Does a faith-based community center impact physical activity practices among middle aged and older adults? An exploratory study.

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ABSTRACT

Introduction: While the importance of regular physical activity to health has been well documented, physical activity levels among middle aged and older adults remain low. Thus, additional health promotion approaches are needed. Literature suggests that as individuals' age, they turn to their faith for guidance. Therefore, the purpose of this study was to assess the impact of a Faith-Based Community Center (FBCC), in a mid-sized Midwest community, on physical activity practices among middle aged and older adults. *Methods:* Using both a quantitative (n=26) and qualitative (n=10) approach, researchers assessed participants' baseline (all were Caucasian; female (69%, n=18), mean age 54 6.3 years) current health status and behaviors, current/intended utilization of the FBCC, and 6 month changes in physical activity behaviors. *Results:* Results reveal at baseline 84% (n=22) of participants were physically active with 81% (n=21) using the FBCC. At six months 67% (n= 12) were physically active with 78% (n= 14) using the FBCC. During that time participants rating their health as good or better decreased 9%. *Conclusion:* This exploratory study indicated that an internet based survey is a viable method of collecting information from members of a FBCC in this age range. Although the results of this small descriptive study did not support a relationship between physical activity behavior and use of the FBCC, additional research on a larger and more diverse sample is warranted in order to more thoroughly examine the health related impact of such a center.

INTRODUCTION

The CDC states that 33.7% of individuals 65 years of age and older report no leisure-time physical activity, while 35.7% report insufficient levels of regular physical activity[1]. Older adults encounter various barriers such as lack of time, muscle soreness, sweating, heavy breathing and poor health when trying to initiate or increase physical activity[2]. Literature suggests that as individuals age, they turn to their faith more for guidance[3], and one possible way to influence the health behaviors of this population is through a faith-based community center. Religious organizations have utilized similar facilities to positively influence health outcomes of the community and their members[4]. However, research examining the impact a faith based facility on health outcomes is nonexistent.

Therefore, the purpose of this exploratory study was to utilize an internet based survey to assess the impact of a Faith-Based Community Center (FBCC: fitness center, indoor swimming pool, community meeting rooms, outdoor walking trails, family fishing pond and other facilities), in a mid-sized Midwest community, on physical activity practices among middle aged and older adults.

METHODS

Assessment Tools

An internet based survey included information on the following factors.

1. FBCC utilization
   - Current use of FBCC components; yes/no
2. Health status and behaviors survey (HSS)
   - Behavioral Risk Factor Surveillance Survey (BRFSS) [5]
     - Self-reported health: Likert Scale (1 = excellent health; 5 = poor health)
     - Life satisfaction: Likert Scale (1 = very satisfied; 5 = not satisfied)
     - Limitations to daily activity: yes/no
     - Work Activity: 1= Mostly sitting or standing, 2= Mostly walking, 3= Mostly heavy labor or physically demanding work
     - BMI: calculated from self-reported height and weight ((weight (lb)/ (height (in)^2) x 703)
     - Currently trying to lose weight: yes/no
     - Physical activity behavior: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, walking, etc. for exercise? yes/no
3. Physical activity behavior
   - Rapid Assessment of Physical Activity (RAPA) survey [6]
     - 9 question tool
       Likert scale
       - 1 = sedentary
       - 2= underactive
       - 3 = regular underactive light activities (not meeting PA guidelines)
       - 4 = regular underactive moderate/vigorous activities (not meeting PA guidelines for time/days/wk)
       - 5 = active (regular moderate/vigorous PA, meeting PA guidelines for both time/days/wk)
     - Strength training: yes/no
     - Flexibility: yes/no

Design

- Descriptive; Baseline and 6 month assessments
- Independent variable: Utilization of the FBCC
- Dependent variable: Physical activity behavior

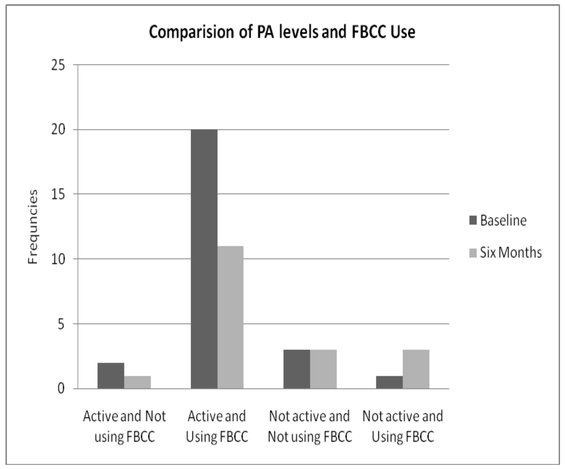
Statistical Analyses

- SPSS: Univariate analyses including means, standard deviations, assumptions of normality and homogeneity of variance

RESULTS

Participants

- Caucasians (n=26)
- Female 69% (n=18)
- Male 31% (n= 8)
- Age range 41- 68 years; Mean age 54 6.3 years



Frequencies and Means of Key Study Variables

Variables	Baseline Assessment	Six Month Assessment
Physical Activity (HSS) (currently active)	84% (n=22)	67% (n=12)
RAPA (currently active)	24% (n=4)	20% (n=2)
Currently strength train	37% (n= 10)	33% (n= 6)
Currently stretch	48% (n= 13)	44% (n= 8)
Currently use the FBCC	81% (n=21)	78% (n=14)
Self-reported health (Excellent, very good or good)	92% (n=24)	83% (n=15)
Life satisfaction (Satisfied or very satisfied)	96% (n=25)	100% (n=18)
Limitations to daily activity (Have limitations)	24% (n=6)	33% (n=6)
Work activity (Sitting/ standing throughout the work day)	64% (n=16)	77% (n=13)
BMI	mean 29.0, SD 5.9	mean 28.6, SD 5.8
Currently overweight or obese	81% (n=21)	72% (n=13)
Currently trying to lose weight	78% (n=18)	75% (n=12)

CONCLUSION

Research shows that older adults turn to their faith more for guidance and that this religiosity positively affects health[3]. Taking this into consideration when attempting to change health behaviors may indeed be a powerful approach to increasing the quality of life of older adults. In addition, a community center located within a place of worship may influence participation by its convenience, and inherent social networks could provide support for attempting new health related behaviors as well. While the sample size of this exploratory study did not allow a rigorous analysis of the relationship between physical activity behavior and use of the FBCC, it did indicate that an internet based survey is a viable method of collecting information from members of a FBCC in this age range. However, older adults who are inactive or underactive may need further encouragement and education in order to take advantage of such a facility. Since only a small proportion of older adults in this study reported being regularly physically active, it remains crucial to find ways to motivate this population to increase levels of daily activity.

LIMITATIONS

- small sample size
- volunteers
- self-reported data
- lack of diversity
- lack of internet access

REFERENCES

1. Centers for Disease Control and Prevention. Healthy Aging Program. (2006) (http://www.cdc.gov/aging).
2. Schutzer KA, and Graves BS (2004). Barriers and motivations to exercise in older adults. *Preventative Medicine*, 39, 1056-1061.
3. Musick, MA, Traphagan, JW, Koenig, HG, and Larson, DB (*2000).* Spirituality in Physical Health and Aging. *Journal of Adult Development,* 7, 73-86.
4. Bopp, M, Lattimore, D, Wilcox, S, Laken, M, McClorin, L, Swinton, R, Gethers, O, and Bryant, D (2006). Understanding physical activity participation in members of an African American church: a qualitative study. *Health Education Research*, 10, 1093-1105.
5. Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Questionnaire*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2006].
6. Topolski TD, LoGerfo J, Patrick DL, Williams B, Walwick J, Patrick MB (2006). The Rapid Assessment of Physical Activity (RAPA) among older adults. *Prev Chronic Dis;* 3(4): A118.