



CJRT · RCTR

Winter 2005, Volume 41 (5)



College of the North Atlantic
Qatar Campus

Features

- Provincial Reports 17–18
- President's Message 9
- Education and Clinical Standards 14
- Respiratory Syncytial Virus in Premies 21
- Consumer Health Trends 23
- Asthma Education 24

On Air

- CNA Qatar 6
- New RT Program 8

Forum 2006 page 16

The journal for respiratory health
professionals in Canada

La revue des professionnels de la santé
respiratoire au Canada



**Canadian Journal of
Respiratory Therapy**
**Revue canadienne de la
thérapie respiratoire**

**Official Journal of the CSRT
Revue officielle de la SCTR**

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Table of Contents

On Air	6
Qatar Nuggets	

President's Message	9
----------------------------------	----------

CSRT News	12
------------------------	-----------

CoARTE
Eleanor Lord
Executive Director's Report
Provincial Reports

Special Interest Groups	21
--------------------------------------	-----------

Respiratory Virus in Premies

Scientific News	22
------------------------------	-----------

Abstracts
Consumer Health Trends
Asthma Education

Industry News	30
----------------------------	-----------

New Invacare Products

The *CJRT* acknowledges the financial support of the Government of Canada, through the Publications Assistance Program (PAP), toward our mailing costs.

Cover Photo

College of the North Atlantic, Qatar Campus.
Photo by Noel Pendergast, story on page 6.

Advertiser's Index

Spiriva	IFC, PI 32, 33
Focus	3
Athabasca University	30
Lung Association	34
Radiometer	IBC
GE	OBC



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Welcome

Christmas is just around the corner and another exciting year for the CSRT is almost behind us.

The CSRT, as an organization that is responsive to the needs of its members, continues to move forward with a number of initiatives.



Doug Maynard

As we endeavour to improve services to our membership we have once again sent out the Membership Services Survey. The response to this survey has been tremendous and I would like to thank all the members who took the time to participate. If you have not received a survey in the mail, you can call Head Office or fill one in on-line at the CSRT website.

From a previous membership survey we found that our members would like more online services, such as online membership renewal. We are pleased to report this service will be available in time for the spring renewal period in the new year.

We have also made CSRT apparel available for purchase and the response has been fantastic. CSRT scrubs and shirts have been selling well and we are considering an expanded offering of clothing. Thank you to those that have purchased this apparel and we hope you wear it with pride.

We hope to see old friends and new faces at the CSRT Educational Forum, Waves of Change, in Saint John, New Brunswick in May 2006. We have an excellent lineup of speakers and a first-class banquet organized. Details can be found on our website under About/Annual Meetings. There is also a registration form on page 16 of this issue, for those wishing to take advantage of our early-bird registration rate.

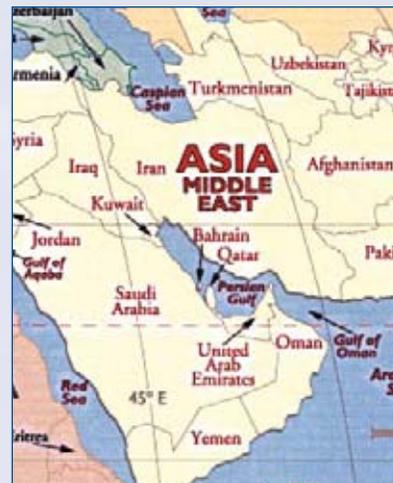
You will also note that the *CJRT* continues to evolve. We have gone to a three-column format and graphic elements are being updated and revised.

Please see page 12 for the Executive Directors Report which details other initiatives by the CSRT.

Doug Maynard BSc, RRT, MBA
Executive Director CSRT
dmaynard@csrt.com

College of the North Atlantic — Qatar

Noel Pendergast, RRT



Downtown Doha, Qatar.

Let me tell you about my day on May 17, 2005. It started as a seemingly typical Tuesday for me as a respiratory therapy educator.

As the alarm sounded at 7:00 a.m., begrudgingly, I rolled out of bed. Upon completion of breakfast and getting ready, I stumbled out the door and drove to the college where I am a respiratory therapy instructor. Noticing my gas gauge was reading almost empty, I had to stop along the route to the college and fill up with gas.

My morning was occupied with last minute preparations for my class at 10:30 a.m.. Having recently discovered some interesting images and animations on the internet, I wanted to add them to the respiratory anatomy and physiology lesson I was about to present. Upon completion of my class at 11:30 a.m., I attended our weekly Health Science faculty meeting. This particular meeting involved planning for the upcoming 'Health Sciences Day' in June, along with a brainstorming session on strategies to improve

recruitment and enrollment in the Health Sciences programs at our college.

The afternoon was occupied with planning for an upcoming anatomy lab session along with a visit from one of my respiratory therapy students looking on some advice on getting some extra help with her math and chemistry courses. After setting up various stations on cardiovascular and respiratory anatomy in the lab and steering my inquiring student towards the appropriate tutors, it was time to call it a day. The day detailed above is a typical day in the life of a respiratory therapy educator. This particular day could easily have been one I experienced as an instructor at the QEII/Dalhousie School of Health Sciences in Halifax, a role I filled for the past seven years.

But for this particular Tuesday, albeit the day unfolded as typical, there are some atypical features which I failed to highlight. Well, atypical features for a respiratory therapy educator in Canada!

When I left my apartment at 8:00 a.m. on that May morning, to head off to work, it was already 32 degrees Celsius. During my 15 minute drive to the College,

I passed through six 'roundabout' traffic circles and not one traffic light. Most of the vehicles accompanying my little Mitsubishi on the well-constructed, wide boulevards were BMW's, Lexus, Mercedes and Porsches. I also passed no fewer than eight mosques.

When filling up my car with gas, I paid only 25 cents (Canadian) per litre and it cost about \$7 (cdn) to fill up my tank with gas.

The students in my class were a mix of men and women, but the men generally were wearing the traditional Arab long white cloak with head gear, referred to as a disdasha. The women were all wearing a long black covering from head to toe, an abaya, with a small number of the women also covering their face with the shelah.

As I left the College at the end of my work day, the temperature was up to approximately 40 degrees Celsius and the steering wheel was so hot in my car it is difficult to hold on to.

By now you are probably realizing my role as a respiratory therapy educator is no longer in Halifax. You are right, because I am working for the College of the North Atlantic of Newfoundland, but at the campus in Qatar (www.cna-qatar.com) .

A long way from Newfoundland ...geographically, culturally and politically. Not to mention the heat and humidity!

Qatar is a small, peninsula-shaped country located in the Arabian (aka Persian) Gulf. Bordering on Saudi Arabia it is also in close proximity to the United Arab Emirates and Bahrain. Qatar's landscape is predominantly desert and is surrounded by the Arabian Gulf on three sides. The entire country's area is approximately equal to two times that of Prince Edward Island's at 11,000 square kilometers, with a population approximately equal to New Brunswick's at 800,000 people. However, similar to other petroleum-rich Gulf countries, approximately 75% of those residing in Qatar are not Qatari by nationality, but rather expatriates from other countries in the Middle East, Africa, South Asia, South East Asia, Europe and North America. The expatriate workers are recruited for various jobs, including anything from a domestic worker to an engineer or a respiratory therapist!

Such a wide breadth of nationalities makes for a very interesting and diverse cultural milieu.

The country is probably best known in North America as the home base for the US military Central Command ("Cent-Com") during the



Respiratory therapy educator, Noel Pendergast with Qatar RT students, giving instruction on suctioning a patient.

most recent Gulf War. As well it is the home of Al Jazeera, the Arab language news station. In fact, Al Jazeera in Arabic is translated as 'the peninsula', representative of Qatar's geography.

Thanks to a forward-thinking, progressive Emir (Sheikh Hamad) and his very much involved wife (Sheikha Mossa) and financed by the country's wealth from oil and natural gas, Qatar has been rapidly developing its' education and health infrastructure. To this end, the country's administration has commissioned a number of universities and colleges from North America to open campuses in Qatar to educate the local population.

In 2001, the College of the North Atlantic of Newfoundland signed a 10 year contract with the government of Qatar to operate a campus

in Qatar. The College began classes in September 2002 and presently offers courses and diplomas in four subject areas; Business Technology, Engineering Technology, Information Technology and Health Sciences.

The Health Science programs presently offered at the Qatar campus include Environmental Health Technology, Paramedicine, Medical Radiography and Respiratory Therapy. Programs in Pharmacy Technology and Dental Assistant are planned to begin in 2006.

My experience in Qatar began on January 3rd, 2005, when I arrived to initiate development work for delivery of the respiratory therapy courses in September, 2005. My job was certainly made a lot easier by the fact respiratory therapy is offered as a diploma program at the College of the North Atlantic campus in St.

On Air Nuggets

New Respiratory Therapy Program

Conestoga College is pleased to announce the partnership with the Southern Alberta Institute of Technology (SAIT) to offer a new program in Respiratory Therapy beginning in September 2006. This three-year advanced diploma program will meet the education requirements set by the College of Respiratory Therapists of Ontario (CRTO) and will be submitted for CRTO approval.

The program will be put forth for accreditation by the Council on Accreditation of Respiratory Therapy Education (CoARTE). It is designed to prepare students with the minimum knowledge, skills, attitudes and judgment necessary to perform their role within the scope of practice as Registered Respiratory Therapists.

The theoretical portion of the program is delivered at Conestoga College while the practical instruction is provided by our affiliated hospitals. Students will have the opportunity to augment their learning in our new clinical simulation lab.

For further information on the program please contact:
Lori Pepler-Beechey BSc, RRT
Program Coordinator,
Respiratory Therapy
Conestoga College
299 Doon Valley Drive
Kitchener, On N2G 4M4
519-748-5220 x 3948
lpepler-beechey@conestogac.on.ca

CSRT National Certification Exam

The next sitting of the CSRT National Examination is January 9, 2006. Details are available on the CBRC Website.

MARRT RT Week

The Manitoba Association of Respiratory Therapists (MARRT) continues to provide activities and information pertaining to the professional advocacy of respiratory therapy. In conjunction with the School of Medical Rehabilitation, Department of Respiratory Therapy, MARRT has acquired a display board promoting respiratory therapy within Manitoba. The display board is available to all MARRT members for promotion of the profession on a rental basis.

A two-day celebration of RT week at Health Sciences Centre, Winnipeg included displays of various types of RT equipment used in both adults and pediatrics. Activities included raffles with various prizes; RT trivia and giveaway items provided by local medical and ventilator supply companies. One Winnipeg hospital chose TV show themes such as "Survivor" to promote RT week within their facility.

MARRT also set up a display at a local shopping mall with the help of RT volunteers from area facilities. Asthma Educators were on hand to perform spirometries, saturation checks as well as MDI education for the public. The display and promotion of RT week even received air time from a local TV station. Equipment was provided by local medical and ventilator supply companies.

The RT based Inter-facility Transport Team was identified as a "Good Practice" by the CCHSA during the acute care phase of our regional accreditation. In their presentation, they commented on the contribution that RTs make to patient safety and commented MARRT's collaborative approach with EMS.

SART Education Day

Candi Thompson (left, below) and Lori Grocutt, co-organizers of the SART Ed Day, relax at the post forum Wine and Cheese. SART held its annual education day and AGM September 9, 2005 in Saskatoon.



New On Line Services

The CSRT is pleased to offer its members a new on-line service. This service will allow you to update information, view your membership file, renew your membership and register for CSRT events. You should have received a mailing from the CSRT recently which included a username and password that will allow you to login on the website under Membership.

Please contact the CSRT at 1-800-267-3422 if you did not receive your information or are having difficulty with the site.

Message from the President

A truly national process for respiratory therapy is becoming a reality in Canada! The National Competency Profile has been endorsed by all regulatory bodies and provincial representatives across Canada.

Following that, we must decide — what is the process? Is it to bring the profession to the evaluation stage or a national examination for graduating respiratory therapists from all the educational programs in the country?

The National Alliance of Respiratory Therapy Regulators is committed to developing a national process for educating and evaluating all graduates. It is beneficial to all of us in the workplace to know that colleagues you work with have comparable training and evaluation and that graduates have the basic essential skills.

Prior to regulation we had mobility across Canada and into the U.S. The federal and provincial governments encouraged professions, other than physicians, to become regulated in order to better protect the public. Our profession, like many others, put forth proposals to become regulated in our respective provinces, knowing the development of a college would better protect the public. The implementation of colleges and provincial jurisdictions created barriers to mobility. In turn, the federal government mandated that all provinces be involved in regulation to create a labour mobility agreement to prevent barriers for those professionals wishing to move across jurisdictions. Thus, this is one

of the mandates of the Alliance of Respiratory Therapy Regulators. In order for our profession to truly be national we must work together, taking in provincial jurisdictions without allowing them to become barriers. We must work as a team to develop the evaluation tool.

The CSRT, on behalf of the Alliance, is diligently working on a proposal to Human Resources and Skills Development Canada. This proposal is to obtain funding to promote the integration of foreign trained professionals along with a national demographic study that would identify the future needs of the profession in terms of manpower. This is one of the important steps the CSRT is taking to move toward a Society that provides tangible benefits to its members. The goal of our strategic plan is to remove ourselves from the regulatory functions and move towards member benefits. As a key goal we hope you, as a CSRT member, will see the benefits of membership to yourself and the profession as a whole.

I had the opportunity to take part in promoting the CSRT at the recent OPIQ (Quebec provincial regulatory body) educational forum. This was an impressive event, boasting at least 600 delegates with a wide array of educational topics presented. I



Sue Jones

spoke to Quebec respiratory therapists and promoted the CSRT as an advocate for the profession from a national perspective. Many misconceptions were cleared up regarding CSRT membership from the Quebec viewpoint. Our booth during the conference was busy and informative.

The CSRT has also been active promoting the profession at job fairs and local events. RT Week was celebrated across the country. Congratulations to those of you who informed other professions or members of the public about the profession.

Another successful year is coming to a close, but at the same a lot of exciting opportunities are coming our way in 2006. The CSRT will be ready to jump and tackle new issues, as we have always done in the past.

Sue Jones, RRT
CSRT President

Mot de la présidente

Un système de thérapie respiratoire fondamentalement national est en voie de se matérialiser au Canada! Tous les organismes de réglementation et les représentants provinciaux d'un bout à l'autre du pays ont appuyé le Profil national des compétences. Reste maintenant à décider quel procédé adopter.

S'agit-il d'amener la profession au stade de l'évaluation ou d'implanter un examen national pour les thérapeutes respiratoires sortants de tous les programmes pédagogiques au pays?

L'« Alliance nationale des organismes de réglementation en thérapie respiratoire » est vouée à l'élaboration d'un procédé national régissant l'éducation et l'évaluation de tous les diplômés. Il est avantageux pour tous et chacun de constater que nos collègues de travail ont reçu une formation et des évaluations semblables et que les diplômés maîtrisent les compétences essentielles de base.

Avant la réglementation, la mobilité s'effectuait à travers le Canada et jusqu'aux É.-U. Dans le but de mieux protéger le public, les gouvernements fédéral et provinciaux ont encouragé la réglementation de certaines professions, outre la médecine. Notre profession, comme bien d'autres, a soumis des propositions de réglementation au sein de nos provinces respectives, sachant que la mise sur pied d'un collègue protégerait davantage le public. Or, la mise sur pied de collègues et de champs d'applications provinciaux a entravé la mobilité. En revanche, le gouvernement fédéral a insisté pour

que toutes les provinces participent à la réglementation afin de créer une entente de mobilité de la main d'œuvre, éliminant les obstacles qui se dressent devant les professionnels qui souhaitent déménager d'un champ d'application à l'autre. Il s'agit d'ailleurs d'un des mandats de l'Alliance nationale des organismes de réglementation en thérapie respiratoire. Afin d'assurer le caractère national de notre profession, nous devons travailler ensemble et tenir compte des autorités provinciales sans qu'elles ne constituent des obstacles. Nous devons élaborer l'outil d'évaluation en équipe.

Au nom de l'Alliance, la SCTR travaille d'arrache-pied à l'élaboration d'une proposition à l'intention de Ressources humaines et Développement des compétences Canada. Cette proposition vise l'obtention de financement en vue de promouvoir l'intégration de professionnels formés à l'étranger et de réaliser une étude démographique nationale pour identifier les besoins futurs en main d'œuvre de la profession.

Voilà une des importantes étapes franchies par la SCTR pour assurer que la Société offre des avantages tangibles à ses membres. Notre plan stratégique prône notre retrait des fonctions de réglementation et il met

l'accent sur les avantages aux membres. En qualité de membre de la SCTR, nous espérons que vous constaterez les avantages de l'adhésion, tant pour vous que pour la profession dans son ensemble.

J'ai eu l'occasion de promouvoir la SCTR à l'occasion du récent forum éducatif de l'OPIQ (organisme de réglementation québécois). L'activité m'a impressionnée par la quantité de délégués (pas moins de 600) et la gamme diversifiée de sujets pédagogiques présentés. J'ai dialogué avec des thérapeutes respiratoires québécois et j'ai fait valoir la SCTR à titre de défenseuse de la profession à l'échelle nationale. Nous avons mis au clair plusieurs malentendus liés à l'adhésion à la SCTR du point de vue québécois. Plusieurs personnes ont visité le kiosque informatif que nous avions monté durant la conférence.

Par ailleurs, la SCTR promeut activement la profession lors de foires d'emploi et d'activités locales. La Semaine de la TR fut célébrée d'un bout à l'autre du pays. Félicitations à tous ceux et celles d'entre vous qui avez informé d'autres professions ou les membres du public au sujet de la thérapie respiratoire.

Une autre année couronnée de succès tire à sa fin et plusieurs occasions stimulantes s'annoncent en 2006. La SCTR sera prête à mettre la main à la pâte, comme elle l'a toujours fait par le passé.

Sue Jones, TRA
Présidente de la SCTR

CoARTE News

Michelle Kowlessar, Accreditation and Education Manager, Council on Accreditation for Respiratory Therapy Education

CoARTE Members

Helen Clark, Chair, Employer
Tom Dorval, Vice-Chair, Didactic Education
Carolyn McCoy, Clinical Education
Dr. Don Reid, Physician
Suzanne Malo, Senior Educational Administration
Josée Prud'Homme, National Alliance Representative
Doug Maynard, CSRT Executive Director

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Tom Dorval
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Maryse Audet
Thelma Cashen

Physicians

Dr. Don Reid
Dr. Nigel Duguid
Dr. Paul Hernandez

Educational Administrators

Marie-France Bélanger
June MacDonald
Marlene Raasok

CRTO Regulator Representatives

Dennis Hunter
Dale Mackey
Dawn Brunelle

New Member on CoARTE

CoARTE is pleased to announce the appointment of Ms. Carolyn McCoy in the position of Clinical Educator representative on the Council on Accreditation for Respiratory Therapy Education (CoARTE). Ms. McCoy is affiliated with the New Brunswick Community College in Saint John and brings over seven years of clinical and educator experience to CoARTE.

Vacant Position on CoARTE

The Public representative position on CoARTE is currently vacant. CoARTE is looking for someone from the public with awareness of issues relating to education and health care. Anyone interested in serving on CoARTE, please contact Michelle Kowlessar, Accreditation Manager by e-mail at coarte@csrt.com or by

phone 1-800-267-3522 or (613) 731-3164 ext. 26.

Accreditation Manual

CoARTE is revising and updating the Accreditation Manual to include new policies and incorporate suggested changes by stakeholders throughout the past two years to make the handbook more user-friendly. The draft version will be forwarded to all stakeholders for feedback next spring. If you have suggestions on improving the Accreditation Handbook, please e-mail the Secretariat at coarte@csrt.com prior to December 31, 2005.

Association of Accrediting Agencies of Canada (AAAC)

The CoARTE Secretariat attended the AAAC Annual General Meeting and General Meeting of Members on November 4, 2005 in Ottawa, ON.

During the General Meeting I made a brief presentation about CoARTE and I am happy to announce that CoARTE was ratified as a full member of the AAAC.

The AAAC Members are currently developing significant programs at this time, one of which may be an important enhancement to the CSRT Accreditation program - an on-line generic training course for Program Reviewers. The training course is near completion and will be available for the Council to assess early next year.

The mission of the AAAC is to ensure the highest quality education of professionals and pursues excellence in standards and processes of accreditation. The AAAC members meet three times a year and share best practices, discuss accreditation issues, and share policies and standards. For more information on the AAAC and its membership, please visit www.aaac.ca.

Volunteer Recognition

Volunteers are the foundation for the success of the CSRT's Accreditation program. The time and expertise donated by respiratory therapists, physicians and school administrators has greatly contributed to CoARTE's continued growth.

CoARTE members, document reviewers and program reviewers participate in intensive work by spending many hours studying and analyzing reports, participating in teleconferences and meetings in the interest of promoting national educational standards for respiratory therapy.

CoARTE would like to acknowledge the contributions of its members, document reviewers and team members who served on program review teams during the calendar year 2005.

continued on page 12

Executive Director Report

Douglas Maynard, BCs, RRT, MBA

The CSRT continues to respond to the needs of its members. We are pleased to report on some of initiatives that have come to fruition over the year.

Primary Care

The CSRT ensures that our profession is represented in any discussion related to health care reform. A particularly hot topic of late pertains to primary health care. The CSRT has been participating in two significant projects in this regard. The National Primary Health Care Awareness Strategy is a national/provincial government project to raise awareness of primary health care.

The Enhancing Inter-Disciplinary Collaboration in Primary Care project is a group of non-governmental health care associations that received a grant to research frameworks and principles that would enhance collaboration among health care professions in the primary care setting. The CSRT has been participating in this process and we will have a report as this project draws to completion this spring. Information on both these projects can be found on the CSRT website (www.csrt.com).

Bylaw Changes

I would like to thank the members that joined us in Edmonton for the CSRT Annual General Meeting. The Annual General Meeting is the primary opportunity for CSRT members to participate in making decisions that govern their Society. At the 2005 AGM the membership voted to make changes to the CSRT bylaws that change how the CSRT treats non-CSRT members.

Historically, the bylaws indicated that members would be treated that same as non-members with respect to their credential. This meant non-members were subject to a complaints/discipline process, the same as members, but it also allowed non-members to receive ongoing recognition for their credential with no responsibility to the organization that provided it.

There were two significant results to this. First, the CSRT had very limited ability to enforce any disciplinary action against a non-member, limiting the effectiveness of the action. Second, some RRTs began to lose sight of the professional significance of the CSRT RRT credential and began

to equate the RRT credential with simply passing a certification exam.

In fact, the CSRT RRT is an indication that an individual has completed an appropriate RT program, has passed an exam and has declared any criminal records. The CSRT RRT credential is also an indication that, as long as you hold that credential, you agree to act in a professional manner according to the CSRT Code of Ethics, and the CSRT Standards of Practice.

The bylaw change that was passed at the 2005 AGM removes any reference to non-members being treated the same as members. The bylaw change also goes on to indicate that maintenance of their CSRT RRT credential will require a current CSRT membership. Specifically, it states that, the CSRT Registration Certificate will only be considered valid in conjunction with a current membership in good standing, in the registered class.

We hope that this will contribute to increasing the profile of individuals that choose to use the CSRT RRT credential and support their profession through membership in the CSRT.

CoARTE News

continued from page 11

It is their commitment to excellence that assures a high quality of the accreditation programs and activities.

Sincere appreciation is extended to the following individuals for their generous contribution of time and expertise.

CoARTE Annual Meeting, November 18-19, 2005

CoARTE held its Annual Meeting in Ottawa on November 18 and 19.

Some of the topics covered during the meeting were international accreditation opportunities, strategic planning and the upcoming implementation of the National Competency Profile. If you wish details on the outcome of these topics, please feel free to contact the Secretariat by e-mail at coarte@csrt.com.

Program Recognition

CoARTE members would also like to extend appreciation to the programs who have worked hard to prepare

and receive program review teams for their on-site accreditation site visits this year. Sincere gratitude to Algonquin College, la Cité Collégiale and Canadore College program personnel for all of your hard work and dedication.

Holiday Wishes

CoARTE would like to wish everyone a joyful, healthy and safe holiday season.

A Note from Eleanor Lord

Recipient of the Robert Merry Award for Professional Achievement

I can't begin to express how proud I am of receiving the award and how deeply moved by it that I feel. It has been both an honour and a pleasure to have been part of the Education Committee, Board, Executive and Long Range Planning Committee of CSRT. CSRT is a wonderful professional association with a grand new vision of the future. I am grateful to have played a small part in its development.

I have been lucky to have worked with so very, very many special people in CSRT over the years - too many to mention individually, but former Presidents Pat Hogan, Mike Bachynski, Tom Dorval, Daniel Pare, Jim Winnick and Brent Kitchen were each outstanding in their own exceptional ways. I am also grateful for all I learned from Dr. Terry Clement, Occupational Profile consultant, and Patricia Haaland, COARTE consultant. Of course the center of my CSRT universe was Cheryl Homuth. She was a constant

support, encouragement and inspiration to all of her Presidents. I love her dearly for all she did for the organization and me personally. Also, I am particularly proud of having my name on the same Award as Terry Boone, who is an indomitable spirit.

My wish for you, Sue Jones, the current board, and head office staff is that you will all find as much stimulation, fulfillment and just plain fun in CSRT activities as I did. I have wonderful memories of my time with CSRT and receiving the Robert Merry Award adds exponentially to that. As I knew Bob, I am very pleased by the memorial aspect.

Again, my sincere thanks to all who were involved in selecting me for the CSRT Professional Achievement Award. I shall treasure it always.

Respectfully,
Eleanor Lord



CSRT Corporate Members 2005–2006

Cardinal Health
Carestream Medical
GE Healthcare
Instrumentation Laboratory
Methapharm
ProResp/ProHealth
Radiometer Canada
Respan Products
VitalAire Canada

Membership Renewals

The deadline for yearly CSRT membership renewal is March 31, 2006.

This year you have the added option of renewing on-line. Please check our website under Membership for details.

CRTO and CARTA members, who wish to take advantage of the CSRT debit plan, must renew by February 15, 2006.

Education and Clinical Standards Report

Ray Hubble, RRT, M.Ed, CSRT Director Educational and Clinical Standards

Technology is fascinating. I just read two separate articles, wrote an assessment test and provided feedback to the producers of the articles.

My PalmPilot® handheld device was the tool, and the free downloadable Epocrates Rx software bundle (<http://www2.epocrates.com/index.html>) provided the materials. The fascinating part was that once I synchronized my handheld device with my desktop, within minutes, a certificate of completion was emailed to me for inclusion in my Professional Development portfolio.

The last six months in the portfolio of Director of Education and Clinical Standards was as busy as ever. Accreditation, Foreign Credential

Recognition, the National Competency Profile and continuing education are all ongoing issues that take time, research, collaboration and patience.

The portfolio, which I currently direct, is up for nominations. I have decided not to re-offer after approximately 12 years of continuous volunteer service at varying levels of the CSRT.

I have another job to volunteer for; that of "Dad". I have missed 5 out of the last 6 of my eldest son's birthdays and I don't want that average to increase. My family and their support for my volunteer activities have been unconditional, and for that, I am grateful. My time in the next

little while will be in ice rinks in Southern NB cheering on my boys.

For anyone interested in participating in this portfolio, please contact the Executive Director, Douglas Maynard at dmaynard@csrt.com for further instructions.

I leave a Board of Directors structure that is strong, focused and working towards the essential ingredients for RT success in Canada: Advocacy, Unity and Service.

Thank you for the opportunity to serve, and for the many friends that I have made and continue to make across this great land of ours.

Calendar of Events

2006

January 21 – 25, 2006
35th Critical Care Conference
 New Orleans, Louisiana
www.sccm.org/education/index.asp

January 26 – 28, 2006
24th Annual Conference on Sleep Disorders in Infancy & Childhood,
 Rancho Mirage, California
www.5StarMedEd.org/sleepdisorders

February 16 – 18, 2006
Pediatric Anesthesiology 2006
 Fort Myers, Florida
www.pedsanesthesia.org

March 3 – 7, 2006
American Academy of Allergy, Asthma and Immunology Annual Meeting
 Miami Beach Florida
<http://www.aaaai.org/>

March 23 – 25, 2006
National Heart Foundation Conference
 Sydney Australia
<http://www.heartfoundation.com.au/2006conference/>

March 23 – 26, 2006
The Fourth European Respiratory Society Lung Science Conference
 Taormina, Sicily
www.ersnet.org/ers/

March 24 – 28, 2006
80th Clinical and Scientific Congress of the International Anesthesia Research Society
 San Francisco, California
www.iars.org

April 20 – 22, 2006
6th Annual FOCUS Conference
 Nashville, Tennessee
<http://www.foocus.com/>

April 24 – 28, 2006
Society for Obstetric Anesthesia & Perinatology, 38th Annual Meeting
 Miami Beach Florida

May 19, – 24, 2006
American Thoracic Society, 2006 International Conference
 San Diego, California

May 16 – 20, 2006
American Society of Hypertension 21st Annual Scientific Meeting and Exposition
 Linking Blood Pressure and Cardiovascular Health
 Hilton New York, New York City

May 19 – 24, 2006
The American Thoracic Society International Conference
 San Diego, California
www.thoracic.org/ic/ic2005/conference.asp

New Membership Options for RT Students!

Full Student Membership

Valid from when you first join the CSRT until March 31 following through to your third year in an approved Respiratory Therapy program has now been reduced to \$130.00. This one-time fee and membership option will continue to include all membership privileges, a copy of the CSRT Occupational Profile, subscription to the Canadian Journal of Respiratory Therapy for the duration of your membership and a Registry Certificate and Pin upon the successful completion of the CSRT National Certification Examination.

Annual Student Membership

Valid from when you first join/renew until the following March 31 will now be available for \$45.00. This membership option will include all membership privileges, one copy of the CSRT Occupational Profile with your first membership payment during your three-year Respiratory Therapy program and subscription to the Canadian Journal of Respiratory Therapy. An additional \$50.00 Registry Fee is payable no later than March 31st in the third year of your Respiratory Therapy program to receive Registry with the CSRT (including a Registry Certificate and Pin) upon the successful completion of the CSRT National

Certification Examination.

Check the CSRT website, under Membership/Student Membership, for further details and new application forms.

Are you a Respiratory Therapy student, graduating in 2008? Any first-year respiratory therapy students graduating in 2008 who have already joined the CSRT prior to the announcement of these changes and who have paid the \$175.00 Student Fee posted will have a refund mailed to them over the next few months. Please ensure the CSRT has your current mailing address on record.

Advocacy Committee

The CSRT is currently in search of three volunteer registered CSRT members to sit on the new advocacy committee.

This is a unique opportunity for members who wish to contribute in helping RRTs across Canada achieve greater professional recognition, to participate in Canadian healthcare policy renewal, and to defend the interests of their profession.

The new CSRT Volunteer Advocacy Committee has been established to assist the Society in:

- raising the profile of respiratory therapy in Canada
- strengthening the CSRT's influence in the Canadian healthcare landscape along with that of its members
- establishing and fostering relationships with policy makers and like-minded organizations
- identifying and implementing grass-roots advocacy activities
- devising and implementing communication strategies

A complete version of the committee's Terms of Reference is available on the CSRT website, under Committees.

Should you wish to become a member of the CSRT's Volunteer Advocacy Committee, please submit a current CV and a short letter demonstrating your interest in sitting on the committee. We would also like to find out what kind of contributions you feel you could bring to the CSRT Volunteer Advocacy Committee. Your application should not exceed 300 words.

Committee member applications are to be sent to the CSRT Head-Office.

Mailing address:

CSRT/SCTR
102-1785 ALTA VISTA DR
OTTAWA ON K1G 3Y6

Fax: (613) 521-4314

E-mail: csrt@csrt.com

Call for Abstracts Forum 2006

The CSRT invites health-care practitioners, researchers, educators, students, administrators, health policy and health services planners to submit abstracts for poster or paper presentation at "Waves of Change" CSRT Educational Forum 2006, in Saint John.

Proposals may pertain to clinical practice areas, program development, research investigation, evaluation of process/program and respiratory healthcare delivery.

The deadline for submissions is **February 28, 2006**.

For complete instructions, guidelines and application form with the CSRT website under Annual Meetings.

The winning poster or paper will receive free registration to Forum 2007.

CSRT Educational Forum Saint John, NB



Confirmed Speakers

- Dr. Dennis Bowie — *Steroid Resistant Asthma*
- Dr. T. Evans — *Anesthesia Hemodynamics*
- Dr. Robert Kacmarek — *Management of ARDS/ Ten Ways to Improve Success with NPPV/Clinical Recognition Program*
- Ann Hudson Mason — *Neonates*
- Joseph Lewarski — *Long Term Care of the Tracheostomy Patient/ Standards for Home Care Respiratory Therapists*
- Sandra MacMaster — *Shiftwork Sleep Syndrome*
- Dr. Rachel Morehouse — *Life/Work Balance: Finding Enough Time For Sleep*
- Sue Ness — *RTs in Primary Care*
- Paul Ouelette — *Sedation in ICU*
- Janette Reyes — *Persistent Pulmonary Hypertension*
- Sean Swarner — *Keynote Speaker*
- Dr. Christer Sinderby — *Neuro-Controlled Ventilation*
- Dr. Glen Sullivan — *Level III Sleep Studies*
- Carl Wiezalis — *Ethics and Professional Behaviour in Respiratory Care/National Emphysema COPD Association (NECA)*
- Joanne Young — *EMP & RT's in Primary Care*

CSRT President's Banquet May 27, 2006

The CSRT is pleased to announce that veteran CBC host Arthur Black will address delegates at the President's Banquet on May 27. For 19 years he hosted Basic Black, a national CBC radio program dedicated to wackiness. He currently hosts two television shows, *Weird Homes* (the winner of a Golden Globe and nominated for a Gemini) and *Weird Wheels*, both of which are self-explanatory. He will be able to provide us with some interesting observations on the human condition as well as the Canadian perspective on being a citizen of the world.

After dinner — get ready for a party! The President's Banquet will be a memorable night. Not only will we have CBC host Arthur Black as our keynote speaker, we will be kicking off our shoes and doing some dancing to the **Boys Next Door**.

Based out of Halifax, **Boys Next Door** is a high energy four-man Maritime Kitchen Party band. They feature folk rock, adult contemporary, several traditional favorites as well as a variety of original compositions. They start at 9:00 p.m. in the Marco Polo Room.

To purchase Banquet tickets please see the Forum 2006 Registration Form.

For a complete details — please refer to the CSRT web-site under Annual Meetings.

■ Full Registration — Members 2006–2007	
*Pre-registration	325.00 <input type="checkbox"/>
After April 21, 2006	395.00 <input type="checkbox"/>
■ Full Registration — Non-members	
*Pre-registration	470.00 <input type="checkbox"/>
After April 21, 2006	540.00 <input type="checkbox"/>
■ Full Registration — CSRT Student Members	
Student Members**	50.00 <input type="checkbox"/>
■ Full Registration — Non-CSRT Student Members	
*Pre-registration	75.00 <input type="checkbox"/>
After April 21, 2006	100.00 <input type="checkbox"/>
■ Daily Registration <input type="checkbox"/> Fri. <input type="checkbox"/> Sat. <input type="checkbox"/> Sun.	
Members	150.00 <input type="checkbox"/>
Non-members	185.00 <input type="checkbox"/>
Student Members**	50.00 <input type="checkbox"/>
■ Options	
President's Banquet	50.00 <input type="checkbox"/>
Additional Exhibitor Representative	150.00 <input type="checkbox"/>

- * **Pre-registration deadline April 21, 2006**
- ****Must be currently enrolled in a CSRT approved program to qualify for the student rate**

Registration includes Exhibitors Breakfast, Sunday Continental Breakfast, two lunches and breaks, Wine and Cheese Reception, all lectures and workshops, entry to Exhibit Hall. GST is included in the total #119220010 RT

Refunds: Refunds are subject to a \$50.00 administration fee.

NAME _____

CSRT FILE # _____

EMPLOYER _____

POSITION (TITLE) _____

YOUR ADDRESS _____

CITY _____ PROVINCE _____ POSTAL CODE _____

HOME TEL. _____ WORK TEL. _____

E-MAIL _____

METHOD OF PAYMENT

TOTAL PAYMENT \$ _____

VISA MASTERCARD

CARD NUMBER _____ EXPIRY DATE _____

SIGNATURE _____

PRINT NAME _____

YES, I WILL BE ATTENDING THE FUN NIGHT AT REDS.

Send to: CSRT 102 - 1785 Alta Vista Drive. Ottawa, Ontario K1G 3Y6
 For more information please contact the CSRT at 1-800-267-3422 or
 (613) 731-3164 Fax: (613) 521-4314 E-mail: csrt@csrt.com

House of Delegates — Saskatchewan Report

Lori Grocutt, RRT

As the HOD representative from Saskatchewan and President of SART (Past-President as of September 9, 2005) I have been in the enviable position of being part of the positive changes within the CSRT. One change, being that I have witnessed an improved employment environment for respiratory therapists with the passing of the MRA. Within Saskatchewan it looks as though self-regulation will finally be a reality, thanks to the hard work by Brent Kitchen and the self-regulation committee. I think I speak for all the RT's in the province when I say, "It's about time".

It appears the Saskatchewan government will grant our request for self-regulation with the stipulation that a college is established separate from the current association. The college will handle credential and disciplinary issues arising from self-regulation as well as establishing a database of all RT's within the province.

As SART has been anticipating self-regulation the majority of the funds required are available. There will likely be an increase in the SART dues but as they are currently very low the increase should not be burdensome. Setting up the college as well as running an association is going to require additional manpower and now would be an excellent time to become involved. Anyone wishing to become part of this exciting endeavor please let me know.

SART held its annual education day and AGM September 9, 2005 at the Travelodge in Saskatoon. It was well attended and provided a variety of interesting and informative speakers. The SART Board of Directors was given the go ahead to hire someone to design and implement a SART web page. With Saskatchewan being such a large province with relatively few RT's communication has been a huge issue. As of September 9, 2005 Peter Luddington assumed the role

of president of SART. The SART board of directors decided that the House of Delegates (HOD) representative would be the SART past president. It was reasoned that this would provide a measure of continuity while allowing for new ideas and fresh viewpoints. However, due to a prior commitment the previous past president was unable to sit on the HOD this last year so I will be covering the position for 2 years. The HOD meets via teleconference every 2 months and in person at the CSRT AGM. If any one has concerns or issues they wish to have addressed, please let me know.

This next year will be one of many changes for the respiratory therapy profession in the Province of Saskatchewan. I feel they will all be positive and contribute greatly to ensuring the integrity and professionalism of our membership.

CSRT Activities

Huron Heights Opportunity Fair

With the principal aim of increasing the profile of respiratory therapy, CSRT Executive Director, Douglas Maynard and Danièle Filion, CSRT Public Relations and Marketing Coordinator, manned a kiosk at the Huron Heights Post-Secondary Education Opportunity Fair. This event was held at Huron Heights Secondary School in Newmarket, Ontario, October 26, 2005.

Students were responsive to the possibility of planning a career in respiratory therapy. Upon introduction to such a diverse and rewarding technology-driven profession, many students demonstrated interest in learning more about respiratory therapy and the institutions that offer training programs.

Parties interested in introducing respiratory therapy to students (in the context of a career day presentation, an information table at a career or post-secondary fair, or any venue where students are invited to receive career option information) may receive CSRT informational and promotional materials for distribution. Contact Danièle Filion at dfilion@csrt.com for details.

OPIQ — 33^e Congrès

In light of the CSRT's recent change in mandate — moving away from regulatory matters to redirect resources toward meeting the members' professional needs — your Society has chosen to attend this year's *Ordre professionnel des inhalothérapeutes du Québec* (OPIQ) forum. The CSRT wanted to

reintroduce itself to potential members residing in Quebec. The OPIQ is the provincial regulatory body charged with overseeing the practice of respiratory therapy.

Sue Jones, President of the CSRT, along with Danièle Filion, the CSRT's Public Relations and Marketing Coordinator, staffed the CSRT booth during the busy two-day conference. Much interest was demonstrated toward the CSRT.

The CSRT is thankful for the opportunity to represent itself at the congress. It is important for all Canadian respiratory therapists to be aware of the Society, its mandate and its services.

British Columbia Society of Respiratory Therapists — Provincial Report

Liz Jolley, President

2005 – 2006

BCSRT Board of Directors

Kendall Brooks, President Elect
Barbara Hornsby, Past President
Jodi Sandberg, Secretary
Ron Thiessen, Treasurer
Rick Lascelle, Director at Large
Lily Cheung, Director at Large,
Students

This year the focus of the Society has been to promote the benefits of membership with the BCSRT. Although we did not host a provincial educational forum in 2005, we continue to support member activities across the province and are excited about the educational opportunities we are involved with.

Our AGM was held in September in conjunction with lectures focusing on pulmonary diagnostics and critical care. In November, we were involved with education symposiums on high frequency oscillation and anesthesia. In February, 2006 we will be sponsoring a neonatal symposium in Kamloops. We are also working with community therapists to promote an educational event on home care (Spring 2006). These opportunities are in addition to the grants we offer to members for the purposes of attending educational events. As part of our commitment to member education, we

have revised the application guidelines for these grants to increase both the value and frequency of awards.

With respect to regulatory issues, our application for self-regulation remains with the government. The Society is working to develop strategies to increase the profile of our profession with the Ministers and Ministry Employees in an effort to move this process forward. We have engaged a lobbyist to assist us with this work. Ultimately, we realize that our profession is under-recognized in many venues, a fact that is hampering us on numerous fronts (including government agencies, hospital employers, and organized health labor unions). We hope to be able to correct this situation at least in part through the development of a media-ready digital video presentation.

Along these same lines, the Board of Directors has also been very busy ensuring that we are in compliance with the various acts of government that hold jurisdiction over our Society. Out of necessity we had to spend a great deal of time reviewing documents to reconcile our Constitution and Bylaws with those registered under the BC Society's Act. In working through this and other processes, and under the gen-

eral direction of the membership, the Board developed a set of guiding principles to define a framework for managing the Society. These principles were presented at the AGM in September to unanimous approval.

As with every year, the value of membership is contingent upon member involvement and the commitment of volunteers that actually do the work of the Society. We are lucky to have some very dedicated professionals within our Society who do so much to promote Respiratory Therapy; this has been reflected in an increased membership numbers. However, with an increase in members, we are in need of more people to step forward with their ideas and their time to support our growing Society. We encourage all interested members to contact the Board of Directors to volunteer their services.

On a final note, we are actively searching for a site for the 2006 educational forum. Again, interested individuals or groups should contact the Board by going to the "Contact Us" section of our website (www.bcsrt.com).

RRTs and Occupational Risks

A Step-Wise Critique of Research

Rebuttal of *Chest* Article

Kevin de Jong, BSc, RRT, CSRT Board of Directors — Treasurer

Abstract Which Accompanied *Chest* Article

Respiratory Health Survey of Respiratory Therapists*

Helen Dimich-Ward, PhD; Michelle Lee Wymer, BSc and Moira Chan-Yeung, MB

* From the Respiratory Division, Department of Medicine, University of British Columbia, Vancouver, BC.

Correspondence to: Helen D. Dimich-Ward, PhD, Respiratory Division, UBC Department of Medicine, Respiratory Division, VGH Research Pavilion, 390-828 West Tenth Ave, Vancouver, BC, Canada V5Z 1L8; e-mail: hward@interchange.ubc.ca

Study objectives: The purpose of this study was to determine whether respiratory therapists (RTs) had an elevated risk of respiratory symptoms and to determine the association of work exposures with symptoms.

Methods: Mailed questionnaire responses from 275 RTs working in British Columbia, Canada, were compared to those of 628 physiotherapists who had been surveyed previously. Analyses incorporated logistic regression analysis with adjustment for age, sex, smoking status, and childhood asthma.

Results: Compared to physiotherapists, RTs had over twice the risk of being woken by dyspnea, having wheeze, asthma attacks, and asthma diagnosed after entering the profession. Among RTs, two work factors associated with asthma were sterilizing instruments with glutaraldehyde-based solutions and the use of aerosolized ribavirin. RTs who used an oxygen tent or hood had the highest risk of asthma diagnosed after entering the profession (odds ratio [OR], 8.3; 95% confidence interval [CI], 12.6 to 26.0) and of asthma attacks in the last 12 months (OR, 3.6; 95% CI, 1.2 to 10.9).

Conclusions: Our data suggest that RTs may be at an increased risk for asthma-like symptoms and for receiving a diagnosis of asthma since starting to work in their profession, possibly related to exposure to glutaraldehyde and aerosolized ribavirin.

Key Words: aerosols • asthma • glutaraldehyde • respiratory therapists • ribavirin (*Chest*. 2004;126:1048-1053.)

© 2004 American College of Chest Physicians

Above is a reprint of an abstract from *Chest*, about an article, "Respiratory Health Survey of Respiratory Therapists" Dimich-Ward *et al.* *Chest*. 2004; 126: 1048-1053; October 2004.

I would encourage you to read the original article if possible as the abstract does not contain the many interesting details of the original. In short, the article deals with the results of a questionnaire sent out to two groups. All of the Physiotherapists (PTs) and all of the

Respiratory Therapists (RTs) in British Columbia were sent a health questionnaire. The Physiotherapy group data were used as the control data. The assumption is that PT and RT both work in similar environments but RTs are exposed to some unique situations and that difference is the subject of this research. The focus is then exposure of the RT group to certain situations (chemicals/drugs such as Ribavirin and Glutaraldehyde) versus the PT group and the comparison of asthma

related symptoms between these two groups. I will be going through some of the data and conclusions as an exercise in interpreting studies of this type.

The Vancouver Sun on October 13, 2004 wrote an article on this very Journal article citing a potentially dangerous work environment for RTs. If a newspaper deems this topic worthy of print, then it is incumbent upon us as Respiratory Therapists to delve into the conclusions made in the *Chest* article about whether or not what we do for a living can affect our health. Not being any sort of authority on this, I sought out an expert opinion on how to systematically interpret these types of studies.

Well known to all with an interest in evidence based medicine, Dr. David Sackett, author of the book, *Evidence Based Medicine — How to Practice and Teach EBM* (the Blue Book) agreed to look at this article for me and walk me through a method of looking at research data and conclusions such as is presented by the authors of the *Chest* journal article. He gave me a list of questions that will help us dissect out the requirements for validity:

1. The first set of requirements has to do with the survey:

1.1 did they use a previously validated questionnaire?

1.2 Did they effectively conceal the study question (so as not to bias the measurement of exposure and/or outcome by "giving-away" the "right" or "self-profiting" answer)?

1.3 Was their response rate 80% or more?

After determining the above questions on relative validity of the survey itself, the following questions were given to determine the degree

to a substance can cause a negative health affect:

- 2. The second set of requirements has to do with "diagnostic tests for causation."
 - 2.1. Is the relation between exposure and asthma strong?
 - 2.2. Is temporality going in the right direction?
 - 2.3. Are there dose-response gradients for intensity and duration of exposure?
 - 2.4. Does the relationship make epidemiological sense?
 - 2.5. Does the relationship make biologic sense?
 - 2.6. Have other investigator found the same relationship ("consistency")?

Gluteraldehyde (G) and aerosolized Ribavirin (AR) are the two agents identified in the Chest article that show the strongest causal relationship to asthma symptoms. In order to give a high degree of certainty to a causal relationship between these agents and asthma development in RTs, the following statements would have to be made from the answers to the questions above:

- 3. We are looking for the following to determine validity (Do the agents G and AR cause asthma in RTs?):
 - 3.1. We need a high response rate to a validated questionnaire that concealed the purpose of the survey. [Ideally, a comparison of early vs. late responders for trends in exposure and outcomes, and in ORs (odds ratio) or RRs (relative risks)]
 - 3.2. We look for a low rate of asthma/symptoms at entry into RT careers (a comparison group in another field would be important)
 - 3.3. We want to see more asthma/ symptoms with:
 - 3.3.1. a longer exposure to G and AR
 - 3.3.2. a higher intensity of exposure
 - 3.3.3. and both of these demonstrable within the RT group
 - 3.4. Do the data show more RTs quitting their jobs because of asthma?
 - 3.5 Is there convincing biologic experiments in animals and volunteer humans?
 - 3.6 In a literature search do we find similar conclusions from other investigations (as long as the others were methodologically sound)?

Note: For your reference on other studies on harm, look in the 'Blue Book' in Chapter 6. The same questions worded differently, are given along with an excellent discussion on these types of studies.

Discussion

The data from the Chest article was then scrutinized by applying these questions and comparing them to the criteria needed to determine a causal relationship.

The authors used a previously validated questionnaire, but did not blind the study question to the cohorts. The response rate for all British Columbia RTs was also less than optimal at 64%.

From statement 3.1 we determine that there could be some issues with determining strong conclusions from the data. For instance, it is possible that the RTs who did respond were RTs who were suspicious that their exposure to G and AR were causative factors in the development of asthma symptoms. To the authors' credit, they mentioned these omissions in their conclusions.

We next look to the data given to determine whether RTs exposure to G and AR causes asthma. How do we do this? From the 'Blue Book' (p.163), we read that an Odds Ratio (OR) of greater than 3 is needed to yield strong validity to the cohort study evidence. What is an OR, you may ask? It is the ratio of those who have symptoms in one cohort, to those who have symptoms in the other cohort. In this case you would need greater than 3 RTs to every 1 PT developing asthma to prove that agents such as AR or G are the cause of this disparity. From the discussion within the article it appears that the only strong relationship to developing asthma or symptoms is when SPAGs are not used when AR is given by a RT. That said, compared to PTs (the control group), we as RTs have a far higher risk of being exposed to substances such as AR and G than they are. Many of the ORs given are less than 3, but it can be concluded that the evidence is leaning towards the RT group developing more asthma symptoms than PTs. Note that the

authors have corrected the data for those RTs who were asthmatics prior to entering the field. Again the authors are very good at admitting these potential biases and other threats to the validity of the data.

The *Chest* article does not contain dose-response data. Doses of G and AR were not measured since it is difficult to do by way of a survey. This leaves it open for further research on our part. Maybe by designing an appropriate nation-wide study the data would show a more positive OR than this provincial study. Maybe the questions could again cover the myriad of agents we are exposed, not focussing entirely on asthma but including other illnesses as well! Since the evidence from this study leans towards a positive relationship (exposure to AR and G may cause asthma), we as professionals should pay attention to this article and take it to the next level.

Conclusion

Yes	Valid questionnaire?
No	Questions blinded?
No	Response > or = 80%?
Yes/No	OR >3
Yes	Temporality?
No	Dose/Response established?
Yes but OR<3	Epidemiologic Sense?
Yes	Boil. Sense?
Yes/No	Other investigators

It has been very helpful to me to have a methodological approach to looking at studies such as this. Above is a makeshift chart showing the requirements for validity. I appreciate the authors of the *Chest* article for their honesty in suggesting that the evidence seems to be leaning towards RTs being affected by the treatments they give! Although the evidence cannot allow a categorical causal relationship, this should send up warning signals to our profession to develop protocols to safely use the agents we rely on to expedite safe patient care.

*Kevin de Jong BSc RRT
Senior Respiratory Therapist,
Critical Care, Owen Sound, ON*

Many thanks to Dr. David Sackett for his expertise and advice!

Respiratory Syncytial Virus in Preemies

Rob Martell BSc RRT, Professional Practice Chief, IWK Health Center
Adjunct Lecturer, Dalhousie University

On September 27, 2005 the CSRT was invited to participate in a press teleconference, gathering leading experts from Children's Hospital Boston and the National Association of Neonatal Nurses to discuss RSV and its potential impact on the most vulnerable, the premature/preterm infant and offer advice on safeguarding premature health.

Speakers included Neonatologists, Infectious disease specialists, Pediatricians, NICU advanced practice nurse, a mother who had two children with RSV and Executive Director of MOST, Mothers of Supertwins.

Dr. Anne Hansen, neonatologist gave an introductory overview of the teleconference beginning with a brief overview of RSV.

RSV is the most common cause of lower Respiratory Tract Infection (LRTI) in infants, particularly vulnerable to preterm infants seasonally usually Fall to Spring. RSV is responsible for nearly half of all bronchiolitic hospital admissions. The preterm infant has increased vulnerability due to poor development of the Respiratory System and lower maternal antibodies available to help fight RSV. Infants may develop Apnea, bronchiolitis or pneumonia. Improvements in Neonatal Care in the last 20 years has lowered overall mortality rates however, this has meant that preterm infants also face many challenges to some potent infectious diseases including RSV. Also, there are numerous RSV risk factors such as chronic lung disease, low birth weight, congenital heart disease, airway disease, multiple births and overcrowding.

There is prophylactic treatment Synagis® (palivizumab) indicated for high risk preterm infants available,

however, there is no guarantee that it will work, if it does, the symptoms may be milder.

Dr. Kenneth MacIntosh, an infectious disease specialist, discussed the background of RSV indicating that it was first discovered in Chimps in the late 1950's. Since that time, other notable viruses have been discovered but none as important as RSV. It is a global virus affecting early childhood. Unlike the measles, once infected, the patient may become infected again. There are often epidemics in the Northern Hemisphere in the Fall to Spring. It spreads by large droplet and is easily spread within Health Centers. "Health care facilities must limit exposure and encourage hand washing to all who enter". RSV is particularly hard on preterm infants because prophylactic antibody numbers have to be plentiful to work and when they work, some patients may even require repeat dosing.

Dr. Steve Spidal from Baton Rouge, Louisiana discussed RSV in relation to overcrowding that has many concerned following the ravages of 2 recent hurricanes. "RSV is not particularly more prevalent in these areas, it is more environmental in nature", as RSV will be problematic due to people living in close quarters such as shelters and small homes with many family members. Again, he emphasized the importance of good handwashing and isolating affected patients in Hospital, however he does recognize the challenges as babies go home.

He suggested the home environment be kept allergen free as well." It is not enough to just smoke outside. Smokers often carry smoke on their clothes which can be just as bad as being around cigarette smoke itself".
Dr. Labella, a General Pediatrician

from Pittsburgh, spoke of quality RSV education that should optimally start in the Hospital. Family members should be informed of the risk factors, and what RSV symptoms look like. He briefly described the RSV infant compared to an infant with the common cold. "He noted that symptoms of RSV infants may include apnea, cough, cyanosis, tachypnea with retractions, wheeze and are generally sick longer".

Angie Bird an NICU nurse and mother of preterm twins described Preterm RSV patient. "Imagine the worst cold you ever had... You find it difficult to breathe. You are so tired that eating doesn't interest you". Parents feel emotionally drained. "Health care workers were encouraged to empower parents in their care and their preparation to go home." Teaching involves using HELP. Handwashing, Educate, Limit Visitors, Prevention with Synagis®.

Finally, a mother of two children one who had RSV and the other, a preterm infant who received RSV-Prevention medication discussed her experience with RSV and the health care system.

Abstracts

The Critical Care Safety Study: The incidence and nature of adverse events and serious medical errors in intensive care.

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Objective: Critically ill patients require high-intensity care and may be at especially high risk of iatrogenic injury because they are severely ill. We sought to study the incidence and nature of adverse events and serious errors in the critical care setting.

Design: We conducted a prospective 1-year observational study. Incidents were collected with use of a multifaceted approach including direct continuous observation. Two physicians independently assessed incident type, severity, and preventability as well as systems-related and individual performance failures.

Setting: Academic, tertiary-care urban hospital.

Patients: Medical intensive care unit and coronary care unit patients.

Interventions: None.

Measurements and main results: The primary outcomes of interest were the incidence and rates of adverse events and serious errors per 1000 patient-days. A total of 391 patients with 420 unit admissions were studied during 1490 patient-days. We found 120 adverse events in 79 patients (20.2%), including 66 (55%) nonpreventable and 54 (45%) preventable adverse events as well as 223 serious errors. The rates per 1000 patient-days for all adverse events, preventable adverse events, and serious errors were 80.5, 36.2, and 149.7, respectively. Among adverse events, 13% (16/120) were life-threatening or fatal; and among serious errors, 11% (24/223) were potentially life-threatening. Most serious medical errors occurred during the ordering or execution of treatments, especially medications (61%; 170/277). Performance level failures were most commonly slips and

lapses (53%; 148/277), rather than rule-based or knowledge-based mistakes.

Conclusions: Adverse events and serious errors involving critically ill patients were common and often potentially life-threatening. Although many types of errors were identified, failure to carry out intended treatment correctly was the leading category.

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Canadian Pediatric Asthma Consensus Guidelines, 2003 (updated to December 2004)

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Background: Although guidelines for the diagnosis and management of asthma have been published over the last 15 years, there has been little focus on

issues relating to asthma in childhood. Since the last revision of the 1999 Canadian asthma consensus report, important new studies, particularly in children, have highlighted the need to incorporate this new information into asthma guidelines.

Objectives: To review the literature on asthma published between January 2000 and June 2003 and to evaluate the influence of new evidence on the recommendations made in the Canadian Asthma Consensus Report, 1999 and its 2001 update with a major focus on pediatric issues.

Methods: Diagnosis of asthma in young children, prevention strategies, pharmacotherapy, inhalation devices, immunotherapy and asthma education were selected for review by small expert resource groups. In June 2003, the reviews were discussed at a meeting under the auspices of the Canadian Network For Asthma Care and the Canadian Thoracic Society. Data published up to December 2004 were subsequently reviewed by the individual expert resource groups.

Results: This report evaluates early life prevention strategies and focuses on treatment of asthma in children. Emphasis is placed on the importance of an early diagnosis and prevention therapy, the benefits of additional therapy and the essential role of asthma education.

Conclusion: We generally support previous recommendations and focus on new issues, particularly those relevant to children and their families. This guide for asthma management is based on the best available published data and the opinion of health care professionals including asthma experts and educators.

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What Health Consumers Want: An Information RX

Jennifer Schenkel, Canadian Health Network

Internet-savvy consumers are increasingly going online to satisfy their hunger for health information. “More and more of my patients are coming to appointments with print-outs from health websites. They have questions and they want answers right away,” says respiratory therapist and COPD/asthma educator, Rosario Holmes.

Not only do health consumers want to be informed, but recent research also suggests they want their health provider to play a leadership role in recommending which websites offer the best information. A study published in the August 2005 issue of the *Journal of General Internal Medicine* reported that of the 177 respondents who used the Internet for health information 62 per cent agreed that physicians should recommend specific websites.

Using the Internet can help consumers play a more active role in making decisions about their health. The downside, of course, is that not all of the information available online is accurate, relevant or up-to-date. Another problem is information overload — consumers can become paralyzed by the sheer volume of online health content.

It’s easy to understand why people with a chronic illness can become desperate and more vulnerable to misinformation and outright scams. Holmes, who runs a COPD pulmonary rehabilitation program at The Lung Association in Ottawa, says she’s had patients who have been duped by shady online product-peddlers.

But more often she’s confronted with chronically ill patients who are scared and overwhelmed by the glut of studies, statistics and treatment

choices. Indeed, a substantial portion of the information they retrieve online is not up-to-date, not written for consumers and not in accordance with best practice guidelines. “This is where the health professional comes in,” says Holmes.

Holmes sees health websites as a complementary tool to support, not replace, in-person appointments. “When consumers know the basics, it’s easier to move on to more advanced education.”

A New Kind of Referral

Health care professionals can play an important role in steering patients to reputable sources of health information. Research shows consumers are more likely to visit a specific health website when it is recommended to them by a trusted health care provider. The best way to ensure patients visit reputable sites is to arm them with the basic tools for evaluating the credibility of online health information.

The Canadian Health Network (CHN) — www.canadian-health-network.ca, a national non-profit health information website led by the Public Health Agency of Canada and leading non-profit health organizations has developed a checklist to help consumers assess health websites. CHN offers credible health information on a variety of topics. It is a partnership that involves national health organizations including The Lung Association, Dieticians of Canada, Canadian Cancer Society and the Canadian Diabetes Association.

Online Health Info 101

Health professionals play an important leadership role in helping patients to critically evaluate online

sources of health information. The following guidelines, adapted from the Canadian Health Network’s checklist called “How to find the most trustworthy health information websites,” are designed to provide consumers with the basics when assessing online health information. For the complete checklist, visit the CHN homepage.

- Is the author’s name (or the name of the organization responsible for the document) clearly stated? If the author is identified, is he or she a professional or accredited authority on the subject?
- Is the author’s interest and/or mandate in developing and sharing this information clear? For example, is a non-profit organization trying to promote exercise and active living or is it a fitness product company trying to sell you exercise equipment?
- Is there enough detail on the issue you’re interested in or does the information seem superficial?
- Does the site have original content or does it only link to other sites?
- Are commercial links and/or sponsorships clearly stated?
- If you have to register to use the site, is the reason clear and your privacy ensured?
- Does the site provide details on the editorial process and how the content is reviewed?
- Does the content include author details and references to supporting evidence?
- Is the date the information was published or updated clearly indicated?

A Community-Based Approach to Pediatric Asthma Education

Janna M. Bentley BSc(Hon); Tannis Ludlow RRT, CAE/Kay Meier MD, MS, FAAP; Lola Baydala MD, FRCPC

Abstract

Background: Asthma is the most common cause of school absenteeism and its prevalence is increasing in Canada. The psychological and financial burden of this disease is enormous, making it imperative that better, more efficacious management programs are developed and implemented.

Methods: Pediatric patients and their caregivers were recruited through physician-referral. All patients were seen by a clinic pediatrician and respiratory therapist or registered nurse, who were specifically trained in asthma education methodologies. Individual action plans were developed for each patient. Follow-up visits were arranged at one month and six months to reinforce asthma education previously presented and to measure each patient's progress. Questionnaires to monitor asthma severity and quality of life were administered at each of these visits.

Results: Using our asthma education program, significant reductions in the number of contacts with the health care system, in the loss of productivity experienced by sufferers and their caregivers, and in the severity and quantity of asthma symptoms were documented. There were also significant improvements in the quality of life for asthmatic patients and their caregivers, as well as significant increases in confidence for self-management.

Interpretation: These data indicate that a multi-disciplinary team approach employing individualized action plans, close follow-up, and one-on-one education is an effective way of reducing the psychological, physical, and financial burden of asthma.

Key Words: asthma, education program, intervention, burden.

Introduction

Asthma is the most common chronic respiratory illness in North America. It significantly affects the quality of life of both the asthmatic patient and their families. Approximately 500 young Canadians die of asthma per year, and suggestions have been made that 400 of these deaths are preventable.¹

Advances are being made in determining the pathophysiology of asthma. However, despite this progress, the prevalence, morbidity, and mortality of asthma continue to rise.² The growing prevalence may be related to the increasing susceptibility of children to atopic disease.³ Alternatively, a shift towards a diagnosis of asthma instead of other respiratory disorders may be responsible.

In Canada, more than \$12 billion was spent on asthma in 1993.⁴ As the prevalence of asthma increases, the number of hospital admissions and emergency room visits increases, as does school absenteeism and missed work days for parents caring for their sick children. In the United States, surveys have shown that asthma is the most common cause of school absenteeism in elementary school-age children.⁵ The increasing prevalence of asthma is a national and international issue. The 1996–97 National Population Health Survey by Statistics Canada reported that 12.2% of children and youths under 20 years of age suffer from asthma. Up to 20% of Australian children are reported to have asthma.⁶ The Center for Disease Control in the United States reported increasing prevalence rates in 1996, with 6.9%

of American children suffering from asthma.⁷

Asthma has a significant impact on the quality of life of children and their families. The diagnosis is often traumatic, especially in an urban setting, where the care for children with asthma is often more crisis-oriented and fragmented, with little focus on prevention.⁸ A diagnosis of asthma may accompany lifestyle changes, activity limitations and emotional stress, presenting an obvious need to address the consequent social and mental health effects of asthma.⁹

An effective management plan is required in order to decrease the impact of asthma on the patient, their family, and the health care system. *Ordonez et al* found that the number of hospital admissions due to asthma could be decreased if the parents and the child were given an individualized asthma management plan, had more knowledge about the condition, were compliant with preventative treatment, started the proper medication at the onset of an asthma attack, and if medical attention was sought when symptoms were not improving.¹⁰ Many studies have looked at the effectiveness of asthma education as part of asthma management. There is some evidence that even limited asthma education may help to lower morbidity, if given to patients visiting the emergency room for an exacerbation.¹¹

Asthmatic pediatric patients and their care givers were recruited for this study. They were seen by a pediatrician and respiratory therapist or registered nurse trained in asthma education methodologies. Asthma education sessions were presented and individualized action plans were developed for each patient. Follow-up visits were arranged at one and

six months to reinforce information previously presented and to monitor each patient's progress. Questionnaires were administered at the initial visit and again at one year to monitor changes in the patients and their families' subjective asthma experience.

Methods

Pediatric patients 0 to 16 years of age, along with their caregivers, were recruited after referral to the Misericordia Community Asthma Education Program. All patients were seen by a pediatrician and respiratory therapist or registered nurse, specifically trained in asthma education methodologies. An initial one hour education session discussed asthma pathophysiology and triggers, prevention, medication and medication delivery devices, spirometry, and peak flow monitoring. An individual action plan was developed for each patient. Follow-up visits were arranged at one and six months to review information previously presented and to record each patient's progress. Additional follow-up visits were arranged until asthma self-management and control were achieved. A pediatric allergist was consulted for all children thought to have an allergic basis to their disease.

Questionnaires were administered at the initial visit and one year later. Each questionnaire explored the subjective asthma experience of patients and their caregivers, and included the following categories: contacts with the health care system, loss of productivity, symptoms experienced, quality of life, and confidence with asthma self-management.

Following the initial visit, all families were encouraged to return to their primary care physician for ongoing care of their asthma. A comprehensive letter and a copy of the child's action plan were sent to the referring physician.

Results: Demographics

The demographics of patients seen with asthma in the Misericordia

Table I. Demographics of the Misericordia Asthma Education Program.

	Demographic Data	
# of Patients		398
# of Males		248
# of Females		150
Minimum Age (years)		1.0
Maximum Age (years)		16.0
Mean Age (years)		9.1

Table II. Contacts with the Health Care System Pre- and Post-Misericordia Asthma Study Intervention.

	Pre-Study Intervention	One-year Post-Study Intervention	% Difference	P-Value
Total # of visits to family physician in past 6-months	72	19	73.6	<0.01**
# of urgent visits to family physician	40	4	90.0	<0.01**
Total # of visits to specialist in past 6-months	50	31	38.0	0.093
# of urgent visits to specialist in past 6-months	12	1	91.7	<0.05*
# of hospital admissions in past 6-months	6	1	83.3	<0.05*
# of days in hospital in past 6-months	4	1	75.0	0.186
# of emergency room visits in past 6-months	25	5	80.0	<0.01**

* Statistically significant difference comparing pre- and post-asthma study intervention, using a 95% confidence interval
 ** Statistically significant difference comparing pre- and post-asthma study intervention, using a 99% confidence interval

Community Health Centre are shown in Table I. Among the 398 pediatric patients who participated, 248 were male and 150 were female. The youngest patient was 1.0 years and the oldest was 16.0 years, with an average age of 9.1 years.

Contacts with the Health Care System

Comparing questionnaire results from the initial visit to one year later, there were 73.6% (P<0.01) fewer visits to a family physician over the previous six-month period. The number of urgent visits to the family physician and an asthma specialist

decreased by 90% (P<0.01) and 91.7% (P<0.05) respectively. Emergency room visits decreased by 80% (P<0.01), and hospital admissions decreased by 83.3% (P<0.05). There was a decrease in the total number of visits to an asthma specialist, and in the number of days spent in hospital, but these numbers were not significant. (Table II)

Loss of Productivity

Post-intervention, there was an 89.1% (P<0.01) decrease in the total number of days of productivity lost by the primary caregiver. The number of paid working days lost

decreased by 97.1% (P<0.01). There was a 76.7% (P<0.05) reduction in the total number of days of normal activity an asthmatic child lost due to asthma. (Table III)

Symptoms

Wheezing, shortness of breath, coughing, and chest tightness were the symptoms used to quantify asthma. A one-week period prior to the first visit questionnaire (before any interventions) and second questionnaire (post-intervention) were comparing the one week symptom history acquired at the initial visit and one year later. A 54.5% (P<0.05) reduction in symptoms was noted after program participation.

Specifically, there was a 50% (P<0.01) decrease in the number of patients experiencing chest tightness. The number of patients uncertain of whether they felt chest tightness decreased by 72% (P<0.05).

There was a 28% (P<0.01) reduction in the number of patients who experienced coughing, and the number of patients reporting no coughing increased by 52% (P<0.01). There was a significant decrease in the number of patients reporting that they were uncertain of whether or not they had experienced coughing after study intervention (P<0.05).

After the study interventions, 54% (P<0.01) fewer patients reported experiencing shortness of breath (SOB). The number of children reporting no feelings of SOB increased by 32% (P<0.01). No children reported uncertainty as to whether or not they had experienced SOB after study intervention. This was a significant decrease (P<0.05).

There was a 50% (P<0.01) reduction in the number of patients who experienced wheezing after the study interventions. There was an increase of 32% (P<0.01) in the number of patients reporting no episodes of wheezing post-intervention, while the number of children who were unsure of any change in their symptoms decreased by 50% (P<0.05).

Table III. Loss of Productivity Pre- and Post-Misericordia Asthma Study Intervention.

	Pre-Study Intervention	One-year Post-Study Intervention	% Difference	P-Value
Total # of days of productivity lost due to asthma in past 6-months for primary care giver	46	5	89.1	<0.01**
# of paid work days lost due to asthma in past 6-months for primary care giver	34	1	97.1	<0.01**
Total # of days of normal activity lost due to asthma in past 6-months for child with asthma	116	27	76.7	<0.05*

* Statistically significant difference comparing pre- and post-asthma study intervention, using a 95% confidence interval
 ** Statistically significant difference comparing pre- and post-asthma study intervention, using a 99% confidence interval

There was a 52% (P<0.01) reduction in the number of patients reporting a disturbance of their sleep due to at least one of the above four symptoms. The number of patients reporting that their sleep had not been disturbed by asthma was increased by 42% (P<0.01). The number of children who were unsure of any change in their symptoms decreased significantly by 50% (P<0.01). (Table IV)

Quality of Life

To measure the asthma-related quality of life. The child's primary care giver was asked about their child's limitations in strenuous activities (hurrying, exercising, running up stairs, or playing sports), moderate activities (walking, climbing stairs, or swimming), and social activities (talking, playing with pets/other children, or visiting friends/relatives) during the two-weeks prior to the questionnaire. The scoring system ranged from a score of '1' for the answer "totally limited", to '7' for "not at all limited". Strenuous activities were less limited after the study interventions, with a 12.5% (P<0.01) increase in the quality of life rating. Similarly, moderate activities were less limited with a 7.2% (P<0.05) increase in the quality of life-scores. Social activity-limitation was also decreased, with an improvement in

the related quality of life score of 6.3% (P<0.05).

Primary caregivers were also asked to evaluate their child's SOB, coughing, chest tightness/heaviness, difficulty sleeping, or wheezing. The scoring system ranged from a score of '1' for the answer "all of the time", to '7' for "none of the time". A subjective decrease in wheezing occurred after the study interventions, resulting in an 8.5% (P<0.05) increase in the wheezing-related quality of life score. No significant improvement in the subjects' quality of life was found as a result of a decrease in SOB, coughing, chest tightness, or difficulty getting a good night's sleep.

A similar scoring system was used for the effect of asthma on emotional functions, i.e. feelings of frustration, fear of not having asthma medications available when needed, and general concerns about having asthma. There were no significant improvements in the patients' subjective quality of life associated with any of these areas.

Quality of life scores related to exposure to environmental stimuli were not significantly impacted by the asthma interventions employed in this study. There were no signifi-

Table IV. Symptoms Experienced and Quantified Pre- and Post-Misericordia Asthma Study Intervention.

Symptom	% Patient's that answered yes				% Patient's that answered no				% Patient's that answered uncertain			
	Pre	Post	% Difference	P-value	Pre	Post	% Difference	P-value	Pre	Post	% Difference	P-value
Chest tightness	75	25	50	<0.01**	35	65	30	<0.01**	86	14	72	<0.05*
Coughing	64	36	28	<0.01**	24	76	52	<0.01**	100	0	100	<0.05*
Shortness of breath	77	23	54	<0.01**	34	66	32	<0.01**	100	0	100	<0.05*
Wheezing	75	25	50	<0.01**	30	70	40	<0.01**	75	25	50	<0.05*
Sleep disturbance by symptoms in last week	76	24	52	<0.01**	29	71	42	<0.01**	75	25	50	<0.01**

* Statistically significant difference comparing pre- and post-asthma study intervention, using a 95% confidence interval

** Statistically significant difference comparing pre- and post-asthma study intervention, using a 99% confidence interval

cant decreases in symptom exacerbation from exposure to dust, cigarette smoke exposure, or exposure to weather or air pollution. (Table V)

Confidence in Self-Management of Asthma

Three areas reflective of the patients/caregivers' ability to self-manage their asthma were examined: ability to implement instructions given by the physician, knowing when to seek emergency assistance, and expressing concerns to physicians under office time constraints.

After intervention, patient/caregivers felt more confident in their ability to implement the instructions given by the doctor (P<0.01). The patients/caregivers' rating of their own ability to implement the instructions given by the doctor showed a significant decrease in the number of those who felt "not very confident" (P<0.01). There were no significant changes in the remaining categories.

The number of patients/caregivers who felt "quite confident" with respect to knowing when to seek emergency assistance significantly increased by 41.2% after the study interventions (P<0.05). The number of those who initially felt "not very confident" significantly decreased after study intervention (P<0.01).

There were no significant changes in the remaining two categories.

The number of patients/caregivers who initially felt "not very confident" in their ability to express concern to their doctor under office time constraints was significantly decreased after intervention (P<0.01). There was no significant change in the number of subjects reporting that they felt "extremely confident", "quite confident", or "not at all confident" in this respect. (Table VI)

Interpretation

Many studies have been done to investigate the role of asthma education in reducing the overall burden of disease. *Haby et al.* conducted a systematic review to determine the impact of asthma education on hospital admissions, emergency department visits, and unscheduled doctor visits. They found limited evidence to support a decrease in these three areas,¹² but they found that asthma education could be helpful in reducing disease burden. Several investigators have shown that multidisciplinary asthma clinics are more efficacious for asthma management when compared to asthma managed solely by primary care physicians.¹³ Our study has shown that a community-based, multidisciplinary asthma education program can significantly reduce disease burden for the patient and their families.

The Misericordia Community Asthma Education Program has had a significant impact on the number of contacts that patients and their caregivers have had with the health care system. Total number of visits, the number of urgent visits to a family physician, and the number of emergency room visits in a 6-month study period were reduced. In addition, hospital admissions and urgent visits to specialists were decreased. These results most likely reflect better asthma control as a result of a better understanding and compliance with the management program. These findings are consistent with the results of *Vilar et al.'s* study, in which a significant decline in the number of hospital admissions and emergency room visits was noted at one-year follow-up post-asthma-intervention.¹⁴ The intervention in Vilar's study was similar to ours in that it involved clinic visits every 1 to 8 weeks, peak flow training and home monitoring, training in the proper use of metered dose inhalers and spacers, optimal anti-inflammatory and bronchodilator dosages, education on environmental control measures, and immunotherapy as needed.¹⁴ Our results also confirm *Vilar et al.'s* finding that asthmatic children who receive face-to-face education fare better and have lower asthma severity scores than those who receive alternative methods of education.¹⁴

Table V. Quality of Life Measures Pre- and Post-Misericordia Asthma Study Intervention.

		Initial Scale Rating	Follow-up Scale Rating	% Difference	P-value
Activity limitations	Strenuous	5.5	6.4	12.5	<0.01**
	Moderate	6.1	6.7	7.2	<0.05*
	Social	6.1	6.7	6.3	<0.05*
Symptoms	Shortness of breath	5.4	6.1	4.2	0.133
	Coughing	5.1	5.9	6.7	0.133
	Chest tightness or heaviness	5.8	6.3	3.5	0.266
	Difficulty sleeping	5.7	6.5	2.6	0.250
	Wheezing	5.7	6.4	8.5	<0.05*
Emotional functions	Frustration	5.6	6.9	0.7	0.437
	Fear of not having asthma medications available	6.3	6.4	2.6	0.182
	Concern about having asthma	5.9	6.3	2.6	0.310
Exposure to environmental stimuli	Dust	5.8	6.1	1.7	0.324
	Cigarette smoke	5.8	6.0	4.8	0.132
	Weather or air pollution	6.4	6.7	4.4	0.058

* Statistically significant difference comparing pre- and post-asthma study intervention, using a 95% confidence interval

** Statistically significant difference comparing pre- and post-asthma study intervention, using a 99% confidence interval

***Patient and/or their families are asked to rate themselves on a quality of life questionnaire. Patients rate their symptoms/emotional functions and exposure to environmental stimuli on a scale from 1-7. 1 = all the time to 7 = none of the time.

In regards to activity limitations patients rate their limitation by 1 = totally limited to 7 = not limited.

Our program decreased the total number of days of productivity lost, as well as the number of paid working days lost for parents caring for a child with asthma. As expected, the total number of ‘days of normal activity lost,’ meaning missed school days, for the affected child was also decreased.

Our study intervention decreased the number of contacts with the health care system and the amount of lost productivity. This may reflect the finding that all asthma symptoms decreased including chest tightness, coughing, shortness of breath, wheezing, and sleep disturbance. Symptoms are directly linked to the physical burden of asthma and are the most objective measure used in our study. They reflect the degree of patient compliance as well as the effectiveness of the medications. Primary noncompliance has been shown to be as high as 30% in patients with asthma, meaning that one-third asthma patients fail to even begin their treatment programs, let alone adhere to them.¹⁵ The symptomatic improvement seen, likely occurred from an increased adherence to medical management. As a result, the physical burden and the financial burden

on our health care system could be expected to decline.

Even more important than the objective measure of asthma-burden is the subjective experience of those living with the reality of asthma. The ‘lived experience’ of this disease is multifactorial and is reflected in the self-reported quality of life ratings used in our study by the patient and/or their caregivers. *Halfon et al.* described five factors that contribute to the lived experience for asthmatic patients, including expectations and beliefs about asthma, knowledge and self-management skills, environmental factors, social aspects such as poverty, and access to and ability to interact with the medical system.¹⁶ Through education, close follow-up, and social work aid for financial support, our program ameliorated all five factors. As expected, the impact on quality of life was significant in our study. We used ‘activity limitations’, ‘symptoms experienced’, ‘emotional functions’, and ‘exposure to environmental stimuli’, as our variables to subjectively measure quality of life. There was a significant decrease of activity limitation in all categories of activity, i.e. strenuous, moderate, and social. Symptomatically, there was a decrease in wheezing. Interestingly,

there was no significant impact on the emotional functioning of these patients and their caregivers. Feelings of frustration, fear of not having the asthma medications available when needed, and concern about having asthma, were not affected by our intervention. Our study is on-going and will monitor these feelings as patients and caregivers become more comfortable and develop more trust in their individual management plans. There was no significant decrease in how much patients were bothered by environmental stimuli such as dust, cigarette smoke, and weather or air pollution, comparing pre- and post-intervention figures. Education regarding atopic triggers (e.g. dust) and environmental irritants (e.g. cigarette smoke or weather) did not change how “bothered” our asthmatic patients were in the presence of these variables. The wording of our questionnaire was insensitive for differentiating whether psychologically they were “bothered” by knowing asthma triggers or physiologically “bothered” with asthma symptoms. We will need to modify our questionnaires to address these issues.

“Confidence with self-managing asthma.” There was a decrease in the number of patients who initially

Table VI. Confidence Self-Managing Asthma Pre- and Post-Misericordia Astham Study Intervention.

		Initial % of patients that felt	Follow-up % of patients that felt	P-value
Ability to implement instructions given by physician	Extremely	27	31	0.311
	Quite	59	69	0.140
	Not very	12	0	<0.01**
	Not at all	2	0	0.161
Knowing when to seek emergency assistance for worsening asthma	Extremely	38	35	0.384
	Quite	46	65	<0.05*
	Not very	16	0	<0.01**
	Not at all	0	0	-
Expressing concerns to physicians even when there is limited time for a visit	Extremely	35	38	0.384
	Quite	49	62	0.100
	Not very	16	0	<0.01**
	Not at all	0	0	

* Statistically significant difference comparing pre- and post-asthma study intervention, using a 95% confidence interval

** Statistically significant difference comparing pre- and post-asthma study intervention, using a 99% confidence interval

felt 'not very' confident with their ability to implement instructions given by the physician. Similarly, there was a decrease in the number of patients who initially felt 'not very' confident about knowing when to seek emergency assistance for worsening asthma. At completion of the study, there was an increase in the number of patients who felt "quite confident" about this issue. There was also a decrease in the number of individuals who felt "not very confident" about their ability to express their concerns about asthma even with office time constraints. From these results, it would appear as though our program is effective at increasing patient/caregiver autonomy when dealing with asthma.

In conclusion, a community-based asthma education program is an effective method of decreasing the physical, psychological, and financial burden of asthma. Using a multi-disciplinary team approach, individualized action plans, close follow-up, and one-on-one education, this program effectively decreased the number of contacts with the health care system, the loss of productivity linked to asthma, the number of symptoms experienced by the patients, improved quality of life, and improved patient confidence and autonomy in managing this disease.

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New Family Compressors and Concentrators

Invacare introduced its new Platinum 10 litre concentrator in July of this year. The Invacare Platinum 10 oxygen concentrator delivers the reliability, performance expected from the Platinum line of concentrators. It provides an attractive alternative to liquid systems. The Platinum 10 will provide supplemental oxygen to patients with high flow needs up to 10 liters per minute. The Platinum 10 has been designed on the same platform as the existing Platinum series and has less than 10 different parts from the Platinum XL 5 concentrator.

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Athabasca

New

1/2 page

1 colour

College of the North Atlantic — Qatar

Continued from page 7

John's. As a result, the curriculum has already been developed and the course outlines are completed and updated on a regular basis. My colleagues in Paramedicine and Environmental Health were not quite so lucky, as their programs are not presently offered in Newfoundland so their task involved development of the curriculum and all the courses.

My colleagues in Newfoundland, specifically Lori Gordon, have been a great resource for me since we will be teaching the same courses, albeit at a different venue, different country, in fact, a different continent! In fact, one of my colleagues from Newfoundland, Mary Parrott, will be joining me in to assist in delivering respiratory course. Mary will be a great resource in Qatar as an experienced instructor with the College in Newfoundland.

The students studying respiratory therapy at College of the North Atlantic-Qatar will complete their clinical training at Hamad Medical Centre, with approximately 600 beds, the largest hospital in Qatar. Hamad Medical Centre is a state-run institution offering free health care to all residents of the country, both Qatari's and non-Qatari expatriates. The hospital cares for patients from neonates to the elderly, with specialties such as cardiovascular surgery and neurosurgery being offered. The hospital is the tertiary care centre for the entire country with approximately 120 critical care beds. Satellite hospitals are located elsewhere in the capital Doha as well as in the northern region of the country.

Presently, the respiratory therapy staff at Hamad Medical Centre is composed of health professionals from other Arab countries, India and the Philippines. Most of these staff

members have completed respiratory therapy training in their home countries. Many are also in the process of completing their North American training in respiratory therapy via on-line education.

The College of the North Atlantic-Qatar has moved into a brand new, state-of-the-art campus, comprised of 21 buildings, including two designated as Health Science buildings. The respiratory therapy classroom and lab are ultra-modern with all new equipment. The ventilators ordered for simulation are consistent with the ventilators used at Hamad Hospital, including Dragger XL, Siemens "i", and Avea ventilators. The lab includes a 'mock ICU' with four ICU beds complete with cardiac and hemodynamic monitors and the 'Sim-Man' for full simulation capability. The respiratory therapy lab has a pulmonary function testing system, complete with exercise testing capability along with a comprehensive anesthesia system.

The College of the North Atlantic-Qatar respiratory therapy students will benefit from the best equipped respiratory and critical care patient simulation lab I can imagine!

It is exciting as a Canadian respiratory therapist to be involved in a project that includes initiating Canadian-standard respiratory therapy education to a different part of the world. Politically, Qatar is quite a progressive country. Although ruled by a monarch, Sheikh Hamad, national elections were introduced in 1999 for the selection of a legislative council. All Qatari citizens are permitted to vote and stand as candidates, including women. From a lung health prospective, Qatar became the first country in the Middle East, of seemingly endemic cigarette smoking, to ban smoking in public restaurants, malls and shops. However, adher-

ence and enforcement of this law remains a little bit to be desired! But at least the administration has realized the significant impact of cigarette smoking on the public's health. Perhaps this realization of the importance of lung health was a factor in the Qatari public health officials selecting respiratory therapy as a key health profession to help ensure the public health of the Qatari citizens.

As a respiratory therapist and a Canadian, it makes me proud to be involved in this project. Considering the different culture and environment in Qatar compared to Canada, it will be an interesting challenge. But I believe the role of a health professional such as a respiratory therapist is similar in any country of the world. Irrespective of language, culture or geography, the patient's health and well-being remains the most important factor to consider.

Now if I can only get used to the heat and humidity!

References

Factual information on Qatar taken from www.cna-qatar.com, <http://www.populationworld.com/Qatar.php> and <http://www.qatar-info.com>

Factual information on Canadian provinces taken from <http://www.gnb.ca/cnb/nb/Pop-e.asp> and <http://www.canadainfolink.ca/chartone.htm>