

## ORIGINAL ARTICLE

# Effectiveness of community-based mental health education programs on mental health issues awareness level among students in Jordan

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## ABSTRACT

**Introduction:** This study examines the effectiveness of Life in My Days, Inc community-based mental health education programs on the awareness of mental health issues among students between the ages of 15-24. **Methods:** This study used a descriptive correlational, cross-sectional design using a self-administered online questionnaire developed by authors which consists of brief psychological status and community based programs effectiveness measurements. **Results:** Attending community-based awareness programs have a positive effect on the level of awareness about mental health issues. Data revealed that 70.2% were satisfied with the information given at different events. Overall program quality rating was good among 77.9% of them, 56.7% agreed that the programs' materials were relevant, and 66.3% (n= 69) of them acknowledged that they gained knowledge and skills. The tendency to recommend similar events to a friend was higher among those who have suicide ideation 94% (n= 33) than those who don't 68.1% (n= 32), and higher among those who lost a loved one from suicide 85.7% (n= 6) than those who have not 78.7% (n= 59). **Conclusion:** The risk of mental illnesses depends on social factors; therefore its prevention strategies need to address the setting of each of the identities carried by individuals as a necessary step in adapting processes and interventions aiming to achieve the ultimate outcome of better mental health among them.

**Keywords:** Mental health, awareness, community-based, suicide, anxiety

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## INTRODUCTION

According to the World Health Organization (WHO), 1 in 4 individuals will live with a mental illness at some point in their lives. Although over 450 million individuals currently live with mental illness, only one third will seek professional support due to lack of awareness, access, and resources (1).

In addition to the rising rates of mental illness, suicide rates are also rising and present a prominent public health issue, and is deemed a global priority (2). Various institutions, including WHO, recommend directing education campaigns to the general public to develop suicidal crises and depression awareness (1-3).

Students, are one of the most vulnerable populations when it comes to suicide and living with mental health

challenges such as mood disorders (4). Moderate to severe depression is common among students (6), 13% of students complain of anxiety, 14% have an eating disorders, and 8% of them are misusing substances (5). In addition, suicidal behaviors and thoughts are highly diffused among students significantly (7). In Jordan, a national cross-sectional study in 2012 showed that 66% of the Jordanian youth population frequently experienced feelings of sadness, 49% felt loss of joy, and 43% felt loss of hope in living backing the global statistics for the prevalence of Mental Health challenges and suicidality within students (8).

Mental illnesses are believed to be triggered or exacerbated by multiple stressors in students' lives: intense academic pressures, the harmonizing of social life with academic responsibilities, and separation from their families and having to deal with more life responsibilities in their college years (3). Mental health challenges among students are also linked with many sociodemographic factors, such as poverty, living alone, living with parents, and perceived social support (4,9-12). Literature proposed that poor students are twice more susceptible to develop mental health challenges

(10). Living alone was found to be a risk factor for mental health challenges (4). Additionally, living with parents was found to be a vital risk factor for suicidal thoughts and behaviors (9,10).

Students mood state has been strongly associated and significantly interferes with academic performance. Dysphoric students showed impairment in their concentration and thoughts compared to non-dysphoric students, were slower than non-dysphoric students reading the passage task and in answering lecture comprehension questions, and were found to have impaired reading strategies, understanding abilities, and proofreading (13). Thus, increasing the awareness level about mental health challenges could help students defeat and overcome their mental health challenges, most notably dysphoric mood (depression and anxiety) (12).

Lower levels of awareness about mental health challenges could be a factor to the development and access to treatment of mental health challenges (9,10). An international study examined mental health service use and estimated how various factors are associated with professional support-seeking and access to mental health (9). In this study, a web-based survey was administered to cover 2,785 university students. The results show that 37% of students were living with depressive symptoms and 84% of students living with an anxiety disorder did not receive or seek professional support, despite the lack of financial barriers and access to short term psychotherapy and counseling in their universities. This phenomenon of not seeking treatment and support was found to be related to lack of awareness about mental health disorders, available services, and insurance coverage (9).

As long as students continue to live with mental health challenges their working skills, time management, and resource management abilities will be impacted negatively and will require additional academic support to address this impact(4,14). In conclusion, it is vital to increase students awareness about mental health challenges, and available services and support.

## **MATERIALS AND METHODS**

### **Design**

This study used descriptive correlational, cross-sectional study design to examine the effect of community-based mental health education programs on the awareness of mental health issues among university students, as well as school students. Data was collected using a self-administered online questionnaire.

### **Setting**

The Jordan Chapter of Life in My Days, Inc conducted a series of community based mental health awareness programs in the period between 14th March, 2017 till

24th February, 2018. In total, thirteen programs were conducted during that time period discussing various topics about mental health challenges, forms of support and treatment, myths of mental health challenges, suicidality, eating disorders, self image related disorders, yoga and mindfulness, emotional intelligence, and various topics around recovery.

Programs were as following :

1. Behind the Curtain event; Awareness event about mental health and most common disorders.
2. A gasp for Air; Awareness event about stress in university years.
3. The Myths about Depression; Educational event about depression, causes and management
4. Spotlight; Educational event about ADHD, autism and sleeping disorders.
5. 13 Reasons Why He Did Not; Story of a suicidality survivor, and founder of Life in My Days, inc.
6. Take Charge of Your Life Workshop; A workshop to empower individuals to manage their life in a self loving and self aware manner.
7. Elements of the Soul workshop; A workshop about the elements of our soul and tools to cope with challenges we face in our lives.
8. Body Memory Workshop; A workshop about the relationship between the body and soul, exercises were done so individuals would know how to meditate and connect on their own.
9. Emotional Intelligence workshop.
10. Ramadan Iftar; An awareness event about spirituality and mental health, eating disorders and the role of social workers in mental health awareness, along with a nice dinner meal for all participants to break their fast in the month of Ramadan.
11. 13 Reasons Why Art Gallery; An art gallery that showcased local artwork which displayed the most common factors that could lead to suicide.
12. The Last Hope Summit; A full day summit with panel discussions and workshops to get individuals aware about suicidality, it's causes and the proper way to intervene.
13. Mental Health Movie Night; Screening of a movie with a discussion afterwards to know how media can affect our mental health.

These events took place in the University of Jordan, Jordan University of Science and Technology (North of Jordan) and various areas around Amman. The questionnaire was distributed using several methods, such as: online, email, and phone to fill the self-reported questionnaire.

### **Sample and sampling**

Once the series was completed, a convenience sample of 200 people who had attended at least one of the aforementioned programs were asked to fill the questionnaire using several methods: online, email, and

phone to fill the self-reported questionnaire. Of those who were asked, 104 agreed to participate in this study, with a response rate of 50%.

### Instruments

The data was collected using both Arabic and English versions of the questionnaire, allowing respondents to select the language they were most comfortable with. Questions were developed by researchers using English language and the WHO guideline for translation and tool adaptation were used to prepare the Arabic version. Pilot testing was conducted to assess the clarity, suitability, and understanding of the selected instruments. On the basis of the participants' positive response, no major modification was added to the questionnaires' items.

Content validity was done by a research and community-based programs expert to ensure that the developed tool is measuring what it is assumed to measure. The tools were as follows:

1. First part: demographic profile including gender, age group, specialty, and number of siblings.
2. Second part: brief psychological status. Whereas almost all the community-based programs were aiming to decrease and resolve issues related to suicide, depression, and stress, this part was developed to assess the overall stress, depression, and suicide status among participants. Thus, enabling measuring the effectiveness of the programs.
3. Third part: community-based programs effectiveness measurements. This part aimed to measure the degree in which the programs influence the participant. This part contains six questions that measure selected dimensions; overall satisfaction about information; overall program quality rating; program invitation tendency to a friend; relevancy of program materials; goal accomplishment; clearness and organization; new knowledge and skills; and topic understanding. Responses are measured on five-point Likert-type ranging from 1 to 5.

## RESULTS

### Descriptive

Results showed that (Table 1) most of the sample were females 77.9% (n=81), while only 22.2% (n= 23) were males. The majority of the sample 61.5% (n= 64) were in the age group from 20 to 24 years old, which implies most were university students. The number of siblings ranged from 0 to 10 with a mean of 3.9 (SD= 1.8), and the mode was 5 siblings.

More than half of participants 54.8% (n= 57) were complaining of stress only under specific situations such as exams, while 29.8% (n=31) were always suffering

from stress, and only 15.4% (n= 16) did not complain from stress at all. Regarding losing a loved one from suicide, most of the participants 87.5% (n= 91) reported that they did not lose any loved one from suicide. Nearly half of participants 43.3% (n= 45) reported having suicidal ideation at least once in their lives.

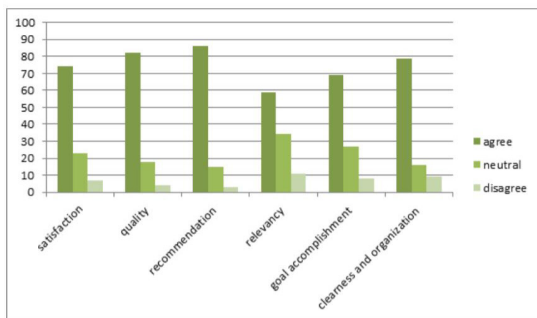
**Table 1:** Demographics

| Variables                   | n=                       | %  |      |
|-----------------------------|--------------------------|----|------|
| Gender                      | Male                     | 23 | 22.1 |
|                             | Female                   | 81 | 77.9 |
| Age                         | 15-19                    | 19 | 18.3 |
|                             | 20-24                    | 64 | 61.5 |
|                             | 25-29                    | 14 | 13.5 |
|                             | 30-34                    | 2  | 1.9  |
|                             | 35-39                    | 0  | 0    |
|                             | 40-44                    | 3  | 2.9  |
|                             | 45-49                    | 1  | 1.0  |
|                             | More than 50             | 1  | 1.0  |
| Specialty                   | Postgraduates            | 63 | 60.6 |
|                             | Health                   | 25 | 24.0 |
|                             | Scientific               | 10 | 9.6  |
| Stress                      | Humanistic               | 5  | 4.8  |
|                             | Not at all               | 16 | 15.4 |
|                             | Always                   | 31 | 29.8 |
|                             | Under specific situation | 57 | 54.8 |
| Lost loved one from suicide | Yes                      | 13 | 12.5 |
|                             | No                       | 91 | 87.5 |
| Suicidal ideation           | Yes                      | 45 | 43.3 |
|                             | No                       | 59 | 56.7 |

### Effectiveness measurements

Community-based awareness programs effectiveness was measured using selected dimensions: overall satisfaction about information, overall program quality rating, program invitation tendency to a friend, relevancy of program materials, goal accomplishment, clearness and organization, new knowledge and skills, and topic understanding. The results revealed that (fig. 1) most of the participants were satisfied and tend to be affected positively toward a better understanding of mental health issues and practicing more positive habits related to mental health. In details; 70.2% (n= 73) of the sample were satisfied with the information given at different events. Furthermore, 76% (n= 79) of the sample stated that topics were clear and organized, 69.2% (n= 72) of them agreed that they understood the introduced topics well, and 66.3% (n= 69) of them informed that they acquired new knowledge and skills. Overall program quality rating was good among 77.9% (n= 81) of the sample. Also, 56.7% (n= 59) of the sample agreed that the program's materials were relevant, and 66.3% (n= 69) of them reported that the goals of programs were

accomplished in their opinion.



**Figure 1: Effectiveness measurements.** These items reflect the degree in which the programs influence the participant. Responses are measured on five-point Likert-type ranging from 1 (strongly disagree) to 5 (strongly agree). Then transformation of data was done considering that 1 (strongly disagree) and 2 (disagree) responses as disagree, and 4 (strongly agree) and 5 (agree) responses as agree.

**Differences in demographics related to effectiveness measurements**

To examine the differences in gender, age, specialty, losing a loved one from suicide, suicide ideation, and stress level related to effectiveness measurements (overall satisfaction about information, overall program quality rating, program invitation tendency to a friend, relevancy of program materials, goal accomplishment, clearness and organization, new knowledge and skills, and topic understanding) Chi-square test was used, setting significant point at alpha < 0.05. Results showed that there was a significant difference ( $X^2 = 8.5, P = 0.04$ ) between males and females regarding overall program quality rating. Males gave a higher rating, with 77.3% (n= 17) of males rating the overall program quality as good. Also, there was a significant difference ( $X^2 = 12.2, P = 0.02$ ) between males and females regarding the relevancy of program materials. Material relevancy was higher among females; 48.4% (n= 31) of them reported that relevancy of program materials was good.

In addition, there was a significant difference between age groups related to overall satisfaction about information ( $X^2 = 39.5, P = 0.02$ ), the highest satisfaction level was observed among the age group between 20 and 24 years old; 80.9% (n= 51) of them reported high satisfaction

level.

There was a significant difference in program invitation tendency to a friend between those who have or have not had suicide ideation ( $X^2 = 9.8, P = 0.04$ ), and between individuals who have lost and who did not lose a loved one from suicide ( $X^2 = 13.4, P = 0.009$ ). The tendency to recommend similar events to a friend was higher among those who are living with suicide ideation 94% (n= 33) than those who don't 68.1% (n= 32), and higher among those who lost a loved one from suicide 85.7% (n= 6) than those who have not 78.7% (n= 59).

**DISCUSSION**

The purpose of this study was to examine the effectiveness of community-based programs on mental health issues awareness level among students. The results revealed that all the aforementioned effectiveness measurements were relatively high, which indicates that awareness programs effectively, and positively contribute to the awareness level about mental health issues. Also, the results assert that these programs play a vital role in primary care level, specifically in preventing mental health challenges. These results are congruent with the results of many studies such as the study done between 2006 and 2009 to measure effect of the GLS (Garrett Lee Smith Memorial) Suicide Prevention Program on Suicide Attempts Among Youths, in which more than 79000 suicide attempts may have been averted during the period studied following implementation of the GLS program (15).

Also, a training program that was done for students in the University of Jordan showed high efficacy in decreasing shyness and depression (16). Moreover, the results revealed that such programs were more beneficial for individuals living with suicidal ideation and those who have lost a loved one from suicide; which falls in line with the mission of Life in My Days, Inc to reach the most marginalized individuals within the community. Results showed that the aforementioned group of people were the highest recommenders for such programs. Thus, such programs could help people to support their loved ones

**Table II: Differences in demographics related to effectiveness measurements**

| Demographic                 | Overall satisfaction about information |      | Overall program quality rating |      | Program invitation tendency to a friend |       | Relevancy of program materials |      | Goal accomplishment |     | Clearness and organization |     | New knowledge and skills |      | Topic understanding |      |
|-----------------------------|--|------|--------------------------------|------|---|-------|--------------------------------|------|---------------------|-----|----------------------------|-----|--------------------------|------|---------------------|------|
|                             | Chi test                               |      | Chi test                       |      | Chi test                                |       | Chi test                       |      | Chi test            |     | Chi test                   |     | Chi test                 |      | Chi test            |      |
|                             | X <sup>2</sup>                         | P    | X <sup>2</sup>                 | P    | X <sup>2</sup>                          | P     | X <sup>2</sup>                 | P    | X <sup>2</sup>      | P   | X <sup>2</sup>             | P   | X <sup>2</sup>           | P    | X <sup>2</sup>      | P    |
| Gender                      | 4.9                                    | 0.3  | 8.5                            | 0.03 | 7                                       | 0.1   | 12.2                           | 0.02 | 3.4                 | 0.5 | 3.3                        | 0.3 | 7.1                      | 0.1  | 8.8                 | 0.07 |
| Age                         | 39.5                                   | 0.02 | 23.4                           | 0.2  | 26.9                                    | 0.3   | 10                             | 1    | 11.8                | 1   | 12.1                       | 1   | 21                       | 0.6  | 12.9                | 1    |
| Specialty                   | 7.3                                    | 0.8  | 7.2                            | 0.6  | 7.6                                     | 0.8   | 25.9                           | 0.01 | 7.9                 | 0.8 | 9.7                        | 0.5 | 11.3                     | 0.5  | 11.3                | 0.5  |
| Stress                      | 5.8                                    | 0.7  | 5.3                            | 0.5  | 14.4                                    | 0.07  | 13.6                           | 0.09 | 11.9                | 0.1 | 13.3                       | 0.1 | 5                        | 0.8  | 8.9                 | 0.4  |
| Lost loved one from suicide | 1.1                                    | 0.9  | 2.2                            | 0.5  | 13.4                                    | 0.009 | 5.4                            | 0.3  | 1.3                 | 0.9 | 2.2                        | 0.7 | 6.6                      | 0.2  | 3.8                 | 0.4  |
| Suicide ideation            | 2.3                                    | 0.7  | 3.8                            | 0.3  | 9.8                                     | 0.04  | 2.3                            | 0.7  | 6.4                 | 0.2 | 3.4                        | 0.5 | 8.5                      | 0.08 | 3.8                 | 0.4  |

and support themselves psychologically by providing them with the necessary information and skills. A study conducted in a rural area in Australia that is known to have high suicide incidence revealed that the subjects who have attended suicide awareness and intervention programs have more comfort and confidence to discuss their suicide ideation (17).

In this study, females represented 77.9% of the study population, while only 22.1% were males, which is in-line with the gender ratio of program participants. The higher rate of female attendees of our community-based programs can be due to the greater interest of females in mental health awareness. This could be related to female students being more serious regarding their education (18), and thus their commitment to their health. It could also be supported by the significant higher relevancy of program materials ( $P= 0.02$ ) among females, despite females having a higher prevalence of major depression when compared with males (19).

This study's results indicated that 54.8% of participants were complaining of stress only in specific situations such as exams, while 29.8% were always suffering from stress. On the other hand, only 15.4% do not complain of stress at all. This could be due to transition from adolescence into adulthood, the increased college student's vulnerability to stress due to the intense academic pressures, as well as separation from their families and having to undertake more responsibilities (3,20,21). In addition, exams are considered a stressful event that can lead to significant mental health issues. For example, medical students are under several academic stressors including the amount of material to be learned, examinations, and continuous assessments (22). Evidence that suggests that university students are at risk of developing mental health issues have increased public concerns regarding psychological morbidity in undergraduate students (21). These results are consistent with previous study results, one study stated that 75% to 80% of college students are moderately stressed and that 10% to 12% are severely stressed (3,20,21).

## CONCLUSION

Across the entirety of the study and the programs looked at we find drastic differences in terms of effectiveness between different groups of students across gender, educational background, and most importantly lived experience. Due to this, public education campaigns must be created to cater for the specific needs of each audience and the realities they live with every day. Since the risk of mental illnesses depends on social factors, its prevention strategies need to address the setting of each of the identities carried by individuals. This is a necessary step in adapting processes and interventions aiming to achieve the ultimate outcome of better mental health among them. A significant gap we found in our research analysis of past studies was the lack of guidelines for

the assessment of public education campaigns and their effectiveness under different social circumstances. We advise that such guidelines are developed to increase the efficacy of these educational campaigns.

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