Mental disorders affect a great number of people worldwide. It is estimated that one quarter of the adult population of the United States suffer from a diagnosable mental disorder. According to the World Health Organization (WHO), among the top 10 leading causes of disability in developing countries, four are mental illnesses. Also, it is projected that by the year 2020, depression will be the leading cause of disability among children and women (1). Only 23% of people with mental illness seek treatment because of lack of available appropriate services and poor insurance coverage (2). These numbers stress the importance of making mental health services more accessible to the population. One key way of doing that is by training primary health care providers in diagnosing mental disorders and providing proper treatment to patients affected by them. Psychotherapy is one of the treatment options that a person suffering from a psychological disorder has. It usually involves one-on-one session between a trained psychotherapist and a patient during which the patient’s problems or stressors are discussed. The aim of psychotherapy is to resolve these problems in a way that will ensure the patient a better quality of life. There are different kinds of psychotherapies currently used, each based on a different theory (3). In the Eastern Mediterranean Region (EMRO), it was estimated that around 10% of the population suffers from mental health conditions and 25% of families in this region has a member suffering from such a condition. Mental illness accounts for 11% of the burden of disease in EMRO countries (4). In a study conducted in Lebanon, it was shown that the lifetime prevalence of mental health disorders reaches up to 25.8% of the population. The most commonly diagnosed disorders were anxiety (16.7%) and mood disorders (12.6%) (5). On the contrary, it was documented that in 2007 the ratio of psychiatrists per 100,000 people in the Arab world ranged from 0 to 3.4 with Qatar having the highest percentage of psychiatrists in the Arab world. The ratio of psychologists in Arab world per 100,000 people ranged from 0 to 5 with Libya having the highest percentage of psychologists (6). Considering these very low numbers of mental health care providers compared to the high number of mental health problems, it is of high importance to bridge the gap between people suffering from mental health problems and mental health care providers in this part of the world. The WHO estimated this treatment gap to exceed 75% in low- to middle-income countries (7). A way to bridge this large gap, as suggested by the mental health Gap Action Program (mhGAP) launched by the WHO, is to train primary care workers to provide mental health services themselves to their patients presenting with psychiatric conditions. By doing so, more people will gain access to treat their mental health conditions in a quick, cost-effective way (7). Therefore, the main focus of this review...
is to discuss how different psychotherapeutic approaches have been used in primary care settings and how to best integrate and apply these approaches and techniques.

Cognitive behavioral therapy
Cognitive behavioral therapy (CBT) is a structured psychotherapeutic approach built on a collaborative relationship between the patient and the psychotherapist. It is a short-term treatment that requires an average of 12 sessions. One of the main elements of CBT is psychoeducation, a process by which a therapist provides the client with information about the process of therapy and about their condition. It is also important to teach patients some stress management techniques to cope with stressful situations more effectively. Patients need to be educated about stress and taught strategies to reduce it. They are educated about specific relaxation techniques such as deep breathing exercises and progressive muscle relaxation that they can use on their own when feeling distressed. Another important element of CBT is that it focuses on the present problem without needing to go back to past life events. At the beginning of therapy, the therapist helps the patient set goals for treatment and along the sessions, progress is monitored. The cognitive aspect of this approach focuses on identifying the patient’s maladaptive beliefs about themselves after which the therapist challenges these beliefs in the aim of replacing them with more adaptive ones. The first step in identifying these beliefs is by exploring the patient’s automatic thoughts. An automatic thought is the first thought a person has after a certain event. In the session, the patient is asked to recount recent negative events. Once they do so, they are asked to describe the first thought that they had after the events. Patterns usually emerge, as patients tend to think in similar ways when faced with different situations. For example, if they fail a test, they might have the automatic thought ‘I am a failure’. This same automatic thought may also arise in other situations such as when they have an argument with someone or if they try to fix their malfunctioning computer but fail to do so, for example. Through exploring the pattern in these automatic thoughts, maladaptive beliefs start to surface (8). Once the maladaptive beliefs are identified they need to be challenged and replaced with more adaptive ones. Challenging maladaptive beliefs can be done through reality testing, an exercise during which the patient is asked to present evidence for and against their beliefs to see whether they are correct or not. This can easily be done by having the patient draw a pros and cons table and write down evidence for and against this belief. Once they realize that this belief is not supported by evidence, they can then be taught how to replace that belief with a more adaptive one (8). The use of behavioral experiments in the form of homework can also help in that change. The patient can be asked to complete a mood log at home in which he/she notes situations that happen during the day and the resulting emotions and thoughts that accompany the event. This exercise helps the patient and the physician understand the patterns in the patient’s life. Behavior activation can also be advised by helping the patient identify certain hobbies or even previously pleasurable activities for them to engage in (3).

Behavior activation
Behavior activation is one of type of CBT and it relies on scheduling activities for patients to engage in that can give them a sense of achievement or pleasure to elevate their mood. Most patients coming to seek help for their mental problems have stopped engaging in activities they used to enjoy and spend most of their time withdrawn and doing activities that affect their mood negatively such as watching TV for long hours or staying in bed. The goal of behavior activation is to get them active again, which will elevate their mood and give them a sense of control because they will notice that they can actually help themselves feel better by engaging in simple activities. The first step of behavior activation is to get a sense of what a day in the patient’s life looks like. By doing so, it will become more evident what activities they are engaging in, if any. It is also helpful to ask about activities that used to bring them pleasure in the past. The primary care physician then discusses with the patient the importance of including pleasurable activities in their life and they agree on one or two activities to begin with for the patient to engage in until their next visit. Examples of activities can vary from making plans with friends, going to the gym, taking a walk, doing activities around the house. Once the patient engages in these agreed upon activities, they can write down how they felt after engaging in the activity. During their next visit, they discuss these activities with the physician and they share the feelings that emerged from them. After seeing the positive effects of these small activities on their mood, the patients become more aware of their control over their mood and will feel less helpless. This in turn will help them engage in more activities and consequently will lift their mood further (8).

CBT in primary care
Several studies have examined whether this approach is suitable for use in primary health care settings when treating patients with different psychological disorders. Major Depressive Disorder is one of the most common psychological disorders encountered by primary care physicians (9). In their study, Conradi et al. (9) compared the effectiveness of usual care alone to usual care combined with psychoeducation, psychiatric follow-up or brief CBT in treating patients with major depression in primary care settings. The results of the study showed that including psychiatric follow-up or brief CBT to usual primary care increases the response rate of patients with
depression. Including psychoeducation alone did not lead to any different results than having usual care alone. Therefore, brief CBT in primary care is effective in treating depression. It is important to note that the effects of CBT in this study were maintained at 3 years follow-up (9). A study conducted by Serfaty et al. (10) showed similar results. In this study, the sample comprised of geriatric primary care patients experiencing symptoms of depression. Compared to those who underwent usual primary care, patients who received CBT had better outcomes and fewer depression symptoms by the end of treatment and at 10 months follow-up. The same outcome was shown in another study that included patients aged 18–75 years. In this study, the results showed that usual primary care for patients with depression, which includes pharmacotherapy, is most effective when combined with brief CBT. The effects of the intervention were maintained at 12 months follow-up (11). In a study including a patient’s choice arm, it was shown that Sertraline, an SSRI, was superior to placebo in treating mild depression. The patients receiving CBT in this study did not show more improvement than the placebo pill group but patients randomized to the CBT group showed marked improvement compared to a self-help group. Even when the patients were given the choice of treatment, CBT or medication, the results were the same as when the patients were randomized into the different groups. This study shows that Sertraline is effective in treating mild depression, an approach that is both time and cost effective. The authors, however, suggest that there might have been a methodological problem, which may have limited the effects of CBT in this study. They recommend, however, the inclusion of specific CBT techniques such as problem solving skills into usual care, so as to provide patients with effective medication as well as the skills they need to overcome their depressive symptoms (12).

The effectiveness of CBT in primary care settings was also studied with patients suffering from anxiety disorders, namely generalized anxiety disorder (GAD) and panic disorder. Panic disorder is characterized by recurring panic attacks with or without agoraphobia or fear of places from which escape is difficult. Because of the bodily sensations that accompany panic attacks, it is common to see patients with panic disorders in primary care settings (13). In this study, patients were randomly assigned to either receive treatment as usual which consists of pharmacotherapy or six sessions of CBT delivered over 12 weeks combined with pharmacotherapy. The results showed that pharmacotherapy combined with CBT led to better treatment outcomes than usual care alone. The results were maintained up to 12 months follow-up (13). Sharp et al. (14) compared the administration in primary care settings of individual CBT versus group CBT to individuals suffering from panic disorders with or without agoraphobia to a wait list control group. The results showed that patients who received any form of CBT, group or individual, showed significant improvement compared to the wait list control. There were, however, no differences between both treatment groups. At 3 months follow-up, on the contrary, the patients receiving individual CBT showed significantly better maintenance of the positive effects of treatment that those who took part in a group-based CBT intervention (14). It was also shown that CBT can help alleviate some symptoms of GAD in older adults (15). GAD is characterized by excessive worrying over almost all aspects of one’s life. In this study, the authors were interested in testing the effectiveness of CBT delivered in primary care settings in treating GAD in older adults. To that end, patients presenting with GAD were randomized to one of two groups; the first group received usual care for GAD, which consists of pharmacotherapy while the second group received pharmacotherapy along with CBT. Their CBT intervention included psychoeducation, relaxation techniques, training in problem solving, cognitive restructuring, and behavior modification. The results of the study showed that the patients receiving CBT had an overall decrease in worry, symptoms of depression and overall psychopathology. However, there were no differences on measures of GAD severity between the two groups indicating that both approaches were effective in managing symptoms of GAD (15).

The focus of the literature on CBT in primary care settings has been on treating depression and anxiety, the most common mental health disorders in primary care settings, as outlined above. However, other studies have been focused on studying the effects of this therapeutic approach in treating other less common disorders. In fact, CBT as opposed to usual care has been shown to effectively treat insomnia, irritable bowel syndrome, low self-esteem, chronic fatigue, and somatization disorder (16–20).

Other forms of psychotherapy in primary care
While CBT is the most widely used approach to treat patients presenting to primary care settings with mental health conditions, the efficacy of other approaches have also been examined in the literature (21). Cognitive therapy is based on the premise that patients have maladaptive thoughts that need to be challenged. For the treatment of panic disorder, the main focus is on the patients’ beliefs about their bodily sensations during a panic attack, which they often misinterpret as a life-threatening heart attack. The difference between cognitive therapy and CBT is that this approach does not rely on behavior modification as part of treatment. The results of the study showed that compared to treatment as usual which decreases panic severity and general anxiety and depression symptoms, the patients who received CBT showed greater response to treatment with less recurrent
panic attacks and more than half of the patients reported being panic-free after treatment (22). On the contrary, another study explored the effectiveness of CBT on depressed patients in primary care settings. This treatment relies on the principles of behavior activation to treat depressive symptoms. The results showed improvement in depression symptoms as well as quality of life in the patients who received CBT (23). In one study, elderly patients suffering from major depression or dysthymia were randomly assigned to Problem Solving Therapy or community psychology, which they referred to as treatment as usual in this study. Problem Solving Therapy is a brief form of therapy especially tailored for use in primary care settings; it consists of psychoeducation and teaching the patients a set of problem solving skills. The results showed that even though patients in both groups showed significant improvement and there were no significant group differences, at 2 years follow-up, the patients who received problem solving therapy showed more durable beneficial outcomes from treatment than those who received usual care (24). In another study targeting the same population, the authors compared interpersonal psychotherapy to usual care. Interpersonal psychotherapy is a brief structured therapy, which starts with psychoeducation and focuses on a patient’s interpersonal relationships and recent interpersonal events that may be affecting the patient after which possible solutions are thought of and skills to implement them are taught. This study showed that elderly patients with moderate to severe depression responded better to Interpersonal Psychotherapy than treatment as usual. There were, however, no differences reported for patients suffering from mild depression (25). The same findings were confirmed in a study conducted by Schulberg et al. (26). In a meta-analysis conducted by Bower et al. (27) comparing counseling in primary care to treatment as usual, it was noted that counseling leads to significantly better results in treating patients with depression and anxiety than usual care alone. It was, however, also shown that the beneficial effects are short lived as the patients who received counseling and those who received usual care showed no differences at later follow-ups.

Conclusion
To sum up, because of the high prevalence rate of psychological disorders in the Arab world (4, 5) and the lack of sufficient specialized mental health professionals (6), it is imperative that some form of psychotherapy is included in primary care practice to treat patients with mental health conditions. The most widely supported evidence-based approach in the literature is CBT but other approaches have also proven to be superior to pharmacotherapy or usual care in treating psychological disorders, namely anxiety and depression. The general agreement in the literature, as summarized above, is that a combination of pharmacotherapy and psychotherapy yield the best results. It can be argued, however, that the severity of the mental illness the patient is suffering from plays a role in which approach works best. In fact, the majority of the literature on this issue discusses the effects of providing psychotherapy along with pharmacotherapy in primary care settings to patients with mild depression or anxiety. No study has been found discussing severe forms of these disorders and how they can be managed in primary care settings. In severe cases, it may be advisable to refer patients to more specialized professionals.

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References
1. World Health Organization (2001). Mental health: a call for action by world health ministers. Available from: http://www.who.int/mental_health/media/en/249.pdf [cited 23 August 2013].
2. Hackley B, Sharma C, Kedzior A, Sreenivasan S. Managing mental health conditions in primary care settings. J Midwifery Womens Health. 2010; 55: 9–19. doi: 10.1016/j.jmwh.2009.06.004.
3. Ayers S, de Visser R. Psychology for medicine. London: Sage; 2011.
4. World Health Organization (2011). Mental health atlas 2011: resources for mental health in the Eastern Mediterranean Region. Cairo: Egypt.
5. Karam E, Mneimneh Z, Dimassi H, Fayyad J, Karam A, Nassar S, et al. Lifetime prevalence of mental disorders in Lebanon: first onset, treatment, and exposure to war. PLoS Med. 2008; 5: 579–86. doi: 10.1371/journal.pmed.0050061.
6. Okasha A, Karam E, Okasha T. Mental health services in the Arab world. World Psychiatry. 2012; 11: 52–4.
7. World Health Organization (2010). mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings. WHO: Geneva, Switzerland.
8. Beck J. Cognitive behavior therapy, 2nd ed. New York: The Guilford Press; 2011.
9. Conradi H, de Jonge P, Kluiiter H, Smit A, van der Meer K, Jenner J, et al. Enhanced treatment for depression in primary care: long-term outcomes of a psycho-educational prevention program alone and enriched with psychiatric consultation or cognitive behavioral therapy. Psychol Med. 2007; 37: 849–62. doi: 10.1017/S0033291706009809.
10. Serfaty M, Haworth D, Buszewicz M. Clinical effectiveness of individual cognitive behavioral therapy for depressed older people in primary care. Arch Gen Psychiatry. 2009; 66: 1332–40.
11. Wiles N, Thomas L, Abel A, Ridgway N, Turner N, Campbell J, et al. Cognitive behavioural therapy as an adjunct to pharmacotherapy for primary care based patients with treatment resistant depression: results of the CoBalT randomized controlled trial. Lancet. 2013; 381: 375–84. doi: 10.1016/S0140-6736(12)61552-9.
12. Hegel U, Hautzinger M, Mergl R, Kohnen R, Schutze M, Scheunmann W, et al. Effects of pharmacotherapy and psychotherapy in depressed primary-care patients: a randomized, controlled trial including a patients’ choice arm. Int J Neuropsychopharmacol. 2010; 13: 31–44. doi: 10.1017/S144545709000224.
13. Roy-Byrne P, Craske M, Stein M, Sullivan G, Bystritsky A, Katon W, et al. A randomized effectiveness trial of cognitive behavioral therapy and medication for primary care panic disorder. Arch Gen Psychiatry. 2005; 62: 290–8.

14. Sharp D, Power K, Swanson V. A comparison of the effectiveness and acceptability of group versus individual cognitive behavior therapy in the treatment of panic disorder and agoraphobia in primary care. Clin Psychol Psychother. 2004; 11: 73–82. doi: 10.1002/cpp.393.

15. Stanley M, Wilson N, Noy D, Rhoades H, Wagener P, Greisinger A. Cognitive behavior therapy for generalized anxiety disorder among older adults in primary care. JAMA. 2009; 301: 1460–7.

16. Edinger J, Sampson W. A primary care “friendly” cognitive behavioral insomnia therapy. Sleep. 2003; 26: 177–82.

17. Moss-Morris R, McAlpine L, Didsbury L, Spence M. A randomized controlled trial of a cognitive behavioural therapy-based self-management intervention for irritable bowel syndrome in primary care. Psychol Med. 2010; 40: 85–94. doi: 10.1017/S0033291709990195.

18. Waite P, McManus F, Shafran R. Cognitive behavior therapy for low self-esteem: a preliminary randomized controlled trial in a primary care setting. J Behav Ther Exp Psychiatry. 2012; 43: 1049–57. doi: 10.1016/j.jbtep.2012.04.006.

19. Godfrey E, Chalder T, Ridsdale L, Seed P, Ogden J. Investigating the active ingredients of cognitive behavior therapy and counseling for patients with chronic fatigue in primary care: developing a new process measure to assess treatment fidelity and predict outcome. Br J Clin Psychol. 2007; 46: 253–72.

20. Escobar J, Gara M, Díaz-Martínez A, Interian A, Warman M, Allen L, et al. Effectiveness of a time-limited cognitive behavior therapy-type intervention among primary care patients with medically unexplained symptoms. Ann Fam Med. 2007; 5: 328–35. doi: 10.1370/afm.702.

21. Alexander C, Arnkoff D, Glass C. Bringing psychotherapy to primary care: innovations and challenges. Clin Psychol Sci Prac. 2010; 17: 191–214.

22. Grey N, Salkovskis P, Quigley A, Clark D, Ehlers A. Dissemination of cognitive therapy for panic disorder in primary care. Behav Cogn Psychother. 2008; 36: 509–20. doi: 10.1017/S1352465808004694.

23. Hopko D, Bell J, Armento M, Hunt M, Lejuez C. Behavior therapy for depressed cancer patients in primary care. Psychother Theor Res Pract Train. 2005; 42: 236–43. doi: 10.1037/0033-3204.42.2.236.

24. Arean P, Hegel M, Vannoy S, Fan M, Unutzer J. Effectiveness of problem-solving therapy for older, primary care patients with depression: results from the IMPACT project. Gerontologist. 2008; 48: 31–123.

25. Schaik A, van Marwijk H, Ader H, van Dyck R, Haan M, Penninx B, et al. Interpersonal psychotherapy for elderly patients in primary care. Am J Geriatr Psychiatry. 2006; 14: 777–86.

26. Schulberg H, Post E, Raue P, Have T, Miller M, Bruce M. Treating late-life depression with interpersonal psychotherapy in the primary care sector. Int J Geriatr Psychiatry. 2007; 22: 106–14. doi: 10.1002/gps.1700.

27. Bower P, Rowland N, Hardy R. The clinical effectiveness of counseling in primary care: a systematic review and meta-analysis. Psychol Med. 2003; 33: 203–15. doi: 10.1017/S0033291703006979.