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INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

RECONNECTING **THE** WORLD

ICAO Mental Health Working Group



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DISCLOSURE

I have no actual or potential financial conflicts of interest in relation to this presentation.

This presentation does not contain confidential information but does cover some activities which are still ongoing. Please contact ICAO for up-to-date information if you wish to quote the material covered.

While the presentation will cover published ICAO work, if opinions are expressed they represent the opinion of the presenter and not the International Civil Aviation Organisation.

TOPICS COVERED

01 Importance of mental health
in aviation

02 ICAO and Mental Health

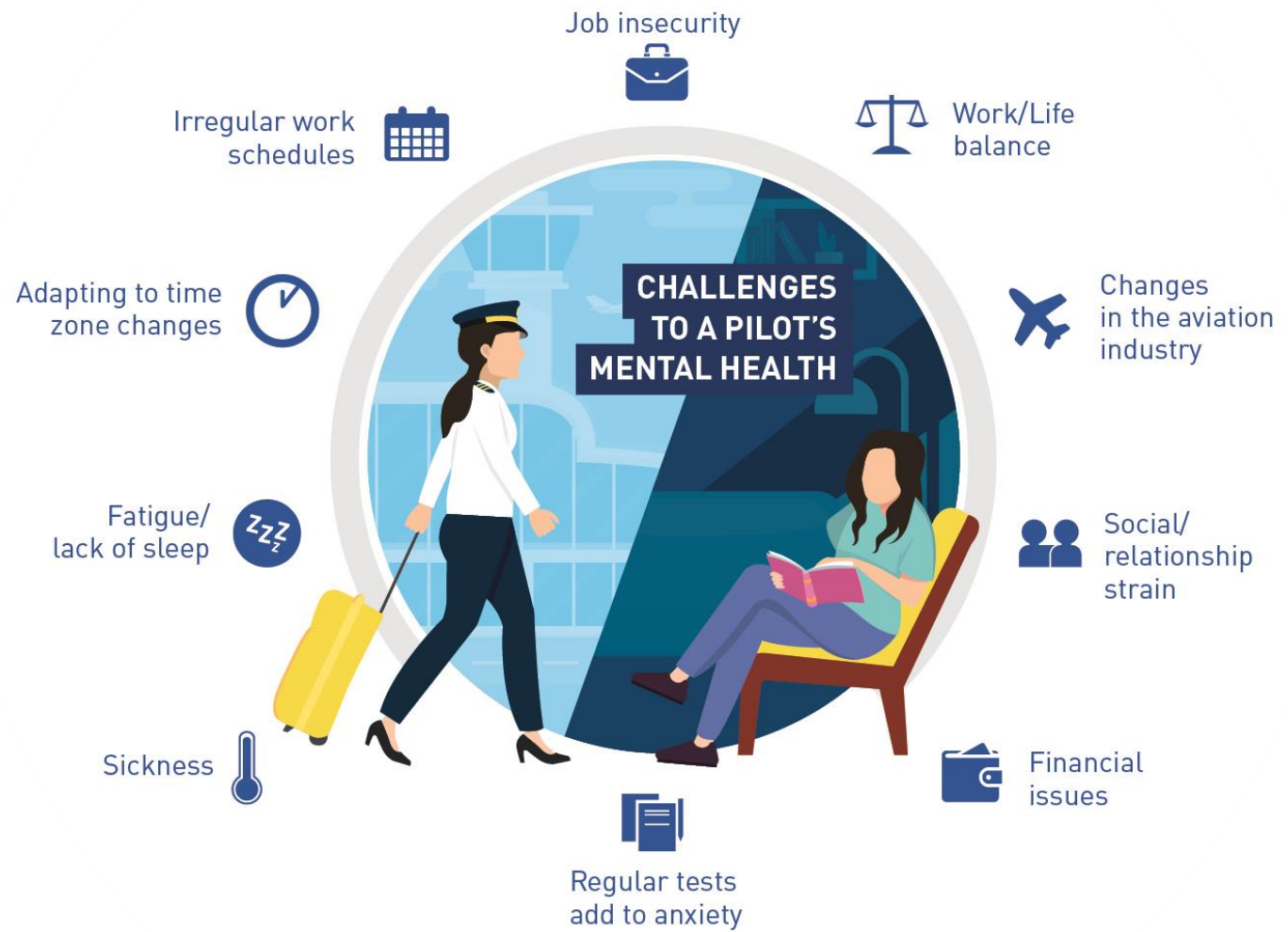
03 Promotion of mental health

04 Peer support

05 Problematic use of psycho-
active substances

06 Questions

01 Importance of mental health in aviation



IMPORTANCE OF MENTAL HEALTH IN AVIATION

- Mental health effects in the earliest days of flying
- Germanwings Flight 9525
- Effects of the Covid-19 pandemic
- Concern regarding Post Covid-19 condition (long Covid)
- Both risk of pilot suicide (and aircraft assisted murder-suicide) and general performance detriment to stakeholders can affect the aviation system.

EFFECTS OF MENTAL HEALTH ON PILOTS

- Research has previously identified mental health issues as a reason for pilot incapacitation, both as inability to perform (Mitchell & Lillywhite, 2013) or as compromised decision-making (BEA, 2016).
- Newman (2007) determined that Mental Health (Psychological + Substance Abuse) was the cause of 4.08% of in-flight incapacitations from 1975-2006.
- Mental health issues are also one of the leading causes for medical disqualification and loss of license for both pilots and air traffic controllers (Evan & Radcliffe, 2012; Pombal et al., 2005; Hova et al., 2017)
- According to the 2016 ICAO Survey on Loss of License, mental health accounts for 22.5% of medium and long-term loss of license and this is supported by EASA's Study on Age Limitations of Commercial Air Transport Pilots (2017) that states that 20% of medical disqualifications are mental health-related (Psychological & Psychiatric)

LINK TO AVIATION SAFETY

This specific link between mental health and aviation safety and performance is harder to quantify. Aviation has robust safety measures in place that make that kind of research difficult at best.

Outside of aviation, however, it has been found that ...

In a meta-analysis, Ford et al. (2011) determined that the correlation between overall work performance and mental health to be 0.4

There is evidence that indicates (Alavi et al., 2017) that for heavy vehicle drivers, depression and anxiety increase the odds ratio of accidents by 2.4 (depression).

FUTURE OF MENTAL HEALTH IN AVIATION

- Mental health poses a dynamic challenge, and how we deal with it may change as time goes by. In addition to the problems of today, other new challenges may become an issue.
- Such as ...
 - Generational differences in new pilots
 - Building resilience as a safety responsibility
 - Nootropic drugs (“smart drugs”) and cognitive performance enhancers
 - Clinical treatments based on psychedelic substances
 - New paradigm for mental health (post-destigmatization)

02 ICAO and Mental Health



ICAO AVMED AND MENTAL HEALTH

- ICAO works to **PROMOTE** mental health in aviation.
- ICAO gives guidance on how to **ASSESS** mental health in safety-sensitive personnel.
- ICAO provides **SUPPORT** to stakeholders to strengthen mental health in aviation.

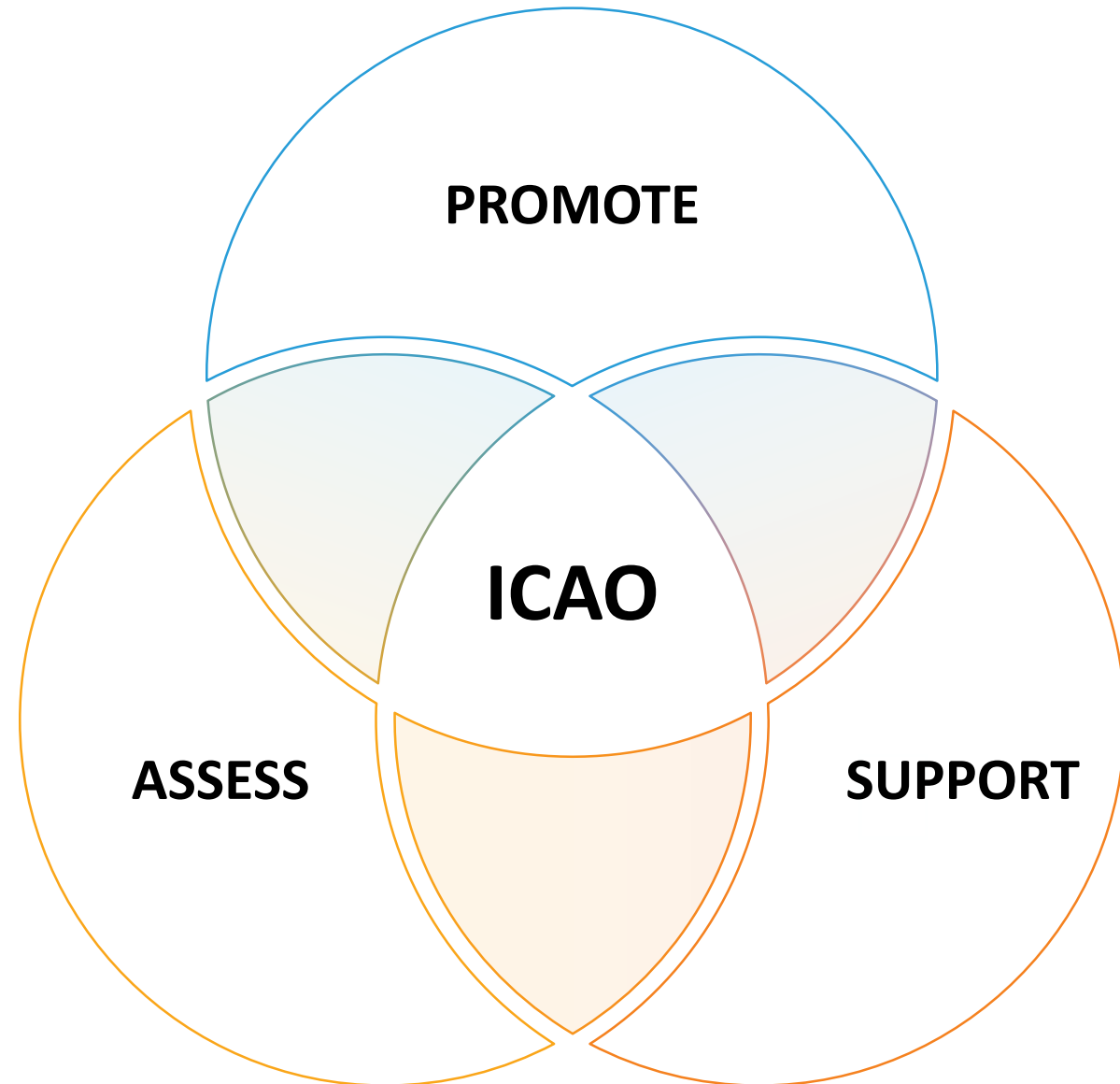
AFFECTING MENTAL HEALTH IN AVIATION

ICAO affects aviation mental health by publishing SARP's and Statements; Documents and Manuals; and Guidelines, best practices and more.

ICAO **promotes** mental health through endorsing health promotions, peer support, specific aviation MH initiatives and more.

ICAO provides **support** to regulators; aviation industry; healthcare providers and more.

ICAO provides guidance on how to **assess** safety-sensitive personnel to aeromedical experts, specialists and other operational personnel (human-in-the-system).



ICAO'S MENTAL HEALTH WORKING GROUP (MHWG)

- One of the working groups of the ICAO Medical Provisions Study Group (MPSG).
- Consists of multi-national experts with a geographical representation of ICAO member states, aviation industry representatives and relevant medical specialists.
- Group is responsible for reviewing the ICAO Standards and Recommended Practices (SARPs) relating to mental health in aviation, as well as developing guidance material to assist member states with the implementation of the SARPs.
- The MHWG is a venue for stakeholders to discuss development and opportunities to strengthen aviation mental health.

PUBLISHED MATERIAL

- Requirements from Annex 1 and Manual of Civil Aviation Medicine.
- ICAO's Electronic Bulletin on *Promoting, maintaining and supporting mental well-being in aviation during the Covid-19 pandemic* (EB2020/55) and Electronic Bulletin on *Post-Covid 19 infection protocol for medical certification* (EB2022/8).
- Multiple working papers submitted to last year's 41st ICAO Assembly: WP256 (Medical Certification and Mental Illness), WP357 (Follow-up on the Measures for Assessing Psychological and Physical Fitness and Management of the Risk Associated with Mental Health) and WP396 (Preventative Health Programmes for Air Traffic Controllers)

PUBLISHED MATERIAL (cont.)

- In addition to the aeromedical domain, ICAO concerns itself with mental health in numerous other areas. These include ...
- ICAO Annex 13 on Accident Investigations and Document 9756 (Manual of Aircraft Investigation), ICAO Annex 19 on Safety Management and Document 9859 (Safety Management Manual)
- In addition there is PANS Training (re. stress), Document 10151 (Human Performance Manual for Regulators), Document 10185 (Manual on Critical Incident Response Programmes for Cabin Crew) and more.

FITNESS-TO-FLY

- Of particular note is ICAO's *Fitness-to-Fly, A Medical Guide for Pilots*.
- Developed by the International Civil Aviation Organization (ICAO) in collaboration with the International Federation of Airline Pilots Associations (IFALPA) and the International Air Transport Association (IATA). It is focused on the health risks pilots face during their careers and the medical recommendations that help them mitigate those risks.



ONGOING WORK AT ICAO ON MENTAL HEALTH

- Promotion of importance of mental health in the aviation environment.
- Creation of guidance material for aviation stakeholders with regards to mental health.
- Review of research with regards to aviation mental health, effects of Covid-19 on MH, aviation safety and mental health, mental health concern incidence rate among pilots and other safety sensitive personnel and more.
- Review of different State approaches to subjects such as: SSRI use, mental health evaluations, age requirements, AME training w. regards to mental health, etc.

03

Promotion of mental health in aviation



MANUAL OF PROMOTING WELL-BEING IN AVIATION

- Proposed Document being considered. It would bring together elements related to mental health, well-being and health promotion.
- It could include
 - Guidance material on health promotion
 - Principles of aviation well-being
 - Aviation mental health terminology
 - Guidance material on peer support

HEALTH PROMOTIONS

Part of ICAO's Annex 1, health promotions are activities done by the State focused on improving health-related outcomes, particularly among license-holders (e.g. pilots).

Health promotions are intended to reduce future medical risks to flight safety and can be a powerful method to place focus on the importance of mental health.

PRINCIPLES OF AVIATION WELL-BEING

A set of guidelines and principles for all aviation stakeholders on how to promote, maintain and support mental health and well-being.

Published in 2020 during the height of the Covid-19 pandemic, these principles have shown to be a timeless examples of how strengthen well-being and bring focus to the importance of mental health in aviation, particularly in a time of crisis.

AVIATION MENTAL HEALTH TERMINOLOGY

One of the challenges faced by aviation professionals is that mental health terms can be culturally-specific and that sometimes the same terms are used to refer to different things depending on where in the world you are.

As aviation is a global endeavour, it is highly important that we standardize the main terms we use so that we can be certain we are tackling the same problem and have the same understanding of key issues.

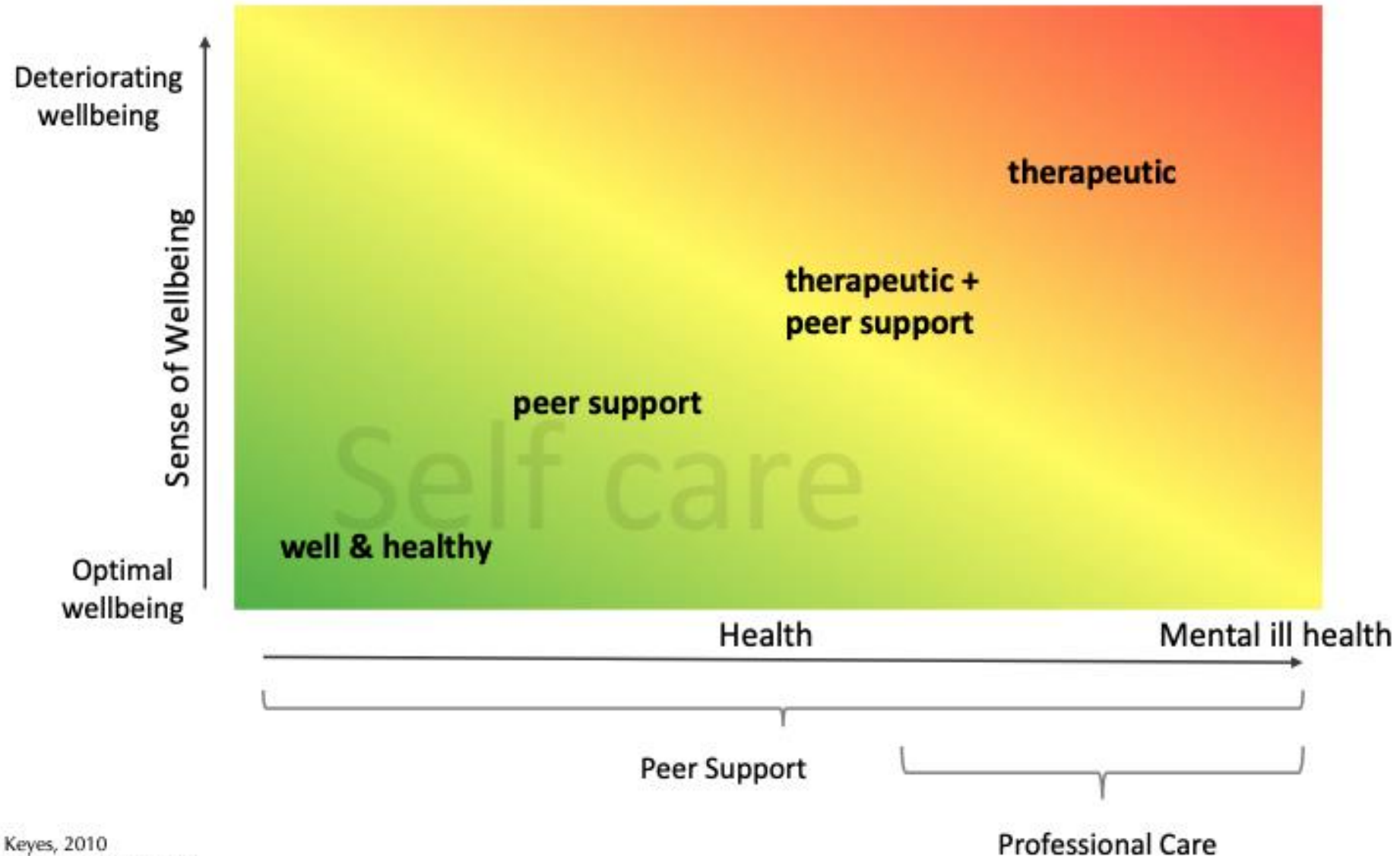
The Aviation Mental Health Glossary will hopefully assist in this matter, allowing aviation professionals to draw on a shared, global resource when dealing with mental health projects.

05 Peer Support



Mental Health and Wellbeing Continua

24



Modified from Keyes, 2010
Santilhano, 2018, Fahrenbrück, 2020

ICAO ON PEER SUPPORT

“A formal Peer Support Programme provides an emotionally safe, non-judgmental environment, where confidential information can be shared. Peers are well-trained and skilled colleagues, who are trustworthy, share common professional qualifications and experiences, may have encountered similar situations, usually work within the same or similar operational context and can relate to his or her colleague’s situation.”



PEER SUPPORT

- The implementation of a peer support program is a proactive safety activity rather than a reactive one. The programme enables anticipation and planning for wellness issues that can impact safety rather than waiting for safety to be compromised by a wellness issue and then responding to it.

(adapted from EB2020/55)

- States have a natural role in the evolution of peer support programmes, through endorsement, promotion, oversight and other activities. States should endorse new and existing programmes. Consistent with the principle that a layered approach to safety is best, States should encourage the development of programs for aviation professionals, particularly to respond to wellbeing issues, critical incidents and substance addiction.

(adapted from Document 10185)

04

Problematic use of psychoactive substances



PROBLEMATIC USE OF PSYCHOACTIVE SUBSTANCES

- Sub-group of the MHWH. Updating Document 9654, the “Manual on Prevention of Problematic Use of Psychoactive Substances in the Aviation Workplace”
- Update will cover such areas as positive safety culture, use of social media, involvement of AME’s, different methods of biomedical testing and more.
- While there have been significant developments in testing methods since the 90s when the manual was first published, the greatest changes were in areas related to organisational factors and aspects related to safety culture.

06

Questions

For more information
contact
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Thank You