Secrets to Healthy Aging

Falls Now the Leading Cause of Traumatic Brain Injury

Alma Bremer was a retired yet still active 86-year-old in May, 2003, when upon returning from a morning at the beauty shop and stepping out of her car, she fell. Bremer fell backwards, striking her head hard against the concrete. She had a recent history of falls due to occasional unsteadiness, but never before had she fallen and hit her head with enough force to cause a serious traumatic brain injury (TBI).

Bremer was taken to the Emergency Department at Mayo Clinic where she was diagnosed with a skull fracture, bilateral frontal subdural hematomas, a cortical contusion, and a subarachnoid hemorrhage.

Surprisingly, Bremer never lost consciousness and her most significant symptom was a severe headache. She was hospitalized for monitoring on a medical floor for a week and then transferred to the rehabilitation unit where she stayed another ten days. She had an unsteady gait and mild difficulties with memory, concentration, and visual-spatial abilities. Upon leaving the hospital, Bremer returned to her assisted living environment.

TBI Model System staff sat down with Bremer at her new home, Charter House, where the now 92-year-old shared how she has fared since her injury five years ago. It is immediately apparent that Bremer is as sharp and spirited as the last time we spoke. She feels she has made a strong recovery from TBI and receives excellent support and care at Charter House.

Since her injury, Bremer has used Life Line, a personal alarm system that allows the wearer to call for help. She follows other safety recommendations including use of a walker. “I have the Cadillac of walkers!”

Bremer also has furniture strategically placed in her home so as not to trip over it, but also so it serves as something sturdy to hold onto. Bremer

Alma Bremer celebrated her 92nd birthday

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kindly asks visitors who stop by to avoid moving things around. In spite of learning to be more cautious, she remains fearful of another fall.

The Centers for Disease Control has reported that falls are the leading cause of TBI. Sharon Munns, RN, of the Mayo Clinic Trauma Center and a member of the Olmsted County Falls Prevention Coalition, notes that falls are the leading cause of death due to unintended injury in Olmsted County.

Twenty to 30 percent of adults who fall suffer moderate to severe injuries such as hip fractures and traumatic brain injuries. Falls increase the risk of premature death and overall medical costs. Coalition goals are to keep people in their homes, prevent falls, teach balance and leg strengthening, develop networks of support, and provide in-home safety assessments. The Coalition provides an education program on fall prevention, entitled Preventing Slips, Trips, and Broken Hips, at regional senior living facilities, community education centers, and churches. Munns has seen promising early results.

Aside from being more cautious, other secrets to healthy aging from Bremer, an Arkansas native and highly regarded 30 year professor of nutrition at Illinois State University (ISU), are “everything in moderation” and “you must put good things into your body.”

When asked about her own favorite meal Bremer answered, with a twinkle in her eye, “all three!”

Bremer also advocates for actively using our brains. She reads the paper daily and works puzzles to exercise her mind. She maintained a positive attitude during her recovery and feels being upbeat on a daily basis was a tremendous help in adapting to the lingering effects of TBI.

Bremer proudly shares for our readers a coveted and often requested cake recipe. (See box on page 3).

It was originally published in the Pantograph in Bloomington, IL, on Dec. 14, 1958. It is very rich, Bremer points out, and “care should be taken in its handling. Do not ice the sides.” Enjoy, compliments of Alma Bremer.

Preventing Falls for the Elderly

• Exercise regularly – regular physical activity is one of the best ways to reduce chances of falling. Exercises that improve balance are most helpful.

• Home safety checks – remove things that might be tripped on, remove throw rugs, keep items you use nearby so a step stool is not needed, install grab bars in the bathroom, use non slip mats on bathtub and shower floors, install handrails and lights on all stairs and outside your home.

• Have your health care provider review medicines, including over the counter medicines.

• Wear safe, sturdy shoes with thin, non-slip soles.

• Poor vision increases the chance of falling, regular vision checks are recommended.

Source: CDC, www.cdc.gov/BrainInjuryInSeniors
**German Sweet Chocolate Cake**

1 package German Sweet chocolate  
1/2 cup boiling water  
1 tablespoon vanilla  
Pinch of salt  
1 cup vegetable shortening  
2 cups sugar  
4 egg yolks  
1 cup buttermilk  
2-1/2 cups cake flour  
1 teaspoon soda  
4 egg whites beaten

Melt chocolate in boiling water; add vanilla and salt after the chocolate melts. Cream shortening and sugar and add beaten egg yolks. Add 3/4 cups of buttermilk alternatively with the sifted flour. Dissolve soda in remaining 1/4 cup buttermilk and add to creamed mixture. Stir in chocolate. Fold in egg whites. Bake in three 9-inch cake pans at 350 degrees F. for 25 to 30 minutes.

**Filling**

3 egg yolks  
1 tablespoon flour  
1 cup sugar  
1/4 teaspoon salt  
1/2 pint whipping cream  
1 stick butter  
1/4 cup chopped pecans  
1 cup short cut coconut  
1 teaspoon vanilla

Beat egg yolks and set aside. Mix flour, sugar and salt and stir into the milk or cream. Add butter and cook in double boiler until butter is melted. Pour small amount over egg yolks, beat and add yolks to milk mixture. Add pecans and coconut. Cook until thick stirring constantly. Remove from heat and add vanilla. Spread between layers and cover the cake with remaining filling.

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**Minnesota’s Annual Walk for Thought:** “Mayo Mind Menders” participated in the Brain Injury Association of Minnesota’s annual Walk for Thought on Saturday, October 4, 2008. More than $150,000 was raised among walkers in Rochester, St. Paul and Duluth, far exceeding the 2008 goal of $110,000.
The goal of inpatient rehabilitation is to improve function to the point that patients can return home. Following inpatient care, individuals with TBI typically go on to receive further outpatient rehabilitation services, often for a considerable period of time.

Unfortunately, the problem of distance from specialized services is often a barrier, particularly in rural regions such as those served by the Mayo Clinic TBI Model System.

While therapy services are available in many small communities, they are often provided by therapists with limited expertise in addressing the unique needs presented by TBI. As a result, people with TBI from rural areas often move to be closer to specialized services, typically at their own expense, or simply do not receive the best level of service.

With advances in technology over the last 10 years, telehealth has developed as a means of providing a variety of services free from the obstacles posed by distance. Through telehealth, specialized clinical services may be delivered to those in need who live significant distances from specialized service providers.

In a recently completed Mayo Clinic TBI model System study, the efficacy of using telehealth to deliver specialized post-acute rehabilitation services to individuals with TBI was tested. The goal of the study was to assess the feasibility of an Internet-based cognitive rehabilitation program for individuals with TBI and associated memory impairment. Specific study aims were to identify factors (such as, severity of brain injury, cognitive impairment, level of emotional distress, personal preference) that predicted who could participate in and potentially benefit from telehealth-based cognitive rehabilitation, and to evaluate effects on emotional and cognitive functioning.

The first phase of this research was meant to determine types of disability or participant preferences that precluded participation in telerehabilitation. This included assessment of attitudes towards receiving rehabilitation in this manner, and determining what factors differentiated those who responded to telehealth from those who did not. Subsequent studies have measured the impact of telerehabilitation on emotional and cognitive functioning.

Participants were ten individuals with a history of moderate to severe TBI with documented memory impairment. All participants received training in how to use a secure instant messaging (IM) system. They were then scheduled to log into the system weekly to participate in online cognitive rehabilitation therapy sessions over the Internet with a cognitive rehabilitation therapist at Mayo.

Treatment focused on training to use a calendar system aimed at improving accuracy and efficiency in home and work tasks. Participants underwent assessment of cognitive function, psychological status, level of functioning and use of compensation techniques both pre- and post-treatment.

Results indicated that all participants were able to learn to use the IM system. Only two of the ten participants missed any planned sessions despite severe memory impairments, with an overall “no show” rate of 4 percent. Findings indicate that individuals with a history of TBI with concurrent memory impairment appear able to learn how to successfully use an Internet-based cognitive rehabilitation program. Complete details of this initial study will be published in the journal Brain Injury.

Building on these initial findings, research is currently underway which will assess whether participation in this Internet-based cognitive rehabilitation program results in improved daily functioning. ■

For more information about participation, see “Research Study” on page 7.
Ardis Sandstrom recently “pro-tired”, what she good naturedly describes as retiring before being asked to leave and while she is still spry enough to enjoy retirement, from her position as Executive Director of the Brain Injury Association of MN (BIA-MN).

Sandstrom served as the Executive Director for the past three years, but has a rich and storied history with the association. Prior to being coaxed into the Director position, Sandstrom served as the Associate Director for 7 years alongside Tom Gode.

During her productive tenure with BIA-MN, Sandstrom helped create Resource Facilitation, a program of tremendous growth and recognition and one subsequently replicated by many BIAs on a national level. External funding and staffing for the organization blossomed under Sandstrom’s careful leadership. Unique programs including Case Management, Multicultural Outreach and general education, information and referral, and volunteer programs have also been initiated or expanded greatly under Sandstrom’s watch.

When Mayo Clinic was funded by the state of Minnesota in 1994 to improve vocational outcomes following TBI, Sandstrom was there, at that time representing Courage Center. When Mayo Clinic was first funded as a TBI Model System in 1998, Sandstrom was there, with ideas and offers of support. When Mayo Clinic was funded two additional times as a TBI Model System and attempted to demonstrate and more recently to scientifically study the best way to teach advocacy skills to individuals and families affected by TBI, Sandstrom was there.

Mayo Clinic TBI Model System staff members wish to extend their sincere and heartfelt gratitude to Sandstrom for her unwavering commitment throughout our long and symbiotic relationship. Her zest and devotion to everyone directly affected by brain injury and to those working to improve the lives of these very individuals has been, well, awesome.

Thank you Ardis Sandstrom!
Meet David King

The BIA-MN Board of Directors voted unanimously to name David King as the Association’s new Executive Director, ending an extensive search of 170 candidates. With 27 years in the nonprofit sector, King has spent the past 15 years as Executive Vice President for AccessAbility, and Courage Center prior to that.

“Having been the Executive Vice President for AccessAbility for 15 years I was ready for a change,” says King. “And once I realized I was ready for a change, it was deciding where I wanted to go. When I looked at the Association there were three key areas that really drew me in.” Those key areas were King’s 27-year history, which included regular contact with individuals with acquired brain injury, having a father with a brain injury, and the BIA-MN’s recent history of increased interaction with diverse populations such as immigrants, refugees, and ex-offenders.

King looks forward to working with an experienced and involved Board of Directors and plans to continue to challenge and engage the BIA-MN staff while supporting an organization that focuses on innovation and excellence.

King is an avid runner and swimmer as well as a voracious reader. He is a season ticket holder to the Minnesota Opera and active in his church. He has been happily married for 19 years and has a 15-year-old son and 11-year-old daughter who are both very active in traveling sports, so you may run into him at various basketball and soccer tournaments.

Mayo Clinic TBI Model System staff welcomes King and looks forward to ongoing collaboration between the two organizations.

Welcome Aboard Mark Warhus

The Mayo Clinic TBI Model System welcomes Mark Warhus as the new Executive Director of the Brain Injury Association of Wisconsin (BIA-WI). Warhus is a 1974 graduate of the University of Wisconsin in Madison and holds a Master’s degree in Urban Affairs from the University of Wisconsin in Milwaukee. He is a Wisconsinite through and through, having lived in Waukesha, Madison, and for the last several years, Milwaukee.

Warhus comes to the BIA-WI with a strong background in grant writing. He worked as a grant specialist and program manager in education, social sciences, and humanities at the University of Wisconsin-Milwaukee. He also worked in grants and program development for the Milwaukee Art Museum and was the first employee and program manager for the Richard and Ethel Herzfeld Foundation, a private charitable foundation providing grants for arts, culture, education, and civic improvement in Milwaukee and southeastern Wisconsin.

Warhus describes the position of Executive Director of BIA-WI as a “wonderful opportunity” and looks forward to learning more about the local, state, and national challenges faced by individuals with brain injury. His overall mission is to grow BIA-WI and expand its activities to best serve individuals with brain injury and their families.

Warhus has three children, all presently living in Madison, WI. Warhus lives in Shorewood, WI, with his wife, Vicki Herman, and plenty of animals to keep them busy. His interests include researching and writing articles, and he has a published book to his name.
Brain Injury Association of Wisconsin
Fond Farewell to Patricia David

Patricia David, fearless leader of the Brain Injury Association of Wisconsin (BIA-WI) for the past 15 years, has retired. Pat David dedicated her heart and soul to the cause of brain injury. Her background as a Rehabilitation Counselor was invaluable to the BIA-WI. She quickly became the backbone of the Association. According to those who worked directly with Pat David, her commitment to the mission of the BIA-WI cannot even be measured. Pat David built capacity within the Association and moved it from a volunteer-based affiliate to one with paid staff. Pat David weathered the years of working out of a closet to a space large enough to house staff and a resource library. Along with expanded physical facilities, Pat David was instrumental in developing and expanding the five core services of the BIA-WI.

Pat David is known by her staff, by thousands of others in the state of Wisconsin, and by the staff of the Mayo Clinic TBI Model System as a person always willing to reach out and go the extra mile. She never backed down from a challenge or collaborative effort if it meant improving the lives of individuals affected by TBI and the systems that serve them.

On behalf of the Mayo Clinic TBI Model System we thank Pat David for her passion and years of service. Also, best wishes in all her future endeavors!

From left: Amanda (daughter); Patricia David; and Rich David (husband).

Research Study: Recruiting Volunteers

The Mayo Clinic is currently recruiting volunteers for a research study. The goal of the study is to improve memory compensation through providing cognitive rehabilitation over the Internet. We are looking for individuals with the following characteristics:

- 18-65 years old
- A documented acquired brain injury, including traumatic brain injury at least one year ago
- Lingering memory difficulties
- Access to a computer with Windows XP and a CD ROM.

The study involves weekly computer contacts between the participant and an experienced cognitive therapist at Mayo Clinic. An initial 2-4 hour interview on site at Mayo Clinic is required prior to beginning the study. You will be reimbursed up to $100 for transportation costs.

If interested, please e-mail Sherrie Hanna, MA: hanna.sherrie@mayo.edu or Dr. Thomas Bergquist: bergquist.thomas@mayo.edu or call 507-255-3116.
OUR MISSION:
The primary mission of the Mayo Clinic TBI Model System is (1) to study the course of long-term recovery after traumatic brain injury (TBI), and (2) to develop, provide and evaluate innovative services to address identified needs for service coordination and community reintegration for persons with TBI.

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- Thomas Tatlock, consumer, Wis.
- Mark Warhus, BIA, Wis.

Brain Rehabilitation Day Program (BRDP) Monthly Support Group

Current and past participants of the Mayo BRDP or former BIOP are invited to attend a monthly support group, held the second Wednesday evening of each month, at 7 p.m. at Saint Marys Hospital, 1-Domitilla (Room 1-314). Meetings are also open to current and past family members.

Partnership Approach to Brain Injury

Family members, friends, and interested persons are invited to attend The Partnership Approach to Brain Injury offered twice a year, usually in the fall and spring. This educational program teaches ways to cope with common problems following brain injury. For more information, or to be added to the mailing list for the Partnership program, call 507-255-3116.