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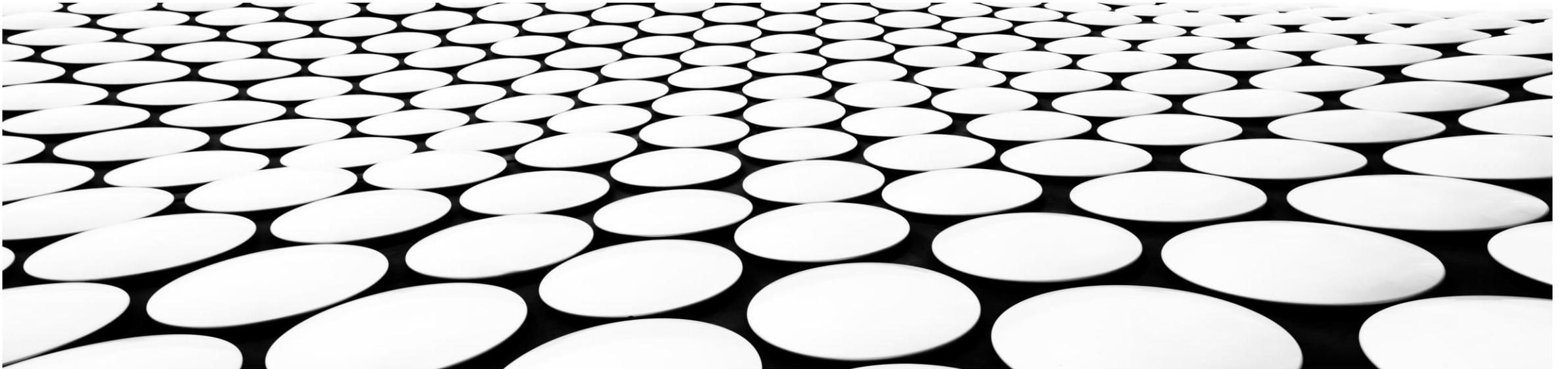
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ADDRESSING MALADAPTIVE COPING MECHANISMS IN RESPONSE TO EXTERNAL STRESSORS AND NEGATIVE AFFECTIVE STATES IN PRIMARY CARE SETTINGS

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NUVANCE HEALTH, NEWTOWN PRIMARY CARE CLINIC, DR. EURICA CHANG PRECEPTOR



PROBLEM IDENTIFICATION AND DESCRIPTION OF NEED

- Individuals respond to negative affective states, including depression and bipolar disorder, and external stressful events with a wide variety of adaptive and maladaptive coping mechanisms or a mixture of both
- Maladaptive coping mechanisms include:
 - substance use and binge eating in response to negative affective states
 - avoidance or withdrawal behaviors, denial, aggression, and rumination
- Explicit identification of both adaptive and maladaptive coping mechanisms amongst patients in primary care settings would be beneficial for patients
- Understanding how patients respond to external stressors and adapt to negative affective states, including depression, mania, hypomania, low self-esteem, and anxiety, is of utmost importance to recognize patients at risk of substance use, binge-eating, and suicidal behaviors and to take steps to mitigate negative effects [1]
- Clear association between negative affective states like depression and bipolar disorder, maladaptive responses, and resulting negative health outcomes over the long run [7, 8, 9, 10]

PUBLIC HEALTH COST

- We will focus here on the costs of quantifiable maladaptive coping mechanisms, namely substance use disorders and eating disorders
- The below data show the economic and social impact of these disorders that arise in part as maladaptive coping mechanisms, although we recognize the inherent complexity of these behaviors with underlying genetic susceptibility and environmental factors contributing to these behaviors.

Substance Use Disorders

- Total annual estimated attributable substance use disorder (SUD) medical cost in American hospitals was \$13.2 billion, including [5]:
 - \$4 billion for inhalant-related disorders
 - \$7.6 billion for alcohol-related disorders
- Estimated 17.7 million deaths were related to smoking between 1964-2012 [4]
- 240 out of 399 victims of sudden-death studied over the course of 1 year in one state had at least one mental health or substance use disorder documented in a recent medical record [3]

Eating Disorders

- Total economic costs associated with Binge Eating Disorder, Bulimia Nervosa, and Anorexia Nervosa estimated to be \$64.7 billion 2018-2019, equivalent to \$11,808 per affected person [6]
- Reduction in wellbeing associated with eating disorders valued at \$326.5 billion

LOCAL PERSPECTIVES ON PROJECT

Physician at Newtown Primary Care Health Clinic:

“Looking at patient coping mechanisms more in detail would be useful. I do not think I have heard of any screening tool that exists for adaptive and maladaptive coping behaviors.”

“Maladaptive coping behaviors and responses to different situations are very common amongst some patients.”

“Any sort of questionnaire for coping would have to be standardized and studied like the screenings used for substance use disorders and depression.”

Community member in Newtown, Connecticut:

“I wish I had more time to discuss my coping responses with my healthcare providers instead of being told to do and not do certain things. I don’t cope with stress in the best way all the time because I’ve always found quick fixes. But I’m open to learning new methods that can adapt to my lifestyle.”

Goals:

GOALS AND INTERVENTIONS

- To develop a standardized approach in eliciting adaptive and maladaptive coping mechanisms of patients with known acute or chronic stressors or negative affective states
- Enable provider to deliver targeted therapeutic intervention or refer to appropriate outside providers
- Specifically aim to reduce or prevent maladaptive substance use or eating patterns via:
 - Bringing to conscious awareness feelings and drives for maladaptive behaviors amongst susceptible patients by answering questionnaires and enabling such individuals to discuss responses explicitly and openly with provider
 - Providing patients with the skills and knowledge needed to prevent or reduce maladaptive coping and foster the development of adaptive coping mechanisms

Interventions:

- Develop a basic questionnaire to elicit adaptive and maladaptive coping mechanisms used by patients in primary care settings, especially those with susceptibility to substance use or eating disorders
- Provide educational material to patients at risk of maladaptive mechanisms, including substance use and eating disorders, based on responses to a basic questionnaire

Methodology:

- Create a succinct, 4-question survey similar in format to PHQ-2/9 but with additional space for patients to discuss adaptive and maladaptive coping mechanisms in words if desired as a framework to design future questionnaires
- Develop appealing, informational educational material 1 page

PROPOSED FRAMEWORK FOR QUESTIONNAIRE

- Below is a tentative framework of a brief questionnaire that can be given to patients, especially those considered at risk of adopting maladaptive coping mechanisms.

| | Not at all | Some days | Most days | All days |
|--|------------|-----------|-----------|----------|
| I respond to negative, internal emotional states with actions and behaviors that I and/or others perceive to be harmful. | | | | |
| I respond to negative, internal emotional states with actions and behaviors that I and/or others perceive to be healthy. | | | | |
| I respond to external stressors with actions and behaviors that I and/or others perceive to be harmful. | | | | |
| I respond to external stressors with actions and behaviors that I and/or others perceive to be healthy. | | | | |

- We would also give room for patients to further describe their healthy and harmful coping mechanisms in words prior to the beginning of their appointments. We would also further clarify the meaning of negative, internal emotional states and external stressors.
- Questionnaires have already been developed to measure coping mechanisms in research studies. [2]
- A more succinct questionnaire than what already exists is needed due to time constraints in primary care settings.

PATIENT EDUCATIONAL MATERIAL SAMPLE

Developing Nurturing and Healthy Responses to Acute and Chronic Stressors and Symptoms of Anxiety, Depression, Mania

Sounds easier said than done, but why do we need to strive to respond to overbearing internal feelings and/or external stressful situations with what we call adaptive coping mechanisms instead of maladaptive coping mechanisms? What even are adaptive coping mechanisms?

Life throws challenges our ways, day after day. Sometimes, some of us respond with drinking alcohol to an unhealthy extreme or binge-eating unhealthy, processed foods, or even using other recreational drugs that affect our health negatively. These are some examples of unhealthy, maladaptive coping mechanisms. Sometimes we even do these things without consciously recognizing that we are doing them and why.

Adaptive coping mechanisms that represent healthy and nurturing responses to the incredible challenges life presents include watching comedy shows or cracking jokes, journaling about our emotions and daily goings-on occasionally, practicing spirituality whether that be mindfulness, meditation, or traditional religious practices, mild to moderate aerobic exercise and weightlifting, developing a hobby or two that spark passion in you, connecting with individuals around you, and more. What are some adaptive coping mechanisms that you already practice in your life, if any, that represent your resilience in the face of life's challenges?

Is it that simple? Adopting adaptive mechanisms will lead to better healthy, you think?

It is most definitely not that simple. We are all different from each other in one way or another. Some of us are exposed to unique traumatic experiences at different timepoints that shape our outlooks on life. Others grow up in widely different family environments, some nurturing, others not so much. All of us as individuals have our brain networks that are shaped by genetics and life experiences, sometimes predisposing us to develop unhealthy substance use or eating patterns.

Despite these differences, we all can take steps to recognize when we are on the verge of binge-eating as a response to stress, for instance, or using an excessive amount of alcohol to respond to feelings of depression. We can turn away from our maladaptive approaches to more adaptive ones. We will not always be perfect. But we can take steps together to move towards healthy lifestyles.

What are some maladaptive coping behaviors that you have adopted recently or at some point in your life, from unhealthy eating patterns to withdrawal from friends and family to excessive and unhealthy substance use?

What do you think you can do to recognize different patterns of maladaptive behavior and stop them in their tracks? What strategies could you adopt to transition from unhealthy responses to stressors or internal mood states to nurturing responses?

We are here to work with you in partnership to take on life's challenges *TOGETHER*.

EFFECTIVENESS AND LIMITATIONS

Below discussion only based on proof of concept due to limited time-frame of clerkship rotation:

Evaluation of effectiveness:

- Qualitatively track patients' experiences in their health records longitudinally, specifically identifying episodes during which individuals used substances or adopted maladaptive eating patterns as a response to a stressor and/or negative affective states or where individuals recognized their triggers and were able to avoid these behaviors after implementation of this questionnaire and targeted behavioral interventions, including educational material
- As an alternative to qualitative approach, could pilot a program that would track substance use and eating disorder behaviors quantitatively (frequency of behaviors, context driving the behaviors, etc.) before delivering first questionnaire and then tracking same behaviors as a response to educational material, as well as targeted interventions by healthcare practitioner

Limitations of this resource:

- Limited time to perform additional questionnaires and targeted therapies in primary care settings
- Confounding factors driving maladaptive coping mechanisms that can limit effectiveness to study direct effect of these materials, including heterogeneity of underlying functional neural connectivity networks between individuals and underlying brain structures, possible endocrinopathies driving eating disorders, varying income levels and exposure to a multitude of home and community environments difficult to control for (such as food deserts, current close networks of individuals using specific substances, etc.), concurrent medication treatments and therapy modalities from other providers, including psychiatrists, counselors, and substance use programs

RECOMMENDATIONS FOR FUTURE PROJECTS AND INTERVENTIONS

Potential for application of related projects in primary care settings is wide and broad:

- Establish regular screening of adaptive and maladaptive coping mechanisms as a regular part of primary care practice for all patients via questionnaires or specific questioning on part of provider
 - Screen every patient specifically with negative affective states like depression, anxiety, and bipolar disorder for explicit substance use or binge eating episodes
 - Provide patients with questionnaires to describe activities that indicate resilience and ability to adapt to external stressors and negative internal affective states
 - Could establish primary care physician-led group therapy for specific maladaptive coping mechanisms, such as binge eating or substance use, as a complement to individual patient appointments
 - Provide opportunities for patients with substance use disorder or binge eating to contact provider's office at moments when deciding to carry out maladaptive coping mechanisms in order to prevent unhealthy behaviors; alternatively, could allow for patient to contact provider's office when patient successfully recognizes triggers for maladaptive coping and does not carry out maladaptive behavior
 - Develop further multimedia educational materials from handouts to personalized videos that patients can turn to when starting or continuing maladaptive coping mechanisms
 - Monitor progress longitudinally via patient charts and quantify behavior changes (for instance, frequency of alcohol use) over time as an indication of adapting positive coping mechanisms

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INTERVIEW CONSENT FORM

- Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.
- Yes Name: Physician at Newtown Health Primary Care Clinic
- Yes Name: Local community member