Results of a nonrandom nationwide survey of 89 child care workers in 20 states concerning work-related health and safety conditions confirm that similar hazardous conditions exist in child care programs throughout the nation. Results also confirm that concern and anger about such conditions and their potential consequences are widespread among staff, as is the need for appropriate training and resource materials to deal with such hazards. The study uncovered a startling prevalence of hazards originally thought to be of little immediate concern, such as the on-site use of chemicals and pesticides. In addition to identifying major hazards in the work environment, respondents were also asked for data on current organizational policy affecting on-site conditions. In general, findings show evidence of working conditions that contribute to the physical and professional debilitation of child care staff and are consistent with previous study results suggesting that child care may adversely affect workers' health. Also included in this report are a brief discussion of a model for improving center conditions and a list of resources providing information on occupational health and safety topics. (RH)
MAKING THE "CHILD SAFE" ENVIRONMENT "ADULT SAFE":
Occupational Health and Safety Concerns for Child Care Programs

by

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Until the 1970's, awareness of occupational health and safety issues was restricted primarily to work settings such as coal mines and factories. However, the discovery of the carcinogenic potential of many chemicals and the stress related diseases of many seemingly safe machines (such as video display terminals) has given rise to worry about health and safety in most occupations.

In the field of child care though, research and concerns about environmental health and safety have focused almost exclusively on the child - his/her exposure to illness, potential accidents, etc. Consequently, most staff have a high awareness of what constitutes a child-safe environment, but many are less aware of the elements within that same environment that are hazardous to their own health and safety. It is often incorrectly assumed that a child-proof environment is automatically adult-proof. In fact, an environment that does not provide for the health and welfare of adults is a potentially harmful environment for all involved: staff, children, parents, and the community at large.

The health and well-being of children in child care is ultimately dependent on the quality of care that is provided. As has been documented, stressed and unhealthy child care workers will have difficulty providing safe, creative, and secure environments for children.

In a 1979 study of 95 child care workers, Whitebook et al. concluded
that staff burnout and high-turnover rates were closely tied to working conditions such as wages, adult-child ratios, benefits, breaks, and substitute policy.\(^2\) The magnitude of the current turnover rate for child care staff (15-30%, contrasting with a 10% rate for other human service workers)\(^3\), and staff perceptions of the effects of their job on their health (in the Whitebook study, 67% of the sample stated that their health was adversely affected by their jobs), warrants a closer look at the types of working conditions that may be responsible for the disintegration of the physical and mental health of child care staff.

Of course, examination of prevailing health and safety conditions must clarify those hazards which can affect everyone (e.g. use of toxic chemicals and pesticides, spread of illness and infection), and those hazards which primarily affect staff (e.g. use of child-sized furniture for adults, wages and benefits.)

Although the implications are great, little research on the topic of child care staff health and safety has been conducted. The aforementioned study of staff burnout confirmed that there are prevalent working conditions which contribute to stress and job dissatisfaction. In response to the completion of that study, the Child Care Employee Project (CCEP)\(^4\) received hundreds of requests for information on topics related to working conditions, highlighting the lack of available information.

In order to prepare responsive training and materials for child care workers, the CCEP continued to investigate and identify hazardous working conditions. In 1982 we contracted with the Labor and Occupational Health Project (LOHP)\(^5\) of the University of California at Berkeley to assist in the research. Staff members of the LOHP and CCEP conducted 15
site visits to child care programs in the San Francisco Bay Area giving them the opportunity to identify work site health and safety hazards and prompt discussion of these issues with staff members. Additionally, the CCEP and LOHP developed an extensive questionnaire to be distributed nationally to child care staff.

Prior to the mailing, the questionnaire was reviewed by child care staff and community college students and was then distributed nationwide as an insert in the CCEP newsletter. Although the distribution was not a random one (the newsletter is sent upon request to individuals and organizations), the large geographic range and the variety of the programs represented suggest a fairly representative sampling of the child care community. The information certainly reflects health and safety conditions are perceived and experienced by child care workers themselves.

The results of the study confirm that there exist similar specific hazardous health and safety conditions in child care programs throughout the nation. The results also confirm that concern and anger about these conditions and their potential consequences is widespread among staff, as is a need for appropriate training and resource materials on these topics. Finally, the study uncovered a startling prevalence of hazards which were originally thought to be of less immediate concern, such as the use of dangerous chemicals and pesticides on-site. In addition to identifying major hazards in the work environment, respondents were also asked for data on current organizational policy which impacts on-site conditions.

These results constitute a pilot study of child care staff health and safety working conditions which will hopefully inspire future
research into the extent of the conditions, their consequences, and their relationship to the health and safety of the children in care. Ultimately, it is the goal of the CCEP to utilize this and other studies to develop and implement in-service and community college health and safety training programs for child care staff.

RESULTS

89 questionnaires were returned from 20 states. Three quarters of the respondents worked directly with children as teachers or aides; the remainder held administrative positions. About three quarters of the respondents worked full-time. Most worked with children under five years old; a few worked with school-age children. Approximately two thirds worked in centers with ten or fewer employees. Two thirds worked in non-profit centers. The remainder worked in public or proprietary programs, and a couple in family day care homes.

Illness/Infection -- Sick Child Care -- Sick Leave/Substitute Policy

Virtually all workers reported exposure to common illnesses, and a fair proportion to less common illness and infections. Responses showed a high staff contraction rate for colds (67%), sore throats (45%), flu (46%), and impetigo (45%). Other contracted illnesses/infections included head lice, childhood illnesses (mumps, chicken pox), conjunctivitis, shingles, and strep throat. 29% of the respondents listed other illnesses they believed to be job-related such as back pain, stress, headaches, and fatigue. 13% of the sample reported contracting illnesses associated with toileting such as giardiasis, hepatitis, diarrhea, parasites, and intestinal problems.

A third of the sample felt they had a high rate of illness due to their jobs, but the response to this question also suggested that the
rate and type of job-correlated illnesses contracted may be related to the length of time teaching, diminishing in frequency and severity over time. This may indicate a type of "self-learning" concerning health habits, pacing, stress, control, etc. over the years, and/or the natural building of immunities.

Center policy regarding sick child care, substitutes, and sick leave for staff were often characterized as inconsistent, unenforced, or non-existent. 60% of the respondents noted that there was no separate area for sick children. Sick children are often "isolated" (until parents arrive) in common areas such as administrative offices, nap rooms, and other classrooms which may increase the possibility of exposure and contraction of illness by others. In addition, because of the lack of sick child care provisions and sick leave for parents when their children are ill, many ailing children inevitably attend child care all day, regardless of center policy. Unfortunately, due to lack of substitutes and/or sick leave, many (58%) of the staff work while sick, often depleting their energy, protracting and spreading illness.

Furniture -- Body Strains -- Accidents

Respondents indicated a lack of adult-size furniture in the place where staff spend the majority of their time: the classroom. (A quarter of the sample noted there was no adult-size furniture available anywhere in the center.) 15% of the sample stated there were no separate toilet facilities for staff. Lack of adult-size furniture has implications for the hygiene, physical safety, and mental health of the staff. One third of the sample noted they experienced body strain from using under-size furniture. Use of non-separate toilet facilities can cause stress from lack of privacy, and potential hygenic problems.
A majority of the sample (64%) noted they must move heavy furniture and/or equipment as part of their job. As a consequence, 43% of the sample noted they had experienced body strain from lifting heavy objects. Other major causes of body strain were lifting and carrying children and reaching into awkward places.

A major cause of on-site accidents was trips and falls over toys and equipment (noted by 32% of the sample.) This reflects the dearth of adequate storage space as reported by 46% of the sample, and the fact that objects are often stored precariously in the classroom and office areas.

In addition to their child care related duties, 74% of the respondents stated that they are also responsible for maintenance of the site - increasing their exposure to potentially harmful chemical cleaning solutions, body strain, and exhaustion.

Chemical Usage and Hazards

To our surprise and concern, (considering the less "hidden" aspects of the dangers of chemical and pesticide use,) over half (62%) of the sample reported that they work with potentially harmful chemicals such as cleaning solutions, and an alarming 63% reported lack of proper labeling of on-site chemicals.

The need for pest control is an acknowledged concern in child care, considering that food and art supply storage, garbage disposal, etc. create breeding grounds for roaches, fleas, lice and other insects and rodents. However, given the lack of information about the long term effects of chemical pesticides, it is a serious concern that half of the respondents report "regular spraying" of their sites and many use chemical preparations such as "Kwell" to control lice.
Many respondents indicated their concern about this and their lack of input regarding choice of pest control. A few responses indicated that staff were utilizing preventative and/or organic measures to avoid chemical spraying.

Of equal concern is the use of potentially harmful art supplies such as powdered tempera (77%), permanent markers (67%), and dry clay (32%). The short term effects of chemical usage on-site may be evident in the skin and respiratory irritation reported by 18% of the group.

Stress

A vast majority (96%) of the participants indicated that their jobs were "stressful". The sources of stress reported were varied, but most could be categorized within three areas: Communication Problems (staff-administration, staff-staff, staff-parent, lack of decision making, etc.); Staff Schedules (no breaks, planning time, or time out of the classroom); Limited Resources (low wages and status, unpaid overtime, no substitutes, high-staff child ratios.)

Health Care

Previous studies have documented the lack of health care benefits available for child care staff, as well as the extremely low wages which prevent staff from purchasing individual health plans. Thus, despite working conditions common to most child care program which can contribute to ill health (e.g. spread of infection and illness, body strains, exposure to chemicals, stress), staff have restricted access to medical services. Inadequate sick leave and substitute policies exacerbate limited health resources. Inadequate health care screening (reported by 76% for rubella and tuberculosis) and coverage
for staff often requires staff to ignore health problems and leave them unattended, presenting a severe hazard to themselves, children, other staff, and possibly the entire community.

In addition, respondents indicated a lack of well thought out and consistent policies for "light duty" during pregnancy. Ironically in a work force comprised primarily of women of child bearing age, this topic does not seem to generate policy until the administration is confronted with a pregnant staff member, and even at that point, it is often left to the individual and co-workers to resolve on a day-to-day basis. 38% of the sample indicated that "light duty" was not a option for pregnant staff, and one respondent indicated that a pregnant staff member would ultimately have to quit her job.

DISCUSSION

In this study we have examined the types of working conditions present in child care settings relating to health and safety, and the adverse effects from such conditions. The results of our study confirm that there do exist unhealthy and dangerous working conditions in child care environments, and that staff suffer from such conditions by experiencing illness, emotional distress, physical disabilities, and exposure to harmful chemicals. In other words, the findings show evidence of working conditions that contribute to the physical and professional debilitation of child care staff, and are consistent with previous study results suggesting that child care may adversely affect one's health.

The prevalence of such similar working conditions throughout the nation may suggest them to be a necessary, albeit distasteful by-product of child care work. However, unhealthy and dangerous conditions need
not be considered "part of the job." Many of these conditions often continue to exist because of the erroneous belief that staff needs and children's needs exist in conflict. For instance:

...an infant caregiver reports to work ill in order not to disrupt the continuity of care for the children, or to insure there is enough staff on hand...

...or, preschool staff conduct staff meetings and eat their meals in child-size chairs...

...or, a child jumps on the back of a staff person "just for a ride"...

While we recognize the need for adequate and consistent staffing, appropriate environments for children, and responsive caregiving for children, it is often at the expense of our own adult health and safety. Placing value on adult needs need not imply foregoing children's needs. In fact, it can enhance the quality of care by preserving the physical and mental health of staff members, and increasing their own effectiveness and career longevity.

In the examples mentioned above, an appreciation of adult needs would enable:

...the development and implementation of an effective substitute policy...

...the provision of comfortable, adult-size furniture for breaks and staff meetings...

...the opportunity for staff to help children understand their impact on adults and encourage the development of prosocial behaviors...

The lack of emphasis on staff health and safety has resulted in a dearth of relevant resources and training for workers. Unfortunately, as with many pressing issues within the field of child care, limited
financial resources present a formidable roadblock when advocating for improvements. In the absence of money available to purchase training, renovate work sites, raise wages and benefits, etc., administrators and staff may still find innovative and effective means of improving working conditions by using the following suggestions. These suggestions, however, are not intended to substitute for the more far-reaching social and fiscal changes which are clearly necessary.

A Model for Improving Conditions Within the Center

Many of the most hazardous working conditions on-site become apparent once the issue is raised and discussed with staff. Identification of other serious hazards, and less overt problems necessitates a joint investigative effort on the part of staff and administration. The LOHP recommends that after identifying existing or potential hazards, staff can utilize a combination of four approaches to control hazards in the work site:

- training
- use of personal protective equipment
- engineering controls
- administrative controls

Child care professionals may find the first and last approaches most relevant, but all approaches should be considered when problem solving. As an example, we have applied this model to the problem of recurring back injury/strain among staff:

Training: Given limited resources, efforts can be made to identify appropriate medical personnel (i.e. physical therapists) in the community who will donate consultation, printed materials, and/or a brief workshop to instruct staff in the care and prevention of back injuries on the job.

Personal Protective Equipment: Staff may be advised as to appropriate
footwear available to avoid back problems.

**Engineering Controls:** Adult-sized chairs and tables for breaks and administrative work may be made available for staff. In addition, an expanse of floor space may be made available for periodic back stretching exercises. To alleviate strain from sitting in small chairs, staff can sit on a phone book to help keep their legs and hips at a 90° angle.

**Administrative Controls:** Examination and modification of sick-leave policy, substitute and break policy, and distribution of tasks may enable staff to better prevent, nurse, and recover from back injury, as well as other illness and injuries.

**Additional Resources**

In addition to the above suggestions, there are existing organizations which can provide information on a variety of occupational health and safety topics:

**Non-Toxic Art Materials**
The Arts and Crafts Institute
715 Boylton St.
Boston, Mass. 02116

Art Hazards Information Center
5 Beekman St.
New York, New York 10038

**Alternative Pest Management Control**
The John Muir Institute Center for Integration of Applied Sciences, Inc.
1010 Grayson St.
Berkeley, CA 94710

**Occupational Health and Safety**
Labor and Occupational Health Program
Institute of Industrial Relations
Center for Labor Research and Education
University of California
Berkeley, CA 94720
The Child Care Employee Project is a program of the Child Care Staff Education Project, a non-profit organization devoted to improving child care working conditions through research, training, consultation, and distribution of resources. A packet of handout materials pertaining to child care occupational health and safety is available from the Project for $3.00. In addition, the CCEP has other resource materials available, including the survey utilized in this study, and a health and safety checklist for use in focusing on key problems on-site.

CONCLUSION

Much effort is devoted in child care to defining what constitutes a safe environment for children. As this report indicates, no child's environment will be safe unless it is simultaneously a safe environment for the adults within it. Child safety and adult safety cannot be competing goals, each vying for staff energy and a piece of the budget. Rather, they are inseparable goals, one unable to exist without the other.

In order to provide consistent and high quality care, staff must have all the tools - including good physical and mental health. As the most important part of a "safe" child care environment, adults and their needs must be considered and attended to.

However, in order to facilitate the improvement of working conditions for staff beyond individual centers, there is a large task at hand: that of changing and rearranging social priorities. The irony of child care work is revealed whenever the value and importance of children is raised. Current fiscal crises offer us a reminder that when it comes to children,
we often say one thing ("Children are our greatest national resource.") and do another (cut back and eliminate programs and services for children.) Historically, the same contradictory message has been conveyed when we say one thing: "Our children are important and deserve high quality care." and do another: overwork, underpay, and endanger the health of those who care for children.

As child care is considered unimportant and unskilled work, no serious consideration is given to its occupational hazards. As has been noted, here lies the danger for children, staff, and the community.

To effect changes in the working conditions of child care staff, there must be an appreciation for the value of the work and a concurrent public awareness of its conditions and their consequences. Child care workers and the organizations which represent them can influence the public, enabling them to see the relationship between child and adult health and safety and its importance in the delivery of services.

While it is true that we value our children, it must be more true that we value all human beings, and would not require any person to work and live under conditions which endanger their physical and mental health.
REFERENCES


4. The Child Care Employee Project, a program of the Child Care Staff Education Project, is a non-profit organization devoted to the investigation and improvement of child care working conditions. For more information, write: Child Care Employee Project, P.O. Box 5603, Berkeley, CA 94705.

5. The Labor and Occupational Health Project, University of California at Berkeley, provides technical assistance, research, training and materials pertaining to workplace health and safety. For more information, write: Labor and Occupational Health Project, Institute of Industrial Relations, Center for Labor Research and Education, U.C. Berkeley, Berkeley, California, 94720.

