

DME Training – Mental Health in Civil Aviation

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Dy Chairman, CAMB - CAAS
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Disclosure

- I have no financial interests that are related this presentation.
- I am not a Psychiatrist.

Scope

- Background
- The focus on mental health
- Implementing competency-based training
- Conclusion

Background

- Memorandum of Understanding between IAASM & SAA (2004)
- Jointly offer an Aviation Medicine course for Medical Examiners





Background

- ICAO convened 3rd Medical Provisions Study Group (MPSG) – 27 April to 1 May 2009
- To harmonise training programmes to ensure that internationally agreed competency standards are met
- Adopted competency-based approach in DME training
- Competency framework for DME training published in Manual of Civil Aviation Medicine in 2012

Background

- Developed a new competency-based course to replace the former course
- Launched in 2013

“IAASM-SAA Aviation Medicine for Medical Examiners and Assessors (Competency-based)”



Background

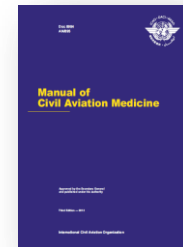
2016 revision – for accreditation by ICAO as a Compliant Training Package

“IAASM-SAA Post-graduate Certificate in Aviation Medicine for Medical Examiners and Assessors (ICAO Compliant Training Package)”



- The focus on mental health...

Focus on mental health

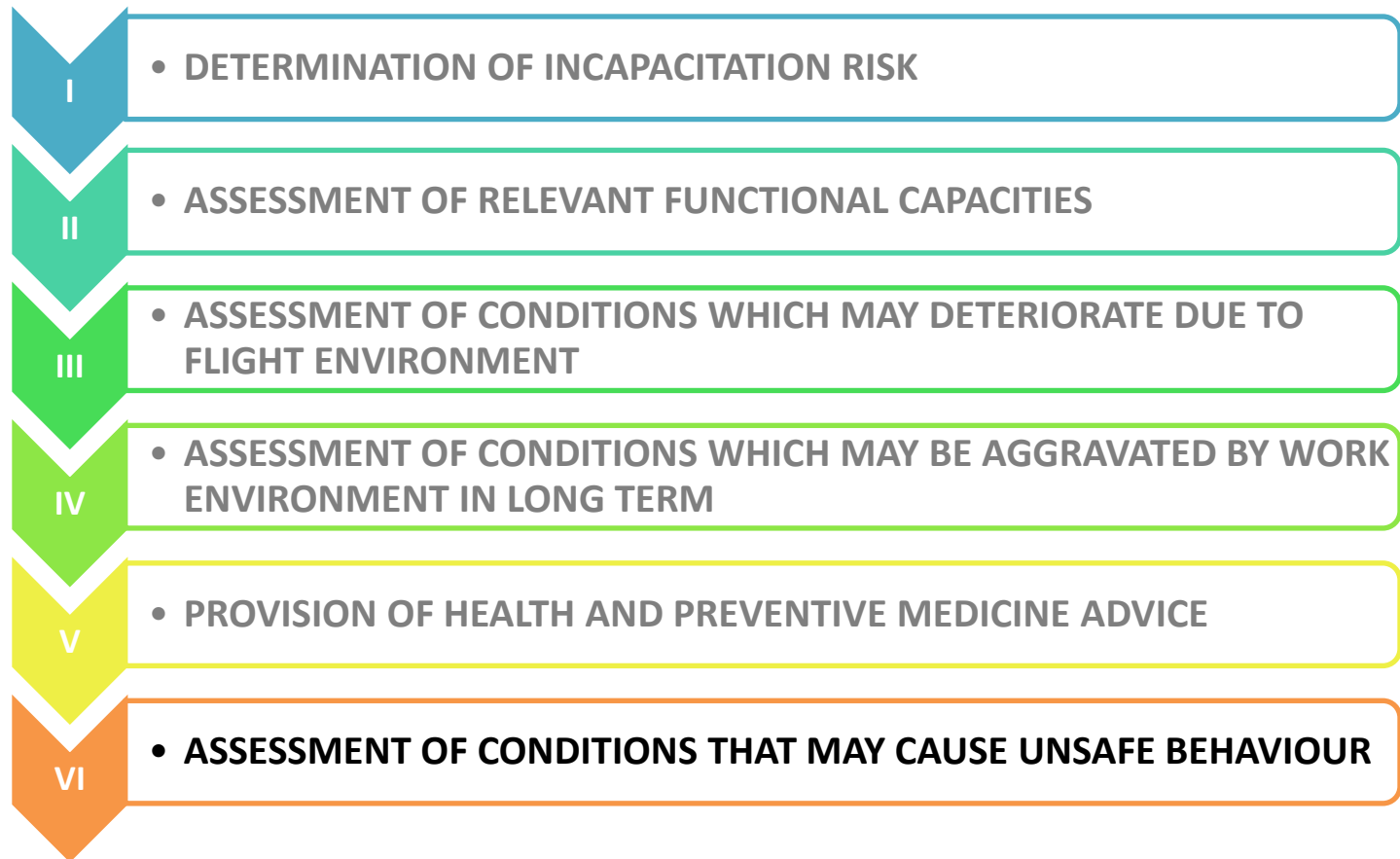


3rd MPSG – Guiding Principles:

1. Physical incapacitation is a rare cause of accidents in two-pilot aircraft undertaking commercial flight operations
2. Overall incidences of physical disease increases significantly with age
3. In many States, the incidence of mental health problems, such as depression and problematic use of psychoactive substances, is increasing whilst cardiovascular disease is declining
4. For some conditions, preventative strategies have been demonstrated to be effective in the general population, eg. depression, alcohol misuse
5. The current periodic medical examination does not formally address mental health or behavioural problems associated with ill health to the same extent as the detection of physical disease
6. The periodic physical examination, like all medical examinations, benefits from a thorough history
7. Current life events can adversely affect the performance of licence holders

Focus on mental health

- 3rd MPSG – Aims of the examination process:



Focus on mental health



Perhaps the most important areas of the examination relate to behaviour. An important competency in this regard is the evaluation of psychiatric and psychosocial factors. This phrase may appear to confuse different elements, but is chosen deliberately. A full psychiatric examination would not normally be conducted by an aviation medical examiner: it should, however, be normal in the course of an assessment to undertake some empirical evaluation of the features of psychiatric illness including behaviour, appearance, orientation, memory, form and content of thought, mood and affect/emotion.

Similarly, although time precludes a full psychological evaluation, it would be valuable for medical examiners to gain some degree of insight into the psychological milieu and social circumstances of the applicant, in a discussion of such areas as domestic/family situation and work stresses, which is referred to in 1.2.2 above. It could be argued that this is at least as important as many other parts of the traditional physical examination. 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. Current life events or concerns such as relationship worries, domestic strife, family stress, financial difficulty, work challenges (including fatigue), or workplace conflict (or even positive events such as marriage, new baby or promotion) have potential to cause preoccupation and distraction in pilots or air traffic controllers and may thus have a significant impact on flight safety, even if they do not constitute a medical condition or diagnosis.

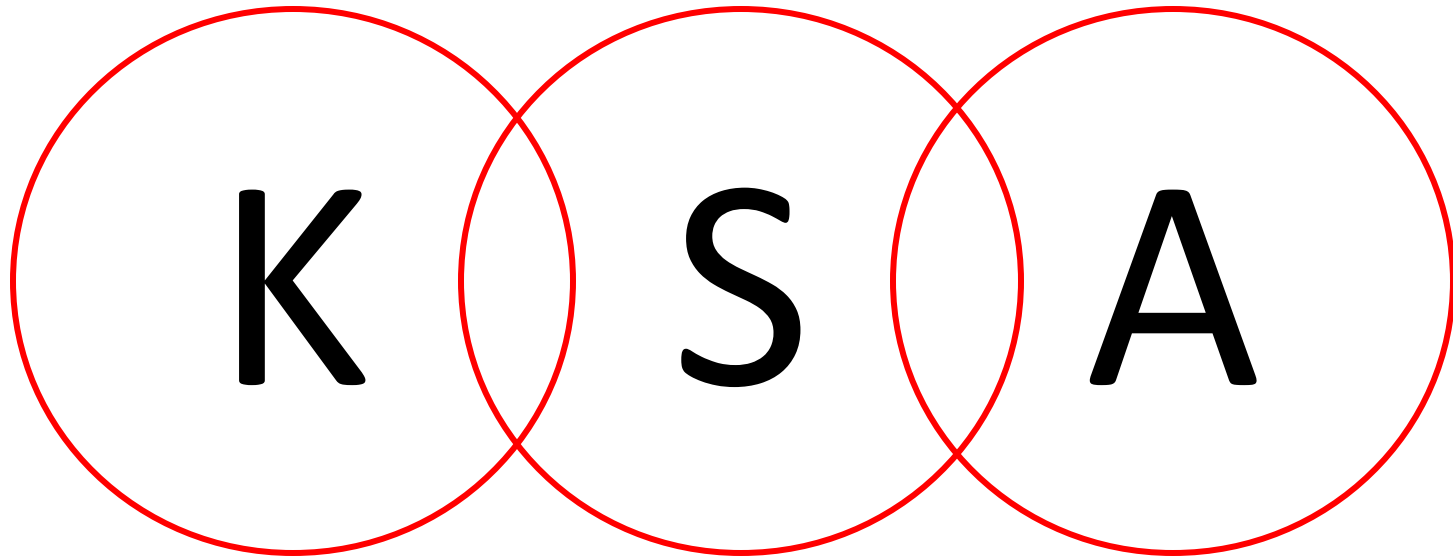
The DME is well placed to identify such situations and discuss them with the applicant to ensure that adequate professional support is provided, whether non-medical or medical, and also that good judgement is exercised by the applicant as to temporarily avoiding flying where appropriate. Further guidance concerning mental health and behavioural issues can be found in Part I, Chapter 2 and Part III, Chapter 9.

- Implementing competency-based training for DMEs

Competency-based training

- So, how to go about it?
 - What constitutes a competency-based mental health package for training of DMEs?
 - How to structure and fit into course framework?
 - How training can be conducted?

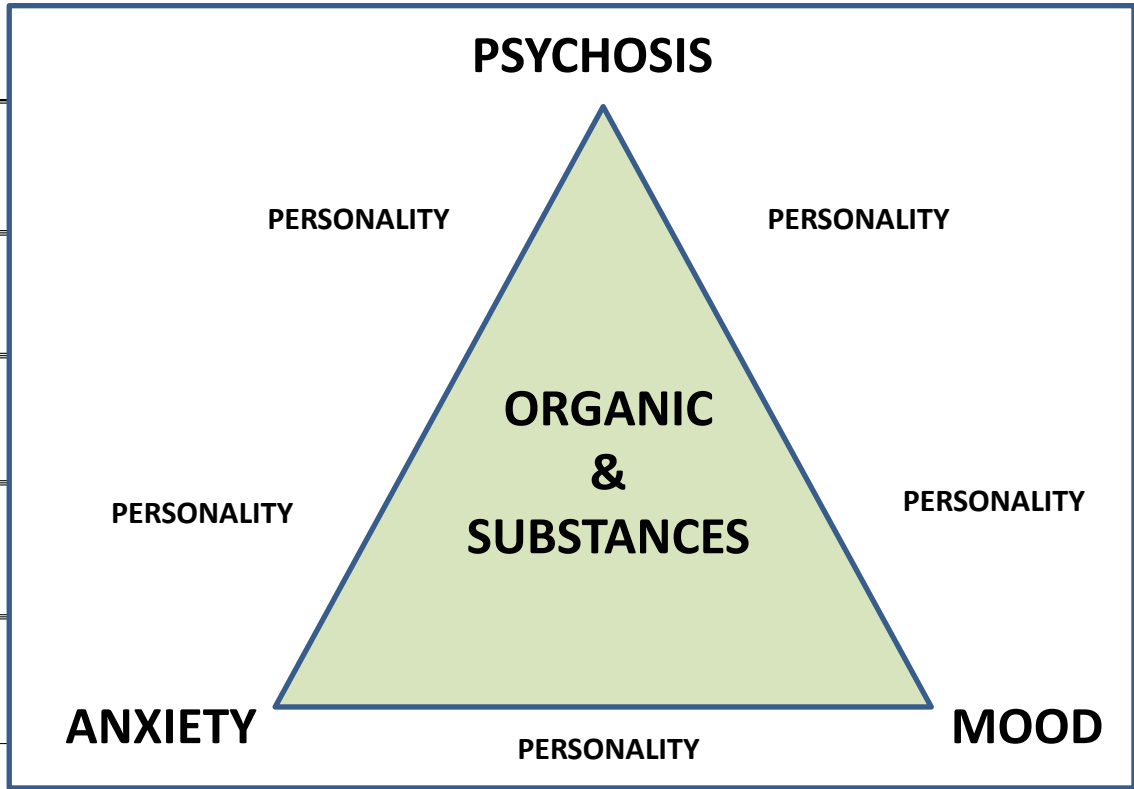
Competency-based training



Inculcate competency; not teach Psychiatry

K Knowledge

M2.6L1	STRESS AND ANXIETY DISORDERS
M2.6L2	MOOD DISORDERS
M2.6L3	PERSONALITY DISORDERS
M2.6L4	ALCOHOLISM AND SUBSTANCE USE
M2.6L5	PSYCHOTIC DISORDERS
M2.6L6	ORGANIC PSYCHIATRIC DISORDERS AND DEMENTIA



INTRODUCTION

A wide range of agents can cause organic disturbances of the brain. The resultant symptoms depend on the causal agent, the part(s) of the brain affected, the previous health of the brain, and the current environment of the person.

The causal agent may be external (alcohol, drugs, medication, injury, etc.) or internal (tumours, endocrine disorders, degeneration, etc.). An organic mental disorder may present with a wide array of psychiatric

S Skills

- Communication
 - Building rapport
 - Establish trust
 - Chat
 - Observe & Explore
 - Handling difficult situations
- Identify stressors/issues/signs
- When and how to deploy screening tool

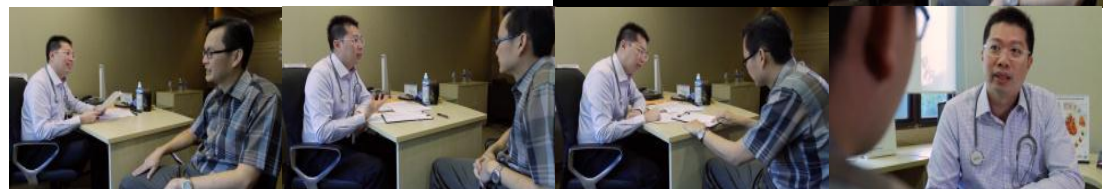
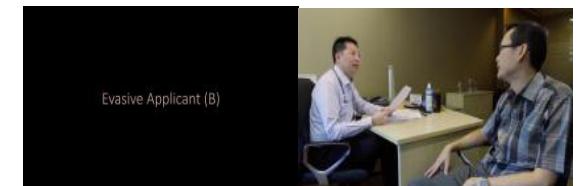
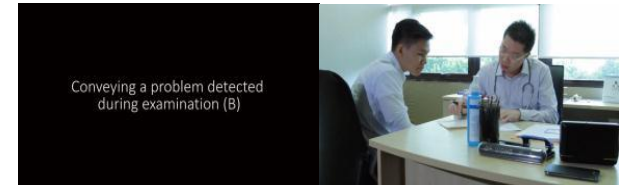
A Attitude

- “Too difficult”
- “Too time consuming”
- “It’s ineffective”
- “It’s pointless”
- “I don’t know what to do”
- “I’d rather not know”



KSA Putting it together

- Lectures
- Videos critique (communication)
- Case discussions
- Instructors role-playing



A Attitude

- “Too difficult”
- “Too time consuming”
- “It’s ineffective”
- “It’s pointless”
- “I don’t know what to do”
- “I’d rather not know”

– A real-life tragedy did the work



Competency-based training

COMPETENCY-BASED AVIATION MEDICINE COURSE FOR MEDICAL EXAMINERS

**M1
REGULATORY
MEDICINE**

**M2
CONDUCTING
MEDICAL
EXAMINATION**

**M3
FOUNDATIONAL
AVIATION MEDICINE**

**M4
RISK-BASED
AEROMEDICAL
EVALUATION**

**M5
OPERATIONAL
AVIATION MEDICINE**

- M2.1 Facilitating Communication
- M2.2 Systematic and Targeted Clinical Examination
- M2.3 Eye Examination and Assessment of Visual Functions
- M2.4 ENT Examination and Functional Assessment
- M2.5 Mental Health Evaluation in Aviation (1)
- M2.6 Mental Health Evaluation in Aviation (2)

COMPETENCY-BASED AVIATION MEDICINE COURSE FOR MEDICAL EXAMINERS

M1 REGULATORY MEDICINE	M2 CONDUCTING MEDICAL EXAMINATION	M3 FOUNDATIONAL AVIATION MEDICINE	M4 RISK-BASED AEROMEDICAL EVALUATION	M5 OPERATIONAL AVIATION MEDICINE
	<ul style="list-style-type: none"> M2.1 Facilitating Communication M2.2 Systematic and Targeted Clinical Examination M2.3 Eye Examination and Assessment of Visual Functions M2.4 ENT Examination and Functional Assessment M2.5 Mental Health Evaluation in Aviation (1) M2.6 Mental Health Evaluation in Aviation (2) 			
	<p>M2.1</p> <p>Facilitating Communication</p> <ul style="list-style-type: none"> M2.1L1 Introductory Comments M2.1L2 Medical Examiner – Applicant Relationship M2.1L3 Removing Barriers to Communication M2.1L4 Studies 			

COMPETENCY-BASED AVIATION MEDICINE COURSE FOR MEDICAL EXAMINERS

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	<p>M2.6</p> <p>Mental Health Evaluation in Aviation (2)</p> <ul style="list-style-type: none"> M2.6L1 Stress and Anxiety Disorders M2.6L2 Mood Disorders M2.6L3 Personality Disorders M2.6L4 Alcoholism and Substance Abuse 			

Competency-based training

Week 2

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
0830	Evaluation of	Evaluation of Endocrine and	ATC Work	ATC Workplace Visit and	Review and Discussion

Week 1

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY		
0830	Course <u>Opening</u>	Eye Examination and Assessment of Visual Functions	Altitude Physiology	Mental Health Issues in Aviation	Interval assessment		
0900							
0930							
1000							
1030	ICAO Personnel Licensing and Medical Provisions						
1100							
1130							
1200							
1230					Aviation Physiology Simulator Practicum		
1300		ENT Examination and Functional Assessment					
1330	Complying with Medical Fitness Requirements		Orientation Physiology – Vestibular system	Mental Health Issues in Aviation			
1400							
1430							
1500							
1530	Facilitating Communication	Systematic and Targeted Examination					
1600							
1630							Human Factors and Crew Resource Management
1700							Aviation Physiology Simulator Brief
1730							

Conclusion

- The 3rd MPSG was an important milestone that had brought focus onto mental health issues
- Competency-based approach offers a systematic and effective way to train DME
- The GermanWings tragedy has shifted the **A** component amongst DMEs, making them more receptive

Thank you.