

Students with Multiple Sclerosis Participating in Recess

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Abstract

The participation of a student with Multiple Sclerosis (MS) in recess can often be both challenging and rewarding for the student and teacher. This paper will address common characteristics of students with MS and present basic solutions to improve the experience of these students in the recess setting. Initially, the definition and prevalence of MS will be presented. This will be followed by a brief discussion of MS in regards to special education law. Next, the benefits of the recess setting for all students will be addressed. The paper will then address the modifications for specific MS symptoms in the recess setting. Lastly, specific methods of proactively including a student with MS in three recess activities will be discussed.

Definition and Prevalence of Multiple Sclerosis

Multiple Sclerosis (MS) is described by the Mayo Clinic as “a potentially debilitating disease in which the body's immune system eats away at the protective sheath that covers the nerves. This interferes with the communication between the brain and the rest of the body. Ultimately, this may result in deterioration of the nerves themselves, a process that's not reversible.” (Mayo Clinic, 2011, p.1). MS is a progressive neurological condition with a variety of symptoms, such as loss of strength, numbness, vision impairments, tremors, and depression. It is interesting and important to note that the intensity of MS symptoms can vary greatly. As an example, one day a person might be extremely fatigued and the next day feel strong. Extreme temperatures can also adversely affect a person with MS. Causes of MS are currently not known and there are no cures for the condition (Disability Specific Instructional Strategies, 2008).

In the United States today, there are approximately 400,000 people with MS. This number increases at a rather fast rate with more than 200 people diagnosed weekly. Worldwide, MS is thought to affect more than 2.1 million people. The disease is not contagious or directly inherited, but scientists have identified factors that may eventually help determine what causes the disease. These factors include gender, genetics, age, geography, and ethnic background (National Multiple Sclerosis Society, 2011).

Of particular interest to this article are children with MS. Although the number of cases for children is relatively small, the authors would like to point out the fact that neurologist believe that there are many undiagnosed cases of MS in children. Of the 400,000 diagnosed cases of MS in the U.S., 8,000 to 10,000 are in children up to 18 years old. The symptoms of MS in children are similar to those in adults and may include:

- Problems with bladder or bowel control
- Weakness
- Problems with walking
- Vision changes
- Muscle Spasms
- Sensory changes, tingling, or numbness
- Tremors
- Seizures (more common in children than adults)
- Lethargy (more common in children than adults) (Webmd, 2011).

Treatment by doctors includes efforts to treat attacks, to prevent future attacks, and to relieve symptoms.

Multiple Sclerosis and Special Education Law

The Individuals with Disabilities Education Act (IDEA) states that children who are determined to have an orthopedic impairment receive special education services if the disorder adversely affects the educational performance of the child. An orthopedic impairment is defined by IDEA as follows:

“a bodily impairment that is severe enough to negatively affect a child’s educational performance. This disability category includes all orthopedic impairments, regardless of cause. Examples of potential causes of orthopedic impairment include genetic abnormality, disease, injury, birth trauma, amputation, burns, or other causes.” (IDEA, 2004).

MS is considered an orthopedic impairment. IDEA states that children should be placed in their “least restrictive environment” in school activities. In terms of the recess setting, a placement with children without disabilities is considered the least restrictive environment for most children with MS. This placement is often important to ensure a quality experience for a child with MS in the recess setting. This positive experience is displayed by the many benefits of recess for children.

Benefits of the Recess Setting for Children

There are a variety of benefits of recess for children with and without disabilities. These include a variety of physical and social benefits. In terms of physical benefits, studies have shown that recess leads to an improvement in participation in out-of-school activity levels – children usually are involved in after-school physical activities on days in which they participate in in-school physical activities (Dale, Corbin, & Dale, 2000). Increased recess levels have also shown to lead to an improvement of general fitness and endurance levels for children (Kids Exercise, 2009). In terms of social benefits, recess has been shown to lead to an improvement in the following social skills:

- Attentiveness (Pellegrini, Huberty, & Jones, (1995)
- Conflict resolution
- Cooperation
- Taking turns
- Using language to communicate
- Problem solving in situations that are real (Council on Physical Education for Children, 2001)

***Modifications for Specific Multiple Sclerosis Symptoms
in the Recess Setting***

With a basic understanding of MS as well as the benefits of recess for children, one can understand the importance of including children with MS in the recess setting. The following table notes some basic MS symptoms and modifications that can be utilized to address them during recess. The reader should note that many modifications address multiple symptoms.

Table 1: Basic Modifications for Specific MS Symptoms in the Recess Setting

MS Symptoms	<ul style="list-style-type: none"> • Modifications to Address MS Symptoms in Recess (it is interesting • to note that some modifications apply to multiple symptoms)
Weakness, Muscle Spasms	<ul style="list-style-type: none"> • Allow for many breaks during the recess period • Provide a variety of equipment sizes such as smaller & lighter balls • Provide for engagement in non-competitive games • Provide shorter distances when throwing objects
Problems with walking	<ul style="list-style-type: none"> • Discourage activities in which students are playing at a high elevation (e.g. walking on playground equipment at a high elevation) • Provide activities that allow the student to remain stationary such as throwing/catching a ball from one location • Provide for engagement in non-competitive games • Provide shorter distances to walk during activities
Vision changes	<ul style="list-style-type: none"> • Discourage activities in which students are playing at a high elevation (e.g. walking on playground equipment at a high elevation) • Provide activities that allow the student to remain stationary such as throwing/catching a ball from one location • Provide for engagement in non-competitive games • Provide shorter distances when throwing objects • Provide shorter distances to walk during activities • Use “safe” throwing objects such as soft balls because of vision problems • Use throwing objects with a “strong” color contrast to the

	background
Sensory changes, tingling, or numbness	<ul style="list-style-type: none"> • Discourage activities in which students are playing at a high elevation (e.g. walking on playground equipment at a high elevation) • Provide activities that allow the student to remain stationary such as throwing/catching a ball from one location • Provide for engagement in non-competitive games • Provide shorter distances when throwing objects • Use “safe” throwing objects such as soft balls because of tactile difficulties
Tremors	<ul style="list-style-type: none"> • Allow for constant direct supervision to assist the student when needed • Allow for many breaks during the recess period • Discourage activities in which students are playing at a high elevation (e.g. walking on playground equipment at a high elevation) • Provide activities that allow the student to remain stationary such as throwing/catching a ball from one location • Provide for engagement in non-competitive games
Seizures	<ul style="list-style-type: none"> • Allow for constant direct supervision to assist the student when needed • Discourage activities in which students are playing at a high elevation (e.g. walking on playground equipment at a high elevation) • Provide for engagement in non-competitive games • Remember the effects of seizure medicine such as disorientation and thus allow for breaks and discourage activities in which the student is constantly moving
Lethargy	<ul style="list-style-type: none"> • Allow for many breaks during the recess period • Provide a variety of equipment sizes such as smaller & lighter balls • Provide for engagement in non-competitive games • Provide water for the student during the recess period

Methods of Including a Student with Multiple Sclerosis in Basketball, Soccer, and Bowling - Related Recess Activities

With an understanding of basic modifications for children with MS in the recess setting, modifications for specific recess activities can be discussed. The following list notes three recess activities and modifications for these activities for children with MS that can allow for a positive experience.

Table 2: Modifications for Including a Student with MS in Recess Activities

Recess Activity	Possible Modifications
Basketball Games	<ul style="list-style-type: none"> • Avoid competitive games where the student is forced to move at a high intensity level • Have students participate in basic shooting games such as “horse” in which students can remain in one place • Use a lighter ball for shooting • If possible, lower the basketball goal when needed • Allow for a variety of breaks
Soccer Games	<ul style="list-style-type: none"> • Avoid competitive games where the student is forced to move at a high intensity level • Have students participate in basic passing and trapping drills • Set a shorter distance to pass the ball • Remember that partner and group activities would be a good choice especially since they facilitate the development of social interaction • Allow for a variety of breaks
Bowling-Like Activities	<ul style="list-style-type: none"> • Provide a lighter ball for the activity • Set a shorter distance to pins • Allow for a variety of breaks

Conclusion

Children with MS often struggle in a variety of school activities. MS affects a child’s abilities in a variety of manners. However, the incorporation of simple modifications during the recess period can help to alleviate some of these negative effects in this setting. Like other children, children with MS can benefit in a variety of ways from participation in recess.

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