

ADVISORY INFORMATION 1/2023

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MENTAL HEALTH AWARENESS FOR AVIATION PERSONNEL

1 Introduction

- 1.1 **The Constitution of the World Health Organization (WHO) states “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”**
- 1.2 Mental health is an essential element of general health, it also includes the absence of any mental disorder or emotional issue. It is a state of well-being in which an individual realizes his or her own abilities, able to cope with normal life stresses, work productively and contribute to his or her community. **(WHO, 2016)**
- 1.3 A study showed that mental disorder was the fifth top factor causing the loss of license for medical reasons in one of the aviation authorities. **(Høva JK, 2017)** Mental disorder, including psychotropic drugs and alcohol misuse had also been rated as one of the leading contributors towards medical-related fatal accidents in commercial air transport operation from 1980 to 2011. **(Mitchell S, Lillywhite M., 2011)**

2 Common conditions of mental health problem

- 2.1 Mental disorder encompasses a range of conditions. Below are examples of few common conditions:
 - 2.1.1 *Stress* is the body’s normal reaction towards a challenge or a demanding situation which requires an adjustment or a response. Any situation that provokes our body to react is known as a stressor and our body’s response towards it is known as stress response, called the fight or flight response. When our mind perceives a situation as a stressor, through a complex neuronal and endocrinal mechanism, the stress hormones (cortisol, adrenaline and norepinephrine) gets released from the adrenal glands which prompts the body to fight the situation or escape from it. Heart rate and blood pressure increases and our muscles get tensed. The digestive system gets suppressed and the function of the immune system gets altered. Sugar (glucose) level in the blood stream increases to provide ‘fuel’ for the body. Our mental function gets altered and we become more focused and vigilant, feel more anxious, and angry. Stress in short bursts, can be positive as it keeps you motivated, alert and ready to

avoid danger. However, prolonged exposure to stress without relief can be detrimental to health. (Dandaithapani T. , 2022)

- 2.1.2 *Burnout* is a state of physical, mental and often emotional exhaustion caused by prolonged and repeated exposure to work stress. According to the WHO, burnout is a syndrome resulting from chronic workplace stress that has not been successfully managed. Burnout happens gradually and if ignored, there is a high risk of developing physical illnesses such as migraine, diabetes, hypertension, gastritis or mental illness such as dysthymia, depression or anxiety disorders. In addition, any pre-existing illness may worsen. (Dandaithapani T. , 2022)
- 2.1.3 *Anxiety* is a feeling of apprehensive uneasiness. It is often an appropriate emotion in situations of danger. It becomes a problem when the emotion is prolonged or excessive in comparison to the actual situation, or results in impaired functioning. (ICAO, How To Keep Mentally Well, 2018)
- 2.1.4 *Depression* is a feeling of sadness. It is characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities. It can also disturb sleep and appetite. Tiredness and poor concentration are common. The effects of depression can be long-lasting or recurrent and can dramatically affect a person's ability to function and live a rewarding life. It is often an appropriate emotion following bereavement. It becomes a problem when the emotion is prolonged or excessive, or results in impaired functioning.
- 2.1.5 *Psychosis* is an abnormal condition of the mind that involves loss of contact with reality. Symptoms include hallucinations (seeing or hearing things that are not present or do not exist) and unusual or bizarre behaviour

3 Factors affecting mental well-being in an aviation personnel

- 3.1 Aviation personnel, especially pilot, cabin crew and air traffic controller, due to irregular work pattern, are subjected to multiple challenges which may affect mental well-being.
- 3.2 The following are widely recognized factors that contribute to one's well-being:
 - a) Sickness affecting regulatory medical fitness assessment;
 - b) Fatigue and lack of sleep;
 - c) Job insecurity and unemployment;
 - d) Social, family, marital relationship disharmony and stress;
 - e) Domestic strife;
 - f) Financial difficulty;
 - g) Work challenges (crossing time zones, irregular work shift);

- h) Workplace conflict;
 - i) New life events (e.g. marriage, new baby);
 - j) Work life imbalance;
 - k) Changes in the aviation industry; and
 - l) Financial issue
- 3.3 Much evidence also suggests that reducing psychosocial risk factors can prevent mental disorder
- 3.4 These factors have potential to cause preoccupation and distraction in pilots, cabin crew and air traffic controllers and may thus have a significant impact on flight safety, even if they do not constitute a medical condition or diagnosis.
- 3.5 It is a good judgement exercised by the license holder to temporarily avoid flying or assume air traffic control where appropriate.

4 Signs and symptoms suggesting of mental health problem

- 4.1 Emotional symptoms:
- a) Negative or depressive feelings;
 - b) Loss of motivation & confidence;
 - c) Anxiety;
 - d) Throwing tantrums;
 - e) Unable to relax;
 - f) Sensitive; and
 - g) Impatience.
- 4.2 Cognitive symptoms:
- a) Difficulty in decision making; and
 - b) Poor concentration and memory.
- 4.3 Changes in behaviour:
- a) Eating habits;
 - b) Sleeping patterns;
 - c) Smoking and drinking habits;
 - d) Dishevelled;
 - e) Procrastinating;

- f) Isolating yourself;
- g) Decrease work performance; and
- h) Frequent absent from work.

4.4 Physical changes:

- a) Feeling excessive tiredness;
- b) Non-specific body pain, headache and joint pain; and
- c) Develop acne.

5 How to keep mental well-being?

5.1 What can an aviation personnel do to remain mentally healthy?

(ICAO, How To Keep Mentally Well, 2018)

5.2 Reduce or avoid psychosocial risk factor.

5.3 Build up mental resilience:

- a) Mental resilience is a process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress – such as family and relationship problems, serious health problem or workplace and financial stressors; and
- b) Activities such as developing hobbies and interest, make time for friends and family, communicate effectively when dealing with people who are making unreasonable or unrealistic demands, learn to improve your work-life balance, improve sleep, exercise regularly and use relaxation or mindfulness technique can improve emotional resilience.

5.4 Connect socially with others:

- a) Show kindness to other with a smile, positive gesture and always be grateful;
- b) Take time to develop and maintain your relationships and social support network when things are going well. For example, keep in touch with friends and family, meeting new people; and
- c) When life becomes tough (e.g. loss of a loved one, a divorce, or even loss of a job), these social networks are invaluable. They can help you regain your mental resilience, mitigate some of the impact, and provide support.

5.5 Get active:

- a) Engage routinely in your favourite activity;
- b) Exercise 75 minutes to 150 minutes a week; and

- c) Exercise has shown to help those with mild depression and can help protect against anxiety. It improves self-esteem, self-control and the ability to meet challenges.

5.6 Quality time with others:

- a) Spend time with family and friends;
- b) Nurture your relationships;
- c) Acts of giving and kindness give us a sense of purpose and increase our feelings of self-worth.

5.7 Be mindful:

- a) Focus your attention to the present moment;
- b) Avoid thoughts unrelated to the task at hand;
- c) Aviation personnel may be distracted by thoughts unrelated to the task at hand, for example poor simulator check, worried of next regulatory medical assessment or worried about job insecurity. Such thoughts may affect one's well-being; and
- d) Mindfulness by focusing your attention to the present moment, rather than dwelling on past or future concerns, for example, change your approach from "I might fail my next simulator check" to a more neutral thought "this is an anxiety" which can be managed more easily.

5.8 Keep learning:

- a) Challenge yourself with new skill outside of the workplace;
- b) Adopt hobbies outside of the workplace; and
- c) Explore new hobby that can expand your horizon, improve your self-esteem, and to connect with others, all of which can improve mental resilience.

5.9 How an organization can help?

5.9.1 Psychologically safe workspace:

- a) Employer is encouraged to inform the aviation personnel the employer/organization's expectations and goals; and
- b) Ensure aviation personnel voice is heard.

5.9.2 Employer should allow ample time for a regular break:

- a) Allow personnel to disengage from work during breaks; and
- b) Maintain good communication with personnel.

5.9.3 Organization to inculcate work life balance culture:

- a) No work-related matters after working hours.

5.9.4 Build good rapport with personnel:

- a) Organize frequent engagement sessions with personnel as a platform for sharing information, and provide recognition for performing personnel can build self-esteem and self-motivation among employee; and
- b) Give certain degree of autonomy to personnel in making decision, this can elevate the sense of belonging. **(Dandaithapani T. , 2022)**

6 Management of Healthcare Professional

- 6.1 The Designated Medical Examiner, general practitioner and psychologist are well placed to identify such situations and discuss with them the applicant to ensure that adequate professional support is provided, whether non-medical or medical.
- 6.2 A Designated Medical Examiner can often provide advice before a situation requires more formal involvement by the regulatory authority.

7 Conclusion

- 7.1 Mental health problems are relatively common in the general population and in the aviation community. Depression is the leading cause of disability worldwide but can be treated effectively.
- 7.2 Many of the conditions which could be contributory to an accident are not major medical problems but situational i.e. dependent on the current circumstances in which an individual finds himself. **(ICAO, DOC 8984 Manual of Civil Aviation Medicine, 2012)**
- 7.3 Aviation personnel are encouraged to seek assistant when facing emotional difficulties or psychological problems



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