GERINOTES

SECTION ON GERIATRICS, AMERICAN PHYSICAL THERAPY ASSOCIATION

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SECTION ON GERIATRICS

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- Fall Prevention—*Celinda P. Evitt, PT, PhD, GCS*
- Health Promotions in Geriatric Care: The Collaboration Between Physical Therapy and Public Health—*Kathryn K. Brewer, PT, GCS, MEd*
- Exercise Prescription for Older Adults—*Dale Avers, PT, DPT, PhD and Patrick VanBeveren, PT, DPT, MA, OCS, CSCS*
- Successful Aging: Biopsychosocial and Environmental Implications for Physical Therapist Practice—*Mary Thompson, PT, PhD, GCS*

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Editor's Note

EDITOR'S NOTE
Geriatric Clinical Specialists/Autonomous Practice

Carol Schunk, PT, PsyD

In this issue of *GeriNotes,* we congratulate the 88 new Geriatric Clinical Specialists (GCS). This is a huge honor and one that takes a great deal of time, dedication, and plain old fashion studying. Many, many years ago in a far away land….oops, wrong story…maybe in a not so far away land but many years ago, I was involved in the beginning stages of the development of the Geriatric Clinical Specialist criteria and training. Working with a group of extremely talented Section members, we were very vested that Geriatrics become one of the approved areas in the new era of clinical specialists. Having a doctoral degree in psychology, I taught the social science portion of the specialty training course to prepare that first group to sit for the exam. In addition, I participated in the item writing workshops. Both the item writing and the preparation courses have become much more progressive in recent years as the profession moved into an era of evidence-based practice. Although I am not a GCS, I admire all who are and view the designation as an ongoing process that does not stop with crossing the stage and receiving the certificate. The designation has multiple ramifications. First and foremost, I think our patients and clients benefit from having a therapist who is a GCSs. Secondly I think GCSs have an obligation to mentor others, be it fellow therapists or students. They should seriously consider their place as a role model for other therapists, encouraging those who are interested to consider a career working with older adults. Lastly the obligation of a CGS is to themselves, to continue their life long learning so that their skills and their practice will evolve just as the item writing and the preparation courses have matriculated since I was involved many, many years ago.

Along the same thought process, Section President John Barr's Perspective "What Shall We Reflect," should prompt all Section members, GCS and non GCS, to think beyond their daily routine to a more encompassing perspective. John asks Section members to reflect about what they have done to change themselves in relation to their profession. One way we are changing is in the area of autonomy. I think there is huge dichotomy with Geriatric Physical Therapists and the concept of autonomy. I have lectured on this subject at a 2005 CSM program and spend time on the topic during the continuing education programs I teach on Home Health Rehabilitation. I am not sure the majority of therapists who specialize in treating the older adult would consider themselves as autonomous practitioners. This is very alarming. If you examine two factors--the independence in geriatric practice settings and the complexity of the older patient--there is no question that the groundwork for autonomy is present. The key is getting everyone to recognize the multiple situations and independent decisions that are made daily in clinical assessment and intervention. Granted there are still some who just follow but that number is dwindling. With the example set by all the Geriatric Clinical Specialists, Section members who reflect on change as prompted by John can only acknowledge progress on their journey to autonomy.

Age is matter of feeling...not years.

— George William Curtis

WINNER OF 2007 SECTION AWARD FOR OUTSTANDING POSTER

Title: Age-related effects of a cognitive task on frontal plane stability during narrow-base walking

Authors: Valerie E. Kelly, Matthew Schrager, Robert Price, Luigi Ferrucci, Anne Shumway-Cook

Institution: Rehabilitation Medicine, University of Washington: Kelly, Price and Shumway-Cook
Clinical Research Branch, National Institute on Aging: Schrager and Ferrucci

PRESIDENT'S PERSPECTIVE: WHAT SHALL WE REFLECT?

John O. Barr, PT, PhD

Time Magazine has publicly designated its "Man of the Year/Person of the Year" since 1927. A man, woman, or idea is chosen "for better or worse, that has most influenced events in the preceding year." Needless to say, the list of recipients since 1927 has ranged from saints to sinners. In January, the 2007 Person of the Year was declared to be… "You!" As *Time* noted: "Who else? You changed the way we see ourselves, and the world we live in forever…" The unconventional cover of this December 25, 2006/January 1, 2007 issue depicted a computer monitor with a silver mylar screen that could reflect the visage of the reader… you…in its mirrored surface.

As the person reflected in that computer's screen, what have each of us done to change the way we see ourselves and our world as physical therapists, physical therapist assistants, or entry-level students, in the past year?

Annually, I look forward to the APTA's Mary McMillan Lecture as a source of professional inspiration and challenge. Although I greatly enjoyed hearing Stanley V. Paris, PT, PhD, FAPTA deliver "In the Best Interests of the Patient" at the 37th presentation in this lecture series, I was even more impressed by reading the text of Dr. Paris's message, as published in the November 2006 issue of *Physical Therapy.*[1] In a very personal and compelling manner, Dr. Paris stressed the theme of autonomy….self-governing…the freedom and responsibility to make independent decisions…not independence…but the status that enables collaborative relationships in research, practice, and education. Among the 6 pillars of Vision 2020 (ie, Autonomous Practice; Direct Access; Doctor of Physical Therapy: Evidence-based Practice; Practitioner of Choice; and Professionalism), the pillar concerned with autonomy ranks preeminent for me.

As with all of you, my initial professional self-image was shaped by an amazing array of individuals who contributed to my entry-level professional education and socialization. For me, at SUNY UpState Medical Center, Syracuse, and through the New York Chapter in the early 1970s, these individuals included Gary Soderberg, PT, PhD, FAPTA and Marilyn Moffat, PT, PhD, FAPTA. Both of these individuals were and continue to be strong advocates of professional autonomy. During my early years as a staff physical therapist at the University of Wisconsin Hospitals, Madison, I was afforded many opportunities for autonomy, while being valued as an important member of teams caring for patients with burns, neurological trauma, and pediatric disorders. Interestingly, the hospital's morale-boosting staff slogan of the time was "My service reflects me!"

Recently, Robert Cialdini, PhD, Professor of Psychology and Marketing in the W.P. Carey School at Arizona State University, presented an on-line marketing and services leadership series on the "Gentle Science of Persuasion."[2] Dr. Cialdini contends that persuasion is based on 6 basic principles that appeal to a set of deeply rooted human drives and needs: liking, reciprocity, social proof, consistency, authority, and scarcity. While all of these principles can be linked to the profession of physical therapy, I found his discussion related to authority…our tendency to listen to experts…to be of particular relevance. Cialdini advises that any communicator who wants to move people in his/her direction needs to reveal their credentials before trying to influence those individuals. People want to work with and are more likely to listen to experts. As an example of this principle, Cialdini described a hospital physical therapy department where many patients post-stroke failed to comply with their PT programs after being discharged, even when advised that doing so would provide a better chance for recovery. Interviews with patients disclosed that although they knew the credentials of their doctors, they had no clue about the expertise of the PT staff…so why follow their orders? Subsequent to Cialdini's recommendation that the staff post their degrees, awards, and certifications on the walls of department, patient compliance was reported to increase by 34%. At times it seems as if some members of our profession are so timid about making their expertise known…in effect not wanting to even cast a reflection…one has to wonder if we're really on the path to autonomy, autonomous practice, and Vision 2020.

At the 2007 APTA House of Delegates, the Section on Geriatrics will be bringing forward 5 motions that emanated from our Exercise Task Force, chaired by Dr. Moffat, and approved by your Board of Directors. These motions are concerned with: an annual visit to a physical therapist for all adults; promotion of the need for this annual visit; physical therapists being included in the "Welcome to Medicare" visit physical exam; physical therapists as role models for patients/clients by meeting national guidelines for exercise participation; a marketing campaign directed toward nurse practitioners and other providers to promote physical therapists as exercise experts. Up-to-date wording of these motions and their support statements will be available on our website www.geriatricspt.org. Questions and comments about these motions can be directed to either Section Vice President, Anne Coffman (acoffman@wi.rr.com) or Section Delegate, Kathy Brewer

(ptkkb@cox.net). Please make it a point to review these motions prior to attending your spring chapter meeting or assembly so that you can contribute to further discussion of these motions. In the context of this *President's Perspective,* these motions represent actions to describe our expertise, exercise authority, and act autonomously in a manner that will continue to change the way we see ourselves and our world of health care.

REFERENCES

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2. Cialdini R. The gentle science of persuasion, Part 5: Authority. Available at: http://knowledge.wpcarey.asu.edu/index.cfm?fa=viewfeature&id=1362. Accessed February 20, 2007.

Dr. Barr is a Professor in the Physical Therapy Department at St. Ambrose University, Davenport, Iowa. A previous member of the Section's Board of Directors, he serves on the editorial board of the Journal of Geriatric Physical Therapy.

YOUR WEBCONNECTION

Lucy Jones, Website Committee

One of the many benefits of your Geriatric Section membership is access to our website, www.geriatricspt.org. Besides the news page, browse the recent research, educational opportunities, the membership directory, course offerings, issues of the *Journal of Geriatric Physical Therapy* and *GeriNote.* It is all available on the website. The site is updated monthly, by Jess Sabo, our Section Executive. We are entering into a revision and overall upgrade of the site, upgrading numerous features and links.

We are considering ways the site could be updated or modified to increase our user friendliness and to enhance our advertising. We need your fresh insight and welcome your participation as a member of the Website Committee**.** If this subject peaks your interest, and you would like to participate in furthering the Section's website visibility and effectiveness, consider becoming involved as a team member for your website connection. If interested in working with our team, please contact me at lhjonespt@aol.com.

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SOCIAL SECURITY REFORM: THREE BASIC OPTIONS

Christa Peters, CSW

The following article was written to meet requirements of an Applied Public Policy course at the University of Indianapolis, Center for Aging taught by Geriatric Program Consultant, Jennifer Bottomley PT, ME, PhD. The course is designed to prepare the learner to apply current public policy to the spectrum of social and clinical settings, emphasizing the major issues and trends which have been made the subject of intense public concern and governmental interest. Thanks to Jennifer for sharing her student's paper with GeriNotes.

INTRODUCTION

Over and over again it is argued that Social Security was the best social program ever started. Well, the greatest social program ever is about to be in the biggest trouble ever. As the latest Social Security Trustees Report makes painfully aware, there will be a funding shortage in the near future. While Medicare is in an even more dire position, the majority of publicity, programs, and discussion has surrounded Social Security reform. The most widely publicized option for policy reform has been to privatize Social Security benefits and give control to the taxpayers. There are many advantages and disadvantages to this suggestion. The following will discuss Social Security's history including the present, future, and possible alterations.

BACKGROUND

Social Security began in 1935 after an Act suggested by then President Franklin D. Roosevelt was signed, introducing a new social insurance program.[1] The Act was intended to provide economic security for the aged in order to protect them from potential losses in their future. These could be from disability, a deceased spouse, and/or retirement. Social Security is a complex program with 2 distinctly different components. The first is the Federal Old Age Survivors Insurance (OASI), which pays benefits to persons who are retired or to the spouse of a retired worker. The second is Disability Insurance (DI), which provides benefits to disabled workers and their families. These two programs are often referred to as OASDI. Combined these two benefits provided compensation to over 47 million people in 2004 totaling over $497 billion.[1]

In order to provide billions of dollars in benefits there is a complex system designed for funding Social Security. The largest source of funding for Social Security is through payroll taxes. For all wage income there is an OASDI tax rate of 12.4%.[1] This tax is split between employers and employees so that each party is responsible for half. There is a limit as to how much income can be taxed for OASDI based on average wages, which changes over time as the average income changes. In 2006, the maximum taxable amount is $94,000.[1] The second source of revenue for OASDI is from income tax on benefits received. Beneficiaries are responsible for paying this income tax based on their own Social Security benefits and currently 85% of benefits are taxable.[1] The income from that taxation is shared with Medicare Hospital Insurance, but the majority of the revenue goes to Social Security. The third source of funding is through interest earned on the assets of the Trust Fund itself. [1]

The actual benefits a person receives are based on his/her average income during his/her working life. The highest wage earning in 35 years of a person's life are averaged to determine what the benefit will be.[1] This way a person's benefits are directly related to his/her lifetime income and are calculated based on the contribution to Social Security. There are adjustments as time passes with regard to the cost of living to ensure a livable benefit. The Social Security Administration recently announced that in 2007 Social Security benefits will increase by 3.3% to account for inflation.

In order to collect benefits there are rules and regulations that need to be followed. There are age and ability requirements and regulations about spouses and dual earner households that limit the amount of benefits a person receives. There are penalties for taking early retirement and beginning to collect benefits as well as incentives for individuals collecting later in life.[1]

The system is often described as a 'pay as you go' system because the current taxes collected are paying for beneficiaries today.[1] There are no specific accounts that hold an individual's taxes and save them for the future. Beneficiaries rely on the workforce at the time of their retirement in order to collect their benefits.

The Social Security Trust Fund is how records are kept of what has been paid and what will be paid to beneficiaries. The Trust Fund does not actually have any money in it, but is the accounting aspect of the program.[1] The Trust Fund is what records expenditures and revenues. At this point all of the revenue exceeds the expenditures and the extra money is used by the federal government to fund other programs. The federal government in turn replaces the money with very large IOUs.[1] The Trust Fund carries a value not of a balance, but of assets that are recorded. All actual monetary transactions go through the United States Treasury. Some of the revenue is invested in securities that are earning interest, which is also added to the net revenue of the Trust Fund for any given year.[1] However, the interest earned comes out of the general operating budget of the government. The Trust Fund is an intricate system fully intertwined in the financial operations of the federal government's spending and accounting. The Social Security Trust Fund is operating at a surplus and will be for some time, but not forever. [2]

ISSUE

According to the latest Social Security Trustees Report, the Trust Fund will be in a deficit beginning in 2040. [3] This

estimate changes every year and continues to draw closer. The primary factor driving that estimate is the increase in number of people who will be collecting Social Security benefits as the baby boomers will be retiring soon. This year the first baby boomers turned 60 years old. So, over the next 30 years there are going to be double the number of seniors meaning a significant increase in the number of eligible beneficiaries.[4] Another major factor driving the estimate of a deficit in 2040 will be the decline in the labor force to retiree ratio over the next 30 years. Currently there are 3.4 workers per pensioner and in 30 years there will only be 2 workers per retiree.[5] This clearly indicates that the revenue per retiree will not be accruing at the same rate as it is currently. The decline in the labor force is primarily because of the graying of the baby boomers. A third cause for strain on the Social Security Trust Fund is the dramatic increase in life expectancy of Americans. When Social Security was commenced, the average life expectancy was 61 years old. To this day the average life expectancy is 76 years old. People are living longer and collecting benefits for much longer than the system was ever intended to provide. With the current age for collecting benefits having been increased to 67 years for those born after 1960, changes have been made in this direction, but many retirees have been and will continue to collect benefits for many years.[2]

ALTERNATE POLICY SOLUTIONS

Since its inception, Social Security has been reformed many times and changes have been made to accommodate a growing and ever changing society. With a heightened awareness that the funding of the 'greatest social program ever' is in imminent danger, there have been several different suggestions about how to be sure people continue to receive benefits. There are 3 major categories in which reform could be classified. The first is benefit reduction, which could consist of a variety of things like raising the retirement age, reducing actual benefits, reducing the cost of living adjustments, and/or using progressive indexing.[6] The second category is to increase revenue which could consist of raising the payroll tax rate or increasing the maximum amount of wages taxable.[6] The third category is to privatize Social Security with money from the Trust Fund going into stocks and/or creating personal retirement accounts.[6]

Since its inception, Social Security has been reformed many times and changes have been made to accommodate a growing and ever changing society.

Increasing Revenue

A reform measure that could create a major difference in the revenue of Social Security would be increasing the payroll tax rate. However, President Bush has declared that he would not authorize an increase and will keep the payroll tax rate at 6.2% for employees and 6.2% for employers.[7] However, he has not eliminated the option of increasing the cap on taxable income. This measure could prove very significant in terms of increasing the revenue of the Social Security Trust Fund.[7] Eliminating the cap on taxable wages could solve over 90% of the funding shortfall of Social Security.[6] Those who oppose this plan are those who are making the higher incomes as they should not be paying for something that they will most likely not need. By eliminating the cap the burden is not only on employees but also employers as they must pay for half of the payroll taxes. It could be speculated that employers will begin to stop supporting Social Security if they are carrying a heavier burden. Increasing taxes is not very popular with the majority of taxpayers even though it is a straightforward solution to the problem.

This solution to the funding shortfall is the simplest and most effective. A change in the taxable amount for Social Security could have immediate results. As opposed to other solutions where time will be needed to see any difference and/or effectiveness this solution is immediate. It is also a long-term solution. Instead of trying policy that may work, but may not, this would definitely have a positive impact on increasing the Trust Fund. This policy change could be seen as a measure to redistribute income within the country as it essentially means the wealthiest are funding benefits for many of the beneficiaries. This country and government is so afraid of income redistribution that this solution to Social Security funding looks a bit too much like redistribution. Unfortunately the influence of lobbyists is backed by the wealthiest taxpayers and the industries and corporations with the most money. This means they also have the most power to stop this policy change and undoubtedly will stop any measure that increases revenue as a solution to the funding shortfall.

Reducing Benefits

Another approach that is also not popular with taxpayers is reducing the benefits of Social Security. The full retirement age has already been increased to the age of 67, but the age for collecting full benefits could be raised even higher.[2] Americans are healthier and living longer so it would not be unreasonable to ask people to work longer before being able to collect Social Security benefits. However, most people do not want to work until they are 70 years old. Some professions can be particularly hard on the body and those people who work in more manual labor settings would be at a disadvantage compared to others as they may physically suffer by having to work longer. A less drastic approach would be to accelerate the timeline of age eligibility and raise the age to 67 earlier than planned. Currently the retirement age of 67 does not become effective until those born in 1960 or after reach retirement.[2] By making those born in 1950 and after have to wait until the age of 67 could drastically improve the outlook of the Trust Fund, but again people do not want to wait any longer than they are already required.

It would be acceptable to change the age of eligibility for benefit collection based purely on life expectancy. The change in life expectancy from Social Security's inception and today is well over 10 years, but the retirement age has not changed to reflect it. However, workers today have more complicated

health problems and a greater number of chronic health conditions that make it difficult to remain in the workforce as long. The arguments appear legitimate on both sides of this issue and it remains difficult to tell a person that they must wait longer and longer to exit the workforce, but based on the numbers it makes sense. Raising the retirement age would be difficult to change any more than it already has and fortunately there are other options for change that may be more conducive to the current American worker.

Another means for reducing benefits is to lower the cost of living adjustments that occur every year. Annually the government decides what the increase in benefits should be based on inflation. A suggestion would be to reduce the cost of living adjustments by a small percentage in order to save money.[6] This suggestion would definitely reduce the benefits a person receives, but the most affected would be the poor elderly. Every little bit makes a difference to a person living below the poverty line.

To decrease what are fair increases would be unfair to the poor and a major economic disadvantage. Some would argue that Social Security was never intended to be the sole source of income for a retired person and if someone is in that situation and relies on Social Security then why should everyone else pay for them. A reduction in cost of living adjustments are only a major detriment to the poor, so why not implement a policy that will help more people in the future to have something rather than making the current benefits larger. While the impact is greater on the poor, everyone is affected by the cost of living adjustments and to reduce them would affect everyone. Without having accurate cost of living adjustments, Social Security would become obsolete and to change its ability to be applicable through time would be a major alteration to this great program's effectiveness.

A third way of reducing benefits would be to use progressive indexing, which consists of means testing. Persons who are making a certain income prior to retirement would have their benefits decreased. For example anyone with an income of over $20,000 would have their benefits cut.[6] This would be in essence punishing the middle and upper classes and those who have planned for retirement. This approach is really about assisting the very poor and eliminating the safety net for anyone else. The purpose of Social Security is to be one part of financial solvency in later life and for those who have practiced this they would be punished in the long run by progressive indexing.

Means testing would turn Social Security into something that it is was never intended to be. It was meant for all persons who have worked and indexing would change this into a means tested program. However, it is possible to have a means testing that is voluntary. Another option could be that for a person with a certain annual income they would be given the choice of whether they would like to collect benefits. Meaning a person with a substantial income who would not benefit in any great way by collecting Social Security, could choose to waive their right to that money and leave it in the Trust Fund to be used for others. This way everyone is still able to receive what they paid into the Trust Fund, but allowing people the power of personal choice.

Privatization

Ideally, the solution to the shortfall in the Social Security Trust Fund would not change benefits and the current Administration is trying to do just that. One of the most highly publicized and debated approaches to reform is to privatize Social Security through individual accounts.[8] This idea is not new and has been discussed in the public sector for many years and was a central issue in both the 2000 and 2004 presidential elections. There are a few advantages and several disadvantages to this idea.

The basic premise of privatization is for people to have some control over their income that goes into the Social Security Trust Fund. Instead of having all of their payroll taxes go to the government, a percentage of funds would be placed into private accounts where the interest earned could be greater than through the Trust Fund. These accounts could take several different forms like stock-index mutual funds, bond funds, and/or cash. Once a person retires these accounts would be turned into annuities and a monthly rate would be determined; benefits would reflect his/her accounts. President Bush has suggested that up to 4% of a person's payroll tax could be placed into personal accounts.[9] Different plans are calling for different percentages ranging from 2% to the full 6.2%.[5] The reason it is expected that private accounts would increase revenue is because the current revenue from Trust Fund bonds earns about 3% where as stocks and bonds could earn up to 5% in interest.[9]

In November 2005 the current Administration announced a plan for the private retirement accounts that would begin with a $1,000 initial amount limit. This means that higher wage earners would not be able to contribute a full 4% of their income because they would go over the initial cap. Every year following the amount allowed in the account would increase by $100 plus any natural wage growth associated with an individual's income.[9] The cap would increase until all workers would be able to place a total 4% of his/her income into the account. None of the money placed into the private accounts could be taken out until retirement. People would have a choice about whether they wanted to participate using the traditional system, using the Trust Fund, or using private accounts. Another component of the program would be the concept of lifecycle accounts. This would mean that the closer a person is to retirement age, the smaller the percentage of the accounts is based in the stock market.[9] This is a means of trying to ensure greater solvency when nearing the time for drawing on benefits.

Besides a potential higher interest yield, another advantage to privatizing Social Security and allowing people to have control over private accounts is inheritance.[8] Currently, when a person dies there are no Social Security benefits passed on to children. Spouses can receive partial benefits, but no other family members are eligible. With private accounts those funds would be passed on as the beneficiary would be the owner. Currently the government is the owner of the money until a beneficiary receives a check. When looking at the changing face of society and the number of partnerships that are not legally recognized, private accounts are appealing. To those the government defines as having an alternative lifestyle, there

are no spousal benefits, which could be ameliorated through private accounts.

One of the criticisms to the privatization of Social Security is that it changes the entire purpose of the program. Social Security was created to ensure that people had some form of income later in life to ensure solvency and eradicate poverty of the elderly. As an insurance program privatization would reduce its reliability resulting in an absence of the certainty it was intended to create. There would be a safety net, but a severely compromised safety net through privatization. It can be stated over and over again that there is a serious risk involved, and while there could be extensive pay-offs, the question remains, "is it worth it?" Reform through privatization is not just about money, but about changing the intent and purpose of Social Security.

The second criticism is the fee of privatizing the benefits. Traders and those who are marketing and working with the monies are going to be collecting fees. This results in a loss of the benefits. Currently there are no fees coming out of the revenue of Social Security to pay traders and other handlers. However, there will be broker fees and those will come off the top. For a younger person beginning the process of privatization even a 1% annual fee would reduce their final balance by 25% after 25 years of investments.[10]

Another disadvantage and/or criticism of privatization is the cost of transition. Many reports offer varying estimates as to what the cost of transitioning the program would be, and all are gross amounts. Varying estimates are $1 to $2 trillion while money is shifted into the accounts.[5] The beginning of the process will include borrowing around $754 billion through 2015 to initiate the accounts.[9] Also, the hole created by transferring the money could be up to $3 trillion that would be needed to pay current and near future retirees.[10] Depending on the literature, the estimates vary, which also appear to correlate with the perspective of the author providing the statistics. The issue with the transition is that it is complicated, expensive, and time consuming. However, over time this debt, regardless of its amount, would be reduced as liabilities to the Trust Fund would be eliminated.

A fourth criticism of privatization is the sheer risk of putting money into stocks that are unreliable. While the yield could be beneficial, the potential loss is also great. The events preceding and following September 11, 2001 proved that anything can happen and the stock market can change dramatically. With the collapse of the NASDAQ prior to September 11, 2001 compounded by the events on that day the Dow suffered its worst day since the Depression.[10] If the money is invested poorly or there are significant changes within the Stock Market, then people will be receiving less money than they would have with the current structure.[5] By taking Social Security funds and putting them at risk in the Stock Market it would ultimately change its intended purpose. The use of lifecycle accounts acknowledges the risk of the stock market and while efforts are being planned to protect one from a possible financial crisis it is still a major risk.

Other countries around the world have been dealing with all of these issues with their government pension systems. Sweden has one of the most aged populations, so they have already made changes to their system and currently have a privatized account plan. There have been advantages and disadvantages from their perspective. In a policy brief from the Brookings Institute it is made clear that whatever the system is and whatever transition is made the details are what is more important. While the big issues are crucial, the actual implementation of a program with regard to administration and fees and the handling of accounts is a major factor for success.[11] There are options with privatization, but the plan needs to be extensive and account for as much as possible before its implementation to encourage success.

Privatization is a highly complicated option for reform and one that is still not ironed out in terms of details. There are many components to privatization with many of them involving great risk, which is contradictory to the purpose of Social Security. There are advantages to privatization, but it does not seem that the advantages outweigh the disadvantages in any way. The partisanship of reform has been very present and a large part of the privatization issue. Social Security reform should not be about political parties, but just about the policy and privatization has done nothing to bring the parties together to work on policy change. Hopefully, reform will occur and it will not involve great risk, but a commitment to solvency by both political parties to increase the greatest good of Social Security.

CONCLUSION

Social Security coverage is nearly universal, with about 95% of older Americans either currently receiving or eligible to receive benefits upon retirement. For two-thirds of older adults, Social Security makes up the largest portion of their monthly income, and for almost one-fifth, it is their only source of income.[8] This program is extremely important to a lot of people and is a true income insurance in their lives. The future of Social Security is a grave issue that needs not be ignored as it could make or break the future of America. There are many different options of ways to ensure the solvency of the Social Security Trust Fund. Just because something is highly publicized does not mean it may be the best option. People need to get involved in this debate by understanding the options and how it will affect them and especially those of the younger generations. They are the people with a vested interest even if they do not realize it. Something needs to change and the change needs to happen now.

For two-thirds of older adults, Social Security makes up the largest portion of their monthly income, and for almost one-fifth, it is their only source of income.

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OUTSTANDING PTA AWARDEE

Lois Armour is the 2007 Section Outstanding PTA awardee.

Lois was on a Medical Leave of Absence at the time of CSM, so the plaque was awarded to her by friends when they got home. Lois is now back in action and continuing to exemplify an outstanding PTA!

WHO'S MINDING MOM'S MEDS?

Patricia Antony, PT, GCS

The following article is information to pass on to clients in keeping with our professional role as patient advocates.

The statistics show that people aged 65 and over (considered elderly) have more illness, consume more drugs, and are more sensitive to adverse drug reactions than other age groups. Roughly two-thirds of the elderly use prescription and over-the-counter drugs. Women use more drugs than men—especially psychoactive and antiarthritic drugs. The average elderly person uses 4 to 5 Rx drugs and 2 over the counter drugs per day. The frail elderly use even more, and there is evidence that drug use is greater in the hospital and facilities than in the community. A typical nursing home resident uses 7 to 8 Rx drugs.[2]

In the United States, medication related problems result in 200,000 deaths per year. Half of the illness, disability, and premature death caused by medication related problems are preventable. In elderly individuals, 30% of hospital admissions may be linked to medication related problems.[1,3,4]

While most of the drugs taken by the elderly are clinically appropriate and necessary, many times seniors find themselves with medication related events that adversely affect their health. The more medications taken, the greater the risk for adverse drug interactions. Some of the causes of drug related issues in the elderly are:

Polypharmacy: Defined as the concurrent use of multiple medications.[6] Many seniors see multiple physicians who prescribe based on their own specialties. This often leads to multiple medications for the same problem and/or medications that enhance or reduce effectiveness of other medications. Often, medications are given to treat the side effects of other medications—leading to a vicious cycle of never ending drugs. Many seniors don't perceive over the counter medications or herbal supplements as drugs and neglect to report that they are taking them to their doctors.

Inappropriate Prescribing: Many seniors have drugs prescribed by their primary care physician who may not be up to date on medications and medication dosages that are appropriate for the elderly. They may be prescribed something in an Emergency Room situation because the ER doctor was unaware of the patient history. Many physicians are not clear with instructions on when to STOP taking a medication or how to taper off medications.

Physiological Issues: Nutritional status, metabolic function, hydration, physical activity, and renal function are some of the factors that can affect how an elderly person processes a drug. The amount of time that a drug can stay in a person's system is very relevant to how that person processes and excretes that drug. Diabetes, liver, and kidney problems can all drastically alter an elderly person's tolerance to a given medication—even when prescribed at therapeutic levels for the elderly.

Cost/Insurance Factors: Unfortunately, many seniors take their medications by what they can afford or what their insurance will cover rather than what is optimal for their health. It is not uncommon for seniors to cut their medications in half trying to 'stretch' their medications and lower their costs. It is also not uncommon to find seniors who stop taking a prescribed medication because it is not covered by their insurance pharmacy formulary. These same seniors are often too embarrassed to tell their physicians that they aren't taking their medications as prescribed.

Adverse Effects: Many seniors stop taking their medications because they are experiencing adverse side effects such as insomnia, dry mouth, falls and balance issues, orthostatic hypotension, or sexual side effects. Many do not consult with their physicians prior to stopping the medications and put themselves at further risk by stopping the drug improperly.

Mental Status Changes: Memory loss is a very common cause of improper administration of medications in the elderly. The more frequent the medication schedule, the more likely that a senior is going to miss a medication dose because they lost track of time or simply forgot. Seniors with dementia are particularly vulnerable to taking their medications improperly.

Sensory Issues: Seniors with low vision may have trouble reading the small print on the prescription bottle or the instructions on how to take the medications. Seniors with insensate hands (such as diabetics) may have trouble opening the bottles or getting small pills out of medication boxes. It is not uncommon in either case to find dropped pills on the floor. Even if the senior finds the pill later, he/she may not know which pill it is or when the pill was dropped.

Hoarding Behaviors: Many seniors are very reluctant to throw away unused medications. This is understandable given the cost of medications, but can lead to accidental poisoning and polypharmacy issues. It is not uncommon to find pills aged over 10 years in the medicine cabinets of the elderly. Taking old medications with reduced efficacy can have dangerous effects–or no effect at all. Seniors need to be encouraged to flush out of date medications down the toilet and store unused medications in a separate place from the current medications.

Sharing: Seniors talk about their illnesses with each other. In their eagerness to help someone out, it is not uncommon for a well intentioned senior to share their medication with a friend so that friend "can see how it works for them." Obviously, this is a very dangerous activity, but surprisingly common.

Self Prescribing: In this age of information, seniors will often self prescribe based on TV commercials, or helpful health store clerks. The use of the internet has prompted a lot of self diag-

nosing and subsequent self medicating that can lead to disastrous effects. The availability of drugs over the counter in the United States is staggering as compared with other countries which only makes this problem worse.

Having described many of the common causes of drug related problems in the elderly, what can we do about it?

1. **Keep up to date lists of current medications and doses.** Ensure that every MD that the senior sees knows exactly what medications are being taken. Some physicians are now requiring patients to bring the actual medications with them to each appointment.
2. **Ask questions**! Seniors need to be educated on what medications they are taking, how the medications should be taken, and what condition they are taking the medication for. They should also be instructed on common adverse reactions to look out for what to do about adverse reactions.
3. **Be clear about allergies or adverse reactions to medications taken in the past.** The primary care physician of the senior should be fully apprised of the patient's history and current medications.
4. **Use medication systems to assist with memory issues**. Some seniors do just fine with simple medication boxes and others may need more sophisticated methods of medication delivery. There are some slick medication dispensers that are computerized and use the phone lines to remind clients to take their medications. These systems are invaluable for those seniors who have to take medications more than 2x/day or for those who tend to self medicate. Once the medication dispenser is loaded, it can be programmed and locked so that the medications are delivered only as directed. There are also phone services that can call to remind people to take their meds. There are also personal services that provide companions or nursing staff to assist an elderly person with taking their medications.
5. **Do some homework before choosing a medication dispenser.** Some medication dispensers are easier to get pills out of than others. The dispensers that have individual cups with lids on are a lot easier for a low vision or insensate patient to get medications from. The client can tip the pills directly from the cup into the mouth without having to actually handle the pills.
6. **Get all the medications from the same pharmacy.** This gives seniors a backup safety net. If a physician has inappropriately prescribed a medication, the pharmacist should catch it before the medication is dispensed. Develop a relationship with the pharmacist at the pharmacy of choice so that there is a comfort level with asking questions.
7. **NEVER share medications** without consulting the primary care MD.
8. **NEVER alter the dose or frequency** of a prescribed medication without consulting the MD.
9. **Clean out medicine cabinets every 6 months**. Flush out of date medications.
10. **Store unused medications** in a separate place from the current medications.
11. **Ask the pharmacist to use a large font size on labels** and instructions if vision is an issue.
12. If a medication is not covered by insurance, ask the doctor to **write an exception letter to the insurance company**, or prescribe something similar that is covered. If you are starting a new medication, ask the doctor about giving samples to try before purchasing the medication.
13. **Have medications periodically reviewed**. The primary care physician should be doing this at each visit. This can also be done by a geriatric pharmacology specialist for a consultation fee. Most clients find that this service is invaluable despite the additional cost.
14. **Make and keep regular check up appointments**. If you are taking Rx medications, you should also be having periodic labs done through your doctor to ensure that the drugs aren't adversely affecting your body. Just because you have been taking a medication for years doesn't mean that it isn't affecting your liver or kidneys over time. This needs to be monitored.

Taking medications seems to be a common age related problem. Although physical therapists may be only peripherally involved, we need to be aware of drug related problems as they do affect participation and progression in rehab. Being knowledgeable of issues as discussed in this article will enhance our ability to best serve patients or family in our role of advocacy for the older adults.

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LINKS FOR MEDICATION DISPENSERS:

http://www.epill.com/md2.html
http://www.assistedlivingstore.com
http://www.guardianmedicalmonitoring.com
http://www.activeandable.com

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OSTEOPOROSIS
A PROBLEM FACED BY POSTMENOPAUSAL WOMEN

Trina Wilson, PT, MHS

Postmenopausal women face many health related problems including osteoporosis. Osteoporosis is a debilitating and devastating disease affecting the elderly, especially in women. This is because of increased longevity of women compared to men. The risk factors and consequences are most prevalent in postmenopausal women. The many risk factors of this disease increases morbidity and mortality, impacts finances, health care cost, and quality of life. It also alters the woman's self esteem, ability to perform functional tasks, nutrition, and interactions with family and society. Osteoporosis has a momentous financial impact on the health care system and families in providing care, treatment, and management of individuals with osteoporosis. Positive outcomes in managing osteoporotic individuals necessitate effective screening, cost effective medications with minimum side effects, treatment regimes that are easy to comply, and the availability of alternate medicines.

OSTEOPOROSIS

The detrimental influence of osteoporosis on women's health has led to development of guidelines defining osteoporosis, diagnosing, management, and treatment by the World Health Organization. In the aging population bone loss occurs 3% to 5% per decade after age 30.[1] Beginning at the age of 45, the onset of bone loss of 1% to 2% per year occurs in women.[2] For postmenopausal women this bone loss rate triples especially in trabecular bone.[1] Disc deterioration due to aging affects the bone trabecular pattern causing unbalanced forces on the end plate resulting in fractures.[3] The distal radius is another site where the trabecular bone is affected by aging.[4] There are many

The detrimental influence of osteoporosis on women's health has led to development of guidelines defining osteoporosis, diagnosing, management, and treatment by the World Health Organization.

risk factors that influence bone turnover. The National Osteoporosis Foundation (NOF) Guidelines have defined preeminent risk factors for osteoporosis. Studies have investigated the effectiveness of the screening and diagnostic tools, conventional and alternative medicines, interventions, and benefits of treatment.[1-10]

MENOPAUSE

Menopause results from cessation of menstruation and ovulation with a reduction in estrogen production or surgical removal of the uterus and or ovaries. Natural menopause occurs in stages defined as premenopause (early or late) and postmenopause.[5,6] Premenopause women have infrequent menstruations.[5,6] In postmenopause women, menstruation has ceased at least 12 months.[5,6] Symptoms associated with menopause are divided into several categories. Vasomotor symptoms included night, day, or cold sweats and hot flashes.[5,6] Psychological symptoms were depression, mood swings, feeling blue, irritability, nervousness, memory loss, difficulty focusing, absentmindedness, and trouble sleeping.[5,6] Anxiety symptoms were fearfulness and heart racing. Genitourinary symptoms were vaginal dryness, heavy vaginal bleeding, and bladder incontinence.[5,6] Various forms of treatments are available to treat menopausal symptoms.

Treatments

Investigators are studying safe and effective treatments cost effective for women with menopause symptoms. Women are also seeking treatments that are convenient to their way of life. Complementary therapies are among these. The Study of Women's Health Across the Nation (SWAN) evaluated the use of complementary and alternative medicine (CAM).[5] The findings were early menopausal women, surgical induced menopause women, and hormone users were using CAM consistently.[5] Also, Japanese and Caucasian women were continuous CAM users and Hispanics were sporadic users.[5] Another study used the Conventional Complementary Alternative Menopausal Practice Survey (CAMPS) to evaluate the use of CAM or combination of CAM and conventional medicine. The findings were 46% used complementary or alternative therapy for menopause symptoms and Minnesota women with education of less than 12 years and income of $25,000 did not use any therapy for their symptoms.[6] Also, Hispanic women, African American women, and non-Hispanic women were less inclined to use any type therapy.[6] Women who used conventional and CAM therapies has higher severity symptom scores after modifying for age, education, income, race/ethnicity, residence state, and menopausal category.[6] Menopause has other physiological influences affecting the woman's body.

VERTEBRAL FRACTURES

The predetermined risk factors for osteoporosis are Caucasian or Asian females, maternal history of fractures and age of 50 years and older.[2,7] Studies found new fracture risk increased significantly in postmenopausal Japanese-American.[1] It has been established that within a year following a new fracture an increase incidence of a second fracture or more occurs.[1,3,4] Spinal compression fractures are prevailing fractures occurring in postmenopausal women over age 60.[3]

Vertebral compression fractures resulting in severe kyphotic deformities increased the occurrence of new fractures.[3,7] Women with prior vertebral fractures are four times more likely to have future vertebral fractures.[1] Also, disc degeneration leads to height loss and spinal deformity that accelerates compressive forces on the thoracolumbar junction causing an increase risk of compression fractures.[3] Vertebral fractures are the most common osteoporotic fracture that goes undiagnosed.[1] Most people do not seek medical attention during the acute vertebral fracture phase.[1] This type of fracture leads to kyphotic spinal deformities causing numerous detrimental changes on the body.

Kyphotic spinal deformities resulting from vertebral fractures affect the respiratory, gastrointestinal, and neurological systems.[1] The forced vital capacity in the lungs is decreased and decreased weight occurs from the compressive forces on the abdominal cavity with thoracic and lumbar compression fractures.[1] These physical deformities also affect the individual psychologically causing depression due to poor self-esteem and anxiety from fear of sustaining more fractures.[1]

Another consequence of vertebral fractures is immortality. Women with vertebral fractures have a poor survival rate.[1] Functionally vertebral fractures lead to immobility due to pain. Pain could be caused by muscle fatigue due to the upper trunk shifting forward, fracture itself, facet arthrosis, microfractures of the trabecular, impingement on the pelvis from the ribs, neural inflammation.[1] Vertebral fractures are treated with bed rest, bracing, and medications.[1] Rao and et al stated bone loss was found after 17weeks of bed rest in normal subjects of .25% per week and 1% in subjects with degenerative spinal diseases.[1] Osteoporotic individuals on bed rest for these fractures lose bone mineral density (BMD).[1] Occasional spinal decompression surgery is required to alleviate the neurological deficit from osseous fragment in the spinal canal.[1]

Surgical Interventions

Surgical intervention of vertebral fractures is extensive and complicated because of the poor quality of osteoporotic bone to adequately secure pedicle screws and wires used to correct the spinal deformity.[1] Achieving adequate decompression of the neural components; fixation requires using larger pedicle screws with methylmethacrylate or bone grafts to strengthen and sublaminar wires.[1] Vertebroplasty and kyphoplasty are used to treat patient with intractable pain who have vertebral fractures.[1]

Vertebroplasty is a procedure for painful osteoporotic vertebral compression fractures.[1] It was initially used for symptomatic hemangiomas of the vertebral body as described by Galibert et al in 1987.[1] In 1998 Reileyin developed kyphoplasty.[1] Both procedures use methylmethacrylate that is injected into the vertebral body under fluoroscopic guidance that restores some vertebral height and stabilize the fracture.[1] The difference between the vertebroplasty and the kyphoplasty is the kyphoplasty involves an insertion of a balloon tamp into the vertebral body prior to injecting the cement.[1] Studies have shown a significant relief in pain of 90% to 95% in patients with compression fractures and 72% to 75% in patients with multiple myeloma or spinal metastases following a vertebroplasty or kyphoplasty.[1] Long term studies following patients 4 to 5 years postvertebroplasty found pain relief continued.[1] Subjects in some of the long-term studies had return pain due to collapse of the adjacent vertebrae or the recollapse of the cemented vertebrae.[1] Long term effect of kyphoplasty has not been investigated.[1]

Complications related to vertebroplasty and kyphoplasty reaction to the cement causing hypoxia and embolism. Possible rib fractures from positioning.[1] Methylmethacrylate leakage into the epidural or paravertebral areas, basivertebral vein or segmental vein, spinal canal or foramen resulting in a neurological deficit can also occur following these procedures.[1]

Hip Fractures

Studies have demonstrated that individuals with multiple and severe compression fractures of the spine have an increase in femoral neck fractures.[1] Osteoporotic hip fractures compounded by the risk factors associated with osteoporosis have substantial consequences related to morbidity and mortality for the elder population. Hip fractures are one of the most common fracture sites other than the spine in a study of postmenopausal women.[8] Early intervention such as surgery can reduce the mortality rate and improve morbidity.[3] In a Canadian study involving women, they investigated the level of function one year after sustaining a hip fracture. The study found only half returned to their prefracture level of function.[2] The Canadian study emphasized the multibillion dollar cost of providing health care for these fractures and the loss of income by the patient and caregiver.[2]

QUALITY OF LIFE

A study using the Italian version of the Quality of Life Questionnaire of the European Foundation for Osteoporosis (QUALEFFO) evaluated the perception of quality of life in ambulatory postmenopausal women with subclinical vertebral fractures and decreased BMD. This study found osteoporotic patients with vertebral deformity perceived worsening mental, social, and physical functions and general health.[9] In patients with low BMD, similar results were seen with the QUALEFFO score.[9] When the QUALEFFO was applied to individuals who are osteoporotic but nonsymptomatic the questionnaire could not distinguish between individuals with or without vertebral fractures.[9] Timely intervention and screening of individuals exhibiting the risk factors for osteoporosis can reduce the impact on the mortality and morbidity rate.

DENSITOMETRY

Decreased BMD is a significant risk factor associated with osteoporosis. The World Health Organization (WHO) defined BMD based on healthy young adult female as 2.5 standard deviation (SD) or below as osteoporosis, greater than 2.5 SD and below as severe osteoporosis, and less than 2.5 SD but greater than one SD as osteopenia.[1,2,8,9,10] Low BMD increases the susceptibility of fractures.[1,3,7] Studies have found a decrease in SD of one increase the risk of fracture in the spine and hip by 2.3 to 2.6 times and vertebral fractures are increased by 5.8 times.[1]

Densitometry measures BMD, which is the most common evaluative tool for assessing bone strength.[8] Densitometry substantiates osteoblastic and osteoclas-

tic activity by measuring bone turnover using serum bone markers.[2] These biochemical markers are alkaline phosphatase, bone-specific alkaline phosphatase, and osteocalcin are bone forming and Pyridinoline, hydroxyproline, deoxypyridinoline, and N- and C-telopeptides are bone resorption markers.[7]

There are several different types of densitometry tools.[7] Dual Energy X-Ray Absorptiometry (DEXA) is a densitometry tool measuring the cortical and trabecular bone quantity.[7] This is done at the femoral neck, total hip and body, lumbar spine, and mid radius. The radiation from the DEXA is low and has a high patient tolerance.[7] The data from the DEXA uses comparative T and Z scores related to gender and age.[7] Quantitative Computed Tomography (QCT) measures cortical and trabecular bone separately in the trabecular skeletal compartment.[7] The QCT evaluates spinal degenerative disease and BMD and can be used on the excessively large and obese population.[7] Patient tolerance is limited due to the high radiation. Portable low radiation densitometries are peripheral DEXA and peripheral QCT evaluate BMD at the radius, phalanges, and calcaneous.[7] These peripheral densitometries are not effective in sequential measurements due to different database standards.[7] Another peripheral measurement tool is ultrasound that assesses the bone strength at the radius, calcaneous, tibia, and phalanges.[7,10]

Densitometry is recommended by the NOF for screening menopausal women with other risk factors contributing to BMD decrease. Other risk factors that reduce bone strength and increase the incidence of osteoporotic fractures are estrogen deficiency, poor calcium intake, smoking, low body weight, hormonal therapy, malnutrition, immobility, anticonvulsant drugs, home environment, and falls.[7,10] Modification of these risk factors can prevent osteoporosis and reduced fractures.

PHARMACOLOGICAL INTERVENTIONS

Modification of certain risk factors can be managed through pharmacological interventions. The pharmacological drugs either act as antiresorptive agent or bone forming stimulating agent. Antiresorptive drugs are bisphosphonates, calcitonin, selective oestrogen receptor modulators, oestrogen, calcium, vitamin D, and parathyroid hormone.[3,4,7,10] Bisphosphonates (BP) encourage osteoclast apoptosis, decrease osteoclast activity and recruitment which inhibit bone resorption.[3,4,7,10] Bisphosphonates are characterized by a phosphorus-carbon-phosphorus bond of stable analogues of pyrophosphate.[3] When taken 50% is absorbed into the bone with a half-life of several years.[3] The other percentage of BP is excreted in the urine.[3] Interaction with food, calcium, iron, coffee, tea, and orange juice inhibit the effect of BPs.[3] Bisphosphonates have gastric side effects such as dyspepsia, diarrhea, abdominal pain, and esophagitis.[3,4,7,10] The side effects of BP can be minimized if taken once or twice a week without decreasing the beneficial affect on the BMD.[3]

The pharmacological drugs either acts as antiresorptive agent or bone forming stimulating agent.

Etidronate is a BP that reduces vertebral fractures and increases BMD in the spine. It was the first BP developed.[3,10] In bone a mineralization defect occur with long-term usage of Etidronate. [3] Renal insufficiency patients are greatly affected by long-term use. [3] Alendronate sodium is a BP used to prevent and treat bone loss in postmenopausal women, glucocorticoid induced osteoporosis, and male osteoporosis.[3,7] Studies have shown reduction in vertebral, wrist, and hip fractures by 50%.[3,7] Other studies showed a decrease in new vertebral fractures and a slight decrease in clinical fractures with administration of alendronate over 4 years.[3,7] Osteoporotic individuals given this drug showed a significant decrease in clinical fractures and nonvertebral fractures.[3,7]

Risedronate is another BP that reduces bone loss postmenopausal women and in men and women with glucocorticoid-induced osteoporosis.[7] In several studies, this drug significantly reduced new vertebral fractures and nonvertebral fractures over a 3-year period and in other studies reduced hip fractures in women with vertebral.[3] Clodronate is used to treat malignant bone diseases, male and postmenopausal osteoporosis, and secondary osteoporosis.[3] Pamidronate is also used in treating Paget's bone disease and malignant bone diseases.[3] This BP impact on the hip and spine was an increase in BMD over a 3-month period when given intravenously.[3] In a phase III trial, tiludronate was discontinued because of lack of evidence to support reduction of fractures.[3] Bisphosphonates currently in clinical trials are ibandronate and zoledronate.[3]

Calcitonin inhibits osteoclast activity and reduces bone resorption.[3,7,10] It is a 32 amino acid produced by thyroid C cells.[3,7,10] It is a powerful osteoclast bone resorption inhibitor that acts on the osteoclast G-protein coupled receptor by initiating cyclic AMP and calcium pathways.[3,7,10] In postmenopausal women, calcitonin prevents trabecular bone loss and increases BMD.[7] Salmon calcitonin administered intranasally has been shown to reduce new vertebral fractures but not on peripheral fractures in postmenopausal women.[3,7] Calcitonin side effects are nausea, facial flushes, and diarrhea when administered intramuscularly or subcutaneously. Salmon calcitonin nasal spray has insignificant side effects.[3]

Selective estrogen receptor modulators (SERMs) selectively interfere with estrogen receptor configuration by acting as an agonists or antagonists.[3,7,10] Selective estrogen receptor modulators are raloxifene, tamoxifen, droloxifen, and tibolene.[3] Raloxifene is used in breast and endometrium treatment. It decreases invasive breast cancer by 70% to 76%.[3,7] Raloxifene is a benzothiophene and its action on bone and lipid metabolism is an estrogen agonist.[3] This involves transformation of growth factor β_3 formation resulting in osteoclast and bone resorption inhibition.[3] Raloxifene returns bone turnover to premenopausal bone loss at all skeletal sites and reduces LDL without stimulating the endometrium.[3] In a control study, Raloxifene slowed cognitive deterioration that was age related but does not relieve postmenopausal vasomotor symptoms.[3,7] It has been shown to reduce vertebral fracture in postmenopausal women with or without vertebral fractures.[3,7] This drug side effect is venous thromboembolism.[3,7] All studies

suggested long-term studies were needed on raloxifene impact on uterine and breast tissues.

In postmenopausal women, tamoxifen did not fully prevent bone loss.[3] In bone, endometrium, cholesterol metabolism tamoxifen is a limited estrogen agonist and in breast it is antagonist.[3] Tibolone is another SERM that prevents bone loss, reduces menopausal symptoms, and does not cause breast tenderness in postmenopausal women.[3] It is a synthetic steroid which acts on receptors of estrogen, progesterone, and androgen.[3] Tibolone impact on fractures and long-term effects on uterus and breast have not been substantiated.[3]

Estrogen Reduction

Estrogen reduction is a pathophysiological consequence of menopause that leads to an increase in bone loss resulting in osteoporosis. This decrease in estrogen affects the relationship between bone formation and resorption mechanism causing increased bone resorption thus leading to bone loss. The resultant effect is osteoporosis due to the disruption of the remodeling mechanisms of bone resorption by osteoclasts and bone forming osteoblasts activities affect the bone matrix.[7] Bone forming osteoblasts are derived from other cells including adipocytes and fibroblasts, which deposit osteoid.[7] These cells produced in the bone matrix either die or become osteocytes.[7] Osteocytes are incorporated into the bone matrix and act as mechanical loading cells.[7] The osteoblasts nuclear receptors and the integrin and cytokine receptors have estrogen and vitamin D receptors.[7] Osteoprotegerin-ligand is a critical cytokine needed for adequate bone formation.[7] Fibroblast growth factor (FGF), platelet derived growth factor (PDGF), insulin like growth factor (IGF), and transforming growth factor *B* (TGF*B)* stimulate osteoblast activity.[7] Hematopoietic progenitor cells are enormous multinucleated cells that form osteoclasts.[7] Interleukin-1, (IL-1), IL-6, IL-11, tumor necrosis factor (TNF), vitamin D_3, granulocyte-macrophage colony-stimulating factor (GM-CSF), and macrophage colony-stimulating factor (M-CSF) regulate formation of osteoclasts.[7] The bone resorption process encompasses the osteoclasts forming a seal on the endosteal bone surface causing attachments between the bone matrix and ventral surface.[7] Hydroxyapatite crystals dissolving from osteoclast acid uncover the protein matrix through a protein pump system.[7] Cathepsins and metalloproteinases, digestive enzymes destroy the exposed protein matrix releasing collagen and growth hormones.[7]

Postmenopausal women have a disruption in the bone resorption and formation process leading to bone loss.[7] The relationship of estrogen depletion on osteoblasts or osteoclasts activity is not fully known.[7] Other contributing conditions to bone loss involve the endocrine and gastrointestinal system, renal disease, neoplastic disorders, genetics, hormonal, immobility, nutrition, pharmacological, and idiopathic diseases can lead to secondary osteoporosis.[1,2,7] In addition, the prevalence of these contributing conditions and the altered relationship between bone resorption and bone formation, menopausal women have additional risk factors associated with osteoporosis.

Estrogen (oestrogen) deficiency leads to increased osteoclasts forming cytokine, M-CSF, from supporting stromal cells and it enhances nuclear protein phosphorylation, Egr-1.[7] Estrogen attaches to osteoblasts and osteoclasts nuclear receptors.[7] It enhances collagen production, increases alkaline phosphatase expression and regulates certain growth factors and cytokines synthesis. Estrogen inhibits osteoclasts formation and bone resorption by suppressing receptor activator for NFß-ligand (RANKL) molecule.[7] It also regulates M-CSF, osteocalcin, and osteonectin and osteopontin molecules.[7] Estrogen hinders bone loss and relieves menopausal symptoms in early and late postmenopausal women.[3,7] This drug has been shown to reduce hip and vertebral fractures by 34% in a study conducted by Women's Health Initiative.[10] Other control studies have shown a 27% reduction in nonvertebral fractures and 40% reduction in hip and wrist fractures.[3,7] However, studies also have shown when hormone replacement therapy (HRT) ceases the bone loss rate assumes its menopausal rate.[3,7] Estrogen loses its effectiveness to reduce the occurrence of fractures after 5 years.[3] It is recommended that HRT should start in early menopause and be continued for at least 10 years.[3]

The combination of estrogen and progestagen are given to postmenopausal women with an intact uterus to decrease the likelihood of endometrial cancer.[3] Progestagen does not affect estrogen impact on bone.[3] Surgical induced menopause (hysterectomy) can receive estrogen only.[3] Estrogen impact on BMD is enhanced with calcium supplements.[3] Side effects of HRT are an increased risk of deep vein thrombosis and pulmonary embolism, vaginal bleeding, breast tenderness, and increase risk of breast cancer with long-term use.[3,7] Studies are inclusive about the benefits of HRT on heart disease.

Vitamin D and calcium is used in the treatment of osteoporosis. Vitamin D analogues are alfacalcidol and calcitriol.[7] It has been shown that calcium slows down bone loss, increases absorption of calcium in the gastrointestine, boosts mineralization, and parathyroid hormone (PTH)-induced bone resorption.[3,7] Postmenopausal women with hip fractures had decreased serum 25-hydroxyvitamin D (calcitriol) and calcium concentration as compared with osteoporotic and nonosteoporotic postmenopausal women.[4] In the elderly population, fractures were reduced with Vitamin D dose given at the physiological level (800 IU per day).[7] Also with aging, a decrease in intestinal calcium absorption, calcitrol levels, and parathyroid hormone stimulation to 1-hydroxylase-enzyme reaction occurs.[7] Studies of elderly men and women have significantly shown combination of calcium and vitamin D decreased hip and all nonvertebral fractures.[3] Other studies have suggested nursing home patients should get vitamin D due to low sunshine exposure, low intake and impaired synthesis of vitamin D.[3] Low levels of vitamin D serum increased susceptibility to osteoarthritis.[4] The side effects of vitamin D are risk of hypercalcemia and hypercalciuria.[7] Calcium has mild gastrointestinal side effects and possible risk of kidney stones.[3] Studies are needed to investigate the impact of vitamin D and calcium on health BMD and long-term use for osteoporosis prevention or treatment.[3,7]

Parathyroid hormone (PTH) regulates growth factors IGF, TGF-β1, TGF-β2, and cytokines expression by stimulating osteoblast activity and preventing

osteoblast apoptosis.[3] Excessive PTH leads to increase bone loss and resorption.[3] Teriparatide is a recombinant form of human PTH consisting of 34 amino terminal amino acids that has been approved for treatment of osteoporosis in postmenopause women by the Federal Food Administration.[4] This PTH caused a greater increase in BMD and decreased nonvertebral fractures in women as compared to BP in the November 2002 study.[4] In clinical trials, a low intermittent dose of PTH increased bone volume and mass thus reducing the risk of new vertebral fractures by 65% to 69%.[3, 7] Other studies have shown the risk of nonvertebral fractures was reduced by 53%.[3] Parathyroid hormone increases BMD in the spine and femoral neck.[3] The side effects are nausea, headaches, and risk of osteosacromas.[3] The risk of osteosacromas was seen in rats but clinical trials have not shown an increase in bone tumors.[3]

Other pharmacologicals used for osteoporosis treatment are sodium fluoride, HMG-CoA reductase inhibitors, vitamin K, strontium ranelate, growth hormone, thiazide diuretics, and ipriflavone.[3,7] Sodium fluoride in control studies have shown an increase in spine and hip bone mass but radial cortical bone mass was decreased.[7] However another study showed no impact on the BMD in the hip.[3] Vertebral fractures were not significantly affected.[7] Overall, sodium fluoride increases bone formation by increasing osteoblast activity and recruitment and becomes integrated into hydroxyapatite component of bone.[3] Studies have shown 3-hydroxy-3-methylglutarylcoenzyme A (HMG-CoA) reductase activate osteoclast apoptosis and decrease osteoclast recruitment and increase osteoblastic bone formation through lipid-lowering statins.[7] Osteoclast apoptosis occurs when the biosynthetic pathway is inhibited by the aminobisphosphonates from mevalonate to cholesterol.[7] Bone morphogenic protein-2 (BMP-2) is a significant osteoblast differentiation agent, regulates statins effect on bone formation.[7] Individuals with type 2 diabetes mellitus had increased BMD in the spine and hip with lovastatin, pravastatin, or simvastatin in clinical studies.[7] Vitamin K serum decreases with age and in hip fracture patients.[3] Menatetrenone is a vitamin K2 compound that has been shown to increase BMD.[3] Strontium ranelate salt stimulates bone formation and reduces resorption.[3] This salt is still under investigation but has shown to increase BMD and reduce vertebral fractures.[3] Because of growth hormones anabolic effect on bone and muscles, it has been used in the treatment of osteoporosis for bone formation.[3] Growth factors such as growth factors I and II and growth factor β are being investigated as to their impact on osteoblast reproduction.[7] Reduction in bone loss and turnover and calcium resorption in the tubular bone is seen with thiazide diuretics but no substantial evidence on its effective role in the treatment of osteoporosis.[7] Some studies have shown a possible decrease in bone loss but not a decrease in osteoporotic fractures in women given ipriflavone.[7]

NONPHARMACOLOGICAL INTERVENTIONS

Nonpharmacological interventions involve nutrition and lifestyle changes. Bone health is affected by poor nutrition, inactivity, alcohol abuse, and smoking.[2,3,10] Low body weight and body mass index (BMI) have been correlated with hip fractures in the geriatric population with poor nutrition.[10] Good nutrition with a balanced diet and at least 1500 mg intake of dietary calcium for postmenopausal women not receiving estrogen has been recommended by the consensus development conference.[3] However, long-term effects of dietary calcium on bone health has not been studied.[3] Following a hip fracture it has been shown that sufficient intake of protein improves the outcome.[3,10] In clinical studies weight bearing exercise have been shown to increase the BMD.[3] Controlled and observational studies on the impact of exercise have shown a reduction in falls and hip and leg fractures but an increase in wrist fractures in the geriatric population.[3] Increased exercise improves mobility and increases muscle strength thus decreasing fractures because of falls.[3]

FALLS

Falls is a major contributing risk factor of the elderly population sustaining fractures. It is a modifiable and preventable risk factor. Falls can be caused by intrinsic, extrinsic, and environmental factors as described by Woolf and Akesson.[10] Intrinsic factors are impaired cognition or depression, visual, balance ambulation, and mobility impairments, age related deterioration, and "blackouts."[10] Extrinsic factors are inappropriate clothing and footwear and multiple drug therapy.[10] Environmental factors are indoor and outdoor hazards.[10] It has been recommended for institutionalized individuals to use hip protectors to prevent hip fractures but compliance is low.[10] Following a fall the individual should have a more in depth physical and medical examination.[10] This should included assessment of transitional movements such as sit to stand from a chair to gait.[10] The geriatric population should have a fall risk assessment as part of their routine care based on recommended guidelines to prevent or decrease the incidence of fractures.[10]

The guidelines adapted from the Royal College of Physicians for preventing fractures in the elderly population included frailty, age, low BMD T-scores, contributing factors to fractures, multiple drugs, prior fractures, and falls.[10] A study conducted on compliance to evidence based clinical guidelines for osteoporosis recommended by NOF versus actual clinical practice found a significant difference between the two.[8] The guidelines recommended initiation of treatment and pharmological interventions should occur in women with BMD T-scores below –1.5 or –2.5 and BMD measurement for women with two or more risk factors.[8] The study found the guidelines were not followed relating to BMD measurement and treatment of osteoporotic women with prior fractures.[8] The differences were attributed to lack of education and familiarity by the patient and clinician about osteoporosis management, treatment, BMD measurement, medication side effects and cost, patient transportation difficulties and continuity of care between the orthopedist and primary care physician in postfracture management.[8]

CONCLUSION

Management and treatment of menopause and related consequences of osteoporosis can prevent or reduce the detrimental effects on women. The effects can be devastating relating to social,

psychological, physical, and financial. Modification of certain risk factors and immediate start of treatment can immensely improve the functional outcome and the quality of life. As evident in the reviewed studies, women are seeking alternative therapies that fit their lifestyle with minimum side effects and cost effective treating menopausal symptoms and osteoporosis.

Early screening, prompt diagnosis, and immediate initiation of treatment can reduce or eliminate the adverse effects of osteoporosis in menopausal women. In addition, patient education and increased clinician awareness of the guidelines for screening and the availability of the evaluation tools reduce the prevalence of fractures, mortality, and morbidity. Successful management and treatment of menopause and osteoporosis leads to a better outcome for women.

Early screening, prompt diagnosis, and immediate initiation of treatment can reduce or eliminate the adverse effects of osteoporosis in menopausal women.

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PATIENT HANDOUTS 2007 STUDENT WINNERS

On the following 6 pages are the 2007 student winners of the Section on Geriatric Patient Handout contest. The winners were selected and announced during the Section awards ceremony at the Combined Section Meeting in Boston. *GeriNotes* is pleased to make these excellent brochures available to Section members to use in their clinical practice. They have been printed in a format for easy copying; each brochure is 2 pages, they are designed to be copied on one piece of paper, 2 sided, back to back and then folded lengthwise to make a 4.5 x 11 handout. Brochures created over the past 3 years are also available on the SOG web site at www.geriatricspt.org.

One of the benefits of belonging, SOG members are encouraged to use the handouts for patient or consumer education. Thanks to all students who submitted a handout and a special CONGRATULATIONS to our 2007 winners.

AQUATIC EXERCISE	Tera Bernard, SPT Nate Mejeur, SPT	Central Michigan University
FALL PREVENTION	Jay L. Sessions, SPT	Louisiana State University
PREVENTING FALLS	Robyn Tregre, SPT	Louisiana State University

Section On Geriatrics
American Physical Therapy Association

Aquatic Exercise

As we grow older it sometimes becomes more difficult to perform exercise and stay fit. Aquatic Exercise can provide health benefits, while decreasing the amount of stress placed on your body.

More Section on Geriatrics consumer information is available at:
www.geriatricspt.org (click "Consumers")

American Physical Therapy Association
800/999-APTA

APTA consumer information:
www.apta.org/consumer

Find a Physical Therapist near you:
www.apta.org/findapt

Created by Tera Bernard, SPT and
Nate Mejeur, SPT

Picture Taken from:
Melbourne Sports & Aquatic Centre. 2006.
Available at: http://ww.msac.com.au/aquatic_exercise_timetable.php?page_id=40.
Accessed July 25, 2006.

Why Aquatic Exercise?

- Being in the water can make you feel up to 90% lighter
- Reduces the risk of injury compared with exercising on land
- Decreases the amount of stress placed on the body's joints
- Water can provide assistance to make exercise easier, or resistance to help with strengthening
- Can help build strength in weak or injured muscles
- Can help increase blood flow and the health of your heart
- Water pressure can help in reducing swelling
- Decreased effect of gravity allows for stretching that you may not be able to do while on land
- Aquatic Exercise can provide variety in your exercise routine
- It can be a group activity providing benefits of socialization and exercise at the same time!

Who benefits?

- All ages, especially older adults
- Those suffering from joint problems such as Osteoarthritis or Rheumatoid Arthritis
- Inactive individuals who do not currently participate in exercise
- Overweight or obese individuals
- People who have chronic back pain or any other chronic pain, such as Fibromyalgia
- Anyone that is looking to start exercising without the stresses of land exercise

Get Involved!

- Talk to your Doctor or Physical Therapist
- Sign up for a class
- Recruit your friends to join with you
- Increase your fitness without increasing your risk for injury!

Exercise to Prevent Falls

Research shows that ankle and knee weakness is significantly related to repeated falls in the elderly. Maintaining good balance and leg strength is important to preventing falls. The following exercises are excellent for fall prevention. Be sure to consult with your doctor before starting any exercise program:

- Walking
- Water aerobics
- Tai Chi
- Weight training
- Cycling

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http://www.fallprevention.org/

http://www.temple.edu/older_adult/

http://www.mayoclinic.com/health/fall-prevention/HQ00657

More Section on Geriatrics consumer information is available at: www.geriatricspt.org (click "Consumers")

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Created by Jay L. Sessions, SPT

The Problem with Falls

Approximately 30% of community-dwelling people older than 65 years old, 40% of those older than 80 years old, and 66% of older people in rest homes fall each year. Falls among the elderly are a major cause of injury, illness, and death. The effects from even a non-injury fall can be devastating emotionally. A single fall can result in:

- Loss of confidence in ability to perform routine tasks
- Restriction in activity
- Social isolation
- Increased dependence on others
- Fear of falling

The decreased activity as a result of the fall can cause:

- Joint stiffness
- Muscle weakness
- Immobility

The above 3 factors lead to more falls and further mobility restrictions.

Fall Prevention DOs

- DO have your blood pressure checked on a regular basis
- DO see a doctor if you feel dizzy when you get up from a bed or chair
- DO see an eye doctor if you experience vision problems
- DO remove throw rugs, extension cords, and clutter from your home
- DO tack down or tape carpet edges
- DO keep hallways clear from clutter
- DO store commonly used items on shelves between hip and eye level
- DO maintain good lighting in your home
- DO install night lights - especially in the bathroom
- DO use a non-skid bathtub/shower mat
- DO install handrails on stairs, in the shower, and beside the toilet
- DO keep a phone nearby at all times
- DO wear shoes with a non-skid sole
- DO exercise regularly

Fall Prevention DON'Ts

- DON'T wax floors
- DON'T use a stepping stool
- DON'T wear loose floppy slippers and long robe
- DON'T sit in furniture low to the ground
- DON'T allow spills to remain on the floor
- DON'T wear high heeled shoes, backless shoes, shoes with a slippery sole, shoes that are too tight, or shoes that are too loose.

SAFETY CHECKLIST

- ☐ Remove all loose wires, cords, and throw rugs. Minimize clutter. Keep furniture in its accustomed place
- ☐ Install grab bars and non-skid tape in the tub or shower.
- ☐ Make sure halls, stairways, and entrances are well lit. Install a night light in your bathroom. Turn lights on if you get up in the middle of the night.
- ☐ Install non-skid rubber mats near the sink and stove. Clean spills immediately.
- ☐ Make sure the treads, rails, and rugs on stairs are secure.

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APTA consumer information:
www.apta.org/consumer

Find a Physical Therapist near you:
www.apta.org/findapt

Created by Robyn Tregre, SPT

Preventing Falls

Common Causes, Conditions, and Risk Factors Associated With Falls

PATIENT/FAMILY EDUCATION

INTRODUCTION

The purpose of this brochure is to familiarize patients with physical conditions commonly associated with falls. A fall is clinically defined as “an unplanned, unexpected contact with a supporting surface”.

In the elderly population, falls often have devastating consequences. Falls can lead to loss of function and even death. It is important that patients understand the close relationship between mental and physical impairments and falls. With aging, the risk for falls greatly increases. Thus, patients should be aware of factors that influence the risk for falls and ways in which falls can be prevented.

PHYSICAL CONDITIONS ASSOCIATED WITH FALLS

- Visual Deficits
- Muscle Weakness
- Impaired Balance
- Dizziness and Fatigue
- Acute Illness
- Dehydration
- Cardiovascular Impairment
- Seizures
- Vestibular Disease
- Poor Posture/Postural Control

RISK FACTORS

There is a significant increase in the risk of falling in people 64 and older. Women are at higher risk than men. Factors associated with falls are classified as intrinsic and extrinsic.

INTRINSIC FACTORS

- Being depressed/anxious
- Fear of falling
- Living alone
- Difficulty walking
- Confusion
- Reduced physical activity
- Reduced muscle strength
- Reduced stability while standing

EXTRINSINC FACTORS

- Stairs without railings
- Slippery surfaces
- Throw rugs
- Poor lighting
- Obstacles

GERIATRIC PHYSICAL THERAPY CLINICAL SPECIALISTS 2007

In 1992, 14 therapists received their Geriatric Clinical Specialist (GCS) designation, becoming the inaugural class of Geriatric Clinical Specialists. Since that time more than 750 physical therapists have passed the exam and requirements for the GCS. This year, the Section welcomes 88 additional therapists who are the 2007 class of Geriatric Clinical Specialists, making a grand total of 772 Geriatric Clinical Specialists.

CONGRATULATIONS FROM THE SECTION, WE ARE VERY PROUD.

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Mr. Morman is a 1995 graduate of Andrews University with a master's degree in physical therapy.

Robert Nithman, PT, DPT, GCS
Dr. Nithman earned a master's degree in physical therapy in 1997 from Duquesne University. In 2005, he was awarded a doctoral degree in physical therapy from Chatham College.

Stacey Nolan, PT, MS, GCS
Ms Nolan received a bachelor's degree in physical therapy from Northeastern University in 1998. She earned a master's of science degree from the same institution in 1999.

Randal Ogburn, PT, GCS
Mr. Ogburn is a 1990 graduate of Eastern Washington University with a bachelor's degree in physical therapy.

Steven Pamer, PT, MPA, GCS
Mr Pamer graduated with a bachelor's degree in physical therapy in 1986 from Ohio State University. He earned a master's of public administration from Cleveland State University in 1994.

Amy Paris, PT, GCS
Ms Paris received a bachelor's degree in physical therapy from the University of Wisconsin - LaCrosse in 1994.

Gregory Patterson, PT, GCS
Mr. Patterson is a 1990 graduate of Georgia State University with a bachelor's degree in physical therapy.

Andrea Perrea, PT, MPT, GCS
Ms Perrea graduated from the University of Southern California with a master's degree in physical therapy in 1994.

Evan Prost, PT, GCS
Mr Prost graduated from the University of Missouri-Columbia with a bachelor's degree in physical therapy in 1988.

Christina Provence, PT, MPT, GCS
Ms Provence graduated in 2002 from Georgia State University with a master's degree in physical therapy.

Nicole Rennie, PT, GCS
Rennie graduated from the University of Wisconsin - LaCrosse with a bachelor's degree in physical therapy in 1993.

Janet Retke, PT, MAOM, GCS
Ms Retke graduated with a Certificate in physical therapy from California State University, Fresno in 1977. In 2005, she received a master's degree in organizational management from the Unversity of Phoenix.

Susan Rice, PT, GCS
Ms Rice received a bachelor's degree in physical therapy from the University of Wisconsin-Madison in 1983.

Dusty Rippelmeyer, PT, MPT, GCS, NCS
Ms Rippelmeyer earned a master's degree in physical therapy from Western University of Health Sciences in 1994. She had previously earned a master's degree from the University of Arizona in 1979 in athletic training. She was certified as a clinical specialist in neurologic physical therapy in 2006.

Cynthia Rogers, PT, MBA, GCS
Ms Rogers graduated in 1974 from the University of Colorado Health Sciences Center with a bachelor's degree in physical therapy. She earned a masters of business administration in 1999 from Arizona State University.

Tambi Rondinone, PT, DPT, GCS
Dr Rondinone graduated in 2001 from Notre Dame College with a master's degree in physical therapy. She was awarded a doctoral degree in physical therapy from Simmons College in 2004.

Therese Rutledge, PT, GCS
Ms Rutledge graduated with a bachelor's degree in physical therapy in 1998 from the University of Findlay.

Arlene Santos, PT, GCS
Ms Santos received a bachelor's degree in physical therapy in 1993 from the University of the East, Manila, Philippines.

Deborah Sarro, PT, MPT, GCS
Ms Sarro received a master's degree in physical therapy from Shenandoah University in 2004.

Naoko Sato, PT, MEd, GCS
Ms Sato is a 1995 graduate of the University of Kansas Medical Center with a master's degree in physical therapy. She had previously earned a master's degree in education from Nihon University in 1988.

Kristin Schulz, PT, MPT, GCS
Ms Schulz earned a master's degree in physical therapy in 2001 from California State Universiy - Long Beach.

Amy Semingson, PT, MPT, GCS
Ms Semingson received a master's degree in physical therapy in 2000 from Azusa Pacific University.

Lisa Shaw, PT, GCS
Ms Shaw graduated with a bachelor's degree in physical therapy from University of Wisconsin-La Crosse in 1989.

Teresa Shea, PT, GCS, NCS
Ms Shea graduated in 1992 from the University of Wisconsin - Madison with a bachelor's degree in physical therapy. She was certified as a clinical specialist in neurologic physical therapy in 2006.

Jason Stolp, PT, MSPT, GCS
Mr. Stolp graduated with a master's degree in physical therapy in 1997 from the University of South Dakota.

Janet Szczepanski, PT, MHS, GCS
Ms Szczepanski is a 1990 graduate of the University of Evansville with a bachelor's degree in physical therapy. She earned a master's degree in health sciences from the University of Indianapolis in 2001

Lynn Tierney, PT, DPT, GCS
Dr Tierney graduated with a master's degree in physical therapy from University of Southern California in 1987. She earned a doctoral degree in physical therapy in 2006 from Western University of Health Sciences.

Douglas Wall, PT, MS, GCS
Mr. Wall graduated with a master's degree in physical therapy from the University of Colorado Health Sciences Center in 1992.

Richard Ward, PT, MS, GCS
Mr. Ward graduated in 1995 with a master's degree in physical therapy from Texas Womans University.

Cami Watson, PT, MHS, GCS
Ms Watson earned a bachelor's degree in physical therapy in 1992 from West Virginia University. She is a 2002 graduate of the University of Indianapolis with a master's degree in health science in neurologic physical therapy.

Sheila Watts, PT, MBA, MS, GCS
Ms Watts graduated with a bachelor's degree in physical therapy from Ohio State University, in 1976. Ms Watts attended the University of New Haven and received a master's of business administration in health care management in 1981. She received a master's degree in geriatric rehabilitation and wellness in 2004.

Carol Weinberger, PT, GCS
Ms Weinberger is a 1978 graduate of the College of St Scholastica with a bachelor's degree in physical therapy.

Barbara Wiegand, PT, GCS
Ms Wiegand graduated in 1975 from the University of Minnesota with a bachelor's degree in physical therapy.

Laurie Wingard, PT, GCS
Ms Wingard received a certificate in physical therapy from Lund University, Sweden in 1992. She had previously received a bachelor's of science degree from the University of Pennsylvania in 1985.

Andy York, PT, MSPT, GCS
Mr. York graduated with a master's degree in physical therapy from the University of South Dakota in 2000.

WANTED
ARTICLES FOR GERINOTES

Topics: Anything Related to Older Adults

Clinicians: Send me an article or an idea

Students at any level: Send me papers you wrote for class

Educators: Send me student papers

EVERYONE LOVES TO PUBLISH
AND IT IS EASY

CONTACT
Carol Schunk, *GeriNotes* Editor
carolschunk@earthlink.net

STUDENT MEMBERSHIP AWARDS WINNERS AND NOMINEES

Here Are Their Stories

Each year, the Section on Geriatrics accepts nominations for the Student Membership Award. Students must be APTA members, be nominated by a Section member, and have demonstrated some interest in physical therapy for aging adults. All eligible students are entered in a drawing, and at CSM we draw 5 PT students and 5 PTA students to receive one year of free Section membership. We received 28 nominations this year, but only got 2 PTA nominations. We would love to see more next year! The Award was created by the Section Board of Directors in order to give free membership to 10 students each year, so that they can experience membership in the Section and have their interest in Gerontologic PT supported. We hope that all the nominees will consider joining the Section if they are not already members: student dues are only $15! Thank you to all of our inspiring nominees, and their nominators, for their support of PT for aging adults.

Below are the 2007 winners and nominees. The information was obtained from their nomination application.

2007 WINNERS

Dana Kuiken, SPT
Des Moines, IA
Nominated by: Jill Heitzman, PT, DPT, GCS, CWS
During Dana's 12-week affiliation at the outpatient clinic of Mary Greeley Rehab and Wellness at Mary Greeley Medical Center in Ames, Iowa, Dana exhibited an interest in working with the older adult. She participated in the Gerontology Colloquium held at Iowa State University and the 2006 Iowa Rural Aging Conference held at the University of Iowa. She actively promoted healthy aging while working with me, her CI, with older patients. She reviewed my Home Study module on The Aging Musculoskeletal System with profound insight into functional situations encountered by the older adult at work and at home. Dana also wrote an article for *GeriNotes* on her reflection of the problems with Referral for Profit situations. Upon graduation, Dana will make a great addition to the Section on Geriatrics and would benefit from a mentor within the Section to keep her interest growing.

Christina LonJeana Gunn, PT
Landrum, SC
Nominated by: Charity Johnson, PT, PhD, GCS
As a student in Elon University's DPT program, Christy conducted a needs assessment among community-dwelling older adults. Based on her findings, she developed a wellness exercise program as part of a community-based service learning project.

Angela Lynn Bryant, SPT
Galax, VA
Nominated by: Charity Johnson, PT, PhD, GCS
Angela has demonstrated a special ability to work with older clients during her coursework in Elon University's DPT program, and for her clinical affiliation, she chose to work in a skilled nursing facility. While there, she prepared and presented a review of dyspnea scales used to assess residents with shortness of breath.

Alison Elizabeth Bates, SPTA
Prosser, WA
My interest in physical therapy with the geriatric population began the summer between my first and second year of PTA school at Green River Community College. That summer I was fortunate enough to find a job as a rehab aide for Yakima Memorial PT. When I went for my interview, I was told I would be working at Garden Village, a skilled nursing facility, and I was terrified about it. My entire life I have been involved in sports and knew I was going to work with athletes. When I thought of physical therapy, I only thought of outpatient practices and working with athletes because that is what I had volunteer experience with. By the end of that summer job, I didn't want to leave, but had to so I could finish school. I loved going to work every day, seeing the patients there, working with them, and getting to know them. I may have helped the patients achieve their goals to become more independent, but they made much more of an impact on me. That summer completely changed my mind about where I am going to apply for PTA positions when I am finished with school in June. I learned so much during that summer and want to continue building my knowledge in physical therapy with the geriatric population. Thank you for taking the time to read and accepting my entry.

Katherine Cottrell, SPT
Columbia, MO
Nominated by: Evan Prost, PT, GCS, Clinical Instructor
My interest in working with the geriatric population developed over the past 5 years, beginning with my volunteer experience at Boone Hospital's Inpatient Rehabilitation department and cumulating in my problem-based learning course this semester which focuses on geriatric physical therapy. This population appeals to me because of my past experiences as well as because of the dynamic nature of each individual. This population not only is a pleasure to work with but are also a huge challenge as most of the individuals' will have multiple system impairments

that must be considered while PT treats the neuromusculoskeletal impairment. To assist in maintaining the safety and independence of a geriatric individual such that they may return to their home is a wonderful gift that any PT can give. I truly enjoy the unique knowledge and experience that the geriatric individual possesses, and feel lucky to have the opportunity to learn from them while they learn from me.

Todd Carroll English, SPT
Elon, NC
Nominated by: Charity Johnson, PT, PhD, GCS
Todd's interest in working with the older client developed throughout his DPT studies at Elon University. For his clinical affiliation site, he chose to deepen his experience by practicing in a VA medical center, where his clinical advisor noted his ability to provide personal, individualized treatments while remaining efficient in his overall work.

Elizabeth Suzann Stewart, SPTA
Topeka, KS
Nominated by: Lori Khan, DPT, MS, PT
Elizabeth "Liz" Stewart is a Physical Therapist Assistant Student at Washburn University. She is a member of the Phi Kappa Theta Honor Society, has been listed on Washburn University Dean's Honor Roll, and has been published in Washburn University's online magazine. Liz works with an elderly gentleman who has a rare form of muscular dystrophy, "Inclusion-Body Myositis." She has volunteered many hours assisting this patient as well as her volunteer work at the skilled nursing facility in Topeka, Plaza West. She assists the recreation department at Plaza West in leading exercise groups with the geriatric residents. If you ask Liz what she loves about being a student Physical Therapist Assistant, she will tell you, "I love to work with geriatric patients. I had a wonderful grandfather and a great aunt & uncle who made it possible for me to have a good childhood. My love for them has carried over into my adult life and has made such an impact that I want to devote my career to assisting the elderly."

NOMINEES

Angela Lea Betts Richardson, PT
Winston Salem, NC
Nominated by: Charity Johnson, PT, PhD, GCS
Angela's interest in geriatrics was evidenced early in her program at Elon University's DPT program, and by her student membership in the Section on Geriatrics. As part of a service learning project during her final clinical internship, Angela conducted a research study on the effectiveness of pressure relieving inserts in the TotaLift chair. Based on her findings, the hospital surgeons decided to purchase a Rojo cushion for every lift chair in every room of the ICU. Angela's presentation of the study received the student research award at the North Carolina Chapter meeting.

Shaunda Gossett, PT
Archdale, NC
Nominated by: Charity Johnson, PT, PhD, GCS
Shaunda expressed interest in working with older clients throughout her coursework at Elon University's DPT program. For her clinical internship, she sought out an opportunity in a skilled nursing facility where she continued to demonstrate excellence and to achieve positive patient outcomes.

Stacia Hall, PT
Convoer, NC
Nominated by: Charity Johnson, PT, PhD, GCS
Early in her academic work in Elon University's DPT program, Stacia demonstrated an interest in working with older clients. While on her clinical internship at a rehab hospital, Stacia created an extensive patient skills manual for the clinic to share with families of older clients. Developed holistically with adult learning principles in mind, the functional training manual has become a valuable educational tool for caregivers.

Cindy A. Michel, SPT
Saint Paul, MN
Nominated by: Mary L. Weddle, MSPT
I am pleased to nominate Ms. Michel for this Award Drawing. As a member of APTA and a full-time, third-year student in good standing in the DPT Program at the College of St. Catherine, she has demonstrated special enthusiasm for working in geriatric PT. She did an outstanding job during her first clinical education course in a skilled nursing facility and she has requested to do another clinical course in this same area of practice. I would be pleased to see her interest in geriatrics supported by being awarded membership in the Geriatric Section!

Like these stories? Nominate a student for this award!
We are now accepting nominees for next year: visit www.geriatricspt.org and click "About Us," "SoG Awards" for instructions.

Cynthia C. Espinal, SPT
Miami, FL
Nominated by: Lisa Roberts, PT, MS, GCS
It gives me great pleasure to nominate Ms. Cynthia C Espinal for the Section on Geriatrics Student Membership Award. Ms. Espinal is a member of the APTA and a second year student in good standing in the MS program at Florida International University. Ms. Espinal has demonstrated an interest in gerontology by joining the Section on Geriatrics. She is also pursuing a certificate in gerontology, which she expects to complete by December 2007. Ms. Espinal is very active in promoting the field of physical therapy. She is class president of the Physical Therapy Student Association at the University and has been involved in organizing many community activities. During

"Hands on Miami" she accompanied elderly disabled adults during a night out with the group. She has also volunteered at a local nursing home.

During Dana's 12 week affiliation at the outpatient clinic of Mary Greeley Rehab and Wellness at Mary Greeley Medical Center in Ames, Iowa, Dana exhibited an interest in working with the older adult. She participated in the Gerontology Colloquium held at Iowa State University and the 2006 Iowa Rural Aging Conference held at University of Iowa. She actively promoted healthy aging while working with me, her CI, with older patients. She reviewed my Home Study module on The Aging Musculoskeletal System with profound insight into functional situations encountered by the older adult at work and at home. Dana also wrote an article for *GeriNotes* on her reflection of the problems with Referral for Profit situations. Upon graduation, Dana will make a great addition to the Section on Geriatrics and would benefit from a mentor within the section to keep her interest growing.

Like these stories? You can support students like these in pursuing their passion for working with aging adults by starting your own Membership Award program! Read on for an example:

We recently received a Section membership form from a student, with a check attached from the student's professor! Rebecca Wojcik, PT, MHPT, GCS of Governors State University in Illinois is paying for two students, Amanda McClure, SPT and Melissa Murray, SPT, to join the Section on Geriatrics. Rebecca taught a geriatrics course last year, and at the end held a drawing for the two sponsored section memberships. To be in the drawing, students had to be APTA members. "Sponsoring student membership in the Section on Geriatrics is a great way to expose students to the resources that are available from the Section," says Rebecca. Well said!

Would you like to sponsor student memberships? Contact a school near you and offer to sponsor a drawing! Go together with other PTs in your area to sponsor several students! Student membership is $15. You can contact PT and PTA Program Directors using the list of Accredited programs on the APTA website (at www.apta.org, click "Education").

Emily Coates, SPT
Norwood, NY
Nominated by: Stacey L. Zeigler, PT, DPT, MS, GCS
Emily is in good academic standing as she enters the last week of her first semester of our graduate program. Emily is a very sweet and sincere person who demonstrates a very genuine interest in taking full advantage of all learning opportunities especially relating to geriatrics. Statement from Emily: In my short life experience, I have witnessed the two extremes of the elderly population. I have witnessed those full of vitality, out golfing or exercising, happy and laughing, enjoying their later years in their own home. I have also seen those confined in nursing homes, often listless and unhappy, bored and unable to rise from their beds. As a future physical therapist, I hope to have the opporutnity to work with the geriatric population, with the hope that I can bring happiness and vitality to my patients, regardless of where they make their home.

Gerald Bunker, SPT
Postsdam, NY
Nominated by: Stacey L. Zeigler, PT, DPT, MS, GCS
With age comes inevitable changes and deteriorations of physical matter. Every since I was a little boy helping my grandmother do something as simple as putting her shoes on, I have had a great respect for the aging. I always felt that one day I would be able to make the difference in the lives of those who have made a difference in mine. This inspired me to choose a clinical affiliation at a skilled nursing facility. Once there, my opinion and views about geriatrics didn't change. Not only did I enjoy helping the residents manage their physical impairments, but the elation and warmth I felt from placing a smile on their faces was invaluable. I believe that I have a natural love for geriatrics and my personality fits this setting perfectly, thus this is what I would like to pursue.

Gregory Alan Cooper, SPT
Conneaut Lake, PA
Nominated by: Julie Hartmann, PT, MEd
It was time to choose a site for clinical practicum two. Greg was willing to try placement at a skilled nursing facility, but reminded me that this was not his primary interest. When I made the site visit, I knew that we had made the right decision. I observed Greg interacting with his residents in a professional, yet caring manner. He spoke about and cared for these residents as if they were all members of his family. His clinical instructor was impressed with his willingness to work with any resident right from the start. He received a written commendation from two daughters, concerning their mother: "He (Greg) was always careful to maintain her dignity and was knowledgeable and efficient when dealing with her problems." As a geriatric practitioner myself, I was thrilled to see the changes in Greg and how he now felt about the geriatric population. I recently went back to the same facility to see another student. The residents still ask how Greg is doing…

Jacqueline Louise Walford, SPT
Clementon, NJ
Nominated by: Jodi G. Handler, PT, DPT
I am nominating my student Jacqueline L. Walford for the student member award drawing. Jackie is a first year student in our DPT program who has exhibited outstanding interest in the field of geriatrics. She is a student member of the APTA. She is an exceptional student academically. She has demonstrated leadership qualities by being elected to our Student Physical Therapist Association Executive Board and was an active participant in our PT Month Activities. One of those activities was a Falls and Balance Screening Clinic for our older adult community. She was the only student from her class who volunteered their time for the lengthy activity. Prior to this

clinic, she had to do special, independent research on the balance tools used because this topic isn't covered until her second year of the program. She worked along with the second year students and demonstrated excellent interactive skills with the older adult clients. She was also able to identify balance and fall risk with some of the clients. I was able to see her passion as she assisted the older adult with the various activities and will be happy to have her as a future colleague in our specialty field of geriatrics.

Janet L. Staples, SPT
Tempe, AZ
I am interested in geriatrics for several reasons. First, as a child growing up, I spent a lot of time with my grandmother, my great-grandparents, and their friends. The stories they told me of their lives and experiences always kept me spellbound and filled me with wonderment. I always knew in my heart what a source of knowledge they held and they were always willing to share with me. This connection has stayed with me throughout life; I am never hesitant to strike up a conversation with an elderly adult to find out what their 'story of life' is. Second, at age 50, I am closer than all of my fellow students at A.T. Still University to being a geriatric. Then there is the fact that the population is shifting to an elderly majority. I so enjoy interacting with the elderly. When doing my recent Fulbright Scholarship research in Norway, I spent much of my free time at the 'eldersentre' making new friends who were as curious about me as I was about them. They were the highlight of my time spent there. Equally, I have enjoyed my time observing at Friendship Village, the assisted living community here in Tempe, AZ, where I live. As the population ages and the older folks keep getting younger and stay active, I feel that there is a golden opportunity to help older adults retain a spring in their step as long as possible. Thank you for considering me in your Section on Geriatrics Student Membership Award.

Jenifer Ann Janszen, SPT
Cleves, OH
Nominated by: Deb Kegelmeyer PT, DPT, MS, GCS
Jeni Janszen has demonstrated an active interest in Geriatrics since entering our PT program. She has been a participant in our community exercise program for individuals with Parkinson Disease. As an off shoot of this she created a brochure describing the benefits of Tai Chi and submitted the brochure to the Geriatric Section brochure competition. She selected clinicals in geriatric practice areas including a SNF and in general seizes every opportunity to work with the elderly and enhance her knowledge of geriatrics.

Joanna-Dawn Alberta Whitlock, SPT
Manchester, ME
Nominated by: Clare Safran-Norton
Please submit Joanna Whitlock from Simmons College DPT program for the geriatric student membership award. She is an excellent student with an outstanding academic record. She is compassionate, respectful, diligent and focused. She enjoys the eldery population and plans to work with them in the future. She has focused her clinical interests in geriatrics during her clinicals to gain more experience in this area. She will be a wonderful asset to our profession. Please consider her as the top choice for this award.

Kelli Alon Trent, SPT
Collinsville, NC
Nominated by: Charity Johnson, PT, PhD, GCS
Kelli, a student member of the Geriatric Section, chose to do her clinical affiliation at a skilled nursing facility. While she was there, she designed 7 competency checklists for physical therapists using modalities with geriatric patients. By the end of her affiliation, she had taken on administrative tasks as well as patient care, including the leading of Medicare meetings.

Kim Fowler, SPT
Ottowa, IL
Nominated by: Jill Heitzman, PT, DPT, GCS, CWS
Kim has spent the last 4 weeks with me on affiliation and has demonstrated outstanding interest in working with the older adult.

Lauren Dayle Simpson, SPT
Indianapolis, IN
Nominated by: Ann Marie Decker, PT, MSA, GCS
Lauren is from a large extended family. She has grown up interacting with her two great-grandparents and four grandparents, all of whom have positively impacted her life. Lauren reports that while in high school she visited a local extended care facility to visit/play cards with the residents on a weekly basis just for fun. She expanded her experiences with older adults as an undergraduate student working with geriatric clients St. Francis Hospital in Beech Grove, as a PT technician. As a first year DPT student at Rockhurst University, Lauren assisted in planning a balance screening for older adults residing in a retirement village near her home. Throughout her internships, Lauren has always shown a unique ability to develop relationships with older adults quickly demonstrating a deep and genuine interest and respect for the full lives the older adults have experienced. As part of her physical therapy education, Lauren has completed multiple case studies examining older adults and the unique problems they face. Lauren has sought out a final clinical internship focused on geriatrics in an acute care setting and is enrolled in the geriatrics elective Rockhurst University's physical therapy program offers. Lauren's ability to solve complex problems while developing rich and deep relationships with clients will serve her well as she pursues her goal of opening a private clinic specializing in care for the older adult. I strongly recommend Lauren Dayle Simpson for the Section on Geriatric's Student Membership award.

Marsha Lee Alford, SPT
Eureka, MO
Nominated by: Margaret Herning PhD, PT
Marsha is a full-time student in her last year of our MPT program and is in good academic standing. She previously earned a bachelor's degree in education and for 24 years worked for the US Post Office while she raised 2 children. During this time she taught water fitness for older adults at the YMCA. At 49 years of age she sold her own home, returned to school, and

met the challenge of being an older student. She is a student member of the APTA (#422158) and has attended CSM 2006 in San Diego as well as the yearly Student Conclaves. She is a positive and caring individual who loves older patients. She volunteered each year to help me with the St. Louis Senior Olympics (working several 8 hr days to time the different events) and also conducted a fitness program for older African Americans living in a senior housing project. Around older patients Marsha constantly smiles and says, "You can do it!" Her interest and encouragement is genuine.

Roby Selby Harrison, III, SPT
Greensboro, NC
Nominated by: Charity Johnson, PT, PhD, GCS
"Trey" Harrison clearly has a special rapport with older clients. Upon completion of his clinical affiliation at a skilled nursing facility, his clinical instructor was highly complimentary about Trey's clinical abilities as well as his manner with his patients. As part of his affiliation, Trey presented an inservice on the principles of motor learning and their applicability to geriatric physical therapy practice.

Stephanie Ann Walters, SPT
Collierville, TN
Nominated by: Ruth Mulvany, PT, MS
Stephanie has shown an active interest in the elderly from the beginning of her experiences in health care. Prior to entering our physical therapy program, she participated in an internship at The Village at Penn State, Life Care Retirement Community, where she worked in assisted living and skilled care developing group fitness programs and working closely with physical therapy and recreational therapy. In our program, she has indicated a desire to pursue gerontology as a specialty in physical therapy and she has excelled in 2 courses that have geriatric content. In class, she shows a keen interest in the topic and contributes examples from her clinical internships. Her gerontology case studies and assignments are exemplary. I believe that Stephanie will make significant contributions to her elderly patients and to the profession of physical therapy.

Stephanie Thomas Ware, SPT
Cape Coral, FL
Nominated by: Laura Wilson White
Stephanie has actively pursued clinical experiences in geriatric settings in order to best prepare herself for a career in geriatric physical therapy. During school breaks, she took the initiative to tour several SNF and inpatient rehab facilities to determine the best options for her clinical rotations.

Stephanie Thornton, SPT
Postsdam, NY
Nominated by: Stacey L. Zeigler, PT, DPT, MS, GCS
Stephanie is very conscientious and has a vibrant and energetic personality that is sure to work well in geriatrics. Statement from Stephanie: I have, within the last year, developed an interest in geriatrics primarily from being around my grandparents. When visiting, I notice all of the health problems they have and wonder what I could do as their granddaughter to decrease their difficulties. As a Student Physical Therapist, I am beginning to understand exactly how much I can help those within this population. Also there is usually more than one health concern, and I find it extremely interesting to see how different health issues interact with one another.

Stephen Bernard Wigger, SPT
Three Oaks, MI
Nominated by: David Village
I became aware of Stephen's special interest in geriatrics shortly after he was admitted to our DPT program 2 years ago. He volunteers regularly in a nursing home, enjoys working in acute care, and is doing his capstone project related to geriatrics. Stephen demonstrates a passion for older adults and plans to work in geriatrics upon graduation.

BALANCE AND FALLS SIG

Ann Williams

As I resign as Chair of the Balance and Falls SIG, I would like to thank all who have helped me advance the knowledge of balance and falls. Thanks to my Board support, Section Administrative support, opportunities for communication through the List Serve and *GeriNotes*, and all of the great speakers at CSM.

In Boston, we had a great presentation "Dizziness in the Older Adult" by Dr. Sue Whitney, Dr. Patrick Sparto, and Dr. Greg Marchetti. They presented principles for differential diagnosis, clinical presentation, and treatment for BPPV.

In the near future, look forward to a Pocket Guide on Balance and Falls from APTA.

Please welcome Judy Daniel from Rochester, New York who will now serve as Chair of the Balance & Falls SIG (email: gdaniel@rochester.rr.com). I know there are great things to come.

STUDENT MEMBERSHIP AWARD

Purpose:
To identify and mentor physical therapy and physical therapist assistant students who have demonstrated an interest in the practice of geriatric physical therapy.

Rationale:
Developing interest in the practice of geriatric physical therapy is a priority to the Section and to the older community. Students are challenged in developing this interest in the clinical setting due to the restraints imposed by Medicare. Students are more likely to remain interested in the older population when they have positive reinforcement of their interest. By awarding Section memberships to these students, we are assisting the advancement of their knowledge, dedication and passion to working with older adults.

Criteria:
To be eligible for this award, the nominee must be:

1. A member of APTA.
2. Enrolled full time in an accredited educational PT or PTA program, residency, or fellowship.
3. In good academic standing.
4. Demonstrated an interest in geriatrics as evidenced by special course work in the area of geriatrics, had an exceptional clinical experience in the area of geriatrics or some other aspect that indicates the student as having special interest in geriatrics, such as, research project, case studies, special presentations, volunteering, etc.

Nomination Process:
1. Any current member of the Section on Geriatrics or a faculty member who teaches the geriatric content at the university may nominate any PT or PTA student.
2. Completion of a post card or e-mail of nomination that describes how and why the nominee meets the criteria. Nominator should provide nominee's full name or APTA member number.
3. Nominations must be returned to the Section office by January 15.

The awards committee will review the nominations to verify they meet the qualifications.

The final award winners will be drawn during the Business Meeting at Combined Sections Meeting. There will be up to 5 PTA and 5 PT students selected to receive one year membership to the Section free.

E- Mail nominations to:
geriatrics@apta.org

WANTED

SECTION ON GERIATRICS
REGIONAL COURSE LEADERS

Our Mission: To further our members' ability to advocate for optimal aging and to provide best practice physical therapy.

Position Title: Regional Course Leader
(See map below for the four regions: East, Central-East, Central-West, West)
Responsible To: Regional Course Committee Chair
Program Goal(s): To offer one high quality, evidence-based, and affordable course per region each year. To have these courses generate income for the Section.
Benefits To You:

- Become familiar with every resource available to members through the Section on Geriatrics, and become more familiar with APTA resources.
- Use your creativity to offer outstanding, affordable continuing education to PTs, PTAs, and other related professions.
- Learn to successfully manage all the logistics related to offering a continuing education course.
- Form a committee in your region dedicated to organizing courses.
- Participate as a committee member volunteer of the Section on Geriatrics throughout the year, with opportunities to get involved in other positions.
- Make lasting contacts and friendships with outstanding PTs and PTAs who have an interest in geriatrics from all over the US.

Responsibilities (You may recruit committee members, delegate tasks, and oversee their progress, as opposed to completing all items yourself):

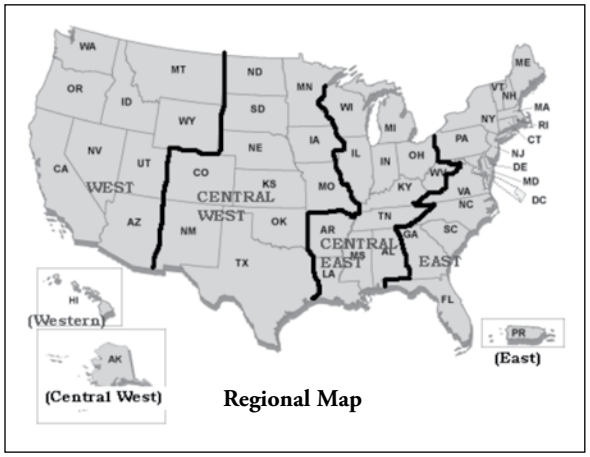
A. Identify and contact potential host facilities for courses.
B. Work with chair in identifying potential speakers for courses.
C. Contact speakers and facilitate contractual agreement with assistance from regional course chair (official contracts will be offered directly from the Section office).
D. Obtain speaker bios, abstracts of speakers' presentations, outlines and objectives for presentations, and handouts. Forward to Section office by deadlines.
E. Collect all information needed for confirmation letters (check list provided by Section office).
F. Communicate to speakers: deadlines, reminders, schedule changes, or other information at necessary intervals prior to the scheduled program.
G. Research hotels in the area where attendees could receive a discounted group rate.
H. Contact the Section Office one month prior to the course to check that hotel and travel arrangements have been arranged for speaker(s).
I. Attend regional programs as needed.
J. Coordinate (or find appropriate on-site contact to coordinate) all meeting activities on-site during the course:
a. Check the rooms in the facility.
b. Ensure that appropriate, functional audio/visual equipment is present.
c. Verify location and effectiveness of light switches and dimmers.
d. Greet speakers and review biographical information for making introductions.
e. If food is being provided, greet caterers and help set up as needed.
f. During presentations, be attentive to timing, audience and speaker needs, room temperature, and outside noises, taking appropriate action when needed.
K. Send thank-you notes to all speakers and volunteers after the course.
L. Coordinate the collation of course evaluation forms with Section office, and communicate results to speakers and Regional Course Chair.

Qualifications:
Must be a member of the Section on Geriatrics.
Must maintain a working e-mail address in APTA's database.
Must be able to respond to queries sent via e-mail or phone within one week.

Training and Guidance: The Section Executive will provide an orientation packet, **as well as a "Course Planning Manual," with the resources to guide you through EVERY aspect of planning a course**. The Regional Course Chair will arrange to talk over the telephone with you within two weeks of receipt of the orientation packet and manual. The Regional Course Chair will provide support throughout the term, work closely to support your work, and is available to answer any questions.

Job Support:

- Course Planning Manual
- The Regional Course Chair is responsible for supporting you in many aspects of course planning.
  This includes:
  - o Oversee course planning, assisting regional leaders as needed. Review the overall content of all course proposals, to ensure a balanced range of marketable topics are being offered nationwide.
  - o Help regional leaders track course budgets, and determine the number of registrants needed to break-even. (As of 2007, a reasonable break-even number is 15 registrants).
  - o Negotiate hotel contract with the hotel(s) recommended by the regional leader. Share copy of contract with Section office and regional leader.
  - o Review speaker, facility, and catering contract details submitted by regional leader, and send to Section office for generation of an official contract if acceptable.
  - o Responsible for all marketing.
  - o Recruit and serve as direct liaison to sponsors for courses.
- The Section office is responsible for supporting you in many aspects of course planning. This includes:
  - o Offering official contracts to speakers and facilities.
  - o Accepting registration forms, answering general questions, processing registrations, and sending confirmation letters.
  - o Printing handouts, certificates, and badges and sending to the facility for the course.



Regional Map

Commitment: 3 year term, estimated 4-6 hours per month.

I have read and understood my responsibilities according to this job description. I understand that official contracts to facilities, speakers, and sponsors can only be offered from the Section office, and should not be extended to anyone from me.

_____ _____

Volunteer- Regional Course Leader Date

INTERNATIONAL ASSOCIATION OF PHYSICAL THERAPISTS WORKING WITH OLDER PEOPLE (IPTOP) WORLD CONFEDERATION FOR PHYSICAL THERAPY INTERNATIONAL CONGRESS, VANCOUVER

Neva Greenwald, IPTOP Liaison

The June Congress in Vancouver is only a few weeks away. The Section on Geriatrics (SOG) will have a presence there in at least 4 ways. First some members will be making educational and scientific presentations. Secondly, the SOG is distributing some educational modules to therapists from developing areas of the world. Thirdly, information on the SOG will be distributed at the IPTOP booth. Last but by no means less important SOG members will be participating in a special educational session, running for leadership positions at the business meeting and attending the social event being held by IPTOP.

The Schedule of IPTOP activities is as follows:
Sunday June 3 at 3:00pm
Panel discussion on world aging, regional variations, and physiotherapy approaches.

Monday 4–Wednesday June 6
The exhibit hall will be open.

The information on location of the business session for IPTOP is not available as yet.

For additional details and information on events not posted please check http://www.wcpt.org/congress

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Geriatric Physical Therapy Listserv
Join at http:/groups.yahoo.com/group/geriatricspt and click 'Subscribe.' When you receive an email confirming your subscription, you have full access to member areas of the site.

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We don't stop playing

because we grow old;

we grow old because we stop playing.

- George Bernard Shaw

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