

Implementing an Educational Program to Enhance Identification, Diagnosis and Treatment of Adolescent Depression into Primary Care in Guatemala

Garcia-Ortega I^{1*}, Rodriguez J², Escobar-Martinez A² and Kutcher S¹

¹WHO/PAHO Collaborative Centre Dalhousie, Canada

²Pan American Health Organization (PAHO)

Abstract

Depression is projected to become the leading cause of disability and second leading contributor to the global burden of disease by the year 2020. Depression commonly has its onset in adolescence-early adulthood, affecting 6-8% of young people during that time span.

Youth onset of Depression usually develops into a chronic condition with substantial morbidity and increased mortality. If untreated, depression can negatively impact the life of an adolescent and in some cases lead to suicide. Early identification and effective treatment provided in primary health care, can decrease depression related morbidity and mortality.

"Identification, Diagnosis and Treatment of Adolescent Depression, A Package for Primary Health Care Providers" is an evidence-based educational program, designed to enhance the knowledge of primary health care providers to better identify, assess, diagnose and treat adolescent depression. This educational program has been field tested in Canada and is accredited as a Continuing Medical Education in Canada. The program has been translated into Spanish and culturally adapted for the Latin America context.

The present article describes the process to establish a 'Train the Trainers' program to integrate the educational program into primary health care in Guatemala.

Keywords: Adolescent; Depression; Identification; Diagnosis; Treatment; Mental Health; Primary Health Care; Educational Program; Guatemala

Introduction

Depression is a common mental disorder, ranked as the fourth leading cause of burden among all diseases. In the age group 15-44 years Depression is recognized as the cause of the second highest burden of disease, amounting to 8.6% of DALYs globally (WHO, 2001).

The World Health Organization (WHO) anticipates that by 2030, Depression will be the leading cause of disability for all ages in developed countries [1]. Depression commonly has its onset in adolescence – early adulthood, with a first peak between 15 and 19 years and often develops into a chronic condition with substantial morbidity. Depression is also associated with many other chronic medical conditions such as cardiovascular disorders, obesity and diabetes where it contributes to poorer outcomes. It is also substantially related to early mortality through suicide (WHO 2001) [1,2].

Despite the high prevalence of Depression in youth a large proportion of young people affected, do not receive the care that they need [3]. Early identification and access to treatment is of particular importance during adolescence, as those who go untreated often develop poor long-term outcomes, including reduced social functioning and deteriorating school performance, poor economic/vocational/ interpersonal functioning as well as increased risk for drug and alcohol use and nicotine dependence or early mortality due to suicide or comorbid medical disorders [4,5].

The capacity of health systems to properly address this significant health problem in young people is substantially under-developed. This need is particularly evident in primary care, where the capacity to identify, diagnose and treat youth Depression using evidence based approaches has been identified as a need and a global priority, and yet provider competencies for doing so are often lacking [3-5].

Many effective mental health interventions do not have to be highly specialized, expensive and resource-intensive to be effectively applied

[4,6]. In a systematic review conducted by Stein et al. [4] the authors reported that brief, psychosocial support, with or without medication, improved a range of outcomes, including in adolescent Depression [7]. Depression in young people can be appropriately treated in primary care as long as the clinical competencies needed for this care are held by primary care providers. Additionally, treating Depression in primary care has the added advantages of: improving access to mental health care; decreasing stigma associated with attendance at stand alone mental health facilities and of avoiding use of specialty mental health services, thus increasing access to these services for those with more complex mental health care needs. Thus the development of strategies to enhance capacity within primary care to effectively address the identification, diagnosis and treatment of Depression in adolescents is to be supported [4,8,9].

Material and Methods

"Identification, Diagnosis and Treatment of Adolescent Depression for Primary Health Care Providers" was developed by Dr. Stan Kutcher, the Sun Life Financial Chair in Adolescent Health and Director of the World Health Organization/Pan American Health Organization Collaborating Center in Mental Health Policy and Training at Dalhousie University and the IWK Health Center (Halifax, Nova Scotia, Canada) in collaboration with primary care providers, paediatricians and child and adolescent psychiatrists. "Identification, Diagnosis and Treatment of Adolescent Depression for Primary Health

*Corresponding author: Iliana Garcia-Ortega, WHO/PAHO Collaborative Centre Dalhousie, Canada, Tel: 1-902 4897854; E-mail: iliana.garciaortega@gmail.com

Received March 14, 2013; Accepted May 04, 2013; Published May 06, 2013

Citation: Garcia-Ortega I, Rodriguez J, Escobar-Martinez A, Kutcher S (2013) Implementing an Educational Program to Enhance Identification, Diagnosis and Treatment of Adolescent Depression into Primary Care in Guatemala. Family Med Medical Sci Res 2:104. doi:10.4172/2327-4972.1000104

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Care Providers” is an evidence based program, designed to enhance the knowledge of primary health care providers (primary care physicians and other members of primary health care teams) to better identify, assess, diagnose and treat adolescent Depression. The educational program has been field tested and is available in Canada in web-based format as an accredited (College of Family Physicians of Canada and Royal College of Physicians and Surgeons of Canada) Continuing Medical Education program for primary health care providers and specialists. It is available at no cost at: http://teenmentalhealth.org/images/uploads/Identification_Diagnosis,_Treatment_Adolescent_Depression_website.pdf

The program consists of:

- 1) An overview of Depression in adolescence
- 2) Narrative and illustrative components to assist first contact health providers in the identification, assessment, diagnosis and treatment of Major Depressive Disorder in adolescents.
- 3) A toolkit containing diagnostic tools and other useful resources for diagnosis, assessment and treatment monitoring of Major Depressive Disorder in adolescents
- 4) Clinical strategies and a tool for adolescent suicide risk assessment

As part of the collaborative work of Sun Life Financial Chair in Adolescent Mental Health with the Pan American Health Organization, the educational program “Identification, Diagnosis and Treatment of Adolescent Depression” was initially reviewed, culturally modified and translated into Spanish by Dr. Iliana Garcia-Ortega, a Spanish speaking psychiatrist, native of Mexico, in 2010. Consistent with the mental health strategy developed by PAHO for the Region of the American [10], the availability of the Spanish translation of the program and an identified need for this training in Central America; PAHO proposed that the program be further refined with the intent for its future distribution and utilization in the Region. Accordingly, and with the support of PAHO and health authorities from Guatemala, the program was presented for further expert review using a two day workshop sited in Guatemala City in January 2013. The workshop goals were:

1. To increase awareness and knowledge regarding adolescent Depression and the benefits of early intervention among primary health care providers in Guatemala.
2. To train a group of trainers to identify, diagnose and treat adolescent Depression utilizing evidence based interventions.
3. Disseminate and implement the program throughout Guatemala.

Participants:

A total of 29 participants attend the workshop including: two primary care physicians, one nurse and twenty six psychologists from different regions of Guatemala.

Process:

The workshop was conducted over 3 days, two days devoted to training and one day to situational review of mental health delivery in primary care in a selected region of Guatemala City. Goals of the workshop were as follows:

- 1) To provide an educational training experience to primary health care providers in Guatemala regarding the diagnosis and treatment of adolescent Depression that would substantially increase their knowledge of this disorder and its management.

- 2) To create a cadre of mental health providers with an enhanced understanding of the diagnosis and treatment of adolescent Depression who could then be engaged in becoming trainers to providers working in the primary care sector to deliver the above described training program.
- 3) Conduct a site visit to a primary care health clinic in Guatemala City to discuss with local stakeholders the challenges, opportunities and potential methods of enhancing their capacity to deliver interventions pertaining to adolescent Depression
- 4) To discuss with appropriate Ministry of Health officials their interest in further development of this intervention in the country of Guatemala.

A knowledge evaluation was conducted prior to participants being introduced to the educational materials. Following the didactic/ seminar format training session, a second knowledge evaluation was conducted. During day three workshop organizers, the training team and representatives from PAHO visited a community Health Centre in Guatemala City. They then met at the offices of the Ministry of Health to discuss further steps and develop future plans to continue the collaborative work.

Methods of the evaluation

A knowledge assessment for program evaluation purposes was conducted on day 1 before training and on day 2 after the training was completed in order to measure knowledge acquisition resulting from the training session. The surveys were anonymous. At the end of the second day 27 surveys of the 29 workshop participants were collected and were able to be matched to the day one surveys, as two participants did not remain until the agenda was completed. The surveys were scored and a statistical analysis was conducted to determine the impact of the training on change in knowledge test scores.

Results of the Evaluation

Scoring of the pre and post tests showed the following mean results.

- Pre Training Score= 58% Correct
- Post Training Score=89% Correct

A Paired samples *t*-test was used to determine whether a significant difference occurred between pre and post test scores.

Results indicate that the post-training mean for correct survey responses ($M=17.8$: $SD 1.39$) was significantly greater than the pre-training mean correct scores ($M= 10.90$: $SD 1.66$), $t(28) = 8.27$, $p < .0001$, suggesting that participation in the training is associated with significant increases in knowledge regarding adolescent Depression (Figure 1).

A workshop satisfaction questionnaire consisting of seven Likert scale scored questions was anonymously completed by all workshop participants.

The mean scores on the satisfaction evaluation forms areas follow and illustrated in figure 2 using a 5 point scale where 0=poor and 5=excellent.

1. Overall I found the workshop useful and informative: 4.83
2. Overall I enjoyed the workshop: 4.70
3. Overall I found the speaker(s) to be of high quality: 4.83
4. Overall I learned information and concepts that will be helpful to me in my work: 4.95

5. I would recommend this workshop to my colleagues: 4.91
6. Overall I would rate this workshop: 4.91
7. Compare to other similar programs I have taken, I would rate this workshop: 4.95

Scoring of the workshop satisfaction showed a mean of 4.84 and a SD 0.89 (M=4.84: SD 0.89) indicating a homogeneous positive attitude towards the training workshop.

Outcomes, Limitations and Discussion

The training program demonstrated significant improvements in participant knowledge related to the diagnosis and treatment of adolescent Depression and extremely positive evaluation of the workshop. It is to our knowledge, the first such intervention in Latin America to address adolescent Depression.

The above reported analyses were conducted as a descriptive program evaluation and not as a research investigation. The findings reported above demonstrate a significant short term knowledge acquisition of a variety of health care providers in the diagnosis, treatment and management of adolescent Depression after the workshop. The training program taught workshop participants how to use a variety of clinical tools and materials that were developed to help enhance their competencies in the identification, diagnosis, treatment and management of Depression in adolescents within the primary care setting. The educational materials were developed by Canadian experts in the field of child and youth mental health and primary care (family physicians and pediatricians) and critically reviewed by independent

experts from Latin America. Additionally, these materials were then contextualized and adapted for use in Latin America by experts in mental health care, primary health care, health education and mental health policy and were designed to be taught to primary health care providers within the context of continuing health education.

The value of a continuing health education approach in addressing health care needs of patients is well established, however, we recognize that the effectiveness of this training approach in improving access to care, quality of care or patient outcomes cannot be determined from this intervention alone and that rigorous randomized controlled trials are needed to evaluate if this training approach can improve participants clinical skills or patient outcomes and satisfaction with care. This project is only an early step on this necessary process and the development of a plan to address this need was identified by both PAHO and Ministry of Health officials as an outcome of this workshop.

Additional outcomes that successfully addressed all the objectives of this training program were as follows. First, Ministry of Health and PAHO officials agreed to develop, deliver and evaluate a series of training programs based on this workshop in selected sites in Guatemala. Second, a plan for funding application to conduct appropriate research on the impact of this program on clinician competencies, access to care, treatment outcomes and patient/family satisfaction with care was developed. Third, a potential demonstration site for this research was identified.

In conclusion, this report has demonstrated the feasibility, utility and significant improvement in participant knowledge pertaining to the diagnosis and treatment of adolescent Depression in Guatemala. It is to our knowledge the first such successful demonstration of this approach in Latin America. It provides the foundation for further program evaluation and research into the impact of this approach on clinician competencies, access to care, outcomes and patient satisfaction of care in the domain of adolescent Depression in the Region of the Americas.

Acknowledgments

This project would not have been possible without support from PAHO-Washington; PAHO Guatemala office and Guatemala health authorities.

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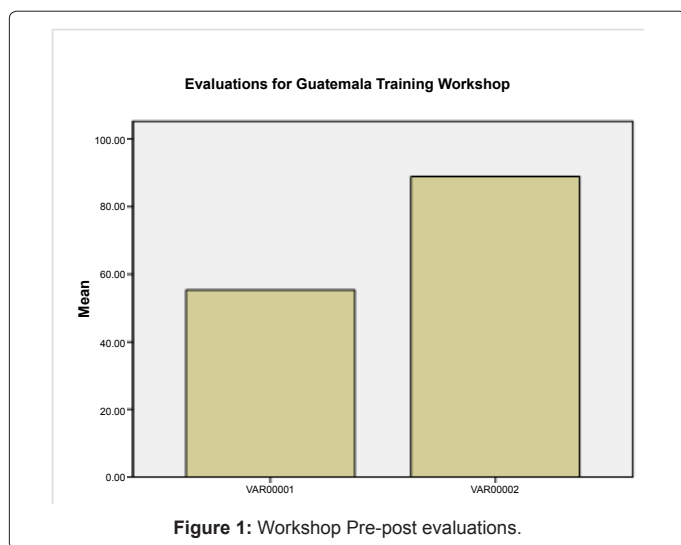


Figure 1: Workshop Pre-post evaluations.

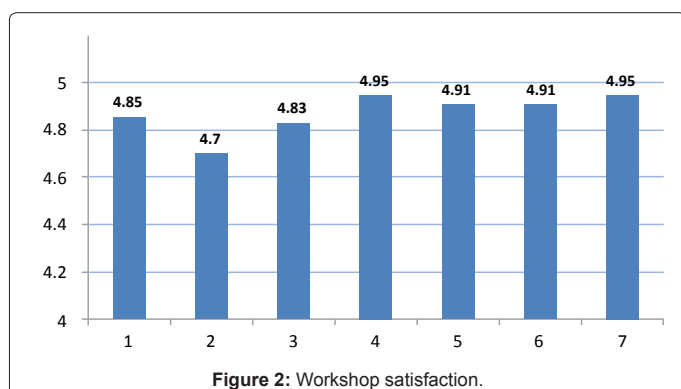


Figure 2: Workshop satisfaction.