



Corps Chief's Message

By COL Rebecca S. Hooper
Chief, SP Corps

What's Your Passion?

As of the 55th Anniversary of the Army Medical Specialist Corps on 16 April 2002, I have been in the Army for 27 years, 7 months, and 24 days. Seems like a long time when I write it down. Seems like a very short time when I stop to reflect about all that has happened during that time. The interesting thing is that there is one word that has been a theme, one constant throughout those years. First as a junior officer, later as a staff officer, and now as a senior leader I personally witness the "passion" with which OTs, PTs, Dietitians, and PAs approach their work.

Last week I had two officers come to my office to brief me. One was an AAR about a completed project. One was a pre-brief about an upcoming activity. I found it interesting that both officers used the very same word, "passion", to describe that which motivated them to work hard, which guided them in a particular direction, which gave them energy and commitment.

As I travel around the Army and visit with SP officers, enlisted soldiers, and civilians, it is very obvious to me that throughout the Corps, there is a drive for excellence, a desire for learning, an extraordinary ability to "do more with less", and a commitment to being the best our

professions have to offer. I am grateful to each and every one of you for caring so much about what you do.

Taking care of the people who are taking care of the patients is my passion. Taking care of the members of the SP Corps can be as routine as attending to the daily business of the Corps or as exciting as getting to participate in the promotion of the first PA to make O-6. Telling you what a great job you are doing is also part of taking care of you.

You're doing a great job. Thank you.

What's your passion?



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Occupational Therapy Section

By LTC Karen Cozean
Chief, Occupational Therapist Section

It has been a busy quarter for Army Occupational Therapy and I'd like to begin by thanking CPT Ted Chapman and his staff for the outstanding Conference hosted by ISR in March. The Management of Burn and Multiple Trauma Patients Course received rave reviews by the participants and a portion of this course will be available on tape for those of you who were unable to attend. Diane J. Atkins, OTR/L FISPO who is nationally known for her work in amputee rehabilitation, was one of the guest speakers at this course and her lectures were recorded. CPT Chapman is working with the automation staff to make six VHS tapes available for a fee of \$2.00 each for Official Government Use Only. You can send a request using DA Form 3903 to the AMEDD Health Sciences Visual Information Television Division, Ft. Sam Houston, TX 78234 to receive these valuable tapes. The tapes will include the following information:

1. Pre-prosthetic Program
2. UE Body-Powered & Electric-Powered Prosthetic Componentry
3. Prosthetic Training Principles
4. Functional Outcomes of unilateral and bilateral Amputees
5. Future UE Prosthetic Research
6. Case Presentation with Bilateral UE Amputee with Prosthetics

These tapes should be available for purchase by the end of May. Each tape runs between thirty and sixty minutes. Efforts are underway to bring you further training in amputee rehabilitation with Diane Atkins and I will provide you further information when funding becomes available.

To establish a uniform approach for treatment of patients requiring amputation of an extremity following trauma, the Guidelines for Management of War Amputees will be published very soon and I will post it on KE under Clinical Guidelines. This guideline was developed by multiple disciplines with input from national subject matter experts. I would like to thank the Regional Occupational Therapy Consultants who provided their valuable input for this important guideline.

Awards and Congratulations

Congratulations to 1LT Patricia Stange, 2LT Michelle Kinsler, 2LT Sean Smith, SGT Kim Diaz, SGT Sean Smith and PFC Melvin Steed, for passing their National Certification Exam!

A recipient has been selected for the Myra L. McDaniel's Writers Award and I look forward to presenting this award to the 2002 winner, during our May 21st, VTC so stay tuned.

Congratulations to COL Valerie Rice and her staff for

receiving The Surgeons General's Excalibur Award for Operation Aegis -Injury Control Program. COL Rice and her staff reduced student musculoskeletal injuries and clinic visits by working with each student battalion to improve their SOPs as well as provide health promotion ideas to reduce training injuries. They created a user's manual guide for commanders and other professionals to implement a similar program. Their injury prevention program will be placed on the Center for Health Promotion and Preventive Medicine (CHPPM) website.

The Excalibur Awards were initiated this year to recognize excellent performance, demonstrate improvement and share ideas throughout the AMEDD. They will be presented annually and I invite you to consider submitting for next years award. You have great ideas and are doing fine work at your facilities that could be recognized. The nomination template is available at the following website: www.cs.amedd.army.mil/qmo/Home.htm. Further information on this award is available from the contest administrator Fay Hendrix at 210.221.7360.

Behavioral Health Reengineering Initiative Update

During the past quarter, the main focus has been to continue to provide input into the Mental Health regulation update, AR 40-216. Occupational Therapy is well represented in this new regulation and members of Project Paratus were present for the latest conference held 23-24 April in San Antonio to ensure the work we do in our process action team aligns with Behavioral Health's initiatives. The working groups and OT representatives for these working groups are: Automation – LTC Bill Howard; Education - LTC Cassy Lewis and COL Valerie Rice; Clinical – CPT Sharon Newton; Policy – LTC Karen Cozean. I thank each of you for taking time out of your busy schedule to attend this meeting and represent our interests.

ASAM

The new ASAM III was piloted at Fort Hood in April and due to the preparation of the PT/OT clinic Chiefs, the interview went well with the staff. LTC Vicki Belcher, C, PT wrote a very helpful summary of the OT/PT meeting with the ASAM staff. I have posted this information on the KE OT section under ASAM III. Take a look; it will help you prepare for your survey. At this time, the team will be visiting Ft. Bragg and WRAMC in June. According to the ASAM staff, the schedule could change so I suggest you keep in touch with the manpower personnel at your local MTF to find out when the team will be visiting you.

Retirements

We have two fine Officers who will be retiring the end of May and I would like to thank each of them for their outstanding service over the years. LTC Janice Rausch has had a 21-year career in the Army and she is a great contributor to the section and Corps as a master clinician and mentor to many officers. She trained our

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Physical Therapy Section

By COL Charles Scoville
Chief, Physical Therapist Section

As summer approaches so does the time for the majority of our moves. Every summer, along with the moves, there are several individuals leaving Active Duty. LTC Jane Freund and COL Gail Deyle will be retiring, and CPTs Kristine Youngstrum, Hazel Temmen and Guy Terry are ETSing. Each of these individuals has contributed to the strength of our Corps and I thank each of them and wish them all the best. In 1999 the Physical Therapist Section of the AMSC had a contest to develop a distinct Physical Therapy Crest. CPT Paula Knebel Smith submitted the winning design. This design is being used in a number of ways. COL Hooper had luggage tags developed with the design printed on them. I have provided these tags to each of our Active Duty Therapists, either at meetings, on site visits, or through a recent mailing. These tags permit each of us to identify ourselves as members of a highly recognized and honored organization. If you did not receive a tag by now, please contact me and I will send you one.

I am extremely proud of all of our therapists and the jobs they are doing, and at least once a week I am asked from one location or another “where’s my PT?” or “how can I get more PTs?” Everywhere we send an Army PT you set the standard and are recognized for your contributions. We have demonstrated that not only do our MEDCEN and MEDDAC Clinics provide the best care available, but they also prepare our therapists to be placed in harms way and care for our troops in austere environments. Each Commander I have spoken with has stated they have “The Best Therapist” in the Army and that PT is crucial to their successful accomplishment of their mission. I thank you all for your day-to-day efforts and for being the best.

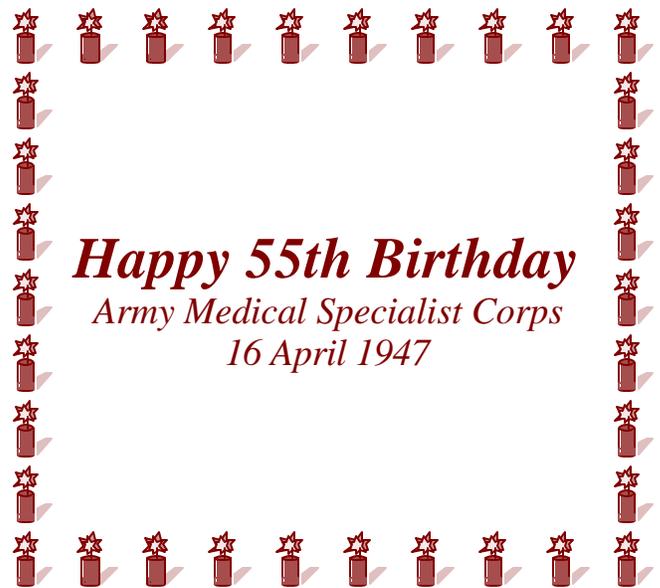
Occupational Therapy Section (con’t)

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Interns well in the concepts of OT. She has been an active contributor to AOTA with her work as the Chair of the Physical Disabilities Special Interest Section and liaison officer with the Commission of Practice. During her last tour, she spearheaded the work done by OTs with the PTRP. She willingly shared her programs with others and we thank you for your vision with this important program. LTC Rausch will reside in Columbus SC.

COL Valerie Rice has had a 25-year career in the Army. She began her career as Assistant Chief, Ft. Bragg and later Chief OT of the 97th General Hospital. She was instrumental in establishing a position at CHPPM for OTs to continue to work in the field of Ergonomics. She is known throughout the Corps for her contributions to research, teaching and mentoring officers in research and publishing. She has published over 50 articles, technical reports and book chapters and is a very successful grant writer. We thank you for your many contributions to the OT section and Corps. COL Rice will reside in San Antonio. We wish these two outstanding officers the very best as they begin new chapters in their lives.

In closing, I wish you all a great summer and I thank each of you for the great work you do for our customers each and every day.



Happy 55th Birthday
Army Medical Specialist Corps
16 April 1947

We would like to know if you celebrated the AMSC birthday in the month of April. Send pictures, newspaper articles, etc. to MAJ Woods at 210-221-8306/DSN 471 or email at yvette.woods@cen.amedd.army.mil

Dietitian Section

By COL Brenda J. Forman
Chief, Dietitian Section

Greetings everyone,

It's hard to believe that I've been in this position for one year. The time is moving very quickly. Let me first thank each of you for your loyal support and patience this past 12 months as I transitioned into my new role. It's been quite and adventurous journey. We have accomplished much these past 12 months, yet there is so more to do in the months ahead.

Here's a quick highlight of some of the exciting things happening around the globe:

DEPLOYMENTS:

MAJ Colleen Kesselring and **SSG Wells** are both deployed with the 21st CSH and are doing a phenomenal job providing medical nutrition therapy and education to soldiers. They have set up shop in the gym and business is booming. If you get an opportunity, please send MAJ Kesselring and SSG Wells a note. MAJ Kesselring's e-mail address is: colleen.kesselring@kuwait.army.mil

MAJ Sarah Spielman from DDEAMC replaced MAJ Reagan in Bosnia and hit the ground running. I am proud to announce that she is serving as the Task Force Deputy Commander for Administration, GME coordinator and TF dietitian and is doing an outstanding job. MAJ Spielman's e-mail address is: sara.spielmann@emain-tc3.5sigcmd.army.mil. Her mailing address is:
MAJ Sara Spielmann
TF Med Eagle
Eagle Base
APO AE 90789

MAJ Joanna Reagan arrived home safely in March and has re-joined her family and friends at WRAMC. Thanks again MAJ Reagan for a job well done!!

1LT Jason Woodward will be joining **MAJ Theresa Kemmer** for the upcoming Pediatric Joint Medical Residency Training Mission to Honduras, 3-11 May 02. Please let me know if you have staff members that are interested in going on subsequent missions. These missions are ongoing and are scheduled for May, Sept and Nov. Please contact MAJ Kemmer directly via e-mail or phone if you have questions about this training opportunity: DSN 662-2007, Com: 202-782-2007

MAJ Will Wheeler recently completed a Staff Assistance Visit to Honduras to assess the need for a dietitian as a part of Joint Task Force Bravo and to provide MNT, and nutrition education for the population. The visit was very successful and plans are in progress to continue to provide support to these soldiers as

LTC Linda Rowbotham served as the PROFIS 44th MEDCOM 65C during the XVIII Airborne Corps Joint Warfighter Exercise at Fort Bragg, North Carolina for the period of 22 January - 1 February 2002.

Kudos are in order for **MAJ Terry Kemmer** who will be presenting her dissertation research findings "*Anemia and Iron Deficiency in Refugee Children from Burma*" at the Asia Pacific Military Medicine Conference in Malaysia and at the Thai Red Cross Society in Bangkok, Thailand in April.

Congratulations to **MAJ Melanie Craig** for her selection as the new Program Director for the U.S. Military Dietetic Internship Consortium, effective 1 July 2002.

OUTSTANDING YOUNG DIETITIAN OF THE YEAR:

Congratulations are definitely in order for **CPT Kerri Murphy**, who was recently selected as the Outstanding Young Dietitian in the State of Georgia. This is quite an accomplishment and speaks very highly of CPT Murphy. Only 2 individuals were selected for this award in Georgia, a state of more than 500 members. She was selected based on:

- Contributions of service/ leadership to the Dietetic Association at all levels, including major contributions, offices held, and years involved.
- Contributions to the Dietetic profession through (a) professional work experience showing evidence of professional responsibility and resourcefulness, contributing beyond her major job responsibility and showing evidence of being a superior dietitian, and (b) scholarly activities and contributions via participation in research projects, publications, and professional group presentations.
- Recognition with community and other professional organizations on a voluntary, non-work related basis.

CPT Murphy served as the President-elect for the Augusta District Dietetic Association and will assume this role in September 02, replacing MAJ Victor Yu.

National Nutrition Month Highlights: Many "extra" educational activities were conducted during March 02 in celebration of NNM. Events ranged from trivia questions by e-mail, education displays throughout facilities and in the community; weekly articles in local newspapers, Installation Dining Facility Staff Education Awareness Campaigns/contests etc. Thank you so much for all of your many activities to enhance nutrition awareness— especially during the month of March. All of your activities will be consolidated by MAJ Corum and will be used in the 2003 DOD NNM Resource Guide.

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Physician Assistant Section

By LTC Louis H. Smith
Chief, Physician Assistant Section

First active duty PA promoted to Colonel

COL William Tozier became the FIRST active duty Army PA to be promoted to the rank of Colonel in a ceremony held at the Stilwell House on Fort Sam Houston on April 1st. The 'eagles' were pinned on COL Tozier by COL Kirkpatrick and his wife Sarah Tozier. In attendance were the senior SP leadership to include COL Hooper, LTC Smith, LTC Cozean, LTC Morrey, and many of the PAs stationed at Fort Sam Houston. A reception followed the ceremony.

New Chief, PA Section announced

The Surgeon General has selected COL Tozier as the next Chief, PA Section. COL Tozier and I will have a short transition period that will begin in mid-June prior to my departure. I encourage each of you to give COL Tozier your support as he leads the PAs through the next four years.

Promotions

The AMEDD Major's board was released on February 20th. PAs did exceptionally well on this board as we had 31 of 33 individuals who were either above the zone or in the primary zone selected for promotion. This is a 94% selection rate, which far exceeds the DOPMA standards. This is a testament to the outstanding records and service that this group of PAs had going into the selection board. Exact promotion dates will be announced when released on the PERSOM webpage @ www.perscom.army.mil <<http://www.perscom.army.mil>>. Congratulations to all who were selected.

Awards

CPT David Hamilton was selected as the 2002 recipient of the Surgeon General's Physician Assistant Recognition Award. CPT Hamilton is assigned to 2nd BN-37th Armor in Friedberg, Germany. The award reads in part, "For exceptional duty as Physician Assistant to 2nd BN-37th Armor, CPT Hamilton worked to streamline the medical care of soldiers. Upon his arrival at Friedberg, Germany he helped initiate and oversee the establishment of a Brigade consolidated aid station, this helped to centralize medical support for the entire Friedberg community and foster a better working environment for all the PAs that worked in the clinic. To ensure consistent medical care, he implemented SOPs that each medic could refer to for accurate treatment protocols for common illnesses and injuries. CPT Hamilton also created a 100 page Medical Platoon Handbook covering aid station operations and training guidelines."

The TSG Physician Assistant Recognition Award was presented to CPT Hamilton at the Presidents Reception at the annual Society of Army Physician Assistants CME Conference

Physician Assistant Readiness and Recertification Preparation Symposium 6HA0626

The annual Readiness and Recertification Course was held at Fort Sam Houston February 25- March 1. The conference was a resounding success with over 40 PAs attending the resident phase. This included PAs who were centrally funded along with Army, Air Force, Navy and Coast Guard PAs stationed either at Fort Sam or in the San Antonio area.

A live Satellite broadcast was transmitted of the classes on February 26-27. This provided 11 hours of Cat I CME that was approved by the AAPA. Over 106 sites picked up the broadcast across the country, in Germany, Belgium, Alaska, and Hawaii. While most participants were PAs, nurse practitioners and some doctors also attended. The feedback from those at each of the participating sites has been overwhelmingly favorable.

Also, a distance learning (DL) project is underway in which we hope to provide approximately 15 hours of CME to any PA who wants to participate. This DL project is a CD/web based program containing numerous lectures from the resident conference. It will allow you to listen to the lecture and take a then take a test. Those successfully passing each test will be given CME credit. The expected release of the CD is in late April or early May. More details will follow as the project is completed.

Society of Army PAs Annual CME Conference

The SAPA conference was held from April 23-27, 2002 in Fayetteville, NC. The 4th Annual Scientific Poster Presentation was held in conjunction with the conference during the same week. This is always an opportunity for any PA who has conducted research, written a paper, or is involved in an interesting project to present their work. There was a substantial cash prize for the top three winning posters along with the opportunity to showcase PAs in practice, which makes it worthwhile to prepare and submit a poster. For more information go to the SAPA website at www.sapa.org <<http://www.sapa.org>>.

Assignments

In the last Medallion I talked about our inventory and how we expect to have over 620 PAs on active duty by the end of this fiscal year. It still looks like we will hit that mark and with some room to spare. MAJ Gross has been doing a great job of making sure all of our authorizations are filled. We will start assigning PAs to TDA overstrength positions this summer. These will be physician slots in either FP or flight surgeon positions.

Operation Enduring Freedom has resulted in some unanticipated problems that we are working to correct. MAJ Gross had

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PERSCOM

By COL Bonnie De Mars
Chief, SP, PERSCOM

It is Spring and the majority of FY 02 promotion boards are complete (06 board in July remains), and I have been in this job for about a year. It is a great time to share some thoughts and observations about the “**personnel** and assignment” business; topics that are near and dear to each of us.

You may or may not know that as a Corps we now number **1000+**. That is 1000+ individuals with needs, concerns, issues and requests. Believe me, that translates into a lot of phone calls, emails, and personnel transactions. It is an on-going challenge to meet the needs of our officers and the Army. There are, however, a number of initiatives NOW in place to put YOU in the driver seat.

The one thing that will make the **BIGGEST** change in how business is done is Army Knowledge Online, usually referred to as AKO. If you are not already enrolled, **you need to be**.

Officers can now be **personally involved** and **accountable** for the management of their own records. It is anticipated that all officers will be able to access their own Official Military Personnel File (OMPF) by **July 2002**. What does this mean? For starters, you will be able to view your OERs and awards. You can determine if all of yours are there, if any are missing, if they are in chronological order, or if any of them are duplicates. You will be able to submit changes via fax and/or scan in missing documents. The expectation is that your record would be corrected in 24-48 hours.

You will soon be able to view your photo as well. All of these changes mean that you will know what your record will look like when it goes before a board. Preparing records for boards and insuring for accuracy and completeness will become a **PERSONAL** responsibility.

AKO also has a number of other features to include an email capability where you can have mail forwarded to this account which can be accessed from the Internet. Do not delay in becoming familiar with all the features and benefits of AKO.

Remember, your local military personnel shop (commonly referred to as MILPO or PSB. It is generally a post unit vs. in your hospital.) is always available to you to complete most of your personnel transactions. It is their responsibility to initiate most of the changes you may need done such as updating awards, changing addresses, the married Army couples program and EFMP requests, etc. **NOTE:** Many of you have not updated your local addresses or your home and duty phone numbers. Please contact your MILPO and get this accomplished. There are times when we may need this information and if we do not have access to it, you may miss out on some opportunities.

Assignments. I would like to reiterate that anticipated

This list is determined after reviewing arrival dates of officers (generally those folks that will have been in place for 3 years) and after conferring with the consultants for each AOC. This is a dynamic list. Things can change due to a variety of reasons. Please go to our web page and submit a current preference sheet and contact us to make us aware of your interests and desires. Please note that there are job descriptions posted for those somewhat unique assignments in our Corps.

To continue on a topic related to assignments, I would like to share that depending on where someone sits, the perspective on the assignment piece will vary. We try very hard to balance the needs of the officer with the needs of the Army. However, there are usually numerous variables to consider and the officer may not always understand the view of the “big picture” and why things are the way they are. Please understand that we do try to work with you, but often there are a number of factors to consider. Sometimes in discussing assignments, we can find a perfect match right on. There are times, though, that we must negotiate different features. This could include considering a different assignment from what was previously discussed, a report date change because there may be too large an underlap at the present or new assignment or a joint domicile conflict. Believe me, we do try to work things out to everyone’s satisfaction (individual officer, outgoing Chief or incoming Chief, needs of the clinic, directorate, etc.), but in the final analysis, when an assignment needs to be filled, our ultimate responsibility is to meet the needs of the Army.

In closing, hopefully many of you have already benefited from the changes discussed above. I think that you will find that there are many ways for you to navigate the “personnel” white waters. We are always open to suggestions on how we can serve you better. Send us an email and let us know how we are doing. Also, be on the lookout for the new roster. We have just about finalized our summer moves.

Keep those soldiers who are in dangerous areas or on missions away from home in your prayers. Freedom is not free as we all know. Thanks for your support and good work. Even though you may not hear it often enough, you and the work you do is appreciated (probably more than you know).

Note: Check the website for new assignment possibilities at www.perscom.army.mil/opamsc/assignment_openings.htm.

Dietitian Section (con't)

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Weigh To Stay Update

The Weigh to Stay Marketing campaign is in full swing at many installations. The POC's have been identified and LTC Rowbotham hosted the first "WTS" phone conference in April where POC's gave updates of their marketing campaigns. Phone conferences will be held monthly. One of the WTS POC's indicated in an e-mail to me that "Weigh to Stay is the Weigh to Go!!! I was very impressed by the enthusiasm that came across the screen.

Dietary Supplements Update:

Please continue all of your education initiatives in this area include the numbers on your monthly report. I have had to use this data on several occasions when answering taskers related to this subject. Remember, our biggest weapon to deal with this very controversial issue is **EDUCATION**. We need to help military beneficiaries make informed decisions as related to dietary supplements. I plan to share with the field a Consumer Awareness Plan and Status Report developed and presented to LTG Peake as related to this topic in my next update to the field.

2nd Annual DOD Population Health and Health Promotion Conference

Dates: 9 – 16 August 02

Location – Baltimore Convention Center, Baltimore Maryland
MAJ Corum, the Conference Planner has included on the agenda a Weight Management Skills Training Workshop as well as several sessions on Complementary Medicine. We are also planning to submit two posters for presentation – the topics will include: "Weigh to Stay", and Dietary Supplements Education Initiatives. I encourage others to submit poster abstracts for presentations as well.

DOD Nutrition Symposium

I hope many of you are planning to attend this symposium in Philadelphia this year prior to attending ADA's Food and Nutrition Conference. The dates are for the symposium will be Friday 18 October and ½ day on Saturday 19 October. The workshop will be expanded to 1.5 days this year to allow us time to have a breakout session by service. We will also host a "Poster Presentation" contest – so start thinking about submitting an abstract for presenting at the Nutrition Symposium this year. This is another great opportunity to share with others all the great work you are doing.

News From WRAMC:

- The Nutrition Care Division renovation is tentatively planned to begin mid April. The Contractors are awaiting the final notice to proceed.
- The Clinical Dietetics and Research Division only had minor issues resulting from the MOCK JCAHO Survey in March. Kathy Brooks did an exceptional job in ensuring that training and updating of the SOPs were completed throughout the Division and the clinical dietitian's and NCOs did an exceptional job at ensuring that they and their wards were prepared for the visit. Cheryl Hostetler also provided valuable assistance with the WRAMC Hospital Patient Screening

- The out-patient immunization screen was completed for the Immunization Clinic. It is an out-pt screening form designed to capture patients at the immunization clinic who are at nutritional risk.
- MAJ Bovill, Steven Hansch, and MAJ Kemmer updated the Nutrition lecture for the CHART Course. They were part of a team effort tasked to redesign the "medical day" of the course. The team was comprised of individuals working with the Center for Disaster and Humanitarian Assistance Medicine (CDHAM), Uniformed Services University of the Health Sciences (USUHS).

News from Madigan Army Medical Center

NATIONAL NUTRITION MONTH HIGHLIGHTS:

Madigan Army Medical Center: Very successful National Nutrition Month (NNM) spearheaded by Holly Trujillo, Nutrition Clinic dietitian and supported by all MAMC dietitians--month long activities included: 1. Daily Nutrition Trivia questions in the E-MAMC Daily Bulletin. Final nutrition quiz on last day of month with 50 winners (answered all questions correctly) received T-shirts, fruit cups, tote bags and other NNM paraphernalia. 2. Daily education display table in Medical Mall/Nutrition Clinic, staffed by staff dietitians, Washington State dietetic interns providing a variety of nutrition and health topics. Display bulletin board. 4. Staff Physician In-service on Nutrition topics. Traditional NNM Grey Army Airfield run. 4.2 mile run-over 80 participants on a cold rainy Ft. Lewis day. Dietitians provided free body fat testing, all participants received T-shirts and water bottles. LT Hillary Harper wrote an article for The Mountaineer on Healthy Eating for Kids.

Okuba Medical and Dental Clinic Dedication at North Ft. Lewis.

Nutrition Care personnel helped support the dedication of the Okuba Clinic. Named after Tech Sgt James Okuba, Medal of Honor awarded by President Clinton for service during WWII. Present for dedication were GEN Eric Shinseki, CSA, Washington State Governor Gary Locke, Washington State Nisei groups and many more.



PROFIS Training for Dietitians and 91M NCOs

By MAJ Ruth Holje
Nutrition Instructor/Writer

What's in a name? For the AMSC Post-graduate Professional Short Course held 28 January – 1 February 2000, the name spells out a mission.

Advanced – beyond the baseline knowledge, more complex situations

Nutrition – our business and area of expertise

Support in – therapeutic, administrative, morale, the commander's priorities

Force – our customers, the military, family members and DoD employees

Health – supporting the picture of health, a strong and fit soldier that is less likely to be injured accidentally, can more readily withstand exposure to disease and stress, and will more promptly heal from wounds or injuries

Protection – the AMEDD motto “to conserve fighting strength”

Gathering at Fort Sam Houston, 17 active duty officers, 3 reserve officers, and 6 noncommissioned officers shared ideas among themselves and with the 24 different speakers on nutrition missions in deployment. Several other 65Cs and 91Ms stationed at BAMC and the AMEDD C&S joined in as their schedules permitted. The Commission on Dietetic Registration approved 26 Continuing Professional Education Units for the course.

Value-Added Benefits. Many speakers got the students involved in their subject. CPT Liz North had small groups come up with a bare minimum list of foods to supplement the UGR-A rations in a combat hospital setting. This list will be tested at the Joint Field Nutrition Operations Course. MAJ Will Wheeler and MAJ Ruth Holje asked for feedback on the latest draft of FM 4-02.56 (formerly 8-505) before sending it to the editor. Mrs. Heather King challenged the class to create health promo-

tion messages for the media. MAJ Teresa Kemmer encouraged the attendees become familiar with tools used to complete nutritional assessments in refugee populations. Larry Hufford, PhD, political science & international relations professor at St. Mary's University, described the complex situation in the Afghanistan region causing all to reflect on their roles in the war.

MAJ Joanna Reagan's, live presentation from Task Force Med Eagle, was the highlight of the conference. MAJ Reagan described her duties and experiences as the Hospital XO, Health Promotions Coordinator, Education Coordinator and Nutrition Services Chief. We met the goal of a successful VTC connection as well as getting “pumped up” for exciting possibilities in future deployments.

Besides the mentioned speakers, we must thank other SP members for their contributions: COL Hooper, COL Forman, LTC Bathalon, LTC Worley, LTC Dilly, LTC Ellison, MAJ Anyachebelu, MAJ Corum, CPT(P) Hernandez, CPT Stavinoaha, and SGM Merrill. Civilian experts and officers from the JAG, MC, MS, VC Corps, rounded out the speaking schedule. Project Officer, MAJ Holje and Administrative Assistant SSG Fransisco Alexander appreciate the support offered to make this course a training success! For more information, please check out Nutrition Care Branch website www.cs.amedd.army.mil/ncb/index.html or Department of Health, Education, and Training website www.cs.amedd.army.mil/dhet/index/html.

Congratulations to the 9A Recipients

LTC Vickie Thomas
LTC Mary Laedtke
LTC Janice Rausch
MAJ Pauline Gross

Ft. Bragg
CHPPM
Ft. Jackson
PERSCOM

CLASS 2002 RESEARCH PROJECTS

EMG activity of the abdominals on static and labile surfaces in subjects with and without LBP. FRAC Chair: Stephen Allison, PT, Ph.D., ECS LTC, SP Associate Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

Abstract

Objective: The purpose of this study was to examine motion in the frontal and sagittal planes and static posture of the thoracic spine in the 3rd through 9th decades of life using noninvasive and clinically meaningful techniques. **Design:** Descriptive. **Setting:** Active duty military members, dependents and retirees. **Patients:** 197 healthy volunteers ranging from 20 to 89 years of age. Criteria for admission into the study were (1) no reports of mid-back (thoracic region) pain currently or within the past 6 months, (2) no previous (thoracic) spinal surgery, (3) no known diagnosis of scoliosis, or osteoporosis with documented compression fracture, and (4) no present pathology which might limit any motion performed in the study. **Main Outcome Measures:** Sagittal and frontal plane motions were measured by two raters using dual inclinometry at T1 and T12. Static posture was assessed using a flexible ruler. **Results:** Intra-rater reliability was excellent ($ICC(3,2) > 0.90$) for both sagittal and frontal plane motions. Inter-rater reliability was determined to be moderate ($ICC(2,2) = 0.74$) for sagittal plane motion and good ($ICC(2,2) = 0.84$) for frontal plane motion. Inter-rater reliability was moderate ($ICC(2,1) = 0.75$) for flexible ruler measurements. Differences in frontal plane motion were significant ($p \leq .001$) for age and gender. Motion in the sagittal plane was significant for age alone. Static posture measurements revealed a main effect ($p < 0.05$) for age and gender on the thoracic angle. **Conclusions:** Regardless of gender, effects of the natural aging process on the thoracic spine tend towards decreased motion and increased kyphotic posture. This study has also shown that in healthy individuals, thoracic range of motion varies greatly and differences in thoracic curvature exist without symptoms of spinal pathology. **Key words:** Thoracic spine, inclinometry, range of motion, posture. **Background and Purpose.** Exercises on labile surfaces thought to enhance abdominal muscle activation are often used clinically but there is currently little evidence to support this method. The purpose of this study was to measure the effects of surface lability on abdominal muscle activation in subjects with low back pain and in controls subjects. We hypothesized that subjects with low back pain (LBP) and control subjects would show similar patterns of increased superficial abdominal muscle activation on labile surfaces compared to a stable surface. **Subjects.** Twenty subjects were enrolled into two groups. The group with LBP consisted of 10 individuals experiencing a current episode of LBP of at least six weeks duration, with an Oswestry score of at least 15 percent. Ten age- and gender-matched subjects without LBP and no history of prolonged back pain were enrolled in the control group. **Methods.** Subjects performed a single curl-up lasting six seconds on four different surfaces of varying stability. Subjects then performed

tions (MVIC) that each lasted three seconds. Surface electromyographic signals were recorded over the upper rectus abdominus, lower rectus abdominus, external oblique and internal oblique on the right and left sides of each subject's abdomen. Data were analyzed using a 2 x 4 mixed-model MANOVA. Independent variables were Surface (with four levels) and Group (with two levels). **Results.** No statistical significance was seen for either of the main effects or for the interaction effect. Post-hoc statistical power was 80.7%. **Discussion and Conclusion.** Curl-up exercises on labile surfaces failed to increase superficial abdominal muscle activation over the activation levels observed on a stable surface. No differences in muscle activation levels were seen between the subjects with LBP and the control subjects. These results differ from those of a recent study conducted on healthy subjects.

Effects of One Versus Two-Strap Backpack Use on Paraspinal Muscle Activity and Lateral Side Bending of the Spine in Healthy Adults. FRAC Chair: Greg Ernst, PT, Ph.D. OCS, LTCR, USN Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

Abstract

Background: A recent amendment to AR 670-1, paragraph 1-10d states that soldiers are now authorized to wear a plain black gym bag, shoulder bag, or backpack over one shoulder while in uniform. This amendment conflicts with basic biomechanical factors affecting posture and stress on spinal joints and muscles. In a news release in August of 1999, the American Physical Therapy Association cautioned against wearing a backpack over one shoulder as it could cause spinal asymmetry and back pain. Studies have documented that carrying an asymmetrical load results in side bending of the spine. Studies have also reported that as spinal muscles become more activated, compressive and shear loading on the spine is increased. This added stress may increase the potential for back pain. No studies to date assessed spinal muscle activation level with asymmetrical spinal loading as occurs when carrying a backpack over one shoulder. This study assessed spinal muscle activity with electromyography (EMG) while subjects wore no backpack, a one strap backpack, and a two strap backpack. **Subjects:** A convenience sample of 20 uninjured subjects (11 males, 9 females) ages 19-37 from the Department of Defense beneficiary population were enrolled in this study. Subjects were recruited from the AMEDD Center and School. **Measurements:** We collected spinal muscle activity data from two different sites on either side of the paraspinal muscles using EMG. We also collected angular measurements with an inclinometer to determine if a difference in spinal side bending existed in the different conditions. **Statistical Analysis:** This study utilized a repeated measures design with the independent variable being three levels of load: no load, one strap backpack, and two strap backpack. The three dependent variables were paraspinal muscle EMG activity recorded on the contralateral side, paraspinal muscle EMG activity recorded on the ipsilateral side, and degrees of spinal side bending. **Conclusions:** Our study

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U.S. Army Research Institute of Environmental Medicine (USARIEM)

By MAJ Maria Bovill
USARIEM

Research Roles of AMSC Officers Assigned to the U.S. Army Research Institute of Environmental Medicine (USARIEM), Natick, Massachusetts

The U.S. Army Research Institute of Environmental Medicine (USARIEM) is a laboratory of the U.S. Army Medical Research and Materiel Command, Fort Detrick, MD. The Institute's mission is to conduct basic and applied research to determine how exposure to heat, severe cold, high terrestrial altitude, occupational tasks, physical training, deployment operations, and nutritional factors affect the health and performance of military personnel. For more information, visit the USARIEM homepage at www.usariem.army.mil.

Military Performance Division (65A, 65B, 65D)

Army Physical Therapists, Occupational Therapists and Physician Assistants are assigned to USARIEM's Military Performance Division (MPD), which has the mission "to develop strategies to optimize physical training, reduce injury incidence, and better match soldiers to the job in order to maximize physical readiness through non-material solutions". The MPD's research areas are Cognitive and Behavior Psychology; Occupational Task Physiology; Biomechanical Evaluation and Musculoskeletal Injury Epidemiology.

65A:

Occupational Therapists at USARIEM have been involved in a variety of research areas related to their clinical background and educational qualifications. These include ergonomic/occupational task performance, exercise and work fatigue, stress diagnostic methods, and cognitive/behavioral studies. Occupational therapy is currently working closely with research psychologists in the *Mental Stress Diagnostic Methods and Performance Consequences* research program. This program's objective is to identify and/or validate diagnostic measures or tools of operational mental stress. Recent studies include: acoustic physiological sensor method-comparison and validation; the effects of exercise fatigue (load carriage and running) on marksmanship; an upper extremity fatigue and marksmanship study; and a pre-post (5-month Arctic trek) hand assessment of Norwegian Navy SEALs.

65B:

The Army Physical Therapist has a unique position when assigned to USARIEM. Therapists are thoroughly involved with the research process, which is planned according to Scientific and Technology Objectives (STO). Presently, development of a new 5-year STO entitled *Physical Training Interventions to Enhance Military Task Performance & Reduce Musculoskeletal Injuries* is nearing completion. Included in this 5-year STO are several research projects designed to test new training programs that may improve performance while minimizing injuries. These

alternative training to high volume running; resistance training for improved occupational performance; resistance training to reduce injuries; and identification of biomarkers that reflect the positive and negative responses to training. If successful, these programs would have far reaching benefits for individual health, army readiness, and for the clinician who treats musculoskeletal injuries. For more information contact MAJ Rachel Evans or CPT Kenneth Blankenship, 508-233-5488.

65D:

Physician Assistant contributions to the research activities at USARIEM focus on injury prevention in soldiers. The Physician Assistant performs injury epidemiologic analysis on training in conventional and unconventional units to assess the risk of injury and evaluate interventions. Additionally, the Physician Assistant is the current Chair of the Human Use Research Committee. The Physician Assistant research conducted in the past year has primarily focused on injuries in general in SOCOM units, particularly foot injuries, and injury incidence in a Forward Support Battalion.

Military Nutrition Division (65C)

The Military Nutrition Division's (MND) mission is to conduct research to define the nutritional requirements and standards for operational rations, develop nutritional strategies to sustain and enhance warfighter performance in all environments, and to evaluate ration and feeding systems. MND is the DoD Executive Agent for Nutrition Research and is responsible for responding to and representing the Surgeon General. In order to accomplish its mission, MND partners with other research facilities to include Pennington Biomedical Research Center, the Massachusetts Institute of Technology (MIT), Boston University (BU) and Harvard University. The 3 primary research programs are:

- Metabolic optimization of warfighter performance in adverse environments, which investigates nutritional mechanisms that regulate human metabolism during rest and exercise in extreme heat, cold and high altitude environments.
- Nutritional optimization of warfighter mental status, which examines nutritional mechanisms involved in neurobiological control of cognitive, sensory and motor responses to maintain homeostasis.
- Ration Sustainment Testing. It is under this program that MND establishes nutritional standards for meals served to military personnel, evaluates and approves current and proposed operational rations and conducts assessments and surveys of the nutritional status and food consumption patterns in military personnel.

Current research conducted by the 65Cs in support of these programs include the following:

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MAJ Bovill: MAJ Bovill examined the nutritional requirements of U.S. Army Special Forces (SF) soldiers assigned to Ft. Carson. Over 9 days, 40 volunteers (SF and Support soldiers assigned to the same unit) were tested. Testing consisted of body weight and % body fat and measures and estimation of energy (kcal) consumed and expended. Energy expenditure was assessed by doubly labeled water, a highly accurate method. Energy intake was estimated by observation in the dining hall and food records to capture intake consumed outside of the dining hall. SF and Support soldiers energy intakes were similar: 3154 ± 542 kcal and 3445 ± 692 kcal, respectively. However, SF expended 22% greater kcal than SP: 4099 ± 740 kcal and 3361 ± 939 kcal, respectively. Body weight and % body fat measurements did not change over the study period, suggesting that self-reported food intake consumed outside the dining facility was underreported. This study demonstrated that SF soldiers did not meet their energy requirements from dining facility meals during routine garrison training. This training can be characterized as prolonged and vigorous, confirmed by the notably high energy expenditure (4099 kcal/day). Optimizing SF energy intake is crucial to ensure readiness when deployed to harsh environments. It is difficult to achieve high energy intakes with limited meal frequency in the dining hall. Thus, energy intake required to meet the energy expenditure of SF is not achieved solely by 3 meals/d and SF are supplementing with foods obtained outside the dining hall. The findings of this study supported a formalized request by the Special Operations Command for an authorization to increase the basic daily food allowance, allowing the dining hall to provide snacks, better meeting the energy needs and ensuring the nutritional quality of these elite, highly active soldiers.

LTC Grediagin: Previous work by USARIEM 65Cs has documented that deployed soldiers often expend more calories than they consume. How this caloric deficit impacts protein requirement is unknown. However, it is known that adequate protein is essential to the maintenance of immune function, muscle mass, and, ultimately, performance. In order to “enhance warfighter performance in adverse environments” LTC Grediagin is researching the effect of a 1500 calorie deficit induced by increased activity (vs. from food restriction) on nitrogen balance and plasma amino acid profile. For 7 days at sea level and 10 days at altitude, 24 well-trained subjects will increase total daily energy expenditure without increasing food intake. During this time, dietary protein intake will remain fixed at 0.9 g/kg/bw and urine and sweat will be analyzed for nitrogen excretion and from this, “nitrogen balance” will be determined.

An additional objective is to determine the impact of a carbohydrate supplement during exercise at sea level and altitude on plasma urea and amino acid profile. One time at sea level and two times at altitude (one acute test and one after acclimatization) subjects will participate in a 1000 kcal exercise trial while consuming carbohydrate at approximately 50 g/hour or a placebo equivalent. Plasma will be drawn at fixed intervals before and during exercise. Analysis of changes in amino acids and urea will provide insight into how altitude effects fuel utilization.

The results of this study will be used to evaluate the current Military Dietary Reference Intake and Nutritional Standard for Op-

erational Rations for protein and to make recommendations regarding the optimal protein content of operational rations and/or nutritional supplements.

LTC Bathalon: The MND was tasked by the Commandant, US Marine Corps (USMC), to study and identify factors associated with weight gain in Marine female recruits at Parris Island Recruit Training Depot, SC. Anecdotally, cadre had observed an increase in the number of female recruits gaining, rather than losing weight, after recruit training. This translated into an unacceptable number of recruits being placed on the Marine Corps weight control program and subsequent discharge for failure to comply with MCO 6100.10B, Weight Control and Military Appearance, as Marine recruits must meet either their maximum allowable weight or percent body fat (%BF) standard to graduate. In order to facilitate weight loss and reduce weight gain and attrition in female recruits, the Commander, 4th Training Battalion, instituted a mandatory energy restricted diet for overweight recruits.

Seventy-five female recruits were followed during their 12 weeks of recruit training. A randomly selected subsample of 51 recruits (mean \pm SD, age: 20 ± 2 y, BMI: 23.1 ± 1.9 kg/m²) was further studied for body composition changes, relationships between weight loss and physical fitness test (PFT) scores, and the validity of USMC and US Navy (USN) %BF equations during weight loss. Recruits were identified as meeting (MS, n=29) or exceeding (ES, n=22) their retention maximum allowable weight. Body weight and composition were measured by dual-energy x-ray absorptiometry (DEXA) and by circumferences using the USMC and USN equations. Physical fitness test scores (sit ups, flexed arm hand, and 3 mile run) were recorded by cadre prior to starting and after 10 weeks of recruit training.

As expected, the ES group was heavier than the MS group (67.8 ± 4.5 vs 61.1 ± 5.1 kg, respectively, $P < 0.0005$) prior to starting recruit training and lost more weight and trunk fat than the MS group ($P < 0.05$). All subjects improved their PFT scores ($P < 0.0005$) and passed after recruit training. Weight loss, per se, was not associated with improved PFT scores, however, regional (arms, trunk, and legs) body composition changes were. The USMC equation was highly specific (identified true negatives - equation and DEXA indicated compliance with %BF standard) whereas the USN equation was highly sensitive (identified true positives - equation and DEXA indicated noncompliance with %BF standard) when compared to DEXA.

This study indicated that the newly implemented energy restricted diet was effective in reducing weight gain in overweight recruits and that changes in regional body composition are associated with improvements in PFT scores. Specificity and sensitivity of the USMC and USN %BF equations differed and were affected by weight loss. Data continue to be analyzed for factors related to weight regulation to include the effect of appetite and stress.

Putting on a Course at Your Facility

By LTC Robinette Amaker
Chief, OT, WRAMC

A well-known Occupational Therapist by the name of Claudia Allen was contacted by OTs from Walter Reed Army Medical Center in the fall, 2001 regarding an OT psychiatric evaluation she developed and researched. These OTs were interested in being trained by her specifically. She offered to put on a course at WRAMC to train the OT staff in the "Allen Cognitive Level Screen." She said she could train an upwards of 40 OTs, which is many more than on staff at WRAMC. The WRAMC staff tossed around the idea of inviting other military OTs to participate. They contacted the Jackson Foundation to learn the rules of procuring funds to pay the transportation costs plus honorarium for Claudia to come to WRAMC. The Jackson Foundation said it was very possible to do this as the OT Service had \$2500 to use. They also said it was fine to collect nominal registration fees to reimburse the account, and that it didn't matter if the registration fee was for military or civilian participants.

Because the Jackson Foundation has limited funds available for clinical use, at the discretion of the individual designee, we were able to use their resources in two ways: (a) for the initial seed money; and (b) for fiscal management. A critical factor when dealing with the money transactions is to use a designated, external source as the responsible financial manager. We are fortunate at WRAMC to have a charitable organization like the Jackson Foundation for the accountability purpose, and most medical facilities have such organizations. In the private sector, it may even be a volunteer, non-profit organization. The key is to assure private individuals are not misusing funds.

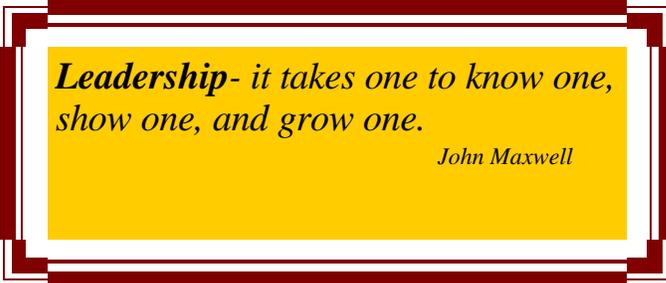
Civilian participants were solicited in two ways. First, local professional networks were used, e.g., state associations, local universities, listing on the mental health list serve, and word-of-mouth. The internet was vital as it kept typical advertising costs to a minimum. Registration forms and correspondence were also directed via email which was essential for cost savings. The course immediately filled up.

The account we have with the Jackson Foundation was replenished through the modest fee--\$50.00 check per participant, of which \$10.00 was used for materials. A nother plus was that Claudia Allen agreed to a modest honorarium which she immediately turned over to development of a training website. The other expense was for airfare. The other speaker, Ivelisse Lazzarini, was not compensated. The Jackson Foundation has a website describing their organization.

The course participants also gave \$5.00 each for drinks and snacks which were purchased at Sam's Club.

Additionally, this experience offered an exceptional opportunity for our occupational therapy service. We coordinated a complex, strategic mission affording therapists the occasion to demonstrate their logistical competencies—quite an accomplishment on

tance of SSG Kendrick, Dr. Burke, Mr. James Davis (Administrative Coordinator of OT), and current intern CPT Yeager, the two-day workshop was a great success! We can provide more specific details if needed. Please contact LTC Amaker or 1LT Stange at (202) 782-6374 with questions.



*Leadership- it takes one to know one,
show one, and grow one.*

John Maxwell

AMSC Guild

The AMSC Guild (AMSCG) is a quarterly meeting of the NARMC (North Atlantic Regional Medical Command-Walter Reed region) AMSCs. COL BJ Mielcarek (Chief of Physical Therapy, WRAMC) started the AMSCG when she realized the great number of AMSCs in the NARMC. Her vision was to hold a quarterly meeting inviting all AMSCs and each meeting is hosted by one of the AOCs. The first meeting kicked off with our Corps Chief, COL Hooper, talking to us about her leadership philosophy and AMSC history. The second AMSCG was hosted by the PAs who enlightened us on the history of the PA. The next AMSCG will be hosted by the OTs, and the guest speaker is Barbara Kornblau, President of the American Occupational Therapy Association.

The AMSCG is an excellent avenue for our Corps to get to know each other, while learning valuable lessons about each other. We encourage all regions to initiate their own AMSCG and look forward to hearing what others are doing.

Physician Assistant Section (con't)

(Continued from page 5)

a number of mid-career individuals lined up to PCS to various locations both CONUS and OCONUS this year, but several have been deployed in support of OEF. As a result she has had to dig deeper into the pool to fill those positions that need filling this summer. This will result in some underlaps late in the year, but this can't be avoided.

There are some jobs out there that may be of interest to some. Here is a short list of some job openings with either the qualifications or the particular ranks needed:

Interservice PA Program Instructors (Masters)
HHC 5th Army (CPT)
Headquarters, TRADOC (MAJ)
2nd ID and 168th ASMB (all ranks)
Saudi Arabia National Guard (MAJ)
Army Battle Lab (MAJ)

Fort Sam Houston
Fort Sam Houston
Fort Monroe, VA
Korea
Saudi Arabia
Fort Leavenworth

If anyone has an interest in a job listed above, contact MAJ Gross at PERSCOM to discuss the possibilities.

Soldiers Can Forward AKO e-mail to Other Accounts

by Patrick A. Swan (2 April 2002)

WASHINGTON (Army News Service) - Using an Army Knowledge Online e-mail address doesn't mean soldiers must surrender their current military or commercial e-mail accounts.

In fact, with AKO's forwarding rule, e-mails from "us.army.mil" addresses can be automatically forwarded to any other e-mail address a user selects, AKO officials explained. They said users can do this by clicking on the "personalize" button after they log on, and then choosing "user profile."

AKO officials set up the forwarding rule because they said they realized most AKO e-mail accounts complement, rather than replace, soldiers' local post and AOL- or Hotmail-type accounts, said Harold Tucker, AKO systems architect.

"Considering how often soldiers move around," added David Hale, AKO webmaster, "it is a significant advantage for them to have one e-mail address that does not change as they move from post to post or from mission to mission.

"Having a 'us.army.mil' email address is much easier for

soldiers' buddies, families and colleagues to remember than the typical installation e-mail address string," Hale said.

The Army's global e-mail directory doesn't always have a soldier's most current e-mail address, Hale said. However, he said that AKO's global e-mail directory does. "That means you stand a much greater chance of reaching the person you want to contact via e-mail," Hale said.

Also, because soldiers can gain access to their AKO accounts from any Internet terminal in the world, Hale said they can maintain communication at times they wouldn't ordinarily have any Army e-mail address, such as when they are in-between assignments or in jobs that don't provide regular Internet access.

(Editor's note: Patrick Swan is a public affairs liaison officer with the Chief Information Officer/G-6.)

For step-by-step instructions, complete with pictures of what the screens look like as you go through the process, login to the SP Knowledge Network and go to the SP Corps Library (Key Words: AKO Mail).



SP's In The News

Certification

The following officers passed their OT certification exam:

LT Sean Smith	Ft. Bliss, TX
LT Stange, Patrice	WRAMC
LT Kinsler, Michelle	Ft. Lewis

The following officers obtained their ADA certification in Weight Management:

CPT James Pulliam	Ft. Leonard Wood
MAJ Bonnie Eilat	Ft. Rucker
COL Sally Hoedebecke	WRAMC

Awards

WRAMC: CPT Roger Bannon and SSG John Kendrick received ARCOMs for their work following the Pentagon Crash.

LTC Robinette Amaker and SFC Benjamin Cuthbertson received MSMs.

CPT Stacie Caswell and 1LT Patrice Stange receive AAMs

Dr. Anne Burke Certificate of Achievement for the Pentagon Crash mission

LTC Linda Rowbotham was awarded the AAM for meritorious service while providing medical support to rescue and recovery operations in response to the terrorist attack on the Pentagon.

Ft. Leonard Wood: MAJ Rhonda Podojil, LT Cheryl Chmielewski and SFC Ava Bounds received AAMs for their part in preparing for JCAHO.

SSG Jeffery Lein made the Deans List for his Bachelor's program

Bosnia: MAJ Sara Spielmann, who is the DCA/Health Education Coordinator, was recognized as a nominee for the Mike Heath Award. This award is given to those who exemplify the ideals of selfless service to others in either direct patient care, or caring for those who do direct patient care. She was nominated for the enthusiasm, positive attitude, and commitment to excellence that are required for the nomination.

BAMC: SPC Curtis Mensch was selected as the BAMC Soldier of the Month for March 2002.

Ft. Campbell: March 2002: SGT Andrew Hartsoe attending BNCOC

Presentations

LTC Karen Cozean, LTC Robinette Amaker, CPT Roger Bannon, CPT Jay Clasing, CPT Ted Chapman, SSG John Kendrick are presenting at the AOTA Annual Conference in Miami 2-5 May. "Current Concepts in Hand Therapy" & "War on Terrorism: Army OTs Response"

USARIEM: MAJ Maria Bovill - Research Dietitian will discuss her research regarding nutrition requirements for special forces

soldiers on CNN. The date is unknown at this time.

Marathon

Ft. Lewis: LTC Ann Grediagin ran Boston Marathon on 15 April 02 (Patriot's Day!)

Marriages/Engagements

Captain Ann Marie Beckman, both an USAR 65C assigned to the 48th CSH, Fort Meade and a civilian dietitian working in Endocrinology and Wellness Services, Walter Reed, married Lieutenant Colonel Don Hall, Medical Service Corps on 23 March 2002.

2LT Lauren Bailey, dietetic intern at WRAMC recently became engaged to Nick Popeck. Their wedding is set for 26 October in Douglassville, PA.

Three civilian employees from Nutrition Care, DDEAMC were selected as "DDEAMC Employee of the Month." This group includes one cashier, the cost accountant, and the division secretary!!

EFMB

Ft. Lewis: CPT Joseph Frost: awarded EFMB 29 Mar 02, one of 9 MAMC soldiers. Both MAJ LesLee Sanders and SFC William Llewellyn were able to be on a portion of the 12 mile road march to show support for the soldiers and help "walk them in".

CPT Kevin Houck and 1LT David Robbins, Physical Therapy section also received this prestigious award.

Ft. Leavenworth: CPT Tracy Hunter successfully earned her EFMB Badge at Camp Bullis!!

Births

BAMC: MAJ Diane Helinski had a baby girl named Mia Alexis on 8 Mar 02.

Ft. Carson: CPT Osma Bukhari had a baby girl on 8 January; Faraaz Bukhari, wt. 6lb 8 oz. Mom and baby doing great.

Promotions

BAMC: SPCs Matthew Fredericksen and John Herrera to SGT.

Ft. Bragg: 1LT Brenda White, 65C, to CPT and SSG Dexter Gray, 91M, to SFC

Ft. Rucker: SPC Michael Oglesby to SGT and he completed PLDC.

Ft. Hood/85th Med Det. (CSC): SGT Richard Howard to SSG

Ft. Stewart: SPC Winston Miles received

(Continued on page 22)

SP Consultants

By COL Rebecca Hooper
Chief, SP, Corps

Most of you are familiar with the fact that each SP Assistant Chief is dual-hatted as a Consultant to the Surgeon General for his or her specialty. I suspect that not as many of you know that the Specialist Corps has additional consultants providing the Surgeon General and the SP Corps with vital information and advice.

The Surgeon General's Consultant program is quite complex. The Consultant Office, a branch of the Health Policy and Services Directorate at MEDCOM, manages it. Each AMEDD Corps identifies specific areas for which consultants are appropriate. Individuals are nominated for these positions based upon their experience and expertise, professional recognition in their specialty, and leadership.

Consultants interact with the field in a variety of ways. They are frequently asked to make site visits where they assist in the maintenance of high standards of clinical practice by answering questions and working toward solving problems. They may also be required to review and make recommendations regarding equipment, recruitment and retention, career planning, policy formulation, short courses, and awards.

The following is a complete roster of the SP Consultants to the Surgeon General. Don't hesitate to call upon any of them with your questions. Utilize their expertise!

Occupational Therapy (65A)	LTC Karen Cozean
Physical Therapy (65B)	COL Charles Scoville
Dietetics (65C)	COL Brenda Forman
Physician Assistants (65D)	LTC Louis Smith
AMSC Clinical Investigation and Research	LTC Max Ito
AMSC Manpower and Force Structure/ Proponency	LTC Maria Worley
Enlisted Affairs	MSG Anthony Tate
Nutrition Care Facility Design	MAJ Guy Desmond

Medallion Publication Schedule

The Medallion is published quarterly. Below are the FY 02 deadlines for submission.

July 12, 2002
October 11, 2002

Adapting to a Changing Global Environment

By Evelyn B. Riley
CHPPM

The Fifth Annual Force Health Protection Conference and the Second Annual DOD Population Health and Health Promotion Conference will be held jointly 9 – 16 August 2002, at the Baltimore Convention Center, at the Inner Harbor in MD. The theme for the joint conferences is “Adapting to a Changing Global Environment”. The U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, MD will host both conferences.

The conferences will provide the multidisciplinary military and civilian force health protection community with the opportunity to increase knowledge and awareness of current issues, attend short courses for professional development, mentor, network, and earn CEUs or CMEs. The first three days, 9 – 11 August, will be skills training workshops designed primarily for, but not limited to, the DOD Conference attendees. The core conference, beginning on 12 August, will include both plenary and breakout sessions designed to provide an exchange of information that has a wide application within the DOD community in the areas of homeland security, environmental health, population health, complimentary and alternative medicine, behavioral health, veterinary medicine, medical research and development, injury prevention, nutrition, and spiritual health. In addition, service-specific breakout sessions will be offered. Topics and lessons learned relating to the events of 11 September 2001 will be presented. The DOD Conference and the three tracks that make up the FHP Conference are described below:

The Second Annual DOD Population Health and Health Promotion Conference - designed to unite the population health and health promotion specialties in an integrated environment that will provide scientific and technical training necessary for the diverse specialties; allow participants to address relevant and significant force health protection issues; and provide mentoring and networking opportunities. It will begin with three days of pre-conference Skills Training Workshops focused primarily on humanitarian assistance, risk communication, behavioral health - post deployment issues, tobacco cessation, dental health promotion, and HIV/STD.

Life Sciences Track - the technical aspects of prevention/detection of environmental, occupational, and disease threats to the health and performance of DOD personnel. This track will include research and development in support of the soldier, toxicology, and veterinary services.

Clinical Sciences Track - the science and delivery of preventive medicine services. Clinical and general preventive services to include immunization, occupational medicine services, hearing conservation, vision conservation, and behavioral health and associated services.

Environmental Sciences Track - topics related to

identifying, assessing and providing recommendations for protecting soldier health. This includes environmental health topics such as industrial hygiene, food and water sanitation, medical surveillance, entomological services, health physics, environmental noise, field sanitation, and disease prevention.

Participants are invited to prepare and display technical posters that will be judged for content and aesthetics by a panel of subject matter experts. The winners will be announced on the final day of the conference. USACHPPM will judge all posters, selecting the ten best submissions for partial central funding of travel and per diem.

Technical presentations are also being solicited for the conference. Both military and civilian vendors are encouraged to exhibit during the conference. Information on the call for papers and the exhibitor prospectus will be found on the FHP website at: <http://chppm-www.apgea.army.mil/fhp>.

The website will be available for registration in March. POC: LTC Roxanne E. Baumgartner, Director, DSN 584-7387/410-436-7387 or Ms. Jane Gervasoni, DSN 584-5091/410-436-5091.

Neuromusculoskeletal Evaluation Course 2002

By CPT Tracy Smith
Course Coordinator

The **DEADLINE** for applications to the NMSE 2002 Course is **1 June 02**. We already have a full applicant pool, however selection is based on need before date of application. For example if a therapist will be PCSing to a 1 person duty site their need is higher than someone going to a medical center ect. Please fax all applications to LTC Kuwamoto at 210-221-2832 or mail it to him at:

Dept of Health Ed and Training
ATTN: MCCS-HEA -LTC Kuwamoto
1750 Greeley Rd. Suite 205
FSH TX, 78234

News From The 91M Training

By LTC Brenda Ellison
Chief, Nutrition Care Branch

Soldiers receive college credits!

Within the last year there has been tremendous change in the 91M curricula at the Academy of Health Sciences. The change has strengthened the value that the 91M soldier brings to the field as the dietitian's extender. To emphasize the impact of these changes, the American Council on Education (ACE) review of the CMF last Fall resulted in an increase from 18 college credits to 27 college credits for the 30 skill level. For skill level 40, the increase was 25 to 29 hours. This represents not just the improvements of the curriculum but also what duties these soldiers are performing in the field. In June, the ACE team will return for a review of the Program of Instruction (POI) to determine what kind and how many hours our formal curriculum will yield. The following information outlines our most recent improvements.

For 91M10, Initial Entry Training: Increased hours in screening and assessment to include anthropometrics, added Basic Life Support certification, and integrated clinical documents preparation with the nutrition care management of the patient. The student experiences the entire nutrition care management of the patient and what knowledge and skills are required. The students also present a mini case study of a patient, which includes developing a menu, analyzing the menu for caloric and nutritional content, and then describing the medical condition relating to the nutritional management. Of the seven weeks of classes, 6 weeks are either hands-on skill application or practical exercises.

For the 91M30 curriculum: Students attending the NCO Academy spend 5 weeks and 4 days in their technical track. This track includes the mid-level management of a nutrition care operation encompassing clinical management, development of a health promotion topic, instruction in weight control, prenatal, and heart healthy management. Students also receive hands-on training in the completion and interpretation of nutrition care reports to include the nutrition care activities, MEPRS/UCAPERS, and pertinent nutrition clinic reports. Your soldiers preparing for BNCOC may be requesting information to prepare themselves for the technical track. We request that they bring specific reports and nutrition class outlines to assist them in their educational experience.

The skill level 40 curriculum consists of a 21-hour track and a 4-hour field exercise evaluation. The 21-hour track is five case studies on various topics. The student evaluates the case using current doctrine and publications and then presents possible solutions to the scenarios. This type of education assists the student in developing several skills to include research, presentation, problem-solving, and decision-making. These are skills that we now expect our sergeants in the rank of SFC to have.

Please visit our website at: www.cs.amedd.army.mil/ncb/index.html or call the Nutrition Care Branch at: (210) 221-3466/3284; DSN: 471. We like hearing from our customers. You are the professionals we are serving. Thanks.

SP Monthly VTC Schedule

This is a tentative schedule. Changes will be forwarded as necessary. All VTCs are scheduled from 1400-1700 EST. The first session is from 1400-1530 EST and the second session is from 1530-1700 EST. **New! All Audio Only participants must contact me at least one week prior to the scheduled VTC to make a reservation.**

21 May 02 1. OT (65A)
 2. PT (65B)

12 Jun 02 1. DT (65C)
 2. TBD

10 Jul 02 1. OT (65A)
 2. PA (65D)

14 Aug 02 1. PT (65B)
 2. TBD

11 Sep 02 1. OT (65A)
 2. DT (65C)

9 Oct 02 1. PA (65D)
 2. TBA

19 Nov 02 1. OT (65A)
 2. PT (65B)

11 Dec 02 1. DT (65C)
 2. Council of Colonels

All questions concerning being added to the monthly SP VTCs should be directed to MAJ Woods at COM (210) 221-8306 or DSN 471. Email: yvette.woods@cen.amedd.army.mil.

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showed that paraspinal muscle activity is significantly greater on the contralateral side when a backpack is carried with one strap. Furthermore, the wearing of a backpack over only one shoulder causes significantly greater lateral spine side bending than wearing no backpack or wearing a backpack using both shoulder straps. **Key Words:** Backpack, Paraspinal, Muscle activity, Electromyography

Reliability of a Measurement of Neck Flexor Muscle Endurance. FRAC Chair: Allyson Pritchard, MPT, LATC CPT, SP, Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

Abstract

Background and Purpose: Deep neck flexor (DNF) muscle endurance has been negatively correlated with cervical pain and dysfunction. The purposes of this study were to determine rater reliability in patients both with and without neck pain, and determine if there was a difference in DNF endurance between the two groups. **Subjects and Methods:** A total of 40 subjects with and without neck pain were enrolled in this repeated measures reliability study. Two raters used an isometric chin-tuck test to assess DNF endurance for all subjects during an initial session, while subjects with neck pain returned for testing one-week later. **Results:** Interrater reliability (ICC 2,1) for the no neck pain group was poor-moderate to good (.67-.78) and was poor-moderate for the neck pain group (.67). Intrarater reliability (ICC 3,1) for the no neck pain group was good to excellent (.82-.91). Chin-tuck test results for the no neck pain group (mean=39 sec SD= 26) and the neck pain group (mean=24 sec SD= 13) were significantly different ($p=.025$). **Discussion and Conclusion:** Reliability values less than good represented measurements obtained during the first testing session. The reliability of the chin-tuck test in patients with neck pain must be improved in order for clinicians to distinguish clinically meaningful change from measurement error. As hypothesized, DNF muscle endurance for no neck pain subjects was both statistically and clinically greater for than those with neck pain. **Key Words:** Deep Neck Flexor, endurance, neck pain, reliability

Inter-tester reliability and validity of the Palpation Meter (PALM) for measuring leg length discrepancy. FRAC Chair: Thomas Sutlive, PT, Ph.D., OCS, LTC, SP, Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

Abstract

Study Design: Test-retest reliability and validity. **Objective:** To determine the validity and reliability of the Palpation Meter (PALM). **Background:** Leg length discrepancies (LLD) have been associated with a variety of musculoskeletal conditions. Therefore, the clinical measurement of LLD has become a routine and important part of the physical examination. The PALM

but little is known about its measurement properties. **Methods and Measures:** 15 healthy and 15 symptomatic subjects with suspected LLD participated in this study. Measurements of pelvic crest height difference (PD) were obtained by two examiners using the PALM. A standing antero-posterior (AP) radiograph of each subject's pelvis was taken, and PD was also determined from the radiograph for comparison with the PALM values. Intraclass correlation coefficients (ICC) were calculated to determine the validity and reliability estimates of the PALM. **Results:** The validity estimates (ICC) of the PALM were excellent (0.90 for rater 1 and 0.92 for rater 2) when compared with the standing AP radiograph of the pelvis. Intra-rater reliability for each rater was excellent (ICC = 0.97, 0.98), and inter-rater reliability was very good (0.88). **Conclusions:** The PALM is a reliable and valid instrument for measuring PD. We recommend that clinicians consider this convenient, cost-effective clinical tool as an alternative to radiographic measurement of pelvic crest height differences. **Key Words:** leg length discrepancy, measurement, pelvic obliquity, reliability, validity

The Thoracic Spine in the 3rd through 9th Decades: A measure of motion and static posture. FRAC Chair: Timothy Flynn, PT, Ph.D. OCS, FAAOMPT, LTC, SP, Associate Professor, U. S. Army-Baylor Graduate Program in Physical Therapy

Abstract

Objective: The purpose of this study was to examine motion in the frontal and sagittal planes and static posture of the thoracic spine in the 3rd through 9th decades of life using noninvasive and clinically meaningful techniques. **Design:** Descriptive. **Setting:** Active duty military members, dependents and retirees. **Patients:** 197 healthy volunteers ranging from 20 to 89 years of age. Criteria for admission into the study were (1) no reports of mid-back (thoracic region) pain currently or within the past 6 months, (2) no previous (thoracic) spinal surgery, (3) no known diagnosis of scoliosis, or osteoporosis with documented compression fracture, and (4) no present pathology which might limit any motion performed in the study. **Main Outcome Measures:** Sagittal and frontal plane motions were measured by two raters using dual inclinometry at T1 and T12. Static posture was assessed using a flexible ruler. **Results:** Intra-rater reliability was excellent (ICC(3,2) > 0.90) for both sagittal and frontal plane motions. Inter-rater reliability was determined to be moderate (ICC(2,2) = 0.74) for sagittal plane motion and good (ICC(2,2) = 0.84) for frontal plane motion. Inter-rater reliability was moderate (ICC(2,1) = 0.75) for flexible ruler measurements. Differences in frontal plane motion were significant ($p \leq .001$) for age and gender. Motion in the sagittal plane was significant for age alone. Static posture measurements revealed a main effect ($p < 0.05$) for age and gender on the thoracic angle. **Conclusions:** Regardless of gender, effects of the natural aging process on the thoracic spine tend towards decreased motion and increased kyphotic posture. This study has also shown that in healthy individuals, thoracic range of motion varies greatly and

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differences in thoracic curvature exist without symptoms of spinal pathology. **Key words:** Thoracic spine, inclinometry, range of motion, posture.

**ALSO LTJG Stephanie Maxfield (Class of 2001) received the Public Health Service JD Lane Junior Officer Investigator Award! For the collaborative project:

A Clinical Prediction Rule for Classifying Individuals with Patellofemoral Pain Who Improve with an In-Shoe Orthotic. Scott D. Mitchell, PT; Thomas G. Sutlive, PT, PhD, OCS; Stephanie N. Maxfield, PT; Cynthia L. Reams, PT; Jon C. Neumann, PT; Christine R. Swiecki, PT; Robert C. Hall, PT, MS, ATC, SCS; Anthony C. Bare, PT, ATC; Timothy W. Flynn, PT, PhD, OCS, FAAOMPT

U.S. Army-Baylor University Graduate Program in Physical Therapy CLASS 2003 RESEARCH PROJECTS

Reliability of provocative hip tests and a functional squat test in patients with knee osteoarthritis: Incidence of positive test findings and short term response to hip mobilization.

FRAC Chair: Robert S. Wainner, PT, Ph.D., OCS, ECS Maj., USAF, BSC, Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

SUMMARY

Hip and knee OA are recognized causes of pain and disability, but joint signs and symptoms may also be due to soft tissue disorders secondary to the basic disease. Although positive hip findings are thought to be common in patients with knee OA, the incidence of these findings has not been studied. Several clinical test procedures are commonly used to screen for hip soft-tissue dysfunction and arthrosis and also serve as treatment markers. Unfortunately, the measurement properties of these tests are not well known. A recent randomized clinical trial demonstrated that manual therapy, in particular joint mobilization, of the lower quarter was more effective than a non-treatment control group for patients with knee OA. However, it is not possible from the design of that study to determine the relative contribution of the hip joint mobilization to the treatment effect observed. Therefore, the purposes of this study are to: 1) Determine the inter-rater reliability of four clinical tests used to assess hip joint involvement and lower extremity function, 2) Assess the short-term effect of hip mobilization on pain and range-of-motion, and 3) Determine the incidence of positive hip findings in patients with knee OA. The twenty asymptomatic and thirty subjects with knee OA in this study will each undergo three provocative hip test and a functional squat test administered by one examiner, and then undergo the exact same procedures administered by a second examiner. In addition, patients with knee OA with positive provocative tests will be treated with hip mobilization procedures. Range-of-motion and pain ratings obtained from the clinical tests are dependant variables and will be re-assessed following hip mobilization. Results from this study may help clinical

with knee OA, thereby reducing examination time, increasing treatment effectiveness, and reducing the overall cost associated with the management of patients with knee OA

A Randomized Controlled Trial of a Leg Orthosis versus Traditional Treatment in Soldiers with Shin Splints
FRAC Chair: Timothy W. Flynn, PT, PhD, OCS, FAAOMPT, LTC, SP, Associate Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

SUMMARY

Anterior-medial and anterior-lateral shin pain commonly referred to as “shin splints” are a major concern for military members. Due to the high incidence and prolonged removal from training, these injuries are costly for the military, due to treatment expenses and loss of manpower. To date, little research has been conducted into identifying effective treatment strategies that may facilitate the soldier’s rapid rehabilitation and return to full duty status after the diagnosis of shin splints. Recently, Alimed® a medical products company has developed a leg orthosis called the Shin Saver™, designed to “relieve the deep ache of shin splint pain.” This leg brace reportedly provides controlled pressure to the injured area, preventing further trauma and allowing healing to take place. However, to our knowledge, no peer-reviewed evidence supports these claims. Therefore, the purpose of this study is to evaluate the Shin Saver™ leg brace on return to activity and decreased pain in soldiers with documented shin splints. Eighteen active duty soldiers who have been medically diagnosed as suffering shin splints within the previous 3 weeks will be randomly assigned to a traditional group or a leg brace group. Patients in both groups will be assessed bi-weekly until they are capable of returning to pain-free jogging at their own pace for 1/2 mile. Primary outcome measures will include: 1) length of time (in days) to pain-free jogging at own pace for 1/2 mile, and 2) numeric rating scale for pain identifying the level of pain during the physical training session. The results of this study have the potential of decreasing lost duty time in soldiers with shin splints. This would result in a tremendous cost savings to the military and improved wellness of the soldiers and airmen.

Identification of patients with patellofemoral pain syndrome who respond best to patellar taping. **FRAC Chair: Thomas G. Sutlive PT, Ph.D., OCS, LTC, SP, Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy (210)-221-7383/8410**

SUMMARY

The purpose of this study is to identify the subgroup of patients with patellofemoral pain syndrome (PFPS) that will respond most favorably to patellar taping. PFPS is a significant clinical problem. It is the most prevalent knee disorder seen in physical therapy and orthopedic clinics,¹⁷ and accounts for 25% of all

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running injuries.³ PFPS is also a prevalent problem in the military population. It was the leading cause of lost training time during basic training in an elite Israeli infantry unit,¹² and in a recent report by Songer and LaPorte,²² PFPS was found to be the primary consideration for a medical discharge within an infantry division.

Despite the prevalence of PFPS, there is no consensus on the most effective treatment for this condition. Historically, conservative treatment of PFPS has focused on restoring normal patellar tracking.¹⁷ Recently, patellar taping has been suggested as a useful treatment for relieving the pain associated with PFPS.¹⁵ This approach is based on the premise that lateral patellar tracking contributes to patellofemoral pain.¹⁵ The purported aim of patellar taping, therefore, is to create a mechanical medial shift of the patella, centralizing it within the trochlear groove and thereby improving patellar tracking.⁶ To our knowledge, no evidence exists that identifies elements from the history and physical examination that have been deemed valid predictors of those patients who will respond most favorably to patellar taping. Identification of these predictors will serve to provide early categorization and thereby appropriate intervention for individual patients.

A series of 50 consecutive individuals who meet the inclusion criteria and are beneficiaries of Brooke Army Medical Center will undergo a standardized history and physical examination. All subjects will then perform a series of functional activities and will grade the pain that they experienced during each activity on a numerical rating scale (NRS).^{2,19,20} After receiving a specific patellar taping technique, all subjects will repeat the functional activities and NRS reports with the patellar tape in place. A successful response to patellar taping will be considered a 50% decrease in the composite NRS score, or a moderate improvement on a Global Rating of Change questionnaire.¹³ Statistical analysis will be performed to determine which elements of the history and examination were predictive of treatment success. Sensitivity, specificity, and likelihood ratios (sensitivity/1-specificity) will be determined for each predictor of treatment success. The results of this study will provide clinicians with specific criteria that identify individuals with PFPS who will respond best to intervention with patellar taping.

The relationship between foot-print, navicular drop, and plantar pressure distribution patterns. FRAC Chair: Paul Stoneman, PT, Ph.D., OCS, Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

SUMMARY

The purpose of this study is to examine the relationship between two different measures used to assess foot type, and the plantar pressure distribution seen in normal walking. There is some evidence that foot type (excessive pronation or supina-

high school runners¹ and in Navy SEAL candidates.² The foot-print, or "wet foot test" method of assessing foot type is commonly recommended for use when deciding what type of running shoe to buy in military exchanges and in the lay literature.³ The navicular drop test is a clinical test used to estimate the amount of subtalar motion that occurs during gait.⁴ Plantar pressure analyses are useful for assessing loading of the foot⁵ and how shoes may affect foot mechanics.⁵ Pressure distributions have also been shown to vary by shoe type.⁶

While the wet-foot test is easily performed, footprints do not accurately predict arch height, rearfoot motion, or relative plantar pressure during gait.⁷ The navicular drop test is a better tool for assessing the degree of foot pronation.⁷ Running shoes are often marketed as being "motion control shoes", or "cushioned shoes" and that runners who overpronate need a motion-control type shoe, and those with a supinated or rigid-type of foot should look for a cushioned shoe.³ To our knowledge, no one has studied the effect of shoe selection on relative plantar pressures in persons of different foot types. While the footprint may not reflect arch height, it may have some bearing in how plantar pressures are distributed in the shoes of different types. The navicular drop test is generally accepted as a measure of foot pronation, but is not known how relative plantar pressures may change in persons with differing degrees of navicular drop in different types of shoes.

Plantar pressure distribution will be measured in 30 individuals who meet the inclusion criteria for the study. Each subject will be required to make one visit to the Physical Therapy Research Lab at the Academy of Health Sciences. After reading and signing an informed consent, each subject will undergo a wet-foot test, a navicular drop test, and plantar pressure distribution testing. None of the testing is invasive. The subjects will be classified as having a pronated foot, normal foot, or supinated foot based on their footprint as described in non-scientific literature.³ The navicular drop test will be done as described by Brody.⁴ Plantar pressure measurements will be done using the PEDAR system. This entails placing an insole with pressure sensors in the shoe. The sensors record pressures during walking which are fed to a computer for analysis. Each subject will do three walking trials, in three different types of running shoes. Shoes will be provided by AAFES and returned to them after testing is complete. The results of this study will provide information on the effect of running shoe selection on plantar pressure distributions while walking in persons of different foot types. This is the first step in a line of inquiry into the interplay of foot mechanics and shoe selection. There is some evidence that proper shoe selection can affect injury rates in the military population. Understanding what the mechanisms for this might be should help us be more effective at injury prevention.

Comparative effects of shoulder muscle fatigue on glenohumeral migration in normal subjects and patients diagnosed with impingement syndrome. An *in vivo* study using cineradiographic assessment. FRAC Chair: CAPT Edward J. Kane, PT, Ph.D., ECS, SCS, ATC, Assistant Professor, U.S. Army-Baylor Graduate Program in Physical Therapy

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SUMMARY

Cineradiographic motion analysis, or video fluoroscopy, has recently been shown to be a valuable adjunctive technique in the diagnosis or evaluation of musculoskeletal conditions [7, 8]. Neer and Foster [9] reported on the effectiveness of cineradiography for the diagnosis of shoulder instability. Interestingly, this imaging tool is used sparingly in studies for diagnosis and evaluation of shoulder pathologies and to our knowledge has not been used to assess pathologic motion patterns in patients suffering from shoulder impingement syndrome. Therapeutic exercises and mobilizations are commonly prescribed treatments for shoulder impingement [1, 2, 6]. Understanding the effects of muscle fatigue on the movement of the gleno-humeral joint could result in better treatment techniques of impingement as well as design of exercise programs that would reduce the occurrence of impingement.

A new cineradiography device, the Dynamic Motion X-Ray (DMX), is purported to be useful for measuring aberrations in joint movement. However, the first step in establishing the clinical usefulness of any tool is to determine the reliability of obtained measurements. To our knowledge, the test-retest reliability of measurements obtained with the DMX have not been reported. In addition, the effects of muscle fatigue on humeral head migration are unknown.

A convenience sample 20 male subjects aged 18-35 years from the Department of Defense beneficiary population will be enrolled in this study. A series of motion analysis measurements of humeral head migration will initially be made, utilizing DMX, at 0°, 45°, 90°, 135°, and maximum abduction for each subject. Following a 5 minute rest period, all DMX motion analysis measurements will be repeated in an identical fashion. After a 2 minute rest period, all subjects will undergo a fatigue protocol. Immediately following the fatigue protocol, DMX motion analyses will be repeated in an identical fashion for a third and final time.

COLLABORATIVE FACULTY RESEARCH

Collaborative projects are ongoing between the U.S. Army - Baylor University Graduate Program in Physical Therapy, U.S. Army -Baylor University Postprofessional Doctoral Program in Orthopaedic & Manual Physical Therapy, Wilford Hall Air Force Medical Center, and the University of Texas at Austin.

Effectiveness of manual physical therapy and exercise for lumbar spinal stenosis: A prospective, randomized, controlled clinical trial.

Principal Investigator (PI): Capt. Julie M. Whitman
Co-Investigators:

LTC Timothy Flynn
COL Gail Deyle

Maj. Robert Wainner
MAJ Matthew B. Garber

LTC Howard Gill

LTC Manuel Domenech

SUMMARY

Lumbar spinal stenosis (LSS) is an increasingly recognized cause of lower back pain and radiculopathy in the elderly population. Although lumbar spinal stenosis is a common and debilitating problem that is highly prevalent in the aging population, objective clinical trials of conservative treatment are relatively sparse. A US national survey of physician visits cited back pain as the most commonly reported musculoskeletal symptom and third most frequently reported symptom in those patients over 75 years of age.¹ Elderly patients with LSS as a source of their back and leg pain suffer from significant functional disability,^{2,3} and many eventually seek surgical intervention. Spinal stenosis is currently the most common and fastest growing reason for spinal surgery in patients over 65 years of age.⁴⁻⁶ In the United States, the surgical rates for LSS more than quadrupled and non-surgical hospitalization rates more than tripled from 1979 to 1990.⁷ In 1994, over thirty thousand surgical procedures for LSS were performed with an annual inpatient expense of almost \$1 billion.^{8,9} Some researchers hypothesize that the reasons for the increase in surgical rates are improved diagnostic technology and surgical techniques, as well as the aging of the population.^{6,7,10} Since the incidence of LSS increases with age, the recognition of this condition and the care for these patients will grow in importance as the number of elderly persons in the United States increases. The purpose of this study is to examine the effectiveness of two physical therapy treatment approaches for patients with LSS. One group will perform unloaded treadmill ambulation, perform a specific exercise program at home and in the clinic, and receive manual therapy intervention. The other group will perform level treadmill ambulation, perform flexion-based exercises at home and in the clinic, and receive placebo ultrasound.

Intra-Rater reliability of the Dynamic Motion X-Ray (DMX) system in measuring motion parameters (velocity and acceleration) of the lower lumbar region during sagittal plane flexion and extension. An *in vivo* study using cineradiographic assessment.

Principal Investigator (PI): CPT Deydre S. Teyhen, PT, MPT, OCS

Associate Investigators (AI): Dr. Lawrence Abraham, EdD
LTC Timothy Flynn, PT, PhD, OCS, FAAOMPT

SUMMARY

Back pain is a “20th century medical disaster”¹ afflicting 60-80% of adults sometime in their life and 30% of Americans each day. LBP has been reported to be the second leading cause of pain outside of the headache.¹ One of the many reasons back pain has been such a disaster is the unsuccessful search for an anatomical cause of a movement based dysfunction.¹ This search continues

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despite the fact that only 15%¹ of all patients with low back pain can be given an anatomical or passive restraint diagnosis for their symptoms. Many researchers have suggested segmental instability as a cause of chronic and recurrent LBP.²⁻⁴ Panjabi theorizes that this instability occurs during mid-range movements (neutral zone) under neuromuscular control, not at the end range of movements under static control.^{5,6}

Currently, segmental instability of the lumbar spine is a clinical diagnosis based on a cluster of symptoms and static end range radiographs in flexion and extension. Since 1944, static end range images have been used to attempt to demonstrate instability by manually measuring abnormal intervertebral movement.¹² Through the years, many research studies have been performed to define "abnormal" intervertebral movement. The current standard to define instability as either an increase in translation (>4-5mm) or an increased angulation (15-25 degrees) based on the level of injury.¹³ However, this standard remains controversial because of its high false-positive, high false-negative, and inability to capture mid-range motion, where aberrant motion is likely to occur.

The purpose of this pilot study is to determine the reliability of the dynamic motion x-ray (DMX) motion analysis system in measuring sagittal plane lumbar flexion and extension. The results of this pilot study will be used towards my doctoral dissertation, which will assess the spinal motion characteristics of those with suspected lumbar instability, those with low back pain without suspected instability. The long-term goals of this line of research are to help accurately diagnose movement based dysfunctions and to develop better treatment programs designed to train the neuromuscular system to treat LBP movement dysfunctions.

A convenience sample of 30 males aged 18-60 from the Department of Defense beneficiary population will be assigned to one of two groups. Group 1 will consist of those with a history of LBP; Group 2 will consist of those without a history of LBP.

All subjects will perform sagittal plane flexion and extension with cineradiographic analysis of motion. Each subject will perform two trials of the test motion. Motion analysis will consist of analyzing position, velocity and acceleration patterns for each subject. Interclass Correlation Coefficients (ICC) will be used to analyze the reliability of both the velocity and acceleration measurements obtained for both groups. Specifically an ICC Model 3 with mean ratings will be utilized. Further, coefficients of variation and method error will be calculated for each group. Descriptive statistics will be used to describe the groups and their movement patterns.

US Army Baylor University Physical Therapy Staff Publication

Smith, Tracy A. The Incidence of Injury in Light Infantry Soldiers. *Military Medicine*. 2002; Vol. 167: 104-108.

By MAJ Rachel Evans
USARIEM

Whether you are a seasoned author, or are waiting for the opportunity to submit your first manuscript, the U.S. Army Medical Department (AMEDD) Journal may provide you with the target audience you've been looking for. This peer-reviewed journal is prepared quarterly for The Surgeon General by the U.S. Army Medical Department Center & School. The goal of the Journal is to expand knowledge of military medical issues and technological advances; promote collaborative partnerships among Services, components, Corps, and specialties; and convey clinical and health service support information.

As a recently appointed member of the AMEDD Journal's Editorial Review Board, I would like to encourage our Corps members to submit articles for review. This is an excellent forum to both market our research, and bring important health care issues to the military medical community. The current issue and some back issues of the Journal can be viewed at <http://das.cs.amedd.army.mil>. Please feel free to contact me at (508) 233-6349 or Rachel.evans@na.amedd.army.mil if I can provide you with more information on submission requirements.

SPs in the News (con't)

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National Nutrition Month Highlights

BAMC: 2LT Johnna Turner, dietetic intern at BAMC, sponsored a National Nutrition Month art contest at FT Sam Houston Elementary School. MG Kevin Kiley presented the awards, and 2LT Turner received a Commander's Coin of Excellence for her outstanding efforts.

Korea: CPT Jessica Stanton organized a National Nutrition Fun Run on Yongsan Garrison. She also co-sponsored a mini health fair with the 18th MEDCOM Health Promotion coordinator. She will be awarded an AAM for her efforts at promoting wellness for the Yongsan Garrison.

HOOAH!!!!

Ft. Campbell : CPT Robin Jarrell was selected to the Fort Campbell Ten Miler Team and the Army Triathlon Team. She also participated in the Walt Disney Marathon in January 2002.

Ft. Gordon: CPT Trisha Stavinoha received recognition for getting a score of over 300 on the last three consecutive PT tests -HOOAH!! She truly exemplifies the fitness aspect of
(Continued on page 23)

ENLISTED AMSC CORNER

By *MSG Anthony Tate*
Senior Enlisted Advisor

This is my first submission to the Medallion as your Senior Enlisted Advisor. As the Senior Enlisted Advisor for the N3, N9, and the 91Ms, I bring eighteen years of experience in MTOE and TDA units to this position. During my first couple of months as your Senior Enlisted Advisor, I have had the opportunity to work with outstanding soldiers within the Specialist Corps. In order to work and succeed as a team, we must first, have a full understanding of each Specialty. One of my goals is to improve communication within the Corps. I look forward to representing each of the Specialties.

anthony.tate@cen.amedd.army.mil
DSN: 471-7103
COMM: 210-221-7103

91M Nutrition Care

By *MSG Nikki Crawmer*
NCOIC, Nutrition Care Branch

Class 072-02, sixteen students will be graduating April 30, 2002. Class 082-02, will be coming on board April 30-31 May 02, anticipating sixteen students. The Joints Field Operations course (JFNCO), will be held 2-10 May 02. We are averaging thirty-five attendees currently with the RTS MED representatives joining. BNCOC will start their track phase 11 April-31 May. SSG Berry was selected as an instructor for the NCO Academy. He will PCS around the end of May. SFC Nikita Williams has retired, effective date 31 July, SFC Eugene Kennedy will PCS to Alaska in June 02 and myself will PCS to Ft. Hood in September 02. We would like to welcome newly assigned instructors, SSG William Butler from Korea and SSG Joshua Allen from Ft. Bragg. We are awaiting the arrival of SSG Reginald Harris in July after attending ANCOG in May. SSG Amanda Murrell will arrive from Ft. Campbell in July and SSG Jeffery Lein from Ft. Leonard Wood in Aug. SSG Gary Schutz and SSG Kelli Daniels will arrive from Alaska in Oct. MSG Patricia Brown from Korea, due in Sept. The end of August, we will be training our Navy counterparts for the first time at Camp Bullis. The AMSC Enlisted Short Course is coming soon, projected dates are the end of October.

N9 Physical Therapy Specialty

By *SFC Bernadette Henderson*
NCOIC, Physical Therapy Branch

Class 01-02 will complete Phase 1 on May 7, 2002, graduating Phase 2 on July 24, 2002. This class was the pilot for the new N9 curriculum under implementation. We are presently updating Critical Task list for the Soldiers Manual and Trainer's Guide. That's something to look forward to. SSG S. Thompson

PCS to Ft. Jackson, SC in Jan 03. The following changes have occurred: SFC D. Major PCS'ed to Ft. Hood, TX in Mar. 02; I have taken over as PT Branch NCOIC; SFC J. Holt has been the NCOIC of 303-N9 Program as of Jun 01; SSG T. Jones has recently received her Bachelor's Degree in Occupational Education, and we have received SSG D. Smith, SSG E. Castro, SSG S. Dubray, SSG H. Ensley and HM2 R. Romero as new staff to the AMEDDC&S since Aug. 01.

N3 Occupational Therapy Specialty

By *SFC John Holmes*
NCOIC, Occupational Therapy Branch

The Management of Combat Stress Casualties Course is a Professional Postgraduate Short Course Program (PPSCP) sponsored by the Office of the Surgeon General (OTSG) and hosted by the Occupational Therapy Branch of the Army Medical Department Center & School (AMEDDC&S). It is a 12-day course which is conducted on an annual basis. The focus of this course is to train Occupational Therapy practitioners to function in Combat Stress Control Units. The Management of Combat Stress Casualties Course is scenario-based. From the moment the attendees arrive, they are provided with the scenario, divided into teams and begin to work. Attendees are involved in conducting multiple critical incident stress debriefings, managing casualties, and providing briefings to units, etc. Due to the variety of health-care personnel and the variety of service members in attendance, course participants are exposed to a wide array of information and experiences that enrich the overall learning experience. All attendees receive certificates of completion.

SPs in the News (con't)

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our Corps!!

Korea: SGT Richard Jack is attended PLDC, Mar 18-12 April. SPC Diane Comacho graduated from PLDC on 9 March 02.

Ft. Stewart: SPC Winston Miles received the maximum points for the E-5 promotion board and will attend PLDC on 21 May 02.

Local Dietetic Association

Ft. Gordon: LT Michael Trust is also involved in the ADDA as he assumed the responsibility of the newsletter. 1LT Nichelle Johnson has been involved in fundraising for the ADDA. These DDEAMC dietitians are leading examples of professional involvement and excellent representatives of Army dietitians!



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