Perceived Health and Self-Efficacy Improve After a Wellness Program in Persons with MS

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INTRODUCTION

- Lifestyle and wellness management are important components of care for persons with MS. As persons with MS strive to become more than their disease and to be advocates for their own health, sustaining self efficacy is instrumental for attainment of health related goals and Quality of Life. Although various programs exist to encourage health and wellness it remains unclear as to how effective or long lasting such interventions are. In addition because of the variable nature of MS, it is not known if all persons benefit equally.
- **PURPOSE**: The purpose of this study was to determine if a multiday wellness program for persons with MS improved quality of life related and physical activity outcomes over time. A secondary goal was to assess whether disease severity (i.e., EDSS) was associated with any such improvements.

METHODS

- **Subjects**: 119 persons with MS (28 men, 91 women) attended one of a series of 4-day wellness programs.

- **Wellness Program/Intervention**: Programs included education in goal setting, motivation, self-management, exercise, stress-reduction, and preventative health, as well as physiological and health-related assessments.

- **Outcomes:**
  - Self-Perceived Health Status[1](SF-36)
    - Physical Function (PF)
    - Role Physical (RP)
    - Role Emotional (RE)
    - Vitality (VT)
    - Mental Health (MH)
    - Social Function (SF)
    - Bodily Pain (BP)
    - General Health (GH)
  - MS Self-Efficacy Scale [2](MSSE)
    - Control Subscale
  - Physical Activity Scale for Individuals with Physical Disabilities [3] (PASIPD, Based on 7-day recall).
  - Measures were obtained by mail prior to attendance (pre) and after 1, 3, and 6 months following program participation to assess longitudinal benefit.

- **Analysis:** Friedman test, followed by Wilcoxon comparisons to pre if p<0.05. EDSS was correlated (Spearman) with any variables showing change.

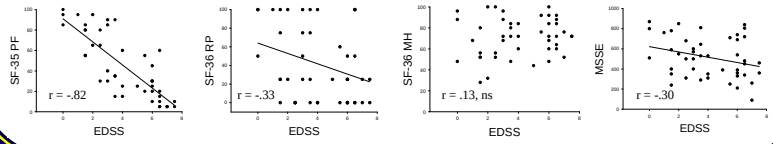
PRELIMINARY RESULTS

Results are from 45 subjects (10 men, 35 women) with complete data for up to 6 months

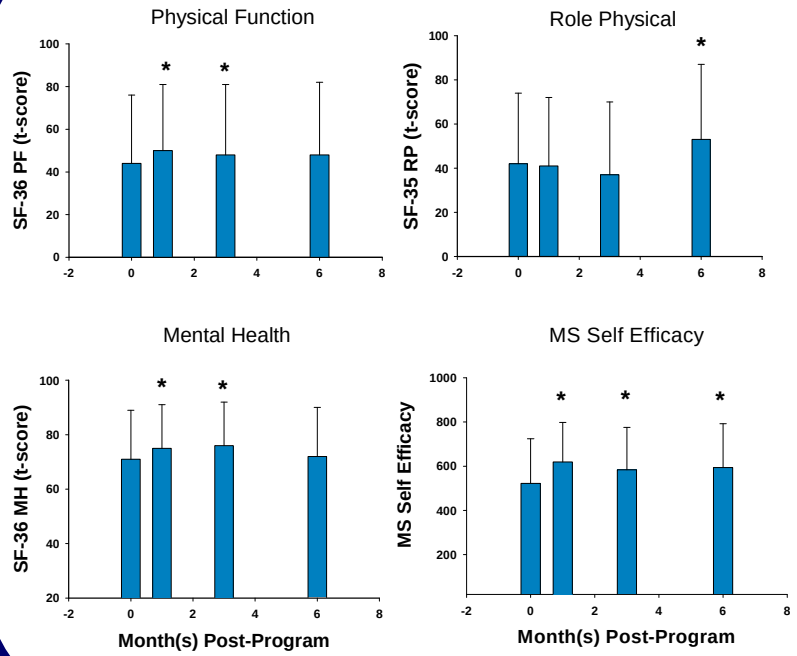
Age	Disease Duration	EDSS
53 (11) yrs, Mn(SD)	13(9) yrs, Mn(SD)	4.0 (0-7.5), Md (range)

- Subjective physical well-being improved as indicated by SF-36 Physical Function (PF) and Role Physical (RP) Scales. See Figs below.
- Subjective mental well-being improved as indicated by the SF-36 Mental Health (MH) scale and the MS Self-Efficacy Control subscale. See Figs below.
- No other SF-36 scale changed significantly from initial pre-program values, nor did PASIPD.
- EDSS was significantly correlated (p<0.05) to initial SF-36, PF, RP and MSSE, of the variables that showed improvement after program participation.

Initial Correlations



Improvement in Perceived Health and Self-Efficacy



Data are Mn(SD) *** p<0.05 compared to initial "0 month"**

Improvement was not Related to EDSS

- Correlations of EDSS to Change After **1 month**

	Δ PF	Δ RP	Δ MH	Δ MSSE
EDSS	-0.04	-0.24	0.11	0.08

- Correlations of EDSS to Change After **3 months**

	Δ PF	Δ RP	Δ MH	Δ MSSE
EDSS	-0.17	0.11	-0.08	-0.07

- Correlations of EDSS to Change After **6 months**

	Δ PF	Δ RP	Δ MH	Δ MSSE
EDSS	-0.08	-0.03	-0.04	-0.02

- Despite initial correlations, there were no significant relationships (p>0.05) between EDSS and any *change* in dependent variable at 1,3, or 6 months.

LIMITATIONS

- Small sample sizes urge caution in interpretation.
- Response selection bias may influence results.
- Physical activity questionnaire may lack sensitivity[4].

CONCLUSIONS

Conclusion 1:
A 4-day wellness program can improve aspects of self-perceived health and result in robust improvements in self-efficacy.

Conclusion 2:
These changes are independent of EDSS.

REFERENCES

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4. Ng and Kent-Braun, *Med. Sci. Sports Exerc*. 29:517, 1996

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