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Pirapon Leo Chaidarun
University of Vermont

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Exercise Promotion for Patients with Mental Health Conditions in Milton, VT

PIRAPON LEO CHAIDARUN MS3

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MENTOR: DR. MELISA GIBSON

Problem Identification

- ▶ Mental Health America ranks Vermont 3rd out of 50 states for providing access to mental health services.⁸
 - ▶ Yet of Vermonters diagnosed with mental illness, **42.3% do not receive mental health treatment.**⁸
 - ▶ The lack of treatment in such a high percentage of those with mental illness increases the importance of lifestyle modifications, such as exercise, in improving their wellness.
- ▶ **Depression:** Across the US since 2013, there has been a **33% increase** in the diagnosis of Major Depression.⁹
 - ▶ Diagnosis among adolescents has **increased by 63%.**⁹
 - ▶ Over 9 million commercially insured Americans have a diagnosis of depression, yet over **2 million of these patients do not seek treatment.**⁹
- ▶ **Anxiety:** It is estimated that **31.1%** of American adults will experience an anxiety disorder at some point in their lives.⁵
- ▶ Research shows that sustained low-intensity exercise stimulates the release of growth factors that promotes nerve cell growth in the hippocampus – which regulates mood – and thus can help relieve symptoms. However, those with mental illness have symptoms (depressed mood, lack of energy, reluctance to leave home) which add further obstacles to initiating exercise.⁴

Public Health Cost

- ▶ Vermont saw a suicide rate increase of 49% between 1999 and 2016 (increase in the US overall was 25% in that time period).³
 - ▶ Of people who died by suicide, over 90% of them showed symptoms of a mental illness.⁷
- ▶ \$193.2 billion in lost earnings per year in America is due to serious mental illness.⁶
- ▶ People with serious mental illness are the third most common cause of hospitalization in the US for both youth and adults aged 18-44.¹
- ▶ According to Dr. Robert Pierattini, chairman of psychiatry at the UVM College of Medicine, up to one-third of emergency department beds "in any number of our hospitals" are occupied by people who need inpatient psychiatric treatment, and can't get a bed.²
 - ▶ Consequently, UVMMC is spending \$21 million to build a facility for inpatient psychiatric beds in Berlin.²

Community Perspective

- ▶ Community Interviewees:
 - ▶ Louise George, LICSW – Clinical Social Worker at Milton, VT
 - ▶ Amy Rainville – Health Coach at Community Health Team at UVMMMC
- ▶ Themes from interviews:
 - ▶ “Exercise is one of the best ways to combat depression/anxiety, but also to prevent them as well” – Louise George.
 - ▶ The prevalence of mental illness is high, but especially in Milton, VT which has a rural population.
 - ▶ Some of the best ways to treat mental illness in those who have obstacles to exercise include going outside, getting a pet that you can take for walks, or using a warm pool for aerobic exercise.
 - ▶ Exercise may seem like a logical solution for mental health to those with a medical background, but may be a new idea to many patients who are unaware of the added benefits of staying active.
 - ▶ Mental illness often is accompanied by other chronic diseases, especially in the elderly, that can also be combated with exercise.

Intervention and Methodology

- ▶ Create a pamphlet containing information regarding:
 - ▶ Screening questions for depression (to help readers determine if they are at risk)
 - ▶ Screening questions for anxiety (to help readers determine if they are at risk)
 - ▶ Definition of depression/anxiety and its impact
 - ▶ Ways in which exercise can positively improve symptoms
 - ▶ Options for discussing with their provider or referrals to the Community Health Team/Counseling
- ▶ Distribute the pamphlet in the Milton Family Practice waiting areas and rooms for patients to read and take home.
- ▶ Tell providers of the pamphlets and follow up with them about effectiveness.

Results

- ▶ Pamphlet (Figure 1) created that attempts to draw attention visually and provide useful information about the benefits of exercise on mental health.
- ▶ There has been a positive response to the idea and practicality of this pamphlet from the Practice Supervisor, physicians, and staff of Milton Family Practice.
- ▶ The Director of the Office of Primary Care and Area Health Education Centers (AHEC) Program has expressed interest in distributing this pamphlet statewide via their Primary Vermont newsletter.

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Figure 1



Could Exercise Improve your Mental Health?

Over the past several weeks, have you:

- Had little interest or pleasure in doing things?
- Felt down, depressed, or hopeless?
- Been continually worried or anxious about a number of events in your daily life?

If so, you may be having symptoms of **depression**. If so, you may be having symptoms of **anxiety**.

Depression and anxiety are two highly prevalent mental health conditions and can often occur together. Anyone can feel down or anxious from time to time, but severe or consistent symptoms may indicate an underlying mental health concern. Research shows that sustained low-intensity exercise can benefit mental health. Being active stimulates the release of chemicals that promote nerve cell growth in the brain, which helps regulate mood and relieve symptoms.

First steps to begin exercising:

- **Ease yourself into a realistic exercise routine**
Getting started is the hardest part, even without added symptoms (low energy/anxiety). Start with doable goals, like a 10 minute walk daily, and steadily build over time.
- **Restart past exercise habits**
Many formerly active people only realize they are depressed/anxious once they stop exercising. If you've exercised previously, try getting back into past routines.
- **Make the exercise enjoyable**
Exercise does not require intense workouts at the gym. Hiking, swimming, cycling, yoga, and walking all provide benefits.
- **Get outside**
Simply getting outside and being in nature will make a big difference.
- **Socialize/Walk a dog**
Being with friends and family while exercising is a great way to socialize while staying fit. Having a dog will bring extra motivation to walk daily.
- **Keep track of progress**
There are many free mobile apps that can record progress made so that you have tangible data of your self-improvement. Monitor your weight and overall mood over time. A paper calendar is another way to log activity and progress.



Your primary care provider is an available resource for discussing symptoms of depression, anxiety, or any other mental health concerns. While exercise improves mental health, more severe symptoms may require medication as well. In Vermont, the local Community Health Team can also provide guidance for incorporating new exercises into your life through services such as a Health Coach. Ask your medical provider about a free referral.

Evaluation of Effectiveness and Limitations

Evaluation of Effectiveness:

- ▶ Set up follow-up surveys for providers at Milton Family Practice to determine how often patients refer to the pamphlet.
- ▶ Survey the patients who read the pamphlet about how effective they felt the information was, and how many were able to begin exercise.
- ▶ Follow up with patients who were able to initiate exercise whether or not they felt an improvement in their mental health.
- ▶ Monitor how many pamphlets are taken over a certain time period.
- ▶ Check with the social workers and Community Health Team if they believe the pamphlets have had an effect or are being mentioned.

Limitations:

- ▶ Patients who would benefit from the pamphlet may not read it due to where it is placed or if they are limited for time.
- ▶ If English is not a patient's first language or if they have any reading difficulties, it is less likely they would utilize the pamphlet.
- ▶ Patients that do not routinely visit the clinic cannot access the pamphlet.
- ▶ Due to limited space on a one page pamphlet, more detailed information cannot be provided.
- ▶ While it is possible to track how many pamphlets are taken, it is difficult to determine how many people read the pamphlet but do not take one.

Recommendations for Future Projects

- ▶ Expand the concept of the pamphlet for other conditions that could benefit from exercise, such as diabetes.
- ▶ Locate other offices and clinics in Vermont that would be able to display the pamphlets.
- ▶ Create a poster with similar information so that it can attract more attention.
- ▶ Make an online article with similar information for patients that do not come into the office frequently.

References

1. Agency for Healthcare Research and Quality, The Department of Health & Human Services. (2009). *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States, 2009*. Retrieved from http://www.hcup-us.ahrq.gov/reports/factsandfigures/2009/pdfs/FF_report_2009.pdf
2. D'Ambrosio, Dan. (April, 2018). "Vermont directs UVM Medical to use \$21M to help fix 'mental health care crisis'". Retrieved from <https://www.burlingtonfreepress.com/story/news/2018/04/18/uvm-medical-revenue-21-m-over-target-so-state-gets-direct-those-funds/515474002/>
3. Doyle-Burr, N. (2018, June 11). Mental health care in Vermont: 'It's just a never-ending battle'. Retrieved from <https://vtdigger.org/2018/06/11/mental-health-care-vermont-just-never-ending-battle/>
4. Harvard Health Letter. (April, 2018). "Exercise is an all-natural treatment to fight depression". Retrieved from "<https://www.health.harvard.edu/mind-and-mood/exercise-is-an-all-natural-treatment-to-fight-depression>"
5. Harvard Medical School (2007). National Comorbidity Survey (NCS). (2017, August 21). Retrieved from <https://www.hcp.med.harvard.edu/ncs/index.php>. Data Table 1: [Lifetime prevalence DSM-IV/WMH-CIDI disorders by sex and cohort](#).
6. Insel, T.R. (2008). Assessing the Economic Costs of Serious Mental Illness. *The American Journal of Psychiatry*. 165(6), 663-665
7. Isometsa, E.T., (2001). Psychological Autopsy Studies - A Review. *European Psychiatry*, 16(7), 379-85. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11728849>
8. Mental Health Resources in Vermont. Laurel House, Inc. (2019) Retrieved from <https://www.rtor.org/mental-health-vermont/>
9. "Two million commercially insured Americans diagnosed with major depression are not seeking any treatment" (March, 2019). Retrieved from <https://www.bcbs.com/the-health-of-america/infographics/two-million-commercially-insured-americans-diagnosed-major-depression-not-seeking-treatment>
10. Vermont Department of Health: Mental Health Scorecard. (January, 2018). Retrieved from <http://www.healthvermont.gov/scorecard-mental-health>