



UNIVERSITY HOSPITALS CASE MEDICAL CENTER/
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Health Education through Health Examination, Part 3: Community-Based Health Interventions for Mercado Global Artisans

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I. Background

The “More Skills Less Pills” program was implemented in October 2013 by the Mercado Global Community Facilitators working closely with Global Health Track/Family Medicine/Case Western Reserve University team members. Over the past two years, the three pillars of the program (“Pain Away” exercises, “Power to Change” group problem solving skills, and “Do-it-together Health Education”) have been revised to better serve the needs of the artisans. During the April 2015 visit to Guatemala, it became clear that we needed more detailed discussions with each artisan to capture her health needs, as well as her attitudes towards her own health. To do this, we decided to design health check-ups to administer to each artisan and a family member in all artisan communities. We started performing health check-up’s in September 2015. During this visit to Guatemala, we provided health check-ups to three communities, covering all artisans currently working with Mercado Global. The check-up was not only a tool to help gain an understanding of individual health problems; it provided an opportunity to give one-on-one health education.

II. Activity Log

See appendix 1.

III. Findings

1: NAHUALA (24 individuals, 1 man) (la Esperanza, Santa Maria, Pan de Vida)

- Vision: 12/23 individuals had vision less than 20/20
- Weight
 - ✓ Normal weight: 4 individuals
 - ✓ Overweight: 14 individuals
 - ✓ Obese: 4 individuals
 - ✓ Morbidly obese: 3 individuals
- Musculoskeletal pain: 18/24 individuals had pain, 6 had no pain
 - ✓ Neck/shoulder pain: 10 individuals
 - ✓ Back pain: 7 individuals
 - ✓ Leg/knee pain: 10 individuals
 - ✓ Arm/elbow pain: 6 individuals

2: SAN ANDRES SEMETABAJ (28, 1 man) (Mondo Verde, Ajkem, Utzipetik)

- Vision: 13/28 individuals had vision less than 20/20
- Weight
 - ✓ Normal weight: 5 individuals
 - ✓ Overweight: 9 individuals
 - ✓ Obese: 14 individuals
 - ✓ Morbidly obese: 0 individuals

- Musculoskeletal pain: 25 individuals had pain, 3 had no pain
 - ✓ Neck/shoulder pain: 16 individuals
 - ✓ Back pain: 5 individuals
 - ✓ Leg/knee: 5 individuals
 - ✓ Arm/elbow: 5 individuals

3: SIPRESALES (23, 22 completed) (Analizadoras, La Fe)

- Vision: 10/22 individuals had vision less than 20/20
- Weight
 - ✓ Underweight: 1 individual
 - ✓ Normal weight: 12 individuals
 - ✓ Overweight: 6 individuals
 - ✓ Obese: 1 individual
 - ✓ Morbidly obese: 2 individuals
- Musculoskeletal pain: 18/22 individuals had pain, 4 had no pain
 - ✓ Neck/shoulder pain: 9 individuals
 - ✓ Back pain: 13 individuals
 - ✓ Leg/knee pain: 2 individuals
 - ✓ Arm/elbow pain: 2 individuals

IV. Assessments

1. A significant number of musculoskeletal problems were identified in each community.
 - Low back pain, shoulder pain, neck pain, foot/ leg pain, and elbow pain were the most common, and most likely resulted from posturing during work.
 - The exact location of the artisans' pain was possibly related to the specific type work done in each community.

2. Significant visual impairments were common in all three communities.
 - Poor lighting in workspaces as well as environmental exposures likely contribute to the number of visual problems seen in the communities.

3. Somatic pain syndrome seemed to be associated with multiple life stressors.
 - Many of the ill-defined musculoskeletal pain syndromes may be secondary to underlying stress, mental health challenges, or low self-esteem.

V. Recommendations

1. Implement revised exercise regimen.
 - See Appendix 2 for exercise regimen.
2. Better lighting and improved working environments for all artisans.
 - Include education on good working environments and the Pain Away program.
 - The workplace environment of the artisans needs to be evaluated more thoroughly based on the type of daily work. This should include an assessment of lighting in the workplace and posture maintained while working.
 - The working conditions in the Mercado Global office should also be evaluated.
3. Implement coping mechanisms to reduce stress among the artisans. These may include organizing retreats and teaching relaxation techniques.
 - Underlying self-esteem issues often manifest as anxiety, fatigue, and generalized pain. We will continue to address self-esteem and empower the artisans through the Power to Change Program and other modalities.

VI. Future Plans

1. Mercado Global Community Facilitators will begin to gather information from the artisans regarding childhood nutrition. These questions may include:
 - a. How long are you breastfeeding?
 - b. When do you introduce liquids other than breast milk?
 - c. What kinds of liquids are you introducing?
 - d. When do you introduce solid food?
 - e. What kinds of solid foods do you introduce?
 - f. What are you feeding children between ages one and two?
2. Mercado Global will develop workshops for the artisans about cooking and childhood nutrition.
3. Help the Artisans improve their overall wellbeing.
 - a. Conduct workshops for Mercado Global community facilitators to learn active listening and empathy.
 - b. Teach the community facilitators to use those skills to help empower the artisans to foster change from within.
4. Consider scaling-up by working with other NGOs to implement the “More Skills Less Pills” approach to other Guatemalan communities.

Appendix 1: Activity Log

Day 1 (4/25/2016)

The team left Panajachel at 0730h and arrived at Nahuala at 0910h . Most artisans were already there. We introduced ourselves and Dr.Morikawa explained the procedure of the health checkup. We proceeded to set up the rooms for each stations. The checkups began at 0930h. The artisans completed weight, height, blood pressure, pulse oximetry, and vision stations. Next, they completed a history and physical exam with a physician. Finally, the artisans met with a physical therapist to learn exercises tailored to their specific pain complaints.

Twenty-eight people gathered at our clinic from three villages (la Esperanza, Santa Maria and Pan de Vida). Twenty-six checkup sheets were collected. We left Nahuala at 1140h and arrived in Panajachel at 1300h.

Day 2 (4/26/2016)

The team left Panajachel at 0830h and arrived at San Andres at 0905h. Most artisans were already there. At 0915h we setup each station. We introduced the team and Dr. Morikawa explained the procedure. At 0930h, the artisans completed weight, height, blood pressure, pulse oximetry, and eye exams. Next, they met with a physician who completed a general history and physical exam. This was followed by a visit with a second physician, who completed a targeted musculoskeletal history and exam. Then, each artisan met with Dr. Morikawa, who summarized the findings from the exam and provided recommendations specific to each artisan's concerns. Finally, they met with the physical therapist, who demonstrated exercises targeted to improve each artisan's pain.

Thirty artisans and family members gathered at our clinic from three villages (Mondo Verde, Ajkem, and Utzipetik). Twenty-eight checkup sheets were collected. We finished all the exams at 1230h, left San Andres at 1240h, and arrived Panajachel at 1310h.

Day 3 (4/27/2016)

The team left Panajachel at 0830h and arrived at Coopertiva at 0915h. We greeted the artisans, introduced ourselves, and Dr. Morikawa explained the health screening process. Setup of each station was completed at 0925h. At 0930h, the artisans completed weight, height, eye, blood pressure, and pulse oximetry exams. Next, they completed a general history and physical exam with a physician, followed by a targeted musculoskeletal history and physical exam with another physician. Then each artisan met with Dr Morikawa, who summarized the findings from the exam and provided each artisan with recommendations. Finally, each artisan met with the physical therapist who demonstrated exercises specific to their musculoskeletal pain complaints.

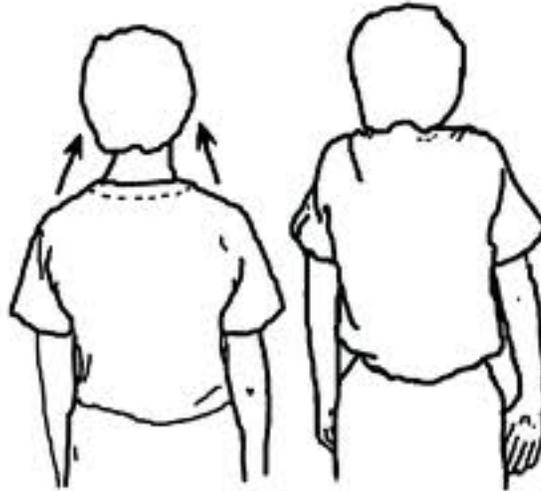
Twenty-four artisans from two villages (Analizadoras and La Fe) arrived at our clinic. Twenty-two checkup sheets were collected. We finished the exams at 1215h, left Coopertiva at 1220h and arrived at Panajachel at 1310h.

Appendix 2. Exercise Regimen

Do these exercises at least twice a day (morning and evening)

1. *Shoulder/neck:*

- a. Shoulder Raise - open the chest, drop the shoulders, breathe in, raise shoulders, and breathe out and lower the shoulders (5 times)



- b. Row - pull elbows together behind back and breathe in. Breathe out and bring hands forward. (5 times)

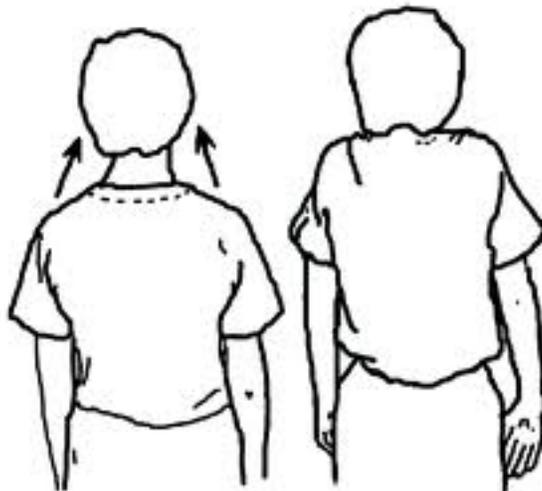


c. Neck Stretch - ear to shoulder. Ten seconds each side. (5 times each side)



2. *Low back pain:*

a. Shoulder raise (5 times)



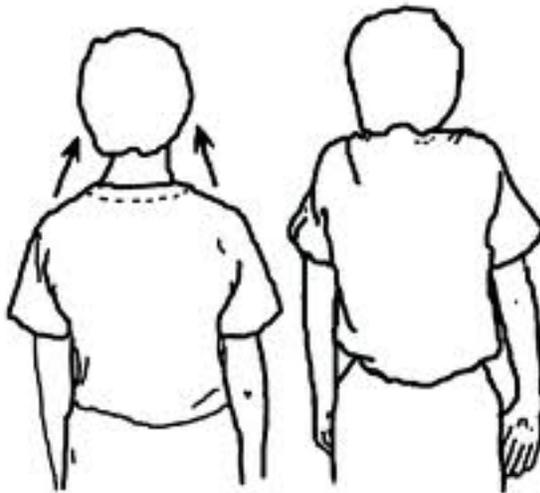
b. Hamstring stretch - seated in chair, exhale, bend over and reach for toes, hold for 5 count (5 times)



c. Twister Rotation with relaxation “storm” (10 to each side)

3. *LEG:*

a. Shoulder raise (times 5)



b. Hamstring stretch (times 5)



- c. Squats – hands in front with straight back, exhale and bend knees to seated position, inhale and return to standing (times 5)

