American Association for Respiratory Care's

Continuing Care & Rehabilitation Bulletin

November / December 2002

Notes from the Chair

by Mary Hart, RRT, RCP

The AARC International Congress, held in Tampa, Fla., in October, was one of the best meetings ever sponsored by the AARC. Thanks to all who helped with the Continuing Care & Rehabilitation Section program. Several well-known speakers presented.

Highlights from the section program include:

- "Year in Review," by Trina Limberg, RRT, FAARC. Trina presented the latest research in pulmonary rehab, along with information on how to maintain a successful pulmonary rehab program.
- "Discussing the Tough Topics," by section medical director, Dr. Paul Selecky. Dr. Selecky gave an upbeat and at times humorous talk on how to deal with patients and families on topics such as sexual dysfunction, advanced directives and end of life issues.
- "Outcomes of Pulmonary Rehabilitation for Different Disease States," by Dr. Neil MacIntyre. Dr. MacIntyre addressed the benefits and outcomes of PR for patients with various disease states, such as COPD, restrictive lung disease and post-op lung surgery.
- "Diagnostic Testing for Pulmonary Rehab," by Catherine Foss, RRT, RPFT. Cathy described diagnostic tests performed pre- and post-pulmonary rehab, such as pulmonary function, six-minute walk and cardiopulmonary exercise.

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Highlights from the Continuing Care & Rehabilitation Section Meeting

by Mary Hart, RRT, RCP

Section members gathered together during the AARC International Congress to discuss concerns and opportunities regarding our specialty. Among the items on the agenda:

- Membership. In order for the section to remain a standalone section, we must have at least 350 members by the end of December, 2003. Currently, we have around 360 members. Please encourage your colleagues to join the section.
- Plans were made to have a "SwapShop" on the section web page. The SwapShop will be used to share forms, policies, procedures, etc. If anyone is interested in helping to establish this important new membership benefit, please contact me at the addresses/numbers listed on page 2.
- Program proposals for next year's Congress in Las Vegas are due by December 31. An electronic form (http://www.aarc.org/education/meetings/rfp/) is available on the AARC web site. Let us know what you would like to see on the program next year. We are always looking for new presenters and fresh ideas.
- Pulmonary Rehabilitation Program Certification forms are now available on the AACVPR web site (www.aacvpr.org). Insurance companies and JCAHO are beginning to ask about program certification.
- HELP WANTED: The section is looking for a new editor or editors for the Bulletin. The basic responsibility of the editor(s) is to contact fellow section members and ask them to write articles of interest to the section, then follow up with those who volunteer to ensure they meet strict copy deadlines. The editor(s) work closely with the AARC Executive Office staff, which provides extensive support in terms of editing articles, providing supplemental copy and putting a professional "polish" on the editions. Again, if you are interested in serving in this capacity, please contact me at the addresses/numbers listed on page 2.

Once again, thank you for your continued support and let's make this the best year ever for our section and the patients we all serve. If you attended the Congress you know the AARC has challenged all its members to help increase membership numbers by recruiting one new member apiece. I'd like to reiterate that challenge to all of you: let's all bring a new member to the AARC and to the section next year! ◆

Section Connection

GET IT ON THE WEB:
Help the AARC increase its efficiency by signing up to receive the Bulletin via the section homepage on the AARC web site (www.aarc.org). To change your option to the electronic Bulletin, send an e-mail to: mendoza@aarc.org.

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Smokers Say, "Pay Me Now"

Most smokers know quitting smoking can bring eventual health benefits, while continuing smoking holds great potential for future health harm. But for many, this recognition isn't enough to get them to kick the habit, say researchers publishing in a recent issue of Nicotine & Tobacco Research. You have to show them more immediate benefits to increase the chances of a successful quit attempt.

The investigators arrived at this finding after evaluating 23 current cigarette smokers, 21 ex-smokers, and 22 people who had never smoked to compare the values they placed on health issues. Each was presented with different scenarios involving a serious sexually transmitted disease, a health problem the researchers chose because it is not related to smoking and therefore equally likely to occur for all participants. In one scenario, designed to see how the subjects weighed future health gains, they were told to imagine they were sick right now but could get well later. In another, designed to see how they weighed future health losses, they were told to imagine they were well right now, but could get sick later.

Smokers placed less value on future damage to their health than did nonsmokers.

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Keeping the Faith

Patients suffering from debilitating illnesses often turn to religion for spiritual support. That's not a bad idea, finds a new study based on 21 cardiac rehabilitation patients. Researchers from Geisinger Health System in Pennsylvania found patients with strong religious beliefs were more confident of their abilities to perform physical tasks during rehab and ultimately had better perceptions of their physical abilities during the 12-week program.

The study involved 11 men and 10 women with an average age of 61 who were classified by age to determine associations regarding spirituality and religiosity (a person's religious practice vs. their spiritual beliefs). Each was administered four questionnaires measuring:

- Religiosity
- Spiritual and Religious Concerns
- Quality of Life
- Self-Efficacy (confidence to perform physical tasks)

Regardless of age, the researchers found ritual and overall religiosity were related to a patient's self-efficacy at the start of the program and ultimately their improvement throughout its duration. A larger study - with a target of 100 cardiac rehabilitation patients looking at five-year outcomes in first-time heart attack and bypass patients - is presently underway to confirm these findings. ◆

Continuing Care and Rehab Bulletin

published by the
American Association for Respiratory Care
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Dyspnea in the Pulmonary Rehabilitation Patient

by Rachel Hawkins and Sally Gardner, respiratory therapy program, Indiana University; Debbie Koehl, BS, RRT, pulmonary rehabilitation program manager, Clarian Health; and Deborah Cullen, EdD, RRT, director, respiratory therapy program, Indiana University, Indianapolis, IN

Editor's Note: The following abstract was presented during the Open Forum at the AARC International Congress in Tampa, FLa.

Background: Given the aging population and increase in COPD, the need for pulmonary rehabilitation will continue to swell. COPD has become the fourth leading cause of death in the United States.? The purpose of this study was to determine whether pulmonary rehabilitation had a positive or negative effect on a patient's perception of dyspnea. Rehabilitation consisted of exercise, breathing retraining and patient education. Moreover, this study evaluated the effectiveness of pulmonary rehabilitation based on the patient's perceptions of dyspnea.

Methods: The results for each questionnaire were compared pre and post eight weeks of pulmonary rehabilitation using the UCSD Shortness of Breath Questionnaire (SOBQ). The SOBQ is a self-administered survey that asks the individual to rate his or her dyspnea on a scale of 0 to 5 during activities of daily living. According to the authors of the UCSD SOBQ, a reduction of 5 points or more in a patient's score is an indication of positive change and suggests a clinically significant outcome.2 Data were gathered from blinded charts utilizing a convenience sample of 48 patients from a rehabilitation program located in a regional hospital in the Midwest. All data were entered and analyzed via Microsoft Excel. Institutional Review Board approval was obtained for this study.

Results: Sixty-seven percent of patients had a significant positive change indicating a decrease in dyspnea. Of the remaining patients, 8% had a negative result consisting of an additional 5 or more points post questionnaire. The remaining 25% had no significant change. The results were statistically significant at the .05 level ($p<.0001$).

Conclusion: Pulmonary rehabilitation does have a positive affect on a patient's perception of dyspnea as measured via the UCSD SOBQ for our hospital-based rehabilitation program participants. ◆

REFERENCES

1. American Association of Cardiovascular and Pulmonary Rehabilitation. Guidelines for pulmonary rehabilitation programs. Champaign, III: Human Kinetics, 1993.
2. http://www.atsqol.org/ucsdsobq.asp. January 15, 2002.

New Diagnostic Tool for Asthma

Researchers from the University of Oklahoma (OU) have found a novel way of using a laser to analyze exhalations of asthma sufferers, opening the door to more accurate diagnosis and prescriptive treatment.

By coupling a laser spectroscopy system to a tunable laser, they created a device that can accurately and simultaneously measure both carbon dioxide and nitric oxide levels of a single exhalation of breath. The precise measurements provided by the instrument might help health care professionals evaluate airway inflammation and prescribe medications at a level of accuracy corresponding to the measurement, thereby providing the most efficient and effective treatment while eliminating overmedication.

The device is currently undergoing clinical trials. Initial findings have been published in two journals of the Optical Society of America: the October edition of Applied Optics and the January 15 edition of Optics Letters. ◆

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E-mail: mendoza@aarc.org for more information.

Specialty Practitioner of the Year: John Nikkel, CRT

The section was proud to honor John Nikkel, CRT, with its Specialty Practitioner of the Year Award at the AARC International Respiratory Congress held in Tampa, FLa., in October. John, a 30-year veteran of respiratory care, received the award during the Annual Awards Ceremony on Saturday morning.

As a respiratory case manager at Queen's Medical Center in Honolulu, Hawaii, John is a strong supporter of pulmonary rehabilitation. His motto - "take a person, one person at a time, and advance them to the highest level of their own abilities" - epitomizes his devotion to helping chronic lung disease patients realize their full potential. The fact that his position is one normally reserved for RNs further exemplifies his exceptional abilities.

In addition to his work at Queen's, John actively supports rehab activities through the AARC and the AACVPR and he has become a leader in Hawaii's fragile children's program, introducing ventilator support into the community and helping medically fragile children go home where they can grow up in the care of their families. Fellow professionals regularly turn to him for advice and consultation regarding the respiratory needs of these kids.

Congratulations, John, on your receipt of this prestigious award! ◆

Quitlines Prove Effective

Telephone-based smoking cessation programs appear to work as well in regular practice as they did in early clinical trials. According to researchers from the University of California, San Diego (UCSD), "quitlines" really do help people kick the habit.

Their study involved 3,282 participants from the California Smokers' Helpline. All participants received a packet of self-help materials and were told counseling was available if they called back after receiving the materials. Those randomized to the treatment group were assigned to receive up to seven counseling sessions, and those assigned to a control group also received counseling if they called back and requested it after randomization. Control group members who did not call back remained in the study as self-help subjects.

After factoring out the control subgroup that received counseling and the corresponding treatment subgroup, the researchers found counseling approximately doubled abstinence rates at 1, 3, 6 and 12 months. The study was published in the October 3 issue of the New England Journal of Medicine. ◆

COPD and Osteoporosis

Canadian researchers found patients with COPD are at risk for vertebral fractures but may not be getting the care they need to prevent them from occurring.

Their review of chest radiographs found 25.5% of patients had at least one vertebral fracture. But only 17.8% of the fractures were recorded in hospital charts and just 38.8% of those who suffered fractures had a diagnosis of osteoporosis in their medical records. Just 19% had been prescribed an osteoporosis medication. The authors concluded vertebral fractures and osteoporosis are underdiagnosed in COPD patients.

The study was presented at a recent meeting of the American Society for Bone and Mineral Research. ◆

The AARC Needs You!

Did you know it takes more than 500 active volunteers to successfully run the vast and varied programs and services offered by the AARC every year? Who should take on these responsibilities? How about you?

President-elect David Shelledy, PhD, RRT, is currently seeking volunteers to serve on various AARC committees and in numerous other capacities during his presidency in 2003. If you'd like to sign up - or just find out more about how you can become more involved in your professional association - check out the following link on AARC Online: www.aarc.org/headlines/volunteer. ◆

Smoking, Infections, and Artherosclerosis

Cigarette smoke can turn the entire body into a breeding ground for infection, leading to chronic infections that in turn foster the buildup of artery-clogging plaque, according to a study reported in the September issue of Stroke. The finding may help explain why some smokers prematurely develop the artery-clogging process that causes most heart attacks and strokes, while others remain free of arterial plaque buildup until they are older.

In the study, current and ex-smokers who had common chronic infections - such as bronchitis, ulcers, urinary tract infections and even gum disease - were more than three times as likely to develop early atherosclerosis than people without such infections.

The researchers used ultrasound scans to examine changes in the carotid arteries of 826 men and women ages 40 to 79. Over the five-year study period, 332 developed new carotid plaques. The risk of developing atherosclerosis was closely associated with the number of years and quantity of cigarettes smoked, regardless of gender, but chronic infection also had a role in plaque development. Nonsmokers with chronic infection had 1.8 times the risk of premature atherosclerosis as nonsmokers free of infection. Among former smokers with infection, the risk was 1.9 times higher, while current smokers with infection had 2.9 times the risk for premature atherosclerosis as infection-free nonsmokers. In ex-smokers with chronic infection, the risk of early atherosclerosis remained elevated even 10 years after they quit, while ex-smokers without infection showed a gradual decrease in risk over time.

The study concludes smokers should be made aware of these dangers and be advised to seek treatment for their chronic infections. ◆

Send Us Your Email Address!

Beginning next year, the Bulletin will be published on a quarterly, rather than bimonthly, basis. But that doesn't mean we'll be communicating with you less often than before. The plan is to increase communication to members via a monthly email newsletter which will feature items of interest to the section. If you're already receiving email messages from the AARC, you will automatically receive these newsletters. If you aren't getting AARC email, that means we don't have your email address. To ensure you don't miss out on these timely publications, send your email address to: mendoza@aarc.org. ◆

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Women More Sensitive to Cough

Researchers testing the responses of both sexes to tussive agents found cough sensitivity is greater in females than males. The study tested 118 patients, 68 of whom were female, with inhalation cough challenges at a clinic for chronic cough.

The inhalation cough challenge materials were inhaled through a mouthpiece for 1 second and the number of coughs in the first 10 seconds after inhalation were recorded. The researchers used inhaled capsaicin, a white crystalline extract of red pepper, and citric acid to cause coughing. Measurements of each successive cough challenge were significantly lower for female patients when compared with male patients. Cigarette smoking and the type of cough being treated did not influence the results.

The investigators note this study of a large group of patients with chronic cough has shown for the first time that women have a heightened cough reflex sensitivity to both capsaicin and citric acid cough challenges. A similar difference between the sexes was also seen in the clinic for two principal diagnostic categories, asthma and gastroesophageal reflux disease.

The study was published in the first October issue of the American Journal of Respiratory and Critical Care Medicine. ◆

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SMOKERS SAY, "PAY ME NOW"

For example, the smokers said they would rather deal with a chronic illness for a longer period of time, 10 years versus 8 1/2, if they could put the illness off for a year.

The authors conclude smoking cessation therapies that illustrate the immediate consequences of not smoking, rather than relying on possible benefits in the distant future, hold greater potential for success. For example, contingency management therapy, in which people are checked regularly to verify their smoking status using physiological measures and then given vouchers for consumer goods and services if they haven't smoked, has proven successful. This type of therapy, say the investigators, can help get people through the difficult initial periods of quitting, to the point where they can start realizing some of the more delayed benefits of not smoking, such as better health. ◆

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NOTES FROM THE CHAIR

- "How to Incorporate Smoking Cessation into a Pulmonary Rehab Program," by Sheila Shearer, RRT. This presentation provided a step-by-step approach to integrating smoking cessation into our programs.
- "Components and Structure of a Pulmonary Rehab Program," by Rebecca Crouch, MS, PT. Rebecca described the components that comprise a successful program, including typical schedules, formats, exercises, patient education, oxygen administration and patient assessment.
- "Reimbursement of Pulmonary Rehabilitation," by Susan Rinaldo-Gallo, MEd, RRT. Susan gave a very descriptive presentation covering current reimbursement, Medicare, federal and state regulations and strategies for reimbursement, CPT codes and G codes. ◆