Collaborative promotion of community health in the third world: "Straighten Up" in Bangalore, India APHA 2007







Introduction

- This PowerPoint presentation will overview "Straighten Up" and delineate it's evolving collaborative implementation in Bangalore, India and globally.
- With over 1 billion people India is a markedly underserved chiropractic population
- Initially I will present the context and rationale for Straighten Up's development.







Overview

Next we will present and practice the basic Posture Pod exercises to prevent and correct slouched, anterior head jut, protracted shoulder posture associated with depression, increased mortality, functional disability, and elevated risk for osteoporotic fractures.





- Then we will briefly describe the collaborative processes used in developing and implementing the initiative in India and other regions.
- Finally we will describe how to make a brief Straighten Up presentation.





Context

Several factors led to the development of Straighten Up including:

- A high prevalence of spinal disability, workrelated back, neck and limb disorders
- 2. A very high prevalence of slouched posture
- 3. A conspicuous absence of a simple short postural improvement program





Straighten Up's Vision

is to empower everyone to spend a couple of minutes every day taking care of their spine, just as they care for their teeth.





Straighten Up's Mission

is to educate everyone in wellnessbased, spine-healthy lifestyles, through collaborative, educational and service-based methods.





Straighten Up Collaborators



- Child and Adolescent Health and Development Cluster of WHO
- Occupational Health Cluster of WHO
- Bone and Joint Decade
- USBJD
- Tobacco Free Kids
- International Labor Organization of UN
- World Federation of Chiropractic
- ACC/COCSA/ACA/ICA
- Commonwealth Association for Mental Handicap and Development Disabilities
- US President's Council on Physical Fitness and Sports





Straighten Up Exercises

- Straighten Up is an enjoyable very short spinal health program designed to help you feel and look your best and prevent spinal disability.
- Basic Rules: 1. Think positively 2. Stand tall in confident "Inner Winner" posture. 3. Breathe calmly, slowly and deeply from your stomach region. 4. Move smoothly without jerking or bouncing.
- Notice: Check with your healthcare practitioner or fitness specialist before starting "Straighten Up" to make sure the activities are appropriate for your specific needs.
- If you experience sharp or recurring pain at any time, STOP and report to your doctor. You may need to modify the exercises.



Posture Pod Flying Friends from Straighten Up

1. Stand or sit tall in **Inner Winner** posture with your head high and stomach in to look and feel better.





If an exercise hurts don't do it.

3. Circle your shoulders backwards for 10 seconds in the **Hummingbird**. Bring your shoulder blades together.



2. Breathe in and stretch your spine as you slowly raise your arms up above your head 3 times in the **Eagle**. Enjoy.



4. Gently draw your head back into your hands 4 times in the **Butterfly**. Then softly massage your neck muscles in the **Trap Opener**. Do these twice daily for better postur

Methods

Through dialogue with the Chiropractic Diplomatic Corps headed by Dr. Michel Tetrault, contact was established with an honored Indian healthcare philanthropist, Dr. Vasu Pandurangi. Initial discussions with Dr. Pandurangi occurred during the May 2006 WHO World Health Assembly. Dr. Pandurangi is the founder and director emeritus of CAMHADD, the Common Wealth Association for Mental Handicap and Developmental Disabilities. Dr. Rand Baird invited me to present Straighten Up to the WFC WHO delegation.



Pictured, left to right: David O'Bryon, ACC executive director, Dr. Margaret Chan, WHO director general, Dr. Asamoa Baah, WHO deputy director general, Dr. Vasu Pandurangi, founder of the Commonwealth Association for Mental Handicap and Developmental Disability, and Dr. Ron Kirk, Life University professor and member of the WFC Public Health Committee.

Preliminary Discussions

- Dr. Pandurangi described the CAMHADD WHO Bangalore Model Healthy City Initiative with Trisector Partners (Karnataka State/55 million population).
- Through the Model Healthy City Initiative health promotion clinics had been established in several hospitals. Screenings were being conducted for heart disease, hypertension, diabetes and recently spinal disorders.
- Dr. Pandurangi and CAMHADD have conducted 17 separate health initiatives in collaboration with WHO over the course of 20 years.



Discussions cont.....

- Gary Auerbach of the WFC Public Health Committee had originally contacted Dr. Pandurangi through WHO External Relations Officer, Dr. Roberta Ritson.
- Dr. Auerbach had originally proposed adding spinal screening to the battery of tests health promotion clinics were conducting.

Cont....

Through Dr. Ritson, Dr. Auerbach also proposed that following newly established WHO guidelines, spinal health care workers be trained with the hope of eventually creating a full scale chiropractic program in Bangalore.

Cont....

- I explained the Straighten Up initiative's mission and goals to Dr. Pandurangi.
- I mentioned a number of collaborating organizations.
- I proposed that we continue to dialogue to develop a collaborative effort in Bangalore to promote spinal health.
- Dr. Pandurangi expressed keen interest working in collaboration.

Cont.....

After receiving guidance from leaders of the WHO Occupational Health Cluster, a subsection of the Public Health Cluster, Dr. Pandurangi contacted me and invited me to help organize Round Table Discussions and an Occupational Health Workshop. This workshop had the intent of establishing India's inaugural worker health profile and workers health plan.

Cont....

I proposed that we establish a Straighten Up India initiative in collaboration with the Bangalore Healthy City Initiative. Straighten Up India would contain public health education and research components. The Round Table Discussions and Worker Health Workshop would inaugurate Straighten Up India.

Cont.....

- Earlier I had asked the ACC Presidents group for help funding Straighten Up and the Presidents Group contributed a grant to help develop and promote the initiative. These monies were used to develop Straighten Up India.
- Many college presidents served on the original Delphi panel that created Straighten Up.

Developing Research Proposal

- I created a detailed research proposal that I sent to the Life University IRB and to the research director for funding of Straighten Up India.
- The proposal included introduction and background, objectives, methods, expenses and expected outcomes for the institution and the profession.

Straighten Up India Objectives

- To assess the efficacy of innovative health promotion methodologies with the following objectives:
- 1. To improve the spinal health and quality of life of selected groups of the children and laborers of Bangalore.
- 2. To improve the self-esteem of the laborers and children of Bangalore through the development of leadership.
- 3. To educate the laborers, health care practitioners, health educators, educators, and the parents of the children of Bangalore in Straighten Up.
- 4. To create an operational model for spinal health promotion and selfesteem enhancement.
- To assess the prevalence of postural disorders including scoliosis and anterior head carriage
- To assess the efficacy of postural training strategies from Straighten Up.

Feb. 18-19,2007 Workshop Outcomes

- India's inaugural plan to develop a workers' health profile and worker's health promotion plan
- Extremely enthusiastic reception of Straighten Up by national, provincial and local health care leaders
- Initiation of training for continuing research efforts
- Development of extensive network of health promotion partners

Future Directions

In collaboration with with CAMHADD, WHO and Tobacco Free Kids, a new health promotion initiative is being established for **Tobacco Free** Workplaces and Health Promotion in the Workplace.





December 17-18, 2007 Workshop in Bangalore

- Will feature tobacco free workplaces
- Stress reduction in the workplace
- Musculoskeletal/spinal health promotion in the workplace
- Attendees and presenters will include India's Minister of Health and the Deputy Director General of WHO

Expected Outcomes

A working model to implement health promotion in the workplace for global application.



Straighten Up on the move

2007 live
 interview
 on CNN
 Espanol on
 World
 Spine Day,
 Oct. 16th



Background Processes for Straighten Up Module Development

- Developed by seed panel through a series of Zoomerang electronic email surveys
- Surveys included prioritization matrix and goals, exercise domains, ordering, naming
- Utilized modified Likert 5 point scales for point tabulation
- Postural improvement and core stabilization achieved highest priority levels (23 out 25 possible points)
- Standing position was unanimously chosen for convenience and habituation



Survey Analysis and Module Shaping

- Panelists submitted exercises which were reviewed for frequency of overlap and congruity with posture and core stabilization scoring highest.
- Exercises were sequenced through point tabulation.
- Program was named by vote.



Life Style Recommendation Development

Key areas chosen included:

- self improvement and goal setting
- active living
- tobacco cessation
- healthy food choices
- sound ergonomic practices
- stress management and relaxation
- systematic spinal check-ups and active care



Delphi Panel Composition

Broad spectrum of healthcare leaders including: clinic directors presidents researchers clinicians association leaders fitness champions WHO and BJD leaders



Electronic Delphi Consensus Process

- Facilitator used Zoomerang electronic surveys.
- 75% agreement inclusion level set.
- Panelists voted on individual PowerPoint slides.
- Input for editing was allowed without slide disapproval.
- All slides achieved consensus agreement levels on first ballot.
- Program received a high degree of positive commentary with multiple descriptors such as "great" and "excellent".



Exercise Module User Feedback

- Obtained initially after five weeks of performance.
- 83% reported postural improvement.
- 78% reported strengthening core muscles.
- 80% reported sit and standing more uprightly and greater spinal comfort.



Observations

- Straighten Up is rapidly gaining momentum and acceptance around the globe.
- The Delphi process functioned admirably.
- A broad range of health care leaders worked together very well for a common goal of health promotion.



Straighten Up Getting Started

- 1."Straighten Up" is intended to be incorporated in a healthy lifestyle of prudent active living. Consistent healthy choices and healthful habits form the bedrock of a healthy life. Our hope is that you make "Straighten Up" a daily part of a vibrant empowering lifestyle for the whole family.
- 2. This version of "Straighten Up" is designed for healthy children and adults to practice daily, like brushing your teeth.
- 3. Consult with your health care provider before practicing this module, especially if you have spinal disabilities or other disorders which limit movement.



"Straighten Up" Lifestyle Choices Promoting the Straighten Up Lifestyle

1. <u>Choose to improve.</u> You are worth it. Maintain a positive perspective. Take small steps at first; set specific measurable health goals and achieve them. Celebrate your health successes; learn from temporary setbacks and move on. Choose to see life as an adventure. Keep learning for a lifetime.



2. Choose to enjoy healthy, invigorating activity

at least 30 minutes daily when possible. Begin slowly, making gradual improvements. Keep an activity log or calendar. If you buy a pedometer, you can count and track your steps. Choosing active hobbies will add variety and spice to your life. Exercise for flexibility, balance, strength and endurance. Perform "Straighten Up" daily to improve your posture and strengthen your core muscles.

"Straighten Up" Choices

- 3. <u>Choose to live tobacco free</u> for your personal health and for your loved ones. Tobacco has detrimental effects on your nervous system and skeletal structures, as well as on your lungs and heart.
- 4. Choose healthy foods. Eat naturally. Enjoy whole grain breads and cereals. Choose several daily servings of fresh fruit and vegetables rich in antioxidants and phytonutrients. Calcium and magnesium rich foods help to build strong spinal columns. Avoid saturated and trans fats found in fast, fried foods. Instead eat more omega 3 fats from flax products, walnuts and small ocean fish for healthy spinal joints. Choose high quality protein foods. Avoid refined sweets, such such as sodas, cookies and candy. When supplementing your diet with vitamins and minerals, make quality choices. Eating in a relaxed atmosphere enhances digestion and assimilation of nutrients.



"Straighten Up" Choices

5. <u>Choose good posture</u> while sitting, standing or lifting. Hold your head high; keep your shoulders back. Lift by bending your legs with objects held close to your torso. This helps to prevent injury. Take frequent mini breaks. Segments of "Straighten Up" work well for this purpose. Change work positions often.

6. <u>Choose a balanced supportive book bag/back</u> <u>pack</u> for school, work or recreation. Carry less weight at one time. Use a bag with broad, padded straps securely positioned on both shoulders.



7. <u>Choose a comfortable supportive mattress</u>. For optimal spinal health sleep on your side or on your back, not face down. Plan for sufficient restful sleep.

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"Straighten Up" Choices

- 8. <u>Choose to be quiet.</u> The stress of life impacts your health and your posture. Take time for relaxation and renewal. Practice thankfulness and positive thinking. Reflect, pray or meditate daily. Read uplifting writings.
- 9. <u>Choose to serve others</u>. Volunteerism and service enhance the quality of our lives and our relationships.
- 10. Choose to be kind to your spine. Regular spinal health check-ups, care and exercises help to ensure that your spine is balanced, aligned and well-adjusted. A healthy spine and nervous system add balance and harmony to life.



Tips for Great Straighten Up Presentations

- Know your audience and their key motivators.
- Involve your audience with questions and active participation in the exercises.
- Use plenty of praise and positive reinforcement to encourage participation.
- With children and youth especially, stay playful and keep a game-like atmosphere.
- Share leadership with your audience.

Further Information

- You may learn more about Straighten Up at <u>www.chirotoolbox.straightenupamerica.org</u>, <u>www.chiropractic-uk.co.uk</u>, <u>www.life.edu</u> or <u>www.cocsa.org</u>.
- You may also email <u>rkirk@life.edu</u>.
- We are looking for partners to promote spinal health and prevent spinal disability globally.
- Web sites contain free downloadable educational tools.
- It takes all of us to make a significant difference.



Thanks

- Special thanks to all of the panelists, who created Straighten Up.
- Thanks to all of the partners who are practicing and promoting the initiative globally.
- Thanks to you for your interest and attention!
- Have a great day and use the Posture Pod liberally!

References and more links

- J Gerontol A Biol Sci Med Sci. 2005 May;60(5):633-7.
 Links
 - Hyperkyphotic posture and poor physical functional ability in older community-dwelling men and women: the Rancho Bernardo study.
 - <u>Kado DM</u>, <u>Huang MH</u>, <u>Barrett-Connor E</u>, <u>Greendale</u>
 <u>GA</u>.
 - Division of Geriatrics, Department of Medicine, David Geffen School of Medicine at University of California, Los Angeles, California 90095, USA. dkado@mednet.ucla.edu

J Bone Miner Res. 2006 Mar;21(3):419-23. Epub 2005 Dec 5. Links

- Hyperkyphotic posture and risk of future osteoporotic fractures: the Rancho Bernardo study.
- <u>Huang MH</u>, <u>Barrett-Connor E</u>, <u>Greendale GA</u>, <u>Kado DM</u>.
- Division of Geriatrics, Department of Medicine, David Geffen School of Medicine at University of California, Los Angeles, California 90095, USA.

J Am Geriatr Soc. 2004 Oct;52(10):1662-7. Links

- Hyperkyphotic posture predicts mortality in older community-dwelling men and women: a prospective study.
- Kado DM, Huang MH, Karlamangla AS, Barrett-Connor E, Greendale GA.
- Division of Geriatrics, Department of Medicine, David Geffen School of Medicine at University of California, Los Angeles, California 90095, USA. dkado@mednet.ucla.edu

- Heinegard D., Johnell O., Lidgren L., et al. The Initiative. bjdonline, the Bone and Joint Decade's Musculoskeletal Portal, June 1998
- King T. National Action Week 2006. The United States Bone and Joint Decade Newsletter. September/October 2006, Volume 8, Issue 2, Page 1
- Martin S. "Straighten Up" Events Backbone of World Spine Day. The Bone and Joint Decade 2000-2010 Press Release. bjdonline. October 2006