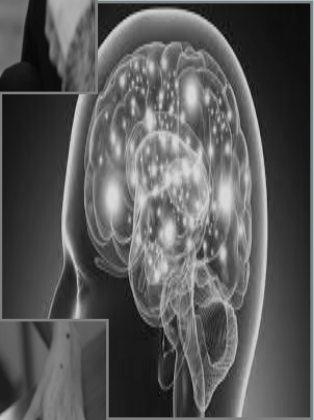




MENTAL HEALTH CONCERNS AND SUPPORT SYSTEM IN AVIATION

By: Dr Edma Naddaf



- In my **34 years** of experience in aviation, including roles as a Psychologist, Assessor, Investigator and Human Factor Specialist, I have observed a common factor that has a serious impact on safety in aviation is Mental health issues.
- It is a silent disease that threatens any aviation setup or operation.
- Mental health in aviation has become a major concern to airlines regulators & passengers.
- Psychological problems among pilots and aviation operational staff are a threat to flight safety and their outcome can be catastrophic. Germanwings in March 2015 and Air Alaska in October 2023.



WHAT IS MENTAL HEALTH?

- Mental health is "well-being, enabling individuals to realize their abilities, manage life's stresses, and contribute to their communities" *World Health Organization.*
- Mental Health is a positive sense of well-being, resilience, and the ability to enjoy life and build meaningful relationships. *Mental Health Foundation.*

MENTAL HEALTH TRENDS ACROSS THE GENERAL POPULATION



- I. A research was conducted on 150,000 adults across 29 countries by Harvard Medical School and the University of Queensland on July 31, 2023,
 - Findings: one out of every two people worldwide is at risk of developing mental health disorder in their lifetime.

- II. In the US, study was published on March 20, 2023. by [Kaiser Family Foundation](#).
 - Findings:
More than 30% of adults in the US reported symptoms of anxiety and/or depression in February 2023.
Over 20% of those adults did not receive the necessary mental health counseling or therapy during the year 2022.

- III. [Mental Health UK](#), reported that over 8 million individuals are concurrently experiencing anxiety disorder in the UK.

These findings underscore the urgent need for enhanced mental health support and services on a global scale.

MENTAL & PSYCHOLOGICAL PERSPECTIVE IN AVIATION

- In the aviation industry, mental health challenges are of critical concern due to the uniqueness and the demanding nature of the profession.
- Both working conditions and environment are physiologically and mentally challenging.
- Aviation staff face the same challenges and life events as the general population, such as: illness, bereavement, marital issues, economic hardships, family difficulties, addiction.
- Aviation staff are expected to manage both their working conditions and personal stressors.
- All this can ultimately increase the risk of building up stress on the individual level.



COMMON TRIGGERS / STRESSORS IN AVIATION



Rosters:

Working in various timeframes can significantly disrupt a person's routine, making it challenging to adjust.

Two types of disrupting rosters:

1. Poor Roster:

Crossing many time zones while alternating between East and West, for long-haul and ultra-long-haul flights. A Pilot could operate a Sydney one week, followed by a New York the next week, then a Melbourne flight a week later, finally, a Los Angeles flight.

2. A Problematic Roster:

That doesn't involve crossing time zones but messes up with your circadian rhythms.

One could have a night duty followed by a short night flight, a short simulator duty, a day duty, another night duty, and then another day duty, followed by another night duty.

It has a direct impact on the executive functioning and judgement of the person be it Pilot, ATC, Engineer & Cabin crew.

The ideal roster as suggested by human factor professionals would be:

- To work for a couple of consecutive night duties, followed by a break, and then consecutive day duties.
- This way, the body can adapt to a routine of sleeping during the day and working at night.
- It is advised to repeat this pattern a few times before taking a break and then transitioning to day duties.



Work-Home Interface:

- Balancing work and personal life can be challenging.
- Frequent absences from home makes it difficult to maintain marital and social relationships with partners, kids and friends

Highly Stressful Job:

- The job itself, the need for alertness throughout the duty, the need to communicate with the colleagues, the cockpit, the crew, the colleagues, the possible emergency etc. contribute to mental strain.

Isolation:

- For those working in remote or international operations, isolation from family and social support networks can lead to feelings of loneliness and stress.

Fatigue:

- An ongoing challenge in aviation. The long hours, irregular schedules, and demanding work environment can lead to physical and mental fatigue, affecting cognitive performance.
- A study was published by European Cockpit Association (ECA) in September 2023.
<https://www.eurocockpit.be/news/pilot-fatigue-new-report-reveals-safety-management-deficiencies#>

Inadequate Leadership:

- A big stressor.
- It is a hazard one has to think off when talking of safety operation. CRM.

Mental health is increasingly becoming a threat in Aviation.

- [Pilot who allegedly tried to shut off engines hadn't slept in 40 hours: Authorities](#)

Hundreds of pilots, cabin crew and engineers currently flying are managing depressive symptoms perhaps without the possibility of treatment due to the fear of negative career impacts.

- [5,000 pilots suspected of hiding major health issues. Most are still flying.](#)

Sadly, the incidence of mental health cases among aviation workers is difficult to determine as pilots, engineers and cabin crew are reluctant to disclose their situation fearing of losing their license.





MENTAL HEALTH TRENDS ACROSS THE AVIATION POPULATION

In the Biomedcentral Magazine published the following findings in December 2016.

- A study done by Alexander C. Wu, Deborah Donnelly-McLay, Marc G. Weisskopf, Eileen McNeely, Theresa S. Betancourt & Joseph G. Allen in December 2016.
- Depression Threshold: 233 airline pilots (12.6%) met the depression diagnosis.
- Suicidal Thoughts: 75 pilots (4.1%) reported having suicidal thoughts within the past two weeks.
- Aviation-focused surveys revealed that 40–66% of pilots agreed that their mental health worsened since the COVID-19 pandemic.



MOST COMMON CAUSES FOR PILOT, CABIN CREWS & ENGINEERS DISQUALIFICATION

Statistics 2019:

- Cardiology 0.59 %
- Neurology 0.26%
- Mental-Psychiatry/Psychology 0.20%

Statistics 2022:

- Cardio vascular
- Mental / psychological

Mental health has become the second largest cause of pilot disqualification.

HUMAN ERROR AS THE SECOND LEADING CAUSE OF AIR CRASHES



Current Statistics:

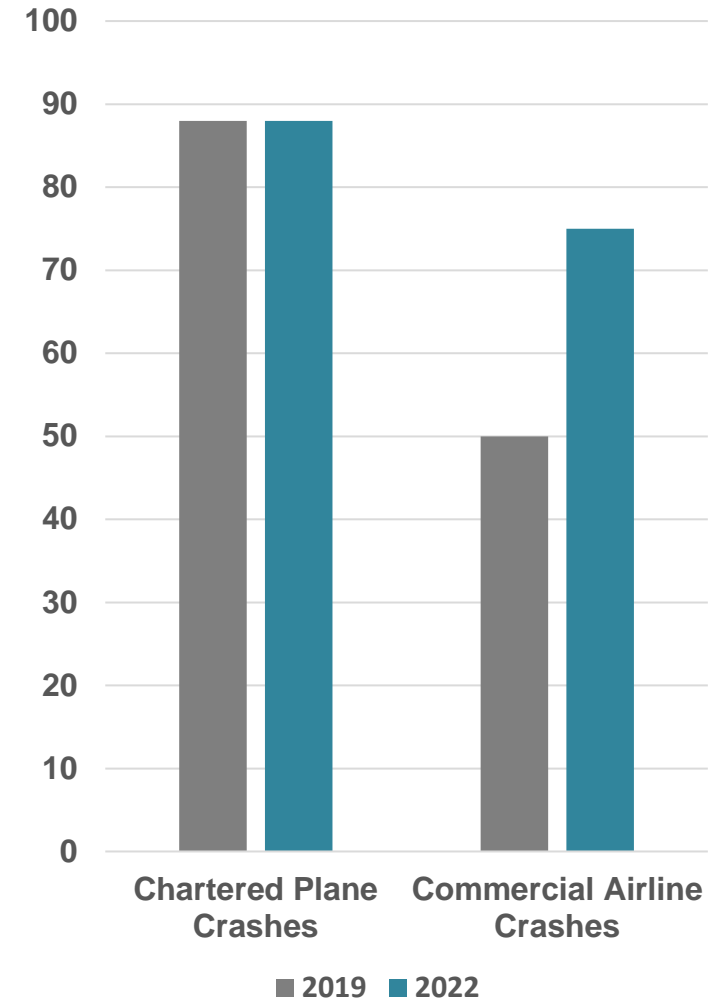
Research revealed that mental health rank as the 2nd leading causes of air crashes.

National Transportation Safety Board (NTSB)

- **Chartered Plane Crashes:** 88% of chartered plane crashes were attributed, partially, to pilot error.
- **Commercial Airline Crashes:** 50% of major airline crashes were linked to human factors, i.e. pilot error, crew coordination and team communication issues.

In September 2022:

75% of civil and military aviation accidents are attributed to human errors across various stages i.e. design, manufacturing, maintenance & training.



What can we do to ensure a safe operation?

- Our first recommendation is to recognize the importance of mental health across the industry.
- Make sure Professional mental health support is provided and accessible to all aviation staff on company expenses (PSP).
- To ensure we put the right culture in our respective set up or companies staff wellbeing should prevail. Remove the stigma.
- Be very selective in the leaders / managers selection. Make sure to choose those that value and understand mental health, wellbeing & human factor.
- Provide online educational seminars on wellbeing.
- Make systematic reviews of what is known as the industry challenges and triggers in order to identify and work on the gaps. i.e. roster is often a challenge for pilots and for ATC.
- Until now most of the aviation operators do not provide mental health insurance to their Staff.

PROFESSIONAL SUPPORT PROGRAM (PSP)

- It is a non-judgmental professional support service usually sponsored by the company to assist the staff with their personal and work related problems.
- The company will contract licensed aviation mental health professionals either on case by case basis or on retainer basis.
- It is strictly confidential service between the professionals and the concerned staff.
- PSP providers will provide resources and educational materials to help employees understand and manage mental health issues.
- PSP providers will make suggestions to the employer related to their wellbeing the safety of their staff.
- PSP providers will also highlight a concerning pattern or practice to their client that is a hazard to the safety.

PSP IN PRACTICE



HOW COULD PEOPLE ACCESS IT? REFERRAL:

- Self-Referral
- Through Doctors
- Through Employers
- Through Colleagues



SUGGESTED STEPS:

- Intake Session
- Initial diagnosis
- Action required if any: grounding / suspension



SERVICES PROVIDED:

- Psychometric Assessment
- Counseling
- Psychotherapy



OUTCOME

- The staff is helped to overcome his issues
- Grounded staff will become fit to work.



BENEFITS TO THE EMPLOYEE

- Employee feels he is cared for and is working for the right company.
- Direct access: to professionals without being labelled or judged.
- Prompt response to a staff in crisis.
- Professional services are paid for by the employer or by the employee insurance.
- It is highly confidential: The employer never knows who uses the services.



BENEFITS TO THE ORGANIZATION



FOOD FOR THOUGHT

What is the best way forward?

Should the above become mandatory?

Is it an expense or an investment?

Q&A

*Thank
you*

Dr Edma Naddaf
email: edma@edmaexec.ae

