**Supplementary information**

**Why study mental health at work?**

The WHO has already reported that mental illnesses are the leading causes of disability adjusted life years (DALYs) worldwide, accounting for 37% of healthy years lost from non- communicable diseases. Depression alone accounts for one third of this disability. The report “The Global Economic Burden of Non-communicable Diseases” (2011) by the World Economic Forum estimates the global cost of mental illness at nearly $2.5T (two-thirds in indirect costs) in 2010, with a projected increase to over $6T by 2030. In other words, poor mental health of the working population leads to significant economic loss. Moreover, workforce participation helps employed individuals to achieve a sense of achievement, provides structure in life, and monetary return.

Given the fact that about one out of seven people in Hong Kong suffers from some kinds of mental health issues, and the labor force participation rate in mid-2014 was 3.90 million which is about 61.5% of the total population, the attitude, knowledge, and practices towards mental health in the workplace can either be one of the biggest obstacles or one of the best aids of all for the working population to achieve good mental health. This study aimed to examine the knowledge, attitude, and behavior about mental health and mental health status of individuals who were 18 years old or above and who had worked for more than 20 hours in the previous week before the interview.

**Key findings of the current study**

* Mental health knowledge of the working population is better than anticipated
* Knowing someone with mental health problems at work is fairly common
* Our working population’s mental health needs improvement
* Participants who work as Professionals and Elementary workers may need more attention about their mental health
* Our industry loses talents because of inefficiencies of dealing with mental health issues in the workplace. We need to provide better mental health support at workplaces

**Study methodology**

This is a cross-sectional mobile telephone survey was conducted by the Social Science Research Centre, The University of Hong Kong in Hong Kong between March and June 2014. We successfully contacted 4,118 people via their mobile phones, with 134 dropping out during the survey, 1,504 not eligible, and 1,070 refusing to participate, and 379 could not speak Cantonese, giving a AAPOR RR5 response rate of 46.1% (=1,031/1,031+1,070+134); and 1,031 eligible participants joined the study. Criteria: (i) 18 or above years old, (ii) were employed at or more than 20 hours in the past week.

*Measures*

1. Knowledge *-* Mental health-related knowledge was measured by the Mental Health Knowledge Schedule (MAKS) - Part A (Evans-Lacko, Henderson, & Thornicroft, 2013) comprised six items covering stigma-related mental health knowledge areas (help- seeking, recognition, support, employment, and treatment and recovery).
2. Attitude to co-workers with mental health issues in the workplace *-* The ten-item scale was developed and validated in the United Kingdom and used in a longitudinal study to measure the changes in employers knowledge, attitudes and practices towards mental health problems in the workplace in England during 2006-2010 (Henderson, Williams, Little, & Thornicroft, 2013).
3. Practices - Reported and intended behavior -Mental health-related reported and intended behavior were measured by the Reported and Intended Behaviour Scale (RIBS). (Evans-Lacko et al., 2013). It assessed changes in four intended and four actual behavior outcomes (domains comprised: living with, working with, living nearby and continuing a relationship with someone with a mental health problem).
4. CHAT - The Case-finding and Help Assessment Tool (CHAT) -The CHAT was developed and validated in New Zealand as a case-finding tool that identifies primary care patients with lifestyle (problematic smoking, drinking, recreational drug use, gambling, exposure to abuse, physical inactivity) and mental health issues (depression, anxiety, difficulty with anger control) (Goodyear-Smith, Warren, Bojic, & Chong, 2013).

*Study Participants*

653 participants (58.1%) were male. The participants mostly worked in the community, social and personal services (28.1%), finance, insurance, estate, and other commercial services (15.6%), construction (11.3%), and transport (11.8) industries. Table 1 and 2 shows the distribution of the occupations and industries of our population in 2013 and study participants.

**Table 1 Population’s and Participants’ distribution of occupations**

|  |  |  |
| --- | --- | --- |
| **Occupation** | **Population**  **mid-2013** | **Percentages (n)** |
| Clerks, Service workers and Shop sales workers | 30.7% | 27.5 (309) |
| Elementary occupations | 20.1% | 18.5 (208) |
| Associate professionals | 20.0% | 18.3 (205) |
| Managers and Administrators | 10.1% | 9.3 (105) |
| Professionals | 7.2% | 6.5 (73) |
| Craft and related workers | 6.9% | 6.4 (72) |
| Plant and Machine operators and Assemblers | 4.9% | 4.5 (51) |
| Refuse to answer | - | 6.6 (74) |
| Others | 0.1 | 1.2 (14) |

.

**Table 2 Population’s and participants’ distribution of industry**

|  |  |  |
| --- | --- | --- |
| **Industry** | **HK Census**  **2011 data** | **Percentages (n)** |
| Community, Social and Personal Services | 25.5% | 28.1 (316) |
| Import/ Export, Wholesale/ Retail | 22.7% | 11.4 (129) |
| Finance, Insurance, Estate and Other Commercial Services | 19.2 % | 15.6 (176) |
| Transport, Warehouse and Communication | 8.9% | 11.8 (133) |
| Hotel & Restaurant | 7.9% | 7.0 (78) |
| Construction | 7.8% | 11.3 (127) |
| Manufacturing | 4.8% | 7.5 (85) |
| Others | - | 7.0 (78) |

**Key findings**

1. Our study found that the knowledge on mental illness among the working population is better than anticipated and we as high as almost 95% of our participants agreed that agreed that mental illness can be helped by psychotherapies.

**Table 3 Knowledge items**

|  |  |
| --- | --- |
| **Knowledge about mental health Items** | **Answered correctly % (n)** |
| 1. Most people with mental health problems want to have paid employment (true) | 90.5 (1018) |
| 1. If a friend had a mental health problem， I know what advice to give them to get professional help (true) | 81.5(916) |
| 1. Medication can be an effective treatment for people with mental health problems (true) | 72.3(813) |
| 1. Psychotherapy (e.g. talking therapy or counselling) can be an effective treatment for people with mental health problems (true) | 95.4(1073) |
| 1. People with severe mental health problems can fully recover (true) | 49.5(557) |
| 1. Most people with mental health problems go to a healthcare professional to get help (false) | 64.4(724) |

1. Also, about 35% of our study participants stated that they had ever worked with someone with mental health problems at work; and more than 50% of participants willing to work with people with mental health problems

|  |  |  |
| --- | --- | --- |
| **Table 4 Reported and intended behaviours items** | **Yes %(n)** | |
| Are you currently working with or have you ever worked with, someone with a mental health problem? | 35.6(401) | |
|  | **Agree** | **Agree slightly** |
| In the future, I would be willing to work with someone with a mental health problem. | 48.8(549) | 14.3(161) |

1. Besides of the positive findings, we found that our working population’s mental health needs improvement because almost 1/4 of our participants were bothered by feeling down, depressed, or hopeless in the past month; and almost 1/3 of our participants were bothered by having little interest or pleasure in doing things and worrying in the past month.

|  |  |
| --- | --- |
| **Table 5 Mental health status measured by the e-CHAT** | **Overall % (n)** |
| Depressed | 24.1 (271) |
| Worry | 31.3 (352) |
| Loss Interest | 32.2 (362) |
| Being harmed | 9.7 (109) |
| Being controlled | 13.0 (146) |
| Anger | 19.1 (214) |

(4) Participants who work as Professional and Elementary workers may need more attention about their mental health.

**Table 6 Some e-CHAT items among different occupations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Items** | **Overall**  **% (n)** | **Professionals**  **% (n)** | **Associate Professionals**  **% (n)** | **Clerks etc.**  **% (n)** | **Elementary**  **% (n)** | **Managers**  **% (n)** |
| Depressed | 24.1(271) | 25.7(29) | 27.0(30) | 22.7(98) | 29.3(27) | 24.8(26) |
| Loss Interest | 32.2(362) | 37.2(42) | 27.0(30) | 34.3(148) | 32.6(30) | 34.3(36) |
| Worry | 31.3(352) | 34.5(39) | 30.6(34) | 28.0(121) | 33.7(31) | 32.4(34) |
| Anger | 19.1(214) | 22.1(25) | 19.8(22) | 14.8(64) | 19.6(18) | 12.4(13) |
| Lack of Exercise | 48.1(583) | 45.1(51) | 45.9(51) | 50.7(219) | 44.6(41) | 51.4(54) |

1. Because people at the managerial and administration have more influence about the polices that may relate to mental health issues at the work place, we found that:

|  |  |  |
| --- | --- | --- |
| **Items (Agree and Slightly agree)** | **Overall % (n)** | **Managers % (n)** |
| 1. Organizations take a significant risk when employing people with mental health problems in a public/client-facing role. | 58.2 (654) | 62.9 (66) |
| 1. Negative attitudes from co-workers are a major barrier to employing people with mental health problems. | 63.2 (711) | 62.9 (66) |
| 1. People with mental health problems are less reliable than other employees. | 29.7 (335) | 36.2 (38) |
| 1. We would be flexible in offering adjustments or accommodations to someone with mental ill health. | 78.8 (893) | 75.7 (56) |

(6) Our industry loses a great deal of talent because about 57.8% (n=649) of the participants strongly agree or agree that our industry does not know how best to deal with mental health in the workplace.

Figure 1. Our industry does not know how best to deal with mental health in the workplace (strongly agree and agree).

(7) About 90.6% of our participants agree or slightly agree that more support in improving the way it deals with mental health at the workplace.

Figure 2. More support in improving the way it deals with mental health at the workplace (strongly agree and agree).

**Recommendations**We recommend that: (1) To set up a monitoring standard about knowledge, attitude, and practices towards mental health and the mental health status of the public to provide reliable data for policy planning; (2) Establish more mental-health friendly working environment and policies to promote a healthy lifestyle for employees; and (3) Encourage more multi-sectorial collaboration, i.e., academic, corporate, NGOs, in creating more support and opportunities for people with mental health issues at different stages

**Selected References**

平等機會委員會向精神健康政策及服務立法會衞生事務委員會提交的意見書 (accessed at 29th August 2014: http://www.legco.gov.hk/yr12-13/chinese/panels/hs/agenda/hs20130225.htm)

Evans-Lacko, S., Henderson, C., & Thornicroft, G. (2013). Public knowledge, attitudes and behaviour regarding people with mental illness in England 2009-2012. *Br J Psychiatry Suppl, 55*, s51-57.

Goodyear-Smith, F., Warren, J., Bojic, M., & Chong, A. (2013). eCHAT for Lifestyle and Mental Health Screening in Primary Care. *Annals of Family Medicine, 11*(5), 460-466.

Henderson, C., Williams, P., Little, K., & Thornicroft, G. (2013). Mental health problems in the workplace: changes in employers' knowledge, attitudes and practices in England 2006-2010. *Br J Psychiatry Suppl, 55*, s70-76.

Kessler, R. C., & Frank, R. G. (1997). The impact of psychiatric disorders on work loss days. *Psychological Medicine, 27*(4), 861-873.

Lahelma, E. (1992). Unemployment and Mental Well-Being - Elaboration of the Relationship. *International Journal of Health Services, 22*(2), 261-274.

Lim, Debbie, Sanderson, Kristy, & Andrews, Gavin. (2000). Lost productivity among full‐time workers with mental disorders. *The journal of mental health policy and economics, 3*(3), 139-146. http://www.nimh.nih.gov/about/director/2011/the-global-cost-of-mental-illness.shtml