The Application of Complementary and Alternative Medicine to Education

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Submission: March 27, 2017; Published: March 30, 2017

Abstract

Teachers and students are under tremendous amount of stress nowadays. There is a need for them to be aware of their psychological and emotional health and equipped with relevant stress coping techniques. This article reviews some of the work that researchers around the world and our team in Hong Kong has been doing on applying complementary and alternative medicine in educational settings to help teachers and students be more aware of work-related stress and better cope with it for healthy life and more effective work or study. Future directions of research are also highlighted.

Keywords: Complementary and alternative medicine, Mindfulness, Teacher, Student, Stress

Introduction

Evidence of using Complementary and Alternative Medicine (CAM) to treat mood or other psychiatric disorders in clinical settings has been mushrooming in the past decade [1]. It is now beyond doubt to researchers that CAM, especially mindfulness exercises, are effective in reducing symptoms of depression, anxiety, and stress [2]. More recently, researchers have attempted to expand the use of CAM into the educational settings, with targets on the health problems of teachers and school children [3-5].

Our research team in Hong Kong has increasingly become aware of the problem of stress and its negative consequences in primary and secondary teachers. The most alarming evidence is due to the sudden increase of suicidal cases in the past years [6]. A local study reported that 13.8% of teachers had general anxiety disorder. The most important issue is that teachers do not have sufficient resources to cope with their psychological problems [7]. In Hong Kong, teachers are working under a lot of stress. Leung et al. [8] investigated the source of stress of secondary school teachers in Hong Kong and discovered that teachers had very high teaching loads. On average, they have to teach 26-30 sessions per week with each session lasting for 40 minutes. Before teaching, teachers also need to prepare teaching materials which are also very time consuming. In addition, some of the duties, for example meeting with parents, may have to be arranged after school hours or even in the evening. As a result, the researchers concluded that teachers in Hong Kong are experiencing tremendous amount of stress. There is therefore a need to help them cope with their work-related stress and alleviate their health problems arising from it. Because of this, our team came up with the idea of introducing CAM into the school settings in Hong Kong. From 2008 to 2012, we were funded for two projects by the Quality Education Fund of the HKSAR government to develop a CAM-based stress management program for teachers [2]. The stress management program was a 12-hr program aiming at increasing teacher’s awareness of their sources and health consequences of stress and the importance of restoring physical and emotional well-being via self-administered techniques. The CAM components of the program consisted of Chinese mind-body exercise (i.e., qigong), stimulation of selected acu-points through self-administered acupressure, and knowledge of maintenance health based on Traditional Chinese Medicine theories. The result in this study was unexpectedly positive and promising. First, it attracted much attention and attendance from frontline teachers in the promotion lecture. Second, many of them volunteered to participate in the program leading to the completion of RCT. Third, objective results showed significant improvement in the outcome measures on psychological and physical health among participants after completion of the program. With the funding support, our team further improved the methodology and conducted another randomized trial comparing the CAM-
based stress management program with CBT [9]. Similarly, it demonstrated that CAM was as effective as well evidence-based CBT in helping participants relieve perceived stress levels and physical symptoms. One advantage of the CAM group is that participants tended to better develop and maintain the habit of doing exercises and self-administration of stress reduction techniques during the follow-up period without the input from health and rehabilitation professionals.

In fact, other researchers have been performing similar activities of promoting CAM in schools. Roeser et al. [10] developed a mindfulness training (MT) and tested its feasibility and acceptance at the school setting in Canada and the US. The aim of the training was to help teachers reduce stress and feelings of burnout. A randomized controlled trial was conducted to investigate the effectiveness of the program. The program was a combination of several CAM methods which included body scans, focused attention meditation, yoga practices, and group discussion of mindfulness practice. The result in this study suggested that MT is feasible and effective in stress reduction.

Aside from teachers, students are experiencing a lot of stress in Hong Kong because of the education system and high expectation from the family. I am very shocked when I discover five students committed suicide in last month alone [11]. This is obviously a serious issue and immediate attention is needed. We believe that this may be due to the fact that students are not able to find ways to reduce their stress arising from their study. Unfortunately, no research has ever been done in Hong Kong to develop a CAM intervention for reducing students’ stress.

Literature suggests that there have been attempts along this line of thinking. A study conducted in the US designed a 10-min daily stress management program for children that lasted for four months [12]. The program included guiding students to practice diaphragmatic breathing, muscle relaxation, and guided imagery. The result showed that this program is helpful for reducing anxiety scores and improving ability to relax in school age children. Furthermore, it has a long term effect that continues to the next school year. Recently, a review paper included 48 studies that were related to school-based mindfulness and yoga interventions in North America and concluded that the research in this field is relatively preliminary [3]. More awareness should be paid into this field and more research should be done. After all, these studies showed that children can benefit from CAM.

Conclusion

Base on the above literature review and personal experience of our research team, teachers and students have been working or studying under a lot of stress in recent years. Both teachers and students need to be more aware of their psychological well-being. They should equip themselves with the knowledge of healthy ways to reduce stress. Researchers have made an attempt to develop programs using CAM to help teachers and students to better cope with their stress in school settings. Preliminary results of available research efforts have shown that using CAM especially mindfulness interventions are a promising approach. I hope that more researchers around the world will participate in this research direction so that more high level RCTs will be conducted in the near future to demonstrate its effectiveness in educational settings.

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