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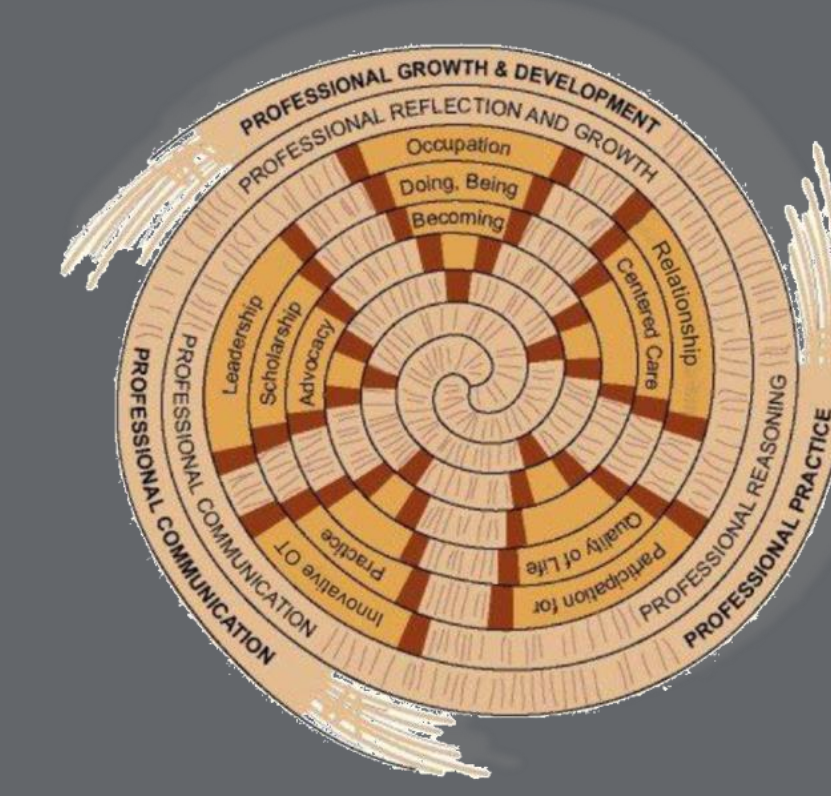
Patricia Siegel

Marcy Rinaldi

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Injuries in food growers: Are there gender differences?



Patricia Siegel OTD, OTR/L, CHT and Marcy Rinaldi MOT/S
University of New Mexico Occupational Therapy Graduate Program

Agriculture and Risk

- According to the Centers for Disease Control (CDC) agriculture is one of the most hazardous industries in the United States.¹
- Farmers are much more likely to sustain significant injury than non-farmers.²
- Data shows the prevalence of musculoskeletal disorders in farmers is high, with a lifetime prevalence of any form of musculoskeletal disorder at 90.6%.²
- Yearly prevalence rates for musculoskeletal disorders are reported at 76.9%.³
- Rates of musculoskeletal disorders are higher among farmers compared to the non-farming population.³
- Farmers report more severe symptoms affecting the hands and forearms.³
- The most common musculoskeletal injury reported was Lower Back Pain (LBP) followed by upper extremity and lower extremity injuries.²

Search Strategy

A literature search was conducted from May 15th through August 3rd, 2022. PubMed, Google Scholar and Google were used as search engines, with terms "musculoskeletal disorders for food growers", "most common musculoskeletal disorders for food growers", "musculoskeletal disorders in food growers by gender", "statistics on injury in farmers" used as search terms. Additional support was received from UNM research Librarian.

Differences in Injury Based on Gender

- Farming injuries could be related to the gendered division of labor on farms.⁵
- Injuries are an indicator of different work exposure.⁴
- Men and women have the same likelihood of injury, however some studies indicate men tend to work with machinery more often, whereas women do more domestic and caretaking work.⁴
- Work exposure is greatly dependent on region, culture and family values.⁵
- Each farm has its own set of values which are influenced by ethnicity, education level, socioeconomic status and cultural traditions.⁵ These values in turn influence how work is distributed and what work is considered appropriate for each gender.



Injury for Male Farmers

- Research shows that men were 5.7 times more likely to be injured when working with farm machinery.^{6,9} The ratio of non-fatal injuries related to machinery in men versus women was 9:1.⁷



- Injuries from machines was most often caused by a rotary blade.⁷
- Men tend to harvest and do maintenance work more often.⁷

Injury for Female Farmers

- Women are 2.4 times more likely to be injured by an animal.⁹
- Women over 60 are more often injured by falls and doing domestic tasks.⁶
- Women presenting to an ER are 1.21 times more likely to be discharged home.⁹
- In one study, women farmers were found to have increased risk for metabolic syndrome, musculoskeletal pain, and psychosocial stress.⁸ As a result of this, women farmers had poorer overall health than male farmers.⁸

How can OT help?

Given the high likelihood of injury in this population coupled with the specific gender needs, it is important that Occupational Therapists be well versed in methods to help this population mitigate and treat injuries. This project aims to address that need and bring education and resources to Occupational Therapists working in settings with agricultural workers.

Ways in which an OT can help:

- Ergonomic Education
- Assistive Technology
- Orthosis Fabrication
- Task Modification
- Energy Conservation Techniques
- Environmental Modification

