Physical Activity in Child Care Settings: Research Findings and Policy Implications

June 16, 2010
2:00 –3:00 p.m. ET

Questions and Answers

Q: Please clarify the amount of time for physical activity if a child is in half day Head Start, full day Head Start, and full day Child Care, since full day Head Start is truly not a full day.

A: It is generally recommended that young children receive at least 120 minutes of physical activity during most days. This activity can be in the form of free play (most of it) or can be facilitated through teacher activities (very structured, like a lesson, to less structured as in working with small groups of children). Depending upon the policy in place either through Head Start or state-level policies, there could be specific standards for activity levels at childcare. Nutrition and Physical Activity Self-Assessment for Child Care (NAP-SACC) Best Practices would suggest 120 minutes for full day and 60 minutes for half day. The Head Start day is about 2-3 hours, this would amount to between 75 – 90 minutes. Remember: some of this activity can be provided within lessons and during inside time.

Q: What resources/support is available to teachers to promote physical activity in their classrooms?

A: PE Central has started to include PreK activities (lessons); also, commercial products are available as well. The SPARK Early Childhood program is widely used and is being evaluated.

Q: What studies are there about preschool programs and child care for young children through age 6 in school districts?

A: Beth Dixon at NYU is evaluating implementation of NYC policies, but she is not evaluating a specific program.

Q: In preschools, a lot of sites are not able to go outside and say they don’t have enough time to provide activity. What are some ways to address this issue?

A: (Dr. Stanton Ward) Urban sites often have limited outdoor space; however, some centers (or homes) may not realize the benefits of active play and having active opportunities for staff. In these cases, it is necessary to meet the directors/staff where they are, help them understand the benefits of active play for children and the need for personal physical activity in staff. Also, starting slowly, presenting some options and allowing the center/home to “select” what they might be willing to do. Perhaps using the NAP-SACC planning model could help gently move childcare facilities toward more and more regular active play for children in their care.

(Dr. Sallis) Timing is a matter of priorities and scheduling. It should be possible to find time for activity, and it would be fine to split activity into shorter intervals. Physical activity can be used as a teaching
tool. Finding space may take some creativity. Perhaps indoor space will need to be cleared for activity sessions, but getting children involved in moving objects would be additional activity. If outdoor space is not available onsite, staff may need to look for space offsite. If a park is not nearby, perhaps arrangements could be made to use a church playground. Getting the children out for daily walks around the neighborhood should be possible in most places.

Q: What other curriculum programs are available that encourage child-parent/adult active play?

A: There are a number of products that have been developed for use by childcare to promote or encourage physical activity (active play) in young children. Some of these are limited to certain types of facilities (I Am Moving, I Am Learning – Head Start); others are commercially available such as SPARK and Animal Trackers. Another product that has been widely used by child care providers is Color Me Healthy which was developed by Cooperative Extension and the Division of Public Health (North Carolina). These materials are available for cost.

Q: Are you aware of any safety programs to go along with increasing activity for child care programs? For example, making sure sand is swept off of concrete surfaces.

A: I am unaware of any specific safety programs such as maintain safe surfaces. There are guidelines for playground safety such as those provided by the National Program for Playground Safety.

Q: Can you speak to the issue of child care teacher/provider obesity and lack of physical fitness?

A: Although research data do not exist to confirm this hypothesis, some obesity researchers suggest that a barrier to increasing children’s activity at child care settings is the health status (low fitness, obesity) that exists among staff. The speculation is that staff, even those who might feel positive about children’s need to play, are unable to easily be involved and that behaviors that support children’s activity might be difficult for these individuals. Also, others have observed that staff who are overweight feel that they are in no position to promote activity, in that they are obviously not active themselves. It is hoped that “worksite wellness” models might begin to appear even at child care settings to allow these individuals to engage in health promotion programs. Larry Webber at Tulane University is studying teacher wellness programs for elementary school teachers.

Q: I have research from the Jim Trelease’s The Read Aloud Handbook which addresses “screen time”, but I would like to know if anyone has more updated research about television watching.

A: From Anderson et al. (BMC Public Health 2008, 8:366 doi:10.1186/1471-2458-8-366): “Of US children aged 4 to 11 years, 37.3% (95% confidence interval, 34.1% to 40.4%) had low levels of active play, 65.0% (95% CI, 61.4% to 68.5%) had high screen time (defined as >2 hr), and 26.3% (95% CI, 23.8% to 28.9%) had both these behaviors. Characteristics associated with a higher probability of simultaneously having low active play and high screen time were older age, female gender, non-Hispanic black race/ethnicity, and having a BMI-for-age ≥95th percentile of the CDC growth reference.”
From Christakis et al. *Pediatrics* 2004. “Early television exposure is associated with attentional problems at age 7. Efforts to limit television viewing in early childhood may be warranted, and additional research is needed.”

Christakis et al. *Pediatrics* 2009:”Children [not infants] in home-based child care programs were exposed to significantly more television on an average day than were children in center-based programs (infants: 0.2 vs. 0 hours; toddlers: 1.6 vs. 0.1 hours; preschool-aged children: 2.4 vs. 0.4 hours).” “… having a 2- or 4-year college degree was associated with 1.41 fewer hours of television per day in home-based programs, but no impact of staff education on television use was observed in center-based programs”.

Q: What suggestions do you have to educate parents about the need to dress children appropriately for active play?

A: A center might start by creating physical activity policies that are adopted for their program. It will require good communication, however, between school and home. Parents need clear information and to have the opportunity to have questions answered. Also, the children can be helpful here. Work with the children to establish what to wear for active play. A good paper on this was written recently by Dr. Kristen Copeland, published in the *Journal of the International Society for Behavioral Nutrition and Physical Activity*.

Q: Is there any work around developing physical literacy or supporting proper movement skills development in young children and the role of child care?

A: A report was published in 2007 in *Pediatrics* (Vol. 119 No. 1 January 2007, pp. 182-191) that discusses the importance of play in promoting healthy child development. Also, a paper by Burdette & Whitaker discusses the value of free play. “*Resurrecting Free Play in Young Children Looking Beyond Fitness and Fatness to Attention, Affiliation, and Affect*” Hillary L. Burdette, MD, MS; Robert C. Whitaker, MD, MPH *Arch Pediatr Adolesc Med*. 2005;159:46-50.

Q: Any plans to review “Milestones of Child Development” of states to see how physical activity is encouraged?

A: We are unaware of any efforts to do so.

Q: Is there any connection or mention of Head Start using the “I Am Moving, I Am Learning” program?

A: “I Am Moving, I Am Learning” has been underwritten by Head Start and is being offered to many regions of the country, for example: Head Start Region III

Q: Has Dr. Ward published her best practices/staff behavior data?

A: We have published *NAP-SACC Best Practices Recommendations* in a recent issue of *Pediatrics*, which includes observations of a large sample (96) of childcare centers. We hope to publish additional papers describing how staff are critical for children’s active play and the contributions to growth and development.
Q: Could Diane recommend some physical activity trainings for Head Start teachers?

A: Availability of physical activity trainings depends upon the region where the Head Start is located and the services available in individual state. Cooperative extension is a good source for physical activity information and I would recommend

Q: Can we get a sample of the NAP-SACC Information?

A: All of the NAP-SACC materials are available free online.

Q: Can you give a research summary that related physical activity to behavior in child care?

A: There is a body of research that links active play to development. Providing a research summary of this material in a brief question and answer document is not possible.

Q: Dr. Sallis mentioned that Head Start Guidelines are currently in development. What is the timeline on this and who is leading this?

A: Office of Head Start (OHS) hopes to have the draft regulations published in the Federal Register sometime later this year.

Q: Self-report data from the Whitaker Head Start study and observation data from best practices reported by Diane both indicate that physical activity practices are currently being met at various levels — low to high. If these practices are included in licensing regulations which often do not include a budget for implementation, how should they be enforced? Should a phased in approach be used?

A: A good place to start is with policies. Some states and cities have begun to add minimal physical activity time requirements (for example, 60 minutes per day for full-day care). Our Best Practice Guidelines encourage 120 minutes (including all forms of formal and informal active time; think: non-sitting time). Enforcement will be limited, based on funding and lack of qualified personnel. However, compliance can be encouraged through education and communication. Creating in-service learning opportunities for teachers and directors is one strategy. Having all players (director and staff) receiving the same information is one step toward general acceptance. Also, information should be provided about how to implement such policies. Provide opportunities for 2-way communication with child care personnel about the challenges of meeting these new requirements. This is an important step. Child care staffs are committed to children; physical activity policies are new and represent a change how things are done. Efforts to support implementation need to be included along with any policy change. Thus, the initial emphasis needs to be on adopting policies, creating awareness of them, and providing staff the training and support they need. As teachers and directors learn how to integrate physical activity into their programs, then expectations can be raised, and including assessments of physical activity practices in licensing review would be appropriate.
About the MCHIRC

The Maternal and Child Health Information Resource Center (MCHIRC) is dedicated to the goal of helping MCH practitioners on the Federal, State, and local levels to improve their capacity to gather, analyze, and use data for planning and policymaking.

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This question and answer sheet was created by moderator Gretchen Noonan and is available online at:


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