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TACKLING OBESITY IN RURAL VERMONT

COMMUNITY HEALTH PROJECT

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Family Medicine- Rotation 4
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PROBLEM & NEED

• Obesity is a growing issue across the United States
  • Over 2/3 of the US population is overweight (BMI= 25.0 – 29.9) or obese (30+)
  • 38% of the country is obese

• Factors contributing to obesity³:
  • Poor nutrition
  • Decreased physical activity levels
  • Poor sleep
  • Low percentage of breastfeeding
  • Lack of access to healthy foods

  Bottom line = Total calories in > Total calories burned

• Adults in America eat 31% more calories today than in 1975

• Vermont struggles with obesity as well:
  • Vermont currently has a 25.1% adult obesity rate²
  • 35.4% of adults are overweight⁵

• Active community interventions to prevent obesity are necessary nationwide
PUBLIC HEALTH COSTS

• Obesity increases risk for a number of diseases including numerous cardiovascular, gastrointestinal, respiratory and endocrine diseases including (but not limited to) type 2 diabetes, GERD, hypertension, stroke, asthma, obstructive sleep apnea and hyperlipidemia\textsuperscript{1,3}

• It is linked to 152 billion dollars of direct costs and 73 billion dollars in preventable costs\textsuperscript{4} per year:
  • Increased ER visits
  • Lost time at work
  • More prescriptions required due to increased number of medical conditions

• Public health cost of obesity in Vermont was calculated to be about $141 million dollars/year in a study done in 2004\textsuperscript{6,7}
COMMUNITY PERSPECTIVE ON ISSUE/SUPPORT FOR ISSUE

• Spoke with preceptors and a staff person at the community health center to gain perspective that obesity was a very big issue in this area.

• Per interview with Anne Somers, Clinical Coordinator & Lisa Moore, Nurse Manager:
  
  • Biggest issues in the community right now include chronic pain, diabetes mellitus, cardiovascular issues, obesity and COPD. Of these, obesity is the biggest issue and is connected with a lot of the other health problems.

  • Both Anne and Lisa stated a brochure on simple health diet and exercise tips would be helpful to have around in the office to give to patients. Biggest topics to include would be how to break down exercise into 5-10 minute intervals, diet tips, websites and apps in addition to the importance of drinking water, how much to snack and how to exercise if you have hip or knee pain.

  • Barriers to achieving a healthy weight include time, ailments such as bad hips or knees, access to healthy food (cost is an issue), transportation issues (can’t get to healthy food source venues such as Veggie VanGo) or a lack of knowledge of how to prepare healthy, tasty foods.
ANONYMOUS INTERVIEW FROM COMMUNITY MEMBER

- Most pressing health issues include poor diet, not enough exercise
- Body type of students and people over the years have changed
- She mentioned how obesity led to multiple other health issues (knee/joint problems)
- Factors that compound the issue of obesity:
  - Long winters: being indoors without being able to go outside
  - Expensive health clubs & boot-camps [initiation fees for joining]- Mill; St. Johnsbury academy
  - It takes a lot of time to prepare healthy foods; families are very busy nowadays and don’t eat together
  - Schools have a lot of responsibility nowadays to prepare delicious looking lunches that are healthy
    - Some schools also don’t qualify for Farm → School programs (Such as Danville)
  - Parents unaware of what are unhealthy vs. healthy foods
  - People in community unaware of programs such as Farm to Table or assistance-ship programs that exist to buy Farmer’s Market foods if you can’t afford healthy options

⇒ Schools have tried to institute nutrition policies as parents were sending students to school with unhealthy snacks such as twinkies with minimal results
⇒ Simplified tips on a brochure would be helpful
METHODS & INTERVENTION

• Perform interviews with community members
  • Interview with Nurse Manager Lisa Moore here at Danville Health Center
  • Interview with Health Care Coordinator Anne Somers here at Danville Health Center
  • Interview with a community member

• Make a brochure with websites & links & diet/exercise tips broken down into simple ways
  • Print that out
  • Keep it in rooms here at Danville Health Center

• Make a survey to evaluate effectiveness: What worked? What didn’t? More people that came into the clinic? Suggestions for improvement? Other ideas?
RESULTS

• Collaborated with Nurse Manager at DHC Lisa Moore and Health Care Coordinator Anne Somers in addition to other staff here at DHC to come up with a finalized product

• Made and distributed 50 pamphlets for simple steps to take to improve diet and physical activity around the clinic (in provider’s offices, in the exam rooms, etc.)
**BROCHURE/PAMPHLET CREATED & DISTRIBUTED AT CLINIC**

### Useful Resources

- **Websites:**
  - If you want to just get started...
  - Diet
  - For general information & tools:
  - To find healthy recipes:
  - What's Cooking?
    - SuperTracker: [www.supertracker.usda.gov](http://www.supertracker.usda.gov)
    - Exercise: [www.fitness.gov](http://www.fitness.gov)

### FAQs

**I have arthritis and my knees hurt when I go walking. How should I increase my level of exercise?**

Swimming is a great, low-impact form of exercise.

**How much water should I drink during the day to stay hydrated?**

Drink enough to keep up with your activity level—about 6 to 8 glasses of water or more.

**How should I snack during the day?**

Healthy snacks (such as cheese, crackers, veggies or fruit) in 2-hour intervals can help keep hunger at bay.

### Further steps:

- **See Exercise & Fitness Resources brochure here for more physical activity ideas.**
- **Contact a staff member for additional information.**
- **Contact your doctor about a referral to a nutritionist.**

### Contact

- Danville Health Center
  - 281 Cedar Lane
  - Danville, VT 05828
  - 802-684-2275

### HEALTHY EATING & LIVING

**Benefits that last a lifetime.**

- **Healthy eating and living:****
  - **Nearby yoga sites:**
    1. **Hunt Space Yoga & Movement Center:**
       446 Railroad St., St. Johnsbury
       802-634-3598 [17 class free; open all days]
    2. **St. Johnsbury Center for Wellbeing:**
       364 Railroad St., St. Johnsbury
       802-746-1236 [more info](http://www.stjohnsbury.org)
    3. **Websites & Apps to track your fitness:**
      - MyFitnessPal [Website & App]
        - [www.myfitnesspal.com](http://www.myfitnesspal.com)
      - SuperTracker [Website & App]
        - [www.supertracker.usda.gov](http://www.supertracker.usda.gov)
      - [Weekly, normal or expect mode]

### If you want to expand your existing exercise regime...

- **There are many online videos of aerobic exercises of varying length and intensity:**
  - [Daily Burn on Hula](http://www.dailymb.com)
  - [Look up workout trainer app on your phone.]
  - **Sign up for a yoga class.**

### Small ways to make a difference

- **Tips:** Regular aerobic exercise can help maintain a healthy weight!

### Key Facts about nutrition

- **1 pound of weight = 3500 calories (general estimate)**
- **Calories in 1 can (12 oz) of soda = 150**
- **Any weight loss can help!**
  - Only 5-10% weight loss is needed to see health benefits
  - For a 200 pound person:
    - **5% = 10 pounds**
    - **10% = 20 pounds**
  - **30 minutes of aerobic exercise (running, walking, etc.) is recommended for good health.**

### Thirty minutes a day can be broken up into:

- **5-minute intervals**
- **10-minute intervals**

**Only you need to cut back by 500 calories a day to lose a pound in a week.**

**500 calories:**

- 3.25 cans of Coca-Cola
- 2.5 cups of tea
- 2.5 medium size donuts

**Quick Tip:** Try substituting a glass of water for a can of soda/beer/juice each day.
EVALUATION OF EFFECTIVENESS & LIMITATIONS OF INTERVENTION

• Discussed plan for evaluation with Lisa Moore and Anne Somers

• Made a 6 question paper survey (which could be administered via phone) to assess if patient’s found brochure useful:
  • Questions included: Did you use the materials? Were they helpful? What have you done differently because of the material? Do you have any suggestions for what could have been done differently? Other comments or suggestions
  • The surveys will be placed in the clinic rooms and will be given with a stamped address about where to return the survey at the same time as the brochure

• Conduct phone interviews using paper survey questions: Speak with patients about whether they found brochures helpful and what they would have liked to seen done differently or added

• After a reasonable amount of time (possibly 1 month), an in-office 3-question survey could be given to assess usefulness of intervention to providers:
  • Were brochures used?
  • Were they helpful?
  • Suggestions for improvement

• Due to the many socioeconomic, cultural and genetic factors that influence obesity, it is hard to address this many intersected concerns in one brochure
SURVEY CREATED TO DETERMINE EFFECTIVENESS OF BROCHURE
RECOMMENDATIONS FOR FUTURE INTERVENTIONS

• Review results of surveys
• Edit brochure as needed based on survey results
• Develop a 1 hour workshop on learning how to take small steps to better health with not only brochures but small demos of exercises to do and motivational videos
• Possibly develop more brochures on a more in-depth look at how to address specific topics addressed in my brochure- i.e. separate brochures for diet and exercise
REFERENCES


Note: All images were checked to be under no copyright restrictions (i.e. they were labelled for reuse or reuse with modification on google images) or cited (see Danville Health Center image on brochure and survey; an image that was provided to me for use by the practice manager but taken by an organization called Flek)