Predictors of Functioning in Women with Fibromyalgia Syndrome (FMS)

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Fibromyalgia Syndrome (FMS)

- Characterized by chronic widespread pain, fatigue and sleep difficulties
- Stimated to affect 3 to 6 million Americans
- Occurs 6 to 8 times more often in women than men
- Ocause is unknown, no preventive measures, medical treatment limited and often ineffective



- Tends to follow a chronic, non-remitting course
- Generally 'invisible' symptoms
- Image FMS can have a substantial impact on functioning and subsequent disability





- To examine predictors of social and role functioning (emotional role functioning, physical role functioning and employment) among women living with FMS
- Data from <u>baseline</u> surveys for participants in the randomized clinical trial of the "Lifestyle Counts" intervention study

"Lifestyle Counts"

- Theoretically and empirically based intervention to promote health and well-being of women with FMS
- Oraws on construct of health within illness (Moch), health promotion theory (Pender), and self-efficacy theory (Bandura)
- Focus on promoting health within the context of living with a chronic condition of FMS

Verbrugge & Jette (1994)

- Pathology presence or absence of disease
- Impairment abnormalities or loss at the physiological, anatomical or mental level
- Functional Limitations restriction or lack of ability to perform basic physical and mental actions
- Disability difficulty doing activities in any domain of life from work to hobbies due to health problems

Questionnaire Battery

- Measures of demographic and illness-related variables
- Fibromyalgia Impact Questionnaire (FIQ)
- Health Promoting Lifestyle Behavior (HPLPII)
- Self-Rated Abilities for Health Practices
- Personal Resource Questionnaire
- Barriers to Health Promoting Behaviors
- CES-D
- SF-36 Social, Emotional & Physical Role Functioning Subscales

Study Participants

197 women with physician-verified FMS
Diagnosed for an average of 9.9 years
Ranged in age from 24 to 74 years
Mean = 53.3 S.D. =9.5
25 women (13%) were age 65 or older

Sample Characteristics

- Education
 - 92% have completed high school
 - 48% have completed college

Race/Ethnicity

- 81 % White
- I 15% Hispanic
- ③ 3.5% African American
- Marital Status
 - Married 63%
 - Never Married 6 %
 - Widowed/Divorced/Separated 27%

Employment Status

The majority (59%) were not currently employed
Overall employment status
Full-time - 26%
Part-time - 15%
Full-time homemaker - 5%
Unemployed due to disability - 23%
Retired - 23%

Descriptive Findings

Compared the mean scores of this sample of women with FMS on the SF36 Subscales to data reported for General US Population (N=2,474)
Norms for Females Age 45-54 (N=193)
Norms for Clinical Depression (N=502)
Mean age 41.6 75% Female

Norms for Back Pain/Sciatica with Hypertension (N=481)

Mean age 60.4 64% Female

Norms for Osteoarthritis with Hypertension (N=175)

Mean age 67.8 74% Female

Social Functioning Subscale

Mean Score for Women with FMS 46.57
 85% of the general population had higher scores

	Mean	25th %	50th %
Women	82.71	50.00	65.00
Depression	57.16	25.00	40.00
Back Pain	81.48	75.00	87.50
Arthritis	79.74	62.50	100.00

Role Emotional Functioning

Mean Score for Women with FMS 56.85
 82% of the general population had higher scores

	Mean	25th %	50th %
Women	81.92	83.00	100.00
Depression	38.90	0.00	33.33
Back Pain	70.90	33.33	100.00
Arthritis	74.84	33.33	100.00

Role Physical Functioning

Mean Score for Women with FMS 33.25
 85% of the general population had higher scores

	Mean	25th %	50th %
Women	79.93	75.00 🦯	100.00
Depression	44.39	0.00	50.00
Back Pain	46.71	0.00	50.00
Arthritis	38.17	0.00	25.00



Stepwise Multiple Regression with the following predictors:

- Length of Diagnosis
- Fibromyalgia Impact Questionnaire
- CESD
- Measures of social support, barriers, health promoting behaviors and specific self-efficacy for health behaviors

Output: Content of the same variables to predict employment status (dichotomous)

Social Functioning

 $\odot R^2 = .47$

Significant predictors
 Fibromyalgia Impact Beta = -.32
 Depressive Symptoms Beta = -.275
 Barriers Beta = -.21
 Years of education Beta = -.12

Role Emotional Functioning

R² = .50
Significant predictors
Depressive Symptoms Beta = -.55
Fibromyalgia Impact Beta= -.23
Age Beta = -.13

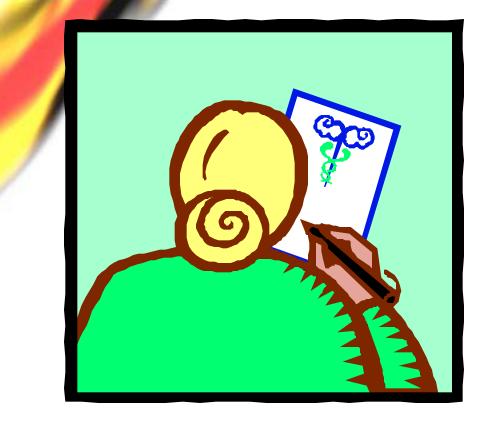
Role Physical Functioning

R² = .48
 Significant predictors
 Fibromyalgia Impact Beta = -.59
 Barriers Beta = -.14



Age and fibromyalgia impact were the only significant predictors

Conclusions



- Disability (impaired role functioning) was a major problem in this group of women
- Social, Role-Emotional and Role Physical Functioning Scores were far below the US population

Role Physical Functioning



- Lower scores than all 4 comparison groups
- Similar scores to persons with rheumatoid arthritis

Role Emotional Functioning



- Lower scores than women age 45-54, persons with arthritis and persons with back pain/sciatica
- Slightly higher/better scores than persons with clinical depression





Lower scores than persons in all 4 comparison groups including those who were clinically depressed

Key Predictors

Key predictors of functioning across domains included:

- Fibromyalgia Impact
- Output Depressive Symptoms
- Barriers to Health Promoting Behaviors

