Do Mental Health First Aid™ Courses Enhance Knowledge?

<table>
<thead>
<tr>
<th>Journal</th>
<th>Journal of Mental Health Training, Education and Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuscript ID</td>
<td>JMHTEP-01-2016-0003.R2</td>
</tr>
<tr>
<td>Manuscript Type</td>
<td>Expert opinion paper/viewpoint</td>
</tr>
<tr>
<td>Keywords</td>
<td>stigma, mental health knowledge, self-help and help seeking, mental health and mental illness, social support</td>
</tr>
</tbody>
</table>
Do Mental Health First Aid™ Courses Enhance Knowledge?

Introduction

Hurdles that Impede the Pursuit of Help

Despite advances in mental health service provision, problems remain. The incidence of conditions such as anxiety and depression, have escalated, at least in some countries and age groups (Twenge, 2000; Twenge and Campbell, 2008; Twenge et al., 2010). In the USA, for example, approximately twice as many people die from suicide as from homicide (Kowalski, 2003). Similar patterns of escalating demand have been observed worldwide (van Praag, 2002).

When people with mental health issues have the support of others; family, friends and colleagues, mental health problems tend to dissipate (Berry and Rickwood, 2000; Rose, 2000). Indeed, social support is reported to be one of the key determinants of mental health as defined by the World Health Organization (WHO): ‘A state of wellbeing that enables people to contribute to their community, work effectively, accommodate stressful demands, and achieve their goals and potential (WHO, 2014).’

Hurdles can impede the benefits of social support (Davey, 2013). These may be divided into two categories; hurdles that deter people from seeking this support and hurdles that impede the capacity of individuals to offer support. This is shown in Table 1.

Include Table 1 about here

Consistent with the theory of planned behavior (Ajzen, 1991), four sets of obstacles deter people from seeking support: Firstly, an assumption that seeking help and support is futile and not worth expending effort. Thus, some individuals assume their mental health problems are immutable rather than malleable (Dweck, 2006). This appears to be common when a label is assigned to these problems, such as obesity (Hoyt et al., 2014), when it is ascribed to biological substrates (Rangel and Keller, 2011).
Secondly, people may assume the community perceives help-seeking as inappropriate; a sign of weakness. This is social norms manifesting as a stigma towards mental illness (Östman and Kjellin, 2002; Davey, 2013). In young males, especially in collectivist nations, these unfavorable perceptions of help seeking appear particularly prevalent (Clement et al., 2015). Thirdly, people do not feel they have the capacity to garner support. Many who experience mental health problems, for example, exhibit an anxious attachment style, in which they feel their attempts to seek help will be rebuffed (Mikulincer and Shaver, 2007).

Finally, intentions to seek help and support may not translate into actions. Depressed people often do not implement the intentions they had generated (Kazen and Kuhl, 2005). This is because depression and similar emotions tend to inhibit the mechanisms that convert intentions into action (Kazen and Kuhl, 2005).

**Hurdles that Impede the Provision of Help**

Additionally, congruent with the theory of planned behavior (Ajzen, 1991), four sets of hurdles may impede the capacity of those around the person to offer support effectively. First, many people have not been exposed to information on how to provide mental health support. Unfamiliar with mental illness, these individuals do not process information fluently on this topic. Studies indicate that if people are unable to process information fluently, they tend to underestimate its importance (Labroo et al., 2009). Several studies have shown that individuals tend to underestimate the significance of topics with which they are unfamiliar; this is called the self-image bias (Lewicki, 1983, 1984). If they perceive mental health as immaterial; their attitudes towards the provision of help are usually unfavorable. Inequality has also been a research focus indicating that income inequality has generally increased across industrialized nations (Wilkinson and Pickett, 2009). This inequality motivates people to seek personal status rather than to help others (Walasek and Brown, 2015). Consequently, social norms that deter the provision of help have increased in recent decades.
People may be willing, but feel unable to help in mental health problems; they offer advice or ask questions that may amplify, rather than resolve the problems. To illustrate, they may prompt someone to discuss the details of a trauma, rather than analyze the causes and consequences igniting a process called rumination, which can magnify distress (Lyubomirsky et al., 2005). Finally, individuals may not implement an intention to offer help. For example, they underestimate the time commitment required to complete the task. This is known as the planning fallacy (Buehler et al., 1994). Accordingly, they feel too busy to assist those who sought their support.

Access to mental health facilities is often limited or unaffordable in some regions. Sparse populations and elevated travel costs compound these problems in rural and remote regions. Consequently in such areas, whilst waiting to access professional help, individuals often need to seek local support from friends, relatives, colleagues, or managers or need to know how to enhance their own psychological wellbeing.

**The Multiple Benefits of Knowledge Acquisition**

Evidence suggests if the community has acquired knowledge about mental health, many of these problems are mitigated, as outlined in the second column of Table 1. For example, learning that provision of social support can actually affect the biological substrate that underpins mental health. For example both psychosocial support and the use of antidepressants, such as Paroxetine, diminish activity in the ventro-lateral prefrontal cortex of the brain (Brody et al., 2001). Equipped with this knowledge individuals are more likely to believe that mental health problems are malleable, rather than ascribed to immutable biological changes even though McNeal’s findings (2015) suggest this is not a simple causal relationship. Suitably equipped, people recognize that many circumstances and events can compound and worsen psychological problems. With this insight, people are less likely to endorse a social dominance orientation, in which they regard some individuals as inherently
inferior to others (Guimond, et al., 2003). Consequently they are less likely to perceive mental illness to be a sign of inferiority or weakness. The acquisition of knowledge fosters self-efficacy, where individuals feel they can achieve their goals (Bandura, 1997). This is likely to override doubts about their capacity to seek help (Bandura, 1997).

Once people acquire knowledge about a topic, they feel this topic is integral to their conceptualization of themselves, which is called ownership (O'Driscol et al., 2006). In response to this feeling, individuals become more likely to commit to their intentions and thus implement these plans (O'Driscol et al., 2006). For informed people, discourse on this topic is processed fluently and individuals will be more inclined to appreciate the significance of mental health, improving attitudes and social norms. (Labroo et al., 2009).

Appropriate knowledge then, has the potential to enhance capacity to offer suitable assistance. Knowledge about how to integrate this assistance into busy lives of individuals is also useful.

**Mental Health First Aid Courses: Benefits and Complications**

Kitchener and Jorm (2010) developed the Mental Health First Aid™ course, as a similar concept to a physical first aid course, to enhance the knowledge, attitudes, and skills of individuals in this realm. The workshop encompasses information about the determinants, manifestations, and treatments of depression, anxiety, trauma, suicide, and substance abuse. It has attracted many awards has been shown to enhance the confidence of attendees to provide help, to seek help, and to understand their own mental health (Kitchener and Jorm, 2002, 2010). The course has been shown to diminish the stigma of mental health problems (Kitchener and Jorm, 2002, 2010).

However, limitations in previous evaluations must be addressed. In these studies, the participants were not a representative sample of the general population—but typically individuals who had already demonstrated an interest in mental health. To redress the existing
stigma and biased assumptions that sometimes perpetuate mental health problems, individuals who showed no previous interest in mental health need to participate. Any course may struggle to improve the knowledge of those who are disinterested in the topic. For example, unless participants experience a state called self-affirmation, in which they feel assured of their values or strengths, they dismiss health information that diverges from their preconceptions (Sherman et al., 2000). They exhibit defensive tendencies in response to uncomfortable information. Research shows those who do not choose to enroll in a course are less likely to value, and thus retain the information presented (Huang et al., 2009). This study aimed to examine whether the Mental Health First Aid™ course improved knowledge in a mixed sample of participants. The sample included students from different health disciplines who were obliged to complete this course as part of their qualification, health professionals and ordinary citizens.

Evaluation

Concept

To evaluate this training program, assessment tests were adopted with attendees asked to complete a knowledge test before the workshop, and then without cross-reference to their initial answers, to answer the same knowledge test after the completion of the workshop. Attendees were asked not to write any information that could identify them other than study number on both versions. The copies were then compared and change assessed by the number of correct responses. Advice from the ethics committee was that as an educational audit, approval was not required.

Participants

The participants were 219 individuals, 110 female and 109 males. The group included undergraduate students from nursing, pharmacy, medicine, social work, humanitarian work, business, education, clinical sciences, psychology and medical laboratory sciences. Also
 included were registered health professionals and interested community members. The age of
participants ranged from 18 to over 40. A total of 162 of these participants completed the
quiz of their mental health knowledge before and after the course.

The Mental Health First Aid™ Course

The Mental Health First Aid course was delivered over 12 hours over four 3 hour sessions.

The aims and importance of first aid in mental health are discussed, demonstrating that
stigma, impaired awareness, and limited availability of services impede the treatment of
mental illness. Attendees learn how to interact with anyone who presents with mental illness,
and the instructor discusses how individuals should refrain from abstract, patronizing,
judgmental, presumptive, or unrealistic comments. In response to a mental health crisis,
attendees were encouraged to initiate five key actions: approach the person, listen without
judgment, offer support and information, encourage the person to seek professional support,
and organize the support of family and friends.

Participants receive information about the features and treatments of common mental
illnesses, such as depression, bipolar disorder, anxiety disorders, psychosis, and substance
misuse. Finally, they learn how to respond to a variety of specific crises, such as suicidal
thoughts and behavior, self-injury, panic attacks, traumatic events, psychotic states, substance
abuse, and aggression.

Assessment of Knowledge

Before and after the course, participants received a quiz, comprising 16 questions. Some of
the questions related to the effect of lifestyle on mental illness, such as whether exercise,
smoking, and family relationships affect the incidence of depression and psychosis. Other
questions related to suitable response while someone is experiencing a crisis, such as a
psychotic attack, panic attack, suicidal ideation, self-injury, aggression, or intoxication: for
example, participants are asked when, if ever, they should ask someone to breathe into a paper bag, offer choices, speak calmly, reason with the person, and offer strong coffee. The total scores before and after were compared using a paired $t$-test. Individual questions were compared using descriptive statistics. As the evaluations were collected identified only by study number, sub-group analysis could not be undertaken.

Results

The number of participants completing the quiz was 162 (74% response rate). The responses of individuals who completed the questionnaire before, but not after, the course were excluded from the analyses. The response rate from participants was disappointing, but there was no coercion to complete the assessments. After completing the course, the percentage of correct responses increased from 57.8% to 71.0%; $p < 0.001$.

The course increased the percentage of correct responses on 12 of the 16 questions. Only 14% of participants exhibited no improvement, and interestingly, 15% actually exhibited a decrement in performance of, typically, between 1 and 3 questions (Figure 1). Analysis per question is at table 2, with questions 5, 8, 9, 10, 11 and 13 are the most improved (median = 23%) and question 11 is the most improved by 50% and question 2 is the least improved by 2%. Question 2 was the most correctly answered question before and after the workshop (94%) and 7, 15, 1, 6 and 16 and question 11 is the least correctly answered before the workshop (median = 67). Questions 7, 6, 10 and 3 were the most deteriorated after the workshop and questions 15, 2 and 5 are the least deteriorate as being answered incorrectly after the workshop (median = 8%). On a scale from 1 to 10, participants rated their level of understanding as 7.00 on average (SD = 2.33). They also rated the degree to which they felt the course was relevant to their lives as 9.00 on average (SD = 1.07).

Discussion
People who experience psychological problems do not always seek help and support from relatives, friends, or colleagues, partly because they perceive their mental illness as immutable and a sign of weakness, or demonstrate other biased assumptions (e.g., Clement et al., 2015; Hoyt et al., 2014). If support is sought sometimes it is not especially beneficial; for example, it may be compromised by the misguided beliefs or busy schedules (Lyubomirsky et al., 2005). Several mechanisms may be operating, for example that familiarity with a topic increases the perceived importance of this information (Labroo et al., 2009). If individuals accumulated more knowledge on mental health, these problems would tend to dissipate, and the prevalence of mental illness theoretically should subside.

The Mental Health First Aid™ course was designed to impart this knowledge (Kitchener and Jorm, 2002, 2010). Published research indicates that many individuals perceive health information as threatening and, therefore, may reject some of the content (Sherman et al., 2000). Consequently, this evaluation was undertaken to assess whether this course does appear to enhance knowledge in a broad sample of the population, comprising students who did and those who did not choose to complete this course. It could have been interesting to break the results down by background and discipline but because the questionnaires were anonymous and the groups small, asking for additional information on background and experience would very probably have identified individuals. In general, the course did improve knowledge on the determinants and experiences of mental health as well as how to interact with individuals during a crisis, such as a panic attack. Answers on 12 of the 16 questions improved.

On one of the four questions in which performance did not improve was related to whether exercise alleviates depression, and approximately 97% of the participants answered this item correctly, both before and after the course, indicating a ceiling effect. On two of the other questions in which performance did not improve, the issues were subtleties and the answers
may not have encapsulated these subtleties. For example, after completing the course, participants were no more likely to recognize that depressed individuals should not be forced to seek help, or that disapproval of people who experience drug and alcohol issues is unhelpful. Arguably, participants who had completed the course recognized that individuals who experience mental illness are often reluctant to seek help. Consequently, these participants may feel that depressed individuals should be forced to seek help or that drug consumption and alcohol over consumption warrants disapproval.

Conclusions and limitations

Although these findings are promising, several limitations need to be addressed in definitive research into the matter. In this educational evaluation, some attendance was voluntary, but under a Federal scheme in operation at the time, all nursing and medical students were expected to take the course. No identifying information was sought, making it impossible to ascertain who had attended voluntarily and who had been compelled. It was therefore not possible to assess whether those forced to attend would have improved to the same extent as people who chose to complete the course. It was also not possible to ascertain the characteristics or conditions that accelerated learning during this course, such as whether individuals are motivated primarily to develop skills or to outperform other people (Dweck, 2006).

This evaluation was undertaken examining whether the course enhanced knowledge rather than choices and behaviors. Definitive research should explore the premise that knowledge of mental health overcomes the reluctance of people to seek help as well as improve the capacity of individuals to offer help. Future research should also investigate whether this course does indeed diminish the biased assumptions and unhelpful behaviors that impede the pursuit and provision of assistance—such as the belief that mental illness is immutable.

References


Do Mental Health First Aid™ Courses Enhance Knowledge?

Table 1. Hurdles that Impede the Pursuit and Provision of Mental Health Support

<table>
<thead>
<tr>
<th>Hurdles to the Pursuit of Support</th>
<th>Role of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health problems are perceived as immutable, and thus support is futile</td>
<td>After people acquire knowledge about mental health, they recognize that mental health problems are malleable, even if partly explained by biological substrates</td>
</tr>
<tr>
<td>Mental health problems are stigmatized as a sign of weakness</td>
<td>After people acquire knowledge about mental health, they ascribe problems to complex social dynamics rather than personal weakness</td>
</tr>
<tr>
<td>People with mental health problems are often unduly sensitive to rejection and thus do not want to request assistance</td>
<td>After people acquire knowledge about mental health, self-efficacy and confidence increase</td>
</tr>
<tr>
<td>People with mental health problems are often unable to translate intention into action</td>
<td>After people acquire knowledge about mental health, they perceive mental health as integral to their conceptualization of themselves, enhancing commitment and implementation of intentions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hurdles to the Provision of Support</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health problems are perceived as unfamiliar and thus unimportant</td>
<td>Redressed if individuals are exposed to extensive information about mental health issues</td>
</tr>
<tr>
<td>As equality of income escalates, people value status rather over cooperation and assistance</td>
<td>As above</td>
</tr>
<tr>
<td>People offer advice or support that magnifies some mental health problems</td>
<td>Redressed if individuals learn how to assist people with a variety of mental health problems</td>
</tr>
<tr>
<td>Because they overestimate the time needed to complete tasks, people often feel too busy to help</td>
<td>Redressed if individuals learn how to integrate mental health issues with everyday life</td>
</tr>
</tbody>
</table>
Corrected Table 1. Results for percent changes from before and after the mental health first aid workshop

<table>
<thead>
<tr>
<th>Question</th>
<th>Corrected from Wrong to Right</th>
<th>From Right to Wrong</th>
<th>Remained correct – no change</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a person who is depressed does not want to seek professional help, it is important to force them to if you can</td>
<td>11</td>
<td>10</td>
<td>79</td>
</tr>
<tr>
<td>Exercise can help relieve depression</td>
<td>3</td>
<td>3</td>
<td>94</td>
</tr>
<tr>
<td>Recovery from anxiety disorders requires facing situations which are anxiety provoking</td>
<td>23</td>
<td>12</td>
<td>65</td>
</tr>
<tr>
<td>Antidepressant medications can be an effective treatment for most anxiety disorders</td>
<td>23</td>
<td>10</td>
<td>67</td>
</tr>
<tr>
<td>When interacting with a person with psychosis, it is best not to offer them choices of how you can help them because it could add to their confusion</td>
<td>45</td>
<td>3</td>
<td>52</td>
</tr>
<tr>
<td>A person with a psychotic illness is less likely to relapse if they have a good relationship with their family</td>
<td>14</td>
<td>14</td>
<td>72</td>
</tr>
<tr>
<td>A good way to help a person with a drug or alcohol problem is to let them know that you strongly disapprove of their substance use</td>
<td>10</td>
<td>20</td>
<td>70</td>
</tr>
<tr>
<td>People with mental illnesses are much more likely to be smokers</td>
<td>28</td>
<td>6</td>
<td>66</td>
</tr>
<tr>
<td>It is not a good idea to ask someone if they are feeling suicidal in case you put the idea in their head</td>
<td>28</td>
<td>6</td>
<td>66</td>
</tr>
<tr>
<td>If a person is cutting themselves to cope with emotional distress, you should avoid expressing a strong negative reaction to the self-injury</td>
<td>28</td>
<td>13</td>
<td>59</td>
</tr>
<tr>
<td>It is best to get someone having a panic attack to breathe into a paper bag</td>
<td>50</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>If someone has a traumatic experience, it is best to make them talk about it as soon as possible</td>
<td>25</td>
<td>7</td>
<td>68</td>
</tr>
<tr>
<td>It is best not to try to reason with a person having delusions</td>
<td>37</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td>If a person is intoxicated with alcohol, it is not possible to make them sober up more quickly by giving them strong coffee, a cold shower or taking them for a walk</td>
<td>19</td>
<td>8</td>
<td>73</td>
</tr>
<tr>
<td>If a person becomes unconscious after taking drugs, it is best to lie them on their side rather than on their back</td>
<td>14</td>
<td>2</td>
<td>84</td>
</tr>
<tr>
<td>If a mentally ill person becomes aggressive, they will generally calm down if spoken to firmly</td>
<td>16</td>
<td>10</td>
<td>74</td>
</tr>
</tbody>
</table>
Do Mental Health First Aid™ Courses Enhance Knowledge?

Figure 1 – Improvement vs. decline

Improvement vs. decline

- Improved: 71%
- No change: 14%
- Decrease in performance: 15%

Legend:
- Improved
- No change
- Decrease in performance