



## **REHABILITATIVE ROLE AND IMPORTANCE OF OUTDOOR PROGRAMME AND AQUATIC ACTIVITY**

### **Introduction**

Rehabilitation is a treatment or treatments designed to facilitate the process of recovery. After an injury, it is required to regain earlier habits /health conditions. Outdoor activities require to modify according to different types of disabilities .A deaf football player require signals instead of whistle. Aquatic activities for children with disabilities can foster physical fitness and motor skill development within a physical education program and during recreational pursuits. It is legal right to request swimming as part of IEP (Individualize Education Programme,) because aquatic is listed as a component of physical education under the Individuals with Disability Education Act (IDEA).Aquatic Instruction for student with disabilities is neither a luxury nor a therapeutic activity.

### **Role of rehabilitation**

Rehabilitation is to restore to a condition of good health, ability to work or the like. Rehabilitation is defined as “a set of measures that assist individuals, who experience or are likely to experience disability, to achieve and maintain optimum functioning in interaction with their environments”(WHO 2011), instrumental in enabling people with limitations in functioning to remain in or return to their home and community, live independently and participate in education, the labour market and civic life.

If any injury occurs in physical education class, immediate care should be provided in the **RICE** (rest, ice, compression, elevation) sequence: Rest should be given immediately to the injured part or joint. Ice or a cold application should be administered immediately and removed after 20 minutes. Cold may be reapplied in one to one and a half hours, depending on the extent of injury. The unavailability of commercial cold packs should not deter this critical treatment; food storage bags can be filled with ice cubes or crushed ice. An even more convenient home method is to place a bag of frozen vegetables on the injured area; frozen corn or peas conform nicely to an injured joint. Compression and elevation reduce internal bleeding and swelling. Without the ice and compression, intra-articular pressure from the swelling might stretch structures, such as ankle ligaments, just as if a person had twisted the joint. Some type of immobilization or rest is needed for musculoskeletal injuries; rest promotes healing and reduces the risk of a prolonged recovery time.

If any injury is not being managed in an appropriate manner, the physical educator might recommend that the student see a medical professional. Many hospitals provide sports medicine services; these clinics or departments are staffed by sport physical therapists or athletic trainers.

If the injured student is progressing normally toward recovery, the physical education class might provide an opportunity for exercises or activities that ameliorate the condition. The Brockport Physical Fitness Test is health related and criterion referenced. This test may be used to assess aerobic functioning, body composition, musculoskeletal functioning, and flexibility development, following recovery from activity injuries.

## **Importance of Outdoor Games**

Team sports are popular way for individuals with disabilities to become involved in physical activity. In elite or inclusive settings, individuals with disabilities have excelled and continue to excel in amateur as well as professional team sports, and many interscholastic and recreational sport programs encourage participation of individuals with disabilities on an integrated basis.

Fully integrated sport is especially encouraged for people with auditory impairments. In fact, as early as the late 19<sup>th</sup> century people with auditory impairments were excelling in sport with non impaired individuals. For example, William Ellsworth “Dummy” Holy, was a Major League baseball player from 1886 to 1902 and was noted as the first person with profound deafness to become a superstar in the game. He is regarded as the first person to use hand signals typically used by umpires and coaches. Hoy was inducted into the Cincinnati Reds Hall of Fame in 2003. Kenny Walker (Professional football) and Curtis Pride (Professional Baseball) are other examples of Deaf individuals who have excelled in sport. Both got signals from managers or coaches and team players while on the field. In other sports, including floor hockey, basketball, and volleyball, which are played in a relatively small area, very few modifications might need to be made. In volleyball, an official pulling the net might signal the beginning or ending of play.

On the other hand, sports played out-of-doors on a large field might require more modification. For instance, in football and soccer, flags and hand gestures can supplement whistles as signals. For deaf players, a bass drum on the sideline might signal the snap of the ball instead of the quarterback’s verbal cadence (National Federation of State High School Association, 2003). There are teams composed entirely of Deaf players who compete against individuals without disabilities.

Many organizations now provide sport programs for athletes with disabilities. The USA Deaf Sports Federation (USADSAF) and its international counterpart, The International Committee on Sports for the Deaf (CISS- Comité International des Sports des Sourds) offer competition solely for those with hearing impairments, CISS is member of the International Olympic Committee (IOC). USADSAF team events include baseball, basketball, ice hockey, soccer, softball, team handball, and volleyball, in which athletes are classified according to gender and degree of hearing loss. These sports are regularly featured at the Deaflympics (formally the World Games for the Deaf) and follow international sports federation rules with some minor adjustments. The Deaflympics occur every two years, alternating between the summers and winter game. Because few modifications are needed for people with hearing impairments to participate in team sports, Other sports organizations such as the National Beep Baseball Association (NBBA), Special Olympics, and the National Disability Sports Alliance (NDSA) have been formed to meet the needs of individuals with disabilities for segregated sport competition. However, Special Olympics promote team sports competition for individuals with intellectual disabilities in totally inclusive settings. This program is known as Unified Sports, Beep baseball, goal ball, quad rugby and wheelchair softball are relatively new team sports designed for players with disabilities.

## **Aquatic Activity Programme for Disable**

Adapted aquatics modified the aquatic teaching environment, skills, facilities, equipments and instructional strategies for people with disabilities. Aquatic activities programme can include different types of aquatic activities, including instructional and competitive swimming, small craft boating, water aerobics, skin diving and scuba diving (AAHPERD-AAALF, 1996).

Individualized instructional planning begins with defining which skills a participant needs to learn and assessing the present level of performance in those skills .Before performing the

assessment, an instructor should determine the skills to be assessed. To help the prioritize skills, questions such as these should be asked of the participant or caregiver:

- ❖ What is the participant interested in learning?
- ❖ What are the important safety skills for the participant ?
- ❖ Where will the participant use the skills outside the class?
- ❖ What equipment does the family have?
- ❖ What are the medical, therapeutic, educational and recreational needs of the participant?

After looking at all the possible skills that are important for a participant, the instructor look at the list of determiners if there are any repeat skills. Skills common to many of the questions just listed should become the priorities to assess (and then be taught, if they are lacking).Assessment items that determine the present level of performance in these skills should be developed.

### **Importance of Aquatics for Disables**

Aquatic activity can enhance physical fitness and motor skills development, within a physical education programme. Physical educators, school administrators, parents, related personels, and special education teacher must be educated about the importance of aquatic activities. The physical and psychological effects of aquatics for student with disabilities are more pronounced and significant than for students without disabilities. Because of the buoyancy afforded by water, many people whose disabilities impair mobility on land can function independently in an aquatic environment without the assistance of braces, crutches, walkers, or wheelchairs. Although adapted aquatic does not focus on therapeutic water exercise, warm water facilities muscle relaxation, joint range motion (ROM), improved muscle strength and endurance (Koury, 1996). Swimming strengthens the muscles that enhance the postural stability necessary for locomotors and object- control skills. Water supports the body, enabling a person to possibly walk for the first time, thus increasing strength for walking on land. Adapted aquatics also enhance breath control and cardiovascular fitness. Blowing bubbles, holding one's breath, and inhalation and exhalation during the rhythmic breathing of swimming strokes improve respiratory function and oral motor control, aiding in speech development (Martin.K, 1983).

Importance is not limited to the physical realm. Water activities that are carefully planned and implemented to meet individual needs provide an environment that contributes to psychosocial and cognitive development. As a student with a physical disability learns to move through the water without assistance, self-esteem and self awareness improve. Moreover, the freedom of movement made possible by water boosts morale and provides an incentive to maximize potential in other aspects of rehabilitation Joanne M.Koury, 1996

The motivational and therapeutic properties of water provide a stimulating learning environment. Some instructors even reinforce academic learning, successfully integrating cognitive concepts during water games and activities centered on math, spelling, reading and other concepts. Participants might count laps, drive for submerged plastic letters, or read their workouts from a whiteboard. These types of activities also help participants improve judgment and orientation to the surrounding environment

Fear is diminished when the aquatic instructor and swimmer easily communicate. In addition to communication skills, a thorough understanding of proper participant positioning, guiding, and supporting is essential. Proper methods of transferring, touching and supporting participants in the locker room, on the pool deck, and in the pool will also develop relationship based on trust. Knowing how to use and work all the adopted equipment, wheelchairs, and flotation devices provides an atmosphere of efficiency and safety that makes everyone feel comfortable. Likewise holding someone with firm and balanced grip, as close as safety and comfort allow, communicates care and establishes trust and rapport (Lepore, Gayle, & Stevens, 1998). In addition, an environment in which the instructor exhibits a consistent personality provides discipline methods that are flexible but consistent, uses caring verbal assurances, and provides balanced and controlled physical handling promotes trust, security and mental adjustment.

### **Conclusion**

Rehabilitation has the great role for disables to regain their body functional after injury .It is the step to make a disable person an able one. In the rehabilitative activities program outdoor and aquatics activity play a great role. Outdoor program can enhance awareness with the environment, leading to social adjustment. Aquatic Activities can enhance physical fitness and motor skills for disabilities. It improved muscle strength and endurance. Swimming enhance the postural stability necessary for locomotors and object control skills .Water support the body , enabling a person to possibly walk for the first time .Adaptive Aquatic also enhance breath control and cardio vascular fitness . The motivational and the therapeutic properties of water provided a stimulating learning environment. Participant improves judgment and orientation to the surrounding environment. Due to buoyancy body movement in water is easier, because, body weight in water is 90% lighter than normal. So aquatic activities is one of the best modality for disables.