation 40-551, Washington: U. S. Government Printing Office. August 17, 1955.

21. Department of the Army. Manual for Army Health Nurses, Technical Manual 8-272, Washington: U. S. Government Printing Office. November 1959. 110 pp.

22. Department of Health, The City of New York, Guide for the Health Program in the Day Care Agency for Young Children. New York: Revised Edition, 1956. 24 pp. (Pamphlet).

23. Goldsmith, Cornelia. "Creative Evaluation of Day Care Centers," Reprint Child Welfare, November, 1953. 4 pp.

24. Haynes, Inez B. "Army Health Nursing," Army Health Nursing: Selected Papers from 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U. S. Government Printing Office, 1958. pp. 5-10.

25. Hosley, Eleanor M. A Manual for the Beginning Worker in a Day Nursery, New York: Child Welfare League of America, 1949. 32 pp. (Pamphlet).

26. Hosley, Eleanor. "Individualizing the Day Nursery Program for the Child," Reprint, Child Welfare (July 1954). 11 pp.

27. James, Ruby Spainhour. "A Survey of the Status of Pre-primary Schools in North Carolina," (Unpublished Master's thesis; School of Education, University of North Carolina, 1947), 90 pp.

28. Keister, Mary Elizabeth. "Day Care Centers and Nursery Schools Have the Same Goals," Reprint. The Child (now Children) (May 1951). 4 pp.

29. Kentucky State Department of Health. Instructions for the Grading of Food Handling Establishments. Louisville: 1949. 45 pp. (Pamphlet).

30. Letter from Mrs. Kate B. Helms, Regional Foster Care Consultant, Children's Bureau, Charlottesville, Virginia, August 3, 1959.

31. Long, Arthur P. "The Army Health Nurse in Preventive Medicine Practice," Army Health Nursing: Selected Papers From 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U. S. Government Printing Office, 1958. pp. 171-175.

32. McCulloch, Margaret C. "Social Dynamics of A Day Care Association," Reprint, Child Welfare, (November 1955). pp. 16-20.

33. Maryland State Department of Health. Regulations Governing Group Day Care of Children. (Mimeographed). Baltimore: 1956. 7 pp.

34. Massachusetts Department of Public Welfare. Recommended Minimum and Preferred Standards for Agencies Giving Day Care to Children Under Seven Years of Age. Boston: Massachusetts Department of Public Health, May, 1952. 26 pp. (Pamphlet).

35. Merkling, Gertrude. "Giant Steps in Day Care," Reprint Child Welfare (October 1958).

36. Moore, Winifred A. Some Aspects of Day Care Licensing at the State Level, New York: Child Welfare League of America, October 1957. 22 pp. (Pamphlet).

37. New York, City of, Health Department. Guide for the Health Program in the Day Care Agency for Young Children. New York: Revised Edition 1956. 24 pp. (Pamphlet).

38. New York, City of, Health Department. Pointers for Parents Choosing a Day Care Agency for your Child. New York: 1954. 3 pp. (Pamphlet).

39. New York, City of. Sanitary Code Section and Regulations Governing Agencies Giving Day Care to Children. Enacted 1943, amended July 14, 1953. 14 pp. (Pamphlet).

40. New York, University of, and others. So You are Starting a Nursery School. (Mimeographed). Albany: 1956. 12 pp. (Pamphlet).

41. Pagels, Elizabeth A. Army Health Nursing: Selected Papers from 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U. S. Government Printing Office, 1958. 305 pp.

42. Pappas, James P. "The Role of the Visiting Nurse on a Military Post," Army Medical Bulletin, 9:563 (July 1949).

43. Peller, Lili E. "Fourteen Points to be Considered in the Group Care of Young Children," Wisconsin Day Care News and Views, (Mimeographed February 1955). 3 pp.

44. Reed, Anna G. "Orientation Needs of Army Health Nurses in the Field of Army Health Nursing," Army Health Nursing: Selected Papers From 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U. S. Government Printing Office, 1958. pp. 61-64.

45. Rosenberg, Anna M. Assistant Secretary of Defense. "Memorandum on Community Day Care of Children on Military Installations," November 1, 1952. Washington, D. C.

46. Salmon, David and Winifred Hindshaw. Infant Schools. London: Longmans, Green and Co., 1950. 324 pp.

47. Social Planning Council of St. Louis and St. Louis County. Five Years of Progress in St. Louis Day Care Services. (Mimeographed). St. Louis: The Council (505 N. 7th St.) December, 1956. 16 pp.

48. Social Planning Council of St. Louis and St. Louis County. Recommended Health Practices for Day Care Centers. (Mimeographed). St. Louis: The Council (505 N. 7th St.) June, 1955. 17 pp.

49. Stanton, Jessie and Marguerite Rudolph. Planning a Nursery School Building. New York: Bank Street Publication. 6 pp. (Pamphlet).

50. Tennessee Department of Public Welfare. Minimum Requirements and Desirable Standards for Day Care Centers. May, 1955. 28 pp. (Pamphlet).

51. U. S. Department of Labor, Women's Bureau. Planning Services for Children of Employed Mothers, Washington: U. S. Government Printing Office, May, 1953. 61 pp. (Pamphlet).

52. Verry, Ethel. "A Day Care Program to Meet Community Needs," Reprint, Child Welfare, (April 1952). pp. 7-9.

53. Waite, Eileen M. "The Role of the Army Health Nurse as a Member of the Preventive Medicine Team," Army Health Nursing: Selected Papers from 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U. S. Government Printing Office. 1958. pp. 207-210.

54. Waite, Eileen M. "The Role of the Nurse in Public Health and Army Health," Army Health Nursing: Selected Papers from 1956 and 1957 Workshops, Walter Reed Army Medical Center, Washington: U. S. Government Printing Office. 1958. pp. 155-159.

A P P E N D I C E S

APPENDIX A

QUESTIONNAIRE

QUESTIONNAIRE ON ARMY DAY CARE CENTERS

General Instructions: Answer each item by checking appropriate space or spaces unless otherwise instructed.

I. Purpose

A. The primary purpose of the day care center is to give day care to:

22 1. Children whose mothers work
38 2. Baby sitting service on an hourly basis
5 3. Provide organized nursery school education
5 4. Others (specify)

B. Children eligible for care at the day care center are:

41 1. Military dependents
36 2. Dependents of civilian employees
29 3. Guests of above persons
1 4. Other (specify)

C. Age of children accepted at day care center: (complete the blank)

1. Minimum age is 1 month and maximum age is no limit.

II. Health Policies

A. Preadmission physical examinations are:

1 1. Required of all children using the day care facility
4 2. Required of children attending nursery school
34 3. Not required of children using the facility
2 4. Others (specify)
5. Is there a follow-up plan for children who are found to have physical defects? 12 Yes 29 No

B. Immunizations required for admission are as follows: (Check appropriate blocks)
Not required - 8

Types of Immunizations

Classification of children	Smallpox	D.P.T.	Diph.-Tetanus	Polio	Typhoid	Other
All children	24	24	14	22	14	4
Nursery School only	1		1			
Hourly Basis						
Others (specify)						

1. Is there a routine procedure for revaccinations and booster shots? 13 Yes 18 No

C. Emergency Care Plan

1. Parent signature for authorizations for a plan in providing emergency care is required. 21 Yes 20 No

2. Parents are required to leave their phone or address where they may be reached at all times. 40 Yes 1 No

3. Children are screened for symptoms of communicable disease prior to daily admission. 36 Yes 5 No

4. Children developing symptoms of illness while in the day care center are isolated and parents are notified immediately. 37 Yes 4 No

5. A written physician's clearance must be presented to the day care center when a child returns after having a communicable disease. 14 Yes 27 No

6. There are standing orders signed by a physician to be followed for first aid and immediate emergency care. 22 Yes 19 No

7. First aid supplies are available at the day care center. 39 Yes 2 No

D. Health Record (Check appropriate blocks) No answer - 6

Type of Record kept in center	All children	None	Nursery School	Other (specify)
Health record with health history	4	36	1	
Immunization record	10	25	1	

E. Preadmission dental examinations are required for: No answer - 1

1 1. All children
36 2. None of the children
3 3. Other (specify)
4 4. There is a follow-up plan for children who need dental work.

III. Staff

A. Pre-employment and periodic health examinations (Check appropriate blocks)

1.

	Examination includes: Chest X-ray	Blood tests	Other tests. (specify)
All employees	34	21	7
Only full time employees	1		

2. Immunizations Not required-5

	Immunizations Required: Smallpox	Polio	Typhoid	Others (specify)
All employees	27	23	23	13
Only full time employees	1	1	1	

B. Qualifications (Check appropriate blocks)

1.

Type of person specified	Type of Position: Supervisor	Assistant Supervisor	Attendants (for infants and toddlers)	Attendant (older group)	Other (specify)
Registered Nurse	11	1	1	1	
Licensed Practical Nurse	2	2	1	0	
Prior experience in caring for children	20	17	21	16	
A mature person who likes children	15	16	21	20	
Special education in child care	5	2	1	2	
Completed American Red Cross course:					
Mother and Baby Care	2	1	0	0	
Home Care of the Sick	2	2	0	0	
First Aid	4	3	2	5	
Other (specify)	5	2	0	2	
No answer	1	1	6	10	

2. Age Requirement

Is there a minimum and maximum age requirement? 17 Yes 21 No If answer is Yes, complete the following statement: Minimum age is 16 years and maximum age is no limit years.

C. Selection of employees (Check appropriate blocks)

Responsibility of selection	Post Surgeon	Health Nurse	Advisory Board	Supervisor	Other (specify)
Interviews or is consulted regarding applicants for position of supervisor	2	0	28	10	2
Interviews or is consulted regarding applicants for attendants	1	0	14	25	1

D. In-service training for employees

1. There is an organized in-service program to add knowledge and skills in health supervision and safety of children. 7 Yes 34 No

2. The people involved in the planning and teaching program are:

5 a. Post surgeon
9 b. Preventive medicine officer
17 c. Army health nurse
2 d. Social worker
9 e. Psychologist
7 f. Sanitary engineer
11 g. Safety officer
12 h. Day care center supervisor
10 i. Nursery school teacher
2 j. Others (specify)
11 k. Not applicable
3 No answer

E. Duties of employees

The duties for each type of assignment in the day care center are written and are available to the employees. 32 Yes 9 No

F. Staffing.

1. Any child or group of children is supervised at all times 36 Yes 5 No

2. Criteria for personnel based on a ratio of workers to children are as follows: (fill in appropriate numbers)

a. Under 1 year of age 1 attendant to _____ children.
b. One year to two years of age one attendant to _____ children.

c. Two years to four years of age one attendant to _____ children.
d. Four years to six years of age one attendant to _____ children.
e. School age children one attendant to _____ children.
9 f. No such criteria used

3. Average daily attendance in all categories except nursery school, over the last year. (Complete one of the following blanks) Estimated 2881 According to actual records _____

Approximate number of days during last year when attendance was higher than the average _____

Approximate average attendance of such peak day? _____

4. Daily average attendance for nursery school if school is in the day care center. 293

IV. Operation

A. Supervision

Supervision of day care center includes representatives from:

35 1. Post surgeon's office (preventive medicine officer, health nurse, sanitary engineer)
30 2. Post engineer's office
36 3. Fire marshal
29 4. Safety officer
34 5. Nursery board
7 6. Others (specify)

B. Day Care Center Advisory Board

Representatives of the post surgeon on the board includes: 11 Preventive medicine officer

15 Army Health Nurse 4 Sanitary Engineer 5 Other (specify)

V. Environmental features

A. Location and communication within day care center

2 Basement 37 First Floor 4 Second floor 0 Other (specify)

Is there a telephone in the office of the day care center? 41 Yes 0 No

Is the center located adjacent to a main highway or street? 24 Yes 17 No

B. Structure of Building

36 1. All windows in the center are screened
37 2. All screens are securely fastened
37 3. No leaks in the walls or ceiling
37 4. Walls in the interior washable

5. Types of floor covering in the day care center

21 a. Linoleum 6 c. Wood 3 e. Large rugs g. Other (specify)
19 b. Asphalt tile 4 d. Cement 0 f. Scatter rugs

6. Major exterior composition of the building

4 a. Brick 15 b. Concrete 21 c. Wood 1 d. Asbestos shingles 1 e. Other (specify)

C. Fire Plan includes:

18 1. Organized plan 19 2. Practice fire drills

3. Fire drills are held 2 Weekly 10 Monthly 8 Quarterly 2 Other (specify)

4. Are there ramps outside the fire exit doors? 12 Yes 23 No No answer - 3 NA - 3

5. Is there a direct telephone line to the fire department? 22 Yes 19 No

D. Physical space.

1. Is there a regulation stating the maximum number of children allowed at any one time? 19 Yes 22 No

2. If there is such a regulation, what is the maximum number allowed at any one time? _____

3. Do children under 18 months of age have facilities separate from those of older age groups, as to sleeping? 35 Yes 6 No as to play? 27 Yes 14 No as to toilets? 28 Yes 13 No

4. Is there a minimum of thirty-five square feet of floor space for each child in play areas exclusive of halls, baths, and kitchen? 18 Yes 23 No

5. Is there a minimum of two feet of floor space between each bed or cot? 26 Yes 15 No

E. Lighting

1. Is the window space at least 15 - 25% of floor space? 33 Yes 8 No
2. Is there at least 20 foot candle light in the playroom and bedroom? 28 Yes 13 No
3. Is there at least 25 to 35 foot candle light in the nursery school room? 4 Yes 1 No

F. Heating and ventilation N/A - 1

1. Is the heating provided by a central steam plant? 17
2. If answer to 1 is No, what type of heating is present?
   3 Coal Furnace 9 Gas Heat 7 Oil 0 Electric 0 Other (specify) No answer - 4
3. How is the heat distributed?
   13 Force Air 3 Gravity circulation 18 Steam 2 Hot water 2 Other (specify) No answer - 4
4. Is there a thermostat to control the temperature of the building? 23 Yes 17 No
5. At what temperature is the thermostat set? 1 Below 70 17 70-75 4 75-80 2 Over 80
6. Are all rooms for children equipped with thermometers? 9 Yes 29 No No answer - 2
7. Are these thermometers placed at the level of the child's activity? 6 Yes 30 No N/A - 5
8. Are screens or other protective covering used around electric heaters, radiators, and fireplaces? 26 Yes 9 No N/A - 6
9. Are electric heaters used in the bathrooms? 1 Yes 39 No
10. Are windows in condition so that they can be opened? 40 Yes 1 No

G. Toilet facilities

1. The lavatory and commode facilities for the children are as follows:

13 a. One lavatory and one commode for each 10 children.
16 b. One lavatory and one commode for each 15 children.
8 c. One lavatory and one commode for each 25 children.
2 d. Other (specify)

34 2. Both hot and cold water available in the lavatory.

3. Which of the following items are available in the bathrooms at all times? 41 Soap 41 Toilet paper 41 Paper towels ___ Individual towels for each child 7 Individual wash cloths ___ Other (specify)

4. Are there inside locks on the doors of bathrooms? 5 Yes 36 No

5. Are there separate commodes and lavatories for employees? 25 Yes 16 No

H. Water supply:

41 1. Obtained from the post water supply
28 2. Drinking fountains in the building
24 3. Drinking fountain has a mouthguard and angle jet.
10 4. Drinking fountain installed at a height to correspond to children's height
3 5. Steps are available
21 6. Disposable paper cups available

I. Refuse disposal

34 1. Garbage stored in a metal container with a tight fitting cover?
27 2. Garbage cans washed after emptying
27 3. Garbage removed from the kitchen after each meal
38 4. Refuse removed from the building daily
30 5. Refuse containers outside reach of children

J. Outdoor Play Area

39 1. Adjacent to building
38 2. Enclosed by a fence
6 3. Covered outside area for inclement weather
28 4. Playground well graded and drained
25 5. Minimum play space of 75 square feet per child
35 6. Surfaces under swings, slides, etc. protected with sand, grass or rubber mats.
36 7. Someone responsible for checking play equipment to see that it is safe.
35 8. Someone responsible for keeping the playground free from glass and other debris.

K. Safety Precautions

1. Are infants held during bottle feeding? 23 Yes 14 No No answer 3 N/A-1
2. At what age do you consider the infant is usually ready to be left alone with a bottle?
   0 Under 3 months 7 3 to 6 months 21 6-9 months 5 Never 7 Other (specify)
3. Who is included in selecting toys and play equipment?

   34 a. Supervisor of center 12 c. Attendants 4 e. Other (specify)
   5 b. Army health nurse 26 d. Nursery Board

4. Are small toys other than wooden, rubber, soft plastic, washable cloth used? 13 Yes 25 No
   No answer-3
5. Are non toxic paints used on toys? 34 Yes 5 No No answer-2
6. Are electrical outlets in the toddlers area out of the reach, or covered to prevent insertion of metal objects? 37 Yes 1 No No answer-3
7. Are gates used at the stairways and in areas where children should not enter? 41 Yes 0 No
8. Are medications, cleansing materials, bleaches, powders, polishes kept in a locked cupboard or otherwise out of reach of children? 40 Yes 1 No
9. Are poisonous and flammable products prohibited in the center? 31 Yes 10 No
10. Are the floors of the center waxed? 26 Yes 13 No No answer-2

L. Janitorial services are performed by: 20 a. Janitor, full time 9 b. Attendants
   76 c. Part time janitor 5 d. Other (specify)

VI. Food and Kitchen Sanitation

A. Formulas are:

   0 a. prepared at the center 38 c. marked imdividually 0 e. kept in refrigerator after 24 hours
   40 b. brought in by parents 38 d. stored in refrigerator 29 f. bottles and nipples cleaned after use

B. Meals

1. Is baby food supplied by the nursery. 11 Yes 29 No N/A-1
2. Meals are:

   21 a. Brought in by parents 10 d. Other (specify)
   22 b. Cooked in the center 19 e. Milk purchased from approved source.
   0 c. Purchased from a concession and delivered to the center

3. How many meals are served a day 16 One 10 Two 1 Three
4. Who prepares the meals if they are cooked at the center? 7 A special cook 16 attendant 1 Other (specify)
5. Are the persons handling food subject to post food handlers regulations? 26 Yes 8 No
   No answer 5 N/A-2

C. Refrigeration

___1. Is there refrigeration space so that formulas and milk can be kept separate from other foods? 32 Yes 12 No
___2. Is there a thermometer in the refrigerator? 23 Yes 18 No No answer-1
___3. At what temperature is milk stored? ___ Below 50° ___ Other (specify) N/A-1

D. Kitchen

___ 1. Is there a storeroom for storing non-perishable foods? 24 Yes 12 No N/A 5
___ 2. Is there closed storage for utensils, dishes and cooking supplies? 22 Yes 11 No N/A-8
___ 3. Is the kitchen separate from the dining area? 27 Yes 6 No N/A 8
___ 4. What are the dishwashing facilities?

   9 a. Dishwasher 8 d. Rinsed with hot water at least two times
   21 b. Hand washed 4 e. Other (specify)
   8 c. Rinsed with hot water once.

5. Do the children all eat at one time in the dining area? 22 Yes 11 No No answer - 2 N/A - 6

6. Are the surfaces of dining tables such that they can be cleaned satisfactorily? 35 Yes 1 No N/A - 5

7. Is there 24 inches of table space for each child? 29 Yes 7 No N/A - 5

8. Are appropriate chairs and tables provided to accommodate the varying sizes of children? 31 Yes 5 No N/A - 5

VII. Daily Care and Needs of the Children

A. Schedule of activities

1. Is there a definite schedule to be followed daily for:

34 a. Rest 33 b. Play 34 c. Meals 32 d. Toilet

B. Personal Hygiene

1. Are hand washing procedures routine

38 a. Before meal 39 b. After toiletries 41 c. And as necessary

2. Are separate towels maintained for each child? If the answer is No, what is used? 41 Yes 0 No (Specify)

3. Are children of 3-4 years and over who come daily given an opportunity to brush their teeth after meals? 5 Yes 31 No No answer - 5

4. Are there separate toilet facilities for the age groups being toilet trained? 19 Yes 21 No No answer - 1

C. Diapering and Diaper Care

1. How are the diapers supplied

3 a. By the day care center
2 b. By diaper service
38 c. By parents
9 d. Others (specify)

2. If the diapers are washed in the day care center, how is it done?

6 a. Soaked in disinfectant before washing.
0 b. Boiled before or after washing
5 c. Washed in automatic washer
1 d. Washed in non-automatic washer
0 e. Two automatic washer cycles used.
0 f. Two or more rinses used if non-automatic machine is used.

3. If the diapers are washed in the day care center, who washes them?

11 Attendants 0 Housekeeping help 6 Others (specify)

19 4. Soiled diapers rinsed and stored in a closet container before disposing of them?

5. If parents furnish diapers, where are individual child's soiled diapers stored?

35 a. In plastic bag at child's bed
3 b. In metal or plastic pail beside child's bed
5 c. Other (specify)

6. Who is responsible for cleaning all the diaper containers?

9 Attendant 1 Housekeeping help 1 Other (specify)

D. Bed linen and clothing

39 1. A separate crib for each infant and toddler

34 2. Sufficient beds for all ages to have separate beds for naps and evening hours.

39 3. Mattresses provided with waterproof covers.

30 4. Cribs and beds cleaned and washed when used for different children.

38 5. Bed linens changed after each child uses the bed.

22 6. Bed blankets changed after each child uses the bed.

35 7. Each child's clothing kept separately.

41 8. Linen on child's bed changed at least once a week.

0 9. Pillows used in cribs.

39 10. Cribs equipped with side rails.

E. Rest Periods

28 1. Separate rooms provided for naps for older children.

25 2. Definite rest hour for all children.

3. How many rest periods a day does the child under 3 years of age have?

6 One 23 Two 5 Other (specify)

F. Play

34 1. Children are required to play outside when weather permits.

17 2. If child cannot for physical reasons be outdoors, a statement from the physician is required.

25 3. Play activities are divided into age groups.

31 4. Toddlers are allowed to play in playpens.

29 5. Toddlers are permitted outdoors, weather permitting.

G. Medications

0 1. Vitamins are given to children attending daily.

7 2. Children are given medication when it is brought in by parents.

H. Please use space below for your suggestions on ways to improve day care centers.

APPENDIX B

LETTERS TO RESPONDENTS

12 Shepherd Lane
Chapel Hill, North Carolina
29 February 1960

Dear

You are probably aware of the problem of supervising day care centers because of the different policies existing at the various military installations. A survey was made by consultants from the Child Welfare League of America who visited eight day care centers located on military posts. The consultants felt our standards were below those for civilian communities.

This was of concern to Major Pagels who felt there was a need to study the programs at the various installations to determine how services might be improved. Situations encountered at previous installations had caused me to also become deeply interested in this problem.

Hoping that it might be of some value to the Army, I have selected the subject Day Care Centers, as a research project in partial fulfillment for the degree of Master of Public Health, at the University of North Carolina. Nursery schools will be included in this study only when housed in the same facility as the day nursery.

This project has been approved by the Office of the Surgeon General.

Your participation in this project by providing the information requested on the enclosed questionnaire will be of inestimable value. I would suggest that you have a conference with the day care center supervisor and fill in the questionnaire during the interview. In order to have factual information for the study please answer each question as honestly as you can. This information will not be used with any reference to the name of the installation. Some assistance from the Preventive Medicine Officer or Post Engineer may be needed in figuring the floor and play space. The safety director may be helpful with lighting specifications, since a camera light meter would determine the number of foot candles of light available.

Your prompt attention and cooperation in completing this questionnaire will be most appreciated. Please return the questionnaire as soon as possible but not later than 25 March 1960. If you would like an abstract of the study please indicate this when you return the questionnaire.

Sincerely,

Mary M. Morris
Captain ANC

I would like a copy of the abstract of the study on Army Day Care Centers.

Name: _____

Address: _____

_____

Dear

The response to the questionnaire on day care centers has been very good. However, in order to make this a comprehensive study I hope to get replies from every installation where there are Army Health Nurses. The present replies indicate that this is a problem area, but I cannot make such a statement until I have more complete representation.

I realize that some Army Health Nurses have very limited activities with the post nurseries. If this is true for you, may I suggest you contact another member in the Preventive Medicine Service or the appropriate person that could supply the requested information.

It is urged that every question be answered, and as honestly as you can. If there is no appropriate answer for some questions please indicate by using N/A (not applicable).

If there is not a post nursery at your installation please send a note to that effect.

Your prompt attention and cooperation in completing the questionnaire will be most appreciated. Please return the questionnaire as soon as possible but not later than 10 April 1960.

Sincerely yours,

Mary M. Morris

I realize you have a good reason for not having returned the questionnaire. The response and interest on day care centers has revealed multiple and varied problems. If your questionnaire is on the way please accept my thanks and disregard this card.

That this report may be inclusive for all installations, please answer the following questions and mail to me immediately.

Fill in answer:

Is there a post nursery on the army installation?

Yes___ No___

If yes, what is the average estimated daily attendance?

_____

Sincerely,

APPENDIX C

DAY NURSERIES (from Manual for Army Health Nurses)

Day Nurseries

A day nursery may be defined as an establishment where children may receive care for part or all of the day while not in custody of a parent. The establishment should be staffed by an adequate number of persons qualified by good health, proper temperament, education, and previous experience. It should be a safe place for children and present no significant hazards to health. The Army health nurse should give assistance to the attendants through individual and group conferences, helping them to understand the health needs of individual children and to evaluate the health needs of each child. In situations where an attendant is not familiar with signs or symptoms which may indicate deviation from normal health the Army health nurse should instruct the attendant. Attendants should inspect each child each day that he comes into the nursery and look for obvious signs of ill health. The following are suggested as minimum standards suitable for any facility where children are left for part or all of a day.

a. Building
   (1) Location. The building should be located away from areas of heavy vehicular traffic. Whenever possible it should be on the ground floor, unless the building is completely fireproof. When other than first floor is used, windows should be firmly and heavily screened and gates installed at each stairway.
   (2) Indoor space. Thirty-five square feet per child is generally accepted as the standard requirement. Space should be so utilized that children can be grouped according to age. If children under two years must be placed in a day care center, a separate room for these little children should be provided. There should be an isolation room for any child who becomes ill after admission to the center. Isolation of the sick child will help prevent the spread of infection from the sick child to the entire group, and will help to protect the sick child from inapparent infections among the others.
   (3) Outdoor space. Outdoor play space is desirable. Seventy-five square feet per child is the accepted standard for such a play area. All play areas should be fenced in.
   (4) Fire protection. Before setting up the facility it should be inspected by the post safety officer and fire chief to determine fire and other physical hazards and to set up whatever protections are needed. Periodic inspections should be made after beginning operations.
   (5) Sanitary conditions. A sanitary engineer of the post preventive medicine officer should inspect the building to see if any health hazards exist. These might include improper sewage disposal, non-potable drinking water,

inadequate kitchen equipment, etc. This inspection should be made before operations begin and periodically thereafter.

b. Equipment .

(1) There should be one toilet and one washbowl for every ten children. These should be of small size and mounted low enough for a child's use.

(2) A washable cot for each child is required if hours of operation include nap time. Sheets and adequate covers for each child should be supplied fresh daily.

(3) Play equipment suitable for the age groups in attendance will be needed. If equipment is painted, the paint should be free of lead. Equipment should, if possible, be of such a nature that it aids in the development of the child as well as making him happy.

c. Personnel

(1) Qualifications. All staff members should be selected on the basis of their affection for and understanding of children. They should be in good physical and mental health, free from communicable disease, and have adequate, up-to-date immunizations. A chest X-ray should be a definite requirement for all personnel before employment and a yearly re-examination required thereafter. Staff working directly with the children should have an awareness of the physical and emotional needs of children and should have demonstrated ability to work with children in a group setting. There should be good understanding of parent-child relationships and how day care affects this relationship.

(2) Number of personnel. There should be one staff member with administrative responsibility for the overall operation and with the authority to see that rules and regulations are met. There should be sufficient staff for constant supervision of the children, with at least one staff member for each ten children over the age of two. For children under two years, there should be one staff member for each five children.

d. Program and Care of the Child

(1) Program. If care is given for more than a one or two hour period, a well defined daily program should be scheduled. This should provide time for play and time for rest. Children should have some choice of activity and the program should be varied enough to meet the needs of all age groups in attendance.

(2) Health care. (criteria for admission).

(a) Each child should bring a certification of immunization, which is up-to-date, for acceptance for daily care.

(b) Physical standards for admission, set forth by a medical officer, should be maintained at the nursery. During the daily physical inspection by a staff member, a parent or guardian should be present so that the child can be taken home at once if he appears ill.
(c) The child who becomes ill after admittance should be isolated and the parent notified. The nursery should require that each parent fill in a card showing where he or she can be reached immediately in case of an emergency. The parent should sign an agreement that he will be responsible for calling for the child immediately upon notification by the nursery.
(d) Provision should be made for emergency first aid and ambulance service should be available.
(e) A medical officer should be available and responsible for overall medical supervision.
(f) Parents should be instructed to bring special feedings, clearly marked with the name of the infant.

e. Advisory Groups. In order to strengthen and improve services a post advisory board may be established for the nursery. This board should include a representative of the parents, a pediatrician, a nurse, a social worker, and if possible, a person trained in the operation of nursery schools.

APPENDIX D

ABSTRACT

12 Shepherd Lane
Chapel Hill, N. C.
May 24, 1960

Thanks for your cooperation in supplying the data for the research study on Army day care centers. Without your assistance this study would not have been as comprehensive.

I am most grateful that you answered my plea for help, in spite of the long questionnaire.

Inclosed is an abstract of the study. The abstract is longer than usual in order for you to know how the centers were classified and how your center rates with the other installations. I hope you will find it interesting, helpful and worth the time you contributed.

Should you wish to see a more detailed report, Miss Margaret Dolan, Department of Public Health Nursing, School of Public Health, University of North Carolina, has indicated that copies of the original report will be available on a loan basis.

Again, may I express my sincere and grateful appreciation for your assistance.

Sincerely yours,

Mary M. Harris

Captain, Army Nurse Corps

ABSTRACT

A STUDY TO DETERMINE THE NEED FOR STANDARDS IN ARMY DAY CARE CENTERS

This study was originally designed to identify the problem areas and hazards in the operation of Army day care centers, and to determine if there is a need for more explicit Army standards.

As finally set up, the study made a preliminary survey of the standards of health and safety currently practiced in Army day care centers and assessed the needs for establishing general standards and guides for the operation of such centers.

A review of the literature showed that a study was done by the Child Welfare League of America in 1952, with eight military installations included. It was their opinion that the military posts were below the minimum standards. For the past forty years the Child Welfare League of America's major responsibility has been the establishment of standards in the field of group care for children.

The Children's Bureau told why problems involved in operating a post nursery are not generally those encountered in a nursery for civilian use. A particular state or locality may have excellent standards for day care centers, but military posts are not subject to those standards except by choice. A consultant from the Children's Bureau felt standards for Army facilities should be developed according to the particular needs of the post.

There was extensive information in the literature on day care centers with emphasis on the need for planning, preparation and coordination in order to insure that centers operate safely, smoothly and efficiently.

The questionnaire used is based on recommendations in manuals on day care centers from four states, one city, the Child Welfare League of America and the recently published Manual for Army Health Nurses.

The survey population of this study consisted of military installations in the United States and overseas areas where health nurses were assigned. Fifty-seven structured questionnaires were mailed to nurses and forty-one were returned. To those who did not reply a post card was sent to determine if there was a day nursery at their installation and the estimated average daily attendance. This was a ninety-eight percent response from the two sources. See Tabl

The present study serves to raise the issue of such standards as they might affect the operation of day care centers. In analyzing the results, it was desired to classify the centers into four groups on the basis of over-all attainment of professional standards. On each of the several hundred items in the questionnaire it was possible to make a rough classification as to whether a standard had been met or not. To get an over-all rating it was necessary to "add" or total these pieces of information. Many of the items on the questionnaire did not seem important enough to contribute to the over-all picture of the standards of the centers, and some items were of too much importance not to be given added weight.

To deal with these considerations, each center was given a demerit rating consisting of the sum of demerits from 145 out of 280 items in the questionnaire, or about half of all the items. Further, eighteen of these items were assigned to be of double importance. A failure to achieve professional standards on these items was scored with two demerits. Items selected for this double demerit treatment were those on which professional organizations have placed special emphasis. There is a large degree of arbitrariness in the whole procedure, but any alternative procedure would have been just as arbitrary. Consideration was given to using fewer items in constructing the demerit score, but this would have a certain disadvantage in that the few items used would have been out of proportion in determining in which of the four groups the center would be classified.

If an item is given so much importance that it determines whether a center is classified as A, B, C or D, then we cannot turn the argument around and describe the center in terms of these items. To give an example of what is at issue, if one defined a center as grade A solely on the basis of its ratio of children to attendants, we could not then argue that all grade A centers had better records of providing adequate attendants for the children under their supervision. To avoid the possibility of this sort of thing a large number of items was used in compiling the demerit rating, so no one item would predominate. There were eighteen items for which double demerits were scored, and 127 items given single demerit points, for a possible demerit score of 145 points. The largest score actually made by a center was seventy-four demerit points.

On the basis of the distribution of demerits the centers were classified into four groups:

A	10 Best centers	20 through 31 demerits
B	9 Good centers	33 through 37 demerits
C	10 Fair centers	38 through 45 demerits
D	12 Poor centers	49 and over demerits.

The attempt was made to make all groups equal in size, but the natural break of the distribution of demerits was also taken into account, so that the four groups vary slightly.

The questionnaires indicated centers primarily provided baby sitting service, two provided services only for working mothers and one served only mothers in the hospital or clinic, keeping babies by the day or by the month. Five centers mentioned organized nursery or kindergarten education as a primary function.

All centers served military dependents. The better centers also provided services for dependents of civilian employees and guests.

As to minimum ages for admitting children, ten of the forty-one centers admit children two months of age or younger. The average minimum age of admission is four months. The maximum age of admission is about nine years.

Pre-admission physical examinations are required at seven centers. Physical examinations are compulsory at all of the nursery schools in conjunction with centers and for only boarders at two other centers. Dental examinations are compulsory at one center and encouraged at two others.

There is a strong tendency for the better centers to have compulsory immunizations and for the grade D centers to place immunizations on a permissive basis. Only about one-third of the overseas centers require compulsory immunizations. Routine procedures for revaccinations and boosters are in effect in only one-third of all centers. Health records are kept as a matter of routine at only five centers, and ten keep immunization records.

Emergency care practices are fairly well maintained at all but the poorest centers.

The higher quality centers have a better record in requiring x-ray and immunizations of their staff members. Standards as to professional qualifications of staff vary widely but are related to the grade of the centers. Eleven of the centers required that the supervisor be a registered nurse, five of these being grade A centers. For staff positions below that of supervisor there was less insistence on professional training and more on personal qualities. Minimum and maximum age standards for the staff tended to be more in evidence in the grade A centers.

Selection of supervisors is shared by the advisory board in three-fourths of the A, B, and C centers but by a smaller fraction of the grade D centers. The in-service training of employees seems largely neglected. Only seven reported organized training programs. However, there is some planning and teaching activity in half of the centers.

In all but nine centers the duties of various assignments are written and available to employees. As for duties, five centers, all grade D, reported that children were not under supervision at all times. The Manual for Army Health Nurses recommends a ratio of one attendant for five children under one year of age, and only four centers achieve this standard. Only one center achieves this standard for children between one and two years. For children over two years of age the manual recommends one attendant for ten children, which is achieved by nearly two-thirds of the centers.

For the average daily attendance at the day care centers and nursery schools, see Table II. The average daily attendance does not tell the whole story. Attendance higher than average was about one hundred days a year, and on such days, the attendance was about fifty percent above the normal. The smaller centers tended to have wider attendance fluctuations from day to day. This does not include the children attending nursery schools.

The section of the questionnaire on the operational procedures revealed that differences between the better and the poorer centers were apparent. Supervision of the centers was less organized in the poorer centers. The center defined as being supervised is one with more than two of the five representatives (post surgeon's office, post engineer, safety officer, fire marshall, nursery board) involved in the supervision. All of the grade A, B and C centers have nearly complete representation from four of these five offices, although one-third of them exclude the safety officer from the supervision procedure.

Similarly, seven reported that they did not have an advisory board. Four of these were grade D.

Under the section on environmental features, the physical facilities were reported as deficient in some centers. A majority of the centers occupied the first floor. Three-fifths of the centers reported that they were adjacent to a main highway or street. The Army manual recommends that the center be away from heavy vehicular traffic. Half of the buildings were brick or concrete. Only eighteen admitted to having a fire plan, and fourteen did not have practice drills. Another eight declined to answer, which probably means about half of these do not carry out fire drills.

The same situation prevails with regard to physical space. Twenty-two centers have no regulations concerning maximum crowding of children, and many centers do not have separate facilities for children under eighteen months of age. Six centers, five of them grade D, have no separation for play, and thirteen centers, eight of them grade D, have no separation for toilet use. Recommendations on all of these items are in the Manual for Army Health Nurses.

The same manual mentions thirty-five square feet per child as being generally accepted as the standard requirement. Twenty-three

centers, including ten of the twelve grade D centers, fail to meet this standard. Similarly, fifteen centers do not have two square feet of floor space between each cot or bed. Lighting standards of twenty foot candles in the playroom and bedroom are not maintained by thirteen centers, eight of which are grade D. Adequate window space is reported by thirty-three centers.

Thermostatic controls operate in only sixty percent of the centers, and only one-third are equipped with thermometers in all rooms. Nine of the twenty-six respondents to this question noted that protective screens and coverings were not placed around heaters, radiators and fire places.

The Army standards of one lavatory and one commode for each ten children is met by only one-third of the centers. Drinking water is available in all centers, but only twenty-eight have drinking fountains, and in only thirteen centers does the height correspond to the child's needs or steps are available. Of those centers without drinking fountains, most have paper cups, but two have neither fountains or paper cups, and presumably a common cup is in use in these situations.

Minimum play area of seventy-five square feet per child is not achieved by sixteen centers. Again, the better centers have a better record. Similarly, not all of the outdoor safety precautions mentioned are achieved by about six centers, predominately those with grade D rating.

The indoor safety precautions are not uniformly met by all centers, but failure does not seem to relate closely to quality grade. Poison and flammable products are not prohibited from the buildings in nine centers. Further, one respondent admitted that medications were within reach of the children.

Food and sanitation practices varied widely. Four centers serve no food, and six serve only refreshments. Meals are usually prepared by an attendant, although six of the grade A and B centers have a special cook. Eight centers do not require that persons handling food be subject to post food handler regulations.

Separate refrigeration for milk and formula is not available in twelve centers, and in eighteen there is no thermometer in the refrigerator.

Adequate kitchen equipment is recommended and specified in the Army manual. Twelve centers do not have a store room for non-perishable foods, and eleven do not have closed storage space.

Only nine centers have mechanical dishwashing facilities. A few which serve refreshments use disposable items. Others wash the dishes by hand. Ten of these meet the accepted standards of either rinsing more than once or using chemicals, but six rinse only once and do not use chemicals.

The questions on chair and tables of a size appropriate to the child reveal that lower grade centers do not maintain as high a standard. Crowding probably occurs in the poor grade centers because staggered meal periods are not in effect.

The section that investigated certain aspects of the daily schedule and care of the children reported them as more highly organized in the grade A centers. Definite scheduling for rest, play, meals and toilet was increasingly lax in the lower grade centers. Handwashing procedures were not routine before meals in three centers nor after toilet visits in two centers. Half of the centers have separate facilities for children who are in the process of being toilet trained, with the better centers more likely to provide such facilities.

Diapers are supplied in the better centers, by the center itself, or through the use of disposable diapers. Five centers depend upon diaper service or parents to provide diapers. Dirty diapers when laundered by the center are soaked in a disinfectant which precedes washing. When diapers are not laundered at the center there is a tendency not to rinse the diaper before placing it in a paper or plastic bag. Many respondents did not fill in this section, thus leaving the impression that practices were not uniform and depended in part on the attendants.

Practices with respect to bed linen and clothing showed sharp quality differences. In a few cases the respondents admitted that separate cribs were not available, bed linen was not changed after each child, cribs were not cleaned and washed after each child, there were not sufficient beds for naps, and children's clothing was not kept separately. Two centers used cribs which were not equipped with side rails.

Facilities for rest periods were much less adequate in the poorer quality centers. In twelve centers older and younger children took their naps in the same room. Play periods are compulsory, weather permitting, in thirty-two centers, and toddlers are permitted outdoors in twenty-nine centers. Dividing play activities into age groups is carried on in twenty-five centers, but sixteen do not have facilities or staff for divided play activities.

Seven centers covering all grades reported children were given medication when requested and provided by parents.

The number of respondents offering specific comments in answer to the open ended question increased with grade. Some of the comments were that standards were needed in the centers. Here again, the poorer centers can be expected to be more aware of the needs for standards.

The superficial conclusion which emerges from the analysis of the data in this study is that standards in some centers are far below what should reasonably be expected. Standards of health and welfare of the children are not adequately safeguarded in these centers.

It is not immediately possible to say that introducing formal standards would improve the situation. There are many intervening considerations that have to be taken into account, and the investigation of these has not been included in the scope of this study. However, the study does throw some light on the possible difficulties that might be involved in setting standards in this area.

In the first place, day care centers are not an integral part of the military establishment. They are primarily a voluntary enterprise that has developed to meet a particular need. A manual of operating procedures would not have the status of a military directive, and compliance would depend on the authority and support given the administrator. This study seems to indicate that, to some extent, failure to achieve health standards is not due to ignorance of proper health procedures but to the lack of support of the establishment and maintenance of good basic health procedures. The evidence for this conclusion is that failure of the centers to apply good health practices does not occur just in areas peculiar to day care centers. Instead, some of the shortcomings occur in areas of health practices not specifically related to day care centers, for example, improper garbage and refuse disposal, and the rinsing of soiled diapers immediately after changing. These demonstrate inconsistencies in good health practices.

Army day care centers take a variety of forms. These vary from a center that is purely for baby sitting purpose to a more elaborate plant with a nursery school. Variation in the attendance require different amounts of space and number of staff. All of these differences would have to be taken into account in setting up standards relevant to all circumstances.

In spite of all the foregoing objections, many respondents to the questionnaire noted the need for standards. Standards are essential, not only for the private use of the administrator, but in enlisting the cooperation and help of other persons in the maintenance and improvement of standards in the center.

High standards of health and safety in the Army day care centers cannot be maintained without continous effort. Standards can be kept up only by a ceaseless guard against the tendency to cut corners, do things the easy way, and to ignore bad practices. In some Army centers, this attempt to maintain standards is successful.

In other centers the fight to maintain standards is not being won. If formal recommendations and suggestions for better operation of the centers would help the personnel to achieve and maintain better standards, the effort necessary to prepare such a report would seem well justified.

TABLE A

NUMBER AND LOCATION WHERE ARMY HEALTH NURSES ARE ASSIGNED

Replies	Military Installations		Total Number
	U. S.	Overseas	
Questionnaire	27	14*	41
Responded to Postcards	4	3	7
No Day Care Center	2	7**	9
No Reply	1	0	1
Total	34	24	58

* One Nurse reported two day care centers.
** Two questionnaires disqualified since they were nursery schools only.

TABLE B

ESTIMATED AVERAGE DAILY ATTENDANCE AT DAY CARE CENTERS,

BY GRADE OF CENTERS

Estimated Attendance	Grade				Reply to Postcards	Total Attendance
	A (10)	B (9)	C (10)	D (12)		
Day Care Center	763	561	643	618	296*	2881
Nursery School	23	140	0	130	0	293
Total	786	701	643	748	296	3144

* Attendance not given by one respondent.