Use of Public Murals to Impact Perceptions of Strength-Training among Elder Latinas with Type II Diabetes Mellitus

Adrienne Martinez-Hollingsworth, MSN, RN, PHN, UCLA School of Nursing, Los Angeles, California

Background

• It is estimated that 1.4 million Latinas aged 45 and older living in the US have Type II Diabetes Mellitus (T2DM). Regular exercise is effective in slowing T2DM disease progression in elder persons and has been recognized as the critical component in reducing fasting blood glucose in this population.

• Strength-training exercises in this elder group support both necessary retention of skeletal muscle mass, and non-insulin based ingress of sugar into a myocyte, which makes this category of exercise more effective in improving glycemic control compared with aerobic efforts alone.

• A preference for aerobic exercise (dancing, walking) among elder Latinas with T2DM and cultural beliefs discouraging females from participation in activities that might be seen as "macho" (masculine) may negatively impact willingness to adopt strength training as part of a T2DM regimen.

Purpose: To impact perceptions and promote strength-training exercises among Latina elders using culturally-familiar imagery and media. To identify and illustrate household items that can be used for strength-training exercises in the home.

Methods: Creation and presentation of familiar cultural images and icons via traditional muralismo (muralism) practices in the Latino community that utilize public art as an expressive and transformative medium. Creation of imagery to be used in pamphlets and other health information materials for the promotion of strength training in elder Latinas.

Implications for Nursing Practice: Through this exploration, nursing professionals will be able to identify culturally-effective and sensitive methods of introducing low-cost, strength-training exercises that may be utilized in the home setting for the purpose of building appendicular muscle and reducing blood sugar. Use of culturally familiar images may positively impact perceptions of acceptability of these practices.

Vendedora de Flores (1944), Diego Rivera (Image labeled for non-commercial reuse)

This famous Diego Rivera painting has several features that promote a more traditional Latina female role:
• Woman appears to be young
• Figure is wearing traditional peasant dress and is shoeless
• Pose is passive; figure is on knees with semi-bowed head
• Pose itself is reminiscent of praying or reflection; figure appears calm in her passivity
• This famous image is well-recognized among Mexican and Mexican-American persons, and frequently appears in public murals-making it an ideal image for transformation.

Mujeres Fuertes son Mujeres Sanas (Strong Women are Healthy Women) (2015) A. Martinez-Hollingsworth

This adaptation of a famous Diego Rivera painting has several features that Redefine the Latina female role:
• Hair is lightened and streaked with gray
• Figure is wearing active wear (t-shirt and shorts, tennis shoes)
• Pose is more active / assertive and implies movement
• Pose itself is reminiscent of lunges, a strength-training exercise used to build muscle in the quadriceps, hamstrings and gluteus muscles
• This image is designed to be displayed as a public mural, but may be incorporated into health education literature.

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