**Emerging Trends of Mental Health in Aviation: A Paradigm Shift**

"Mental health…is not a destination, but a process. It’s about how you drive, not where you’re going." — *Noam Shpancer*

In aviation, mental health is a significant concern, both male and female pilots are prone to mental health problems. After the Germanwings catastrophe in 2015, which the copilot of the aircraft deliberately caused, poor mental health issues have drawn increasing attention. Although there is some information on mental health in the aviation industry, ongoing efforts are being made to compile pertinent data and offer improved treatments.

Pilots often have tough and stressful jobs, and the aviation sector has started paying more attention to mental health issues. A fluctuating circadian rhythm, high occupational expectations, and a lack of social support at home all contribute to poor mental health (Cary & Stephen, 1985). Although there is a paucity of information about mental health in aviation, experts and airlines have been aware of these problems (Cary & Stephen, 1985). In aviation, mental health is treated with a macho and dejected mentality (Cary & Stephen, 1985). It should be noted that although pilots receive a lot of attention when discussing mental health in the aviation industry, other aviation professionals are also affected (Arghami, 2005). As the strains of the profession mount over the course of a pilot's career, the prevalence of mental illness becomes an even bigger problem. According to Robert, Gaby & Peter (2002), pilots frequently deal with weariness as a result of their demanding work schedules, prolonged absences from home, and erratic schedules.

**Mental Health**

According to the Public Health Agency of Canada (2020), mental health is the capacity of an individual to feel, think, and behave in ways that improve their quality of life while respecting their own personal, social, and cultural boundaries (Manwell et al. 2015). Cognitive, perceptual, and behavioral processes are all impacted by mental health, which also includes emotional, psychological, and social well-being. Additionally, it affects how they cope with stress, interact with others, and make decisions. Subjective well-being perceived self-efficacy, autonomy, competence, generational reliance, trauma, and self-actualization of one's intellectual and emotional potential are only a few examples of what mental health is (The World Health Report, 2001).

Mental health is a condition of mental wellness that helps people to manage life's stressors, recognize their potential, learn, and function successfully, and give back to their communities. It is a crucial element of health and well-being that supports both our individual and group capacities to make decisions, form connections, and influence the world in which we live. A fundamental human right is the right to good mental health, additionally, it is essential for socioeconomic, communal, and personal development.

According to the Mental Health Foundation (MHF, 2008) one's thoughts and feelings about themselves and their lives define their mental health, which has an impact on how they deal with and manage adversity. One's ability to operate, take advantage of opportunities, and engage fully with family, friends, the workplace, community, and peers is considered as being impacted by one's mental health. Physical and mental health are closely related since they both have direct and indirect effects on one another. Thus, it is conceivable to argue that a person's mental health is a state of equilibrium in which they are at peace with themselves, able to interact with others in a productive manner, and capable of taking care of both their fundamental and higher-functioning needs. Positive functioning entails handling change, interpersonal interactions, and emotions in a healthy way.

More than the absence of mental diseases defines mental wellness. It is experienced differently from person to person along a complex continuum, with varied levels of difficulty and distress as well as potentially very different social and clinical effects. There are several mental states connected to considerable distress, functional disability, or a risk of self-harm, including mental disorders and psychosocial disabilities. Lower levels of mental well-being are more likely to be experienced by those with mental health issues.

**Case studies of Aviation Accident due to Poor Mental Health**

 In a report published in 2018, Nepali investigators concluded that the pilot's "severe mental stress" and unpredictable behavior were to blame for the March crash of US-Bangala Flight 211 at Kathmandu's Tribhuvan International Airport (KTM). The flight's captain, Captain Abid Sultan, was suffering from significant mental stress and worry, which caused him to make mistakes during the flight and finally resulted in the horrific accident that killed 51 persons on board, according to the official investigation conducted by the Nepali government. According to the study, Sultan was temporarily relieved of his flying responsibilities while serving in the Bangladeshi Air Force in 2002 because of depressive symptoms, but he was later reinstated following another mental assessment. In the three years that Sultan worked for the airline, no symptoms were mentioned in any of his medical records.

All 144 passengers as well as all six crew members dead. Andreas Lubitz, the co-pilot, intentionally caused the crash after receiving treatment for suicidal thoughts and having his medical condition ruled him unable to work. The examination into Lubitz revealed that he had received therapy for suicidal tendencies before receiving his training as a commercial pilot. He had also been temporarily denied a US pilot's license due to his psychotic depressive treatments. Lubitz had seen more than 40 doctors and had been frequently unable to go asleep for years due to what he thought were eyesight issues; he feared he was going blind. He started researching online because he was worried that going blind might result in him losing his pilot's license.

Chris Daniel, although having a stellar flying record, committed suicide in June 2022 because he never sought treatment for his mental health problems. Even while we think pilots who commit suicide are rather uncommon, this extreme result is one of the reasons we need to bring about change. The safety culture in aviation needs to change such that mental health care services are viewed as a sign of wellness and prevention rather than danger and sickness. This can be done by using appropriate monitoring and reevaluation. The 2 million American passengers who rely on the aviation system every day would also gain from this shift in addition to the pilots.

**Aerospace safety and Mental Health**

Ensuring the mental health of aviation personnel, such as pilots, air traffic controllers, and maintenance staff, is crucial to maintaining a safe and effective aviation system. There are some key points regarding the relationship between aerospace safety and mental health.

1**. Pilot Mental Health:** Due to their responsibility for the safe operation of aircraft and the lives of passengers and crew, pilots' mental health is of the utmost significance. Problems with mental health, such as stress, anxiety, depression, or other difficulties, can affect a pilot's performance, cognition, ability to make decisions, and reaction times.

**2. Safety Reporting Culture:** For aircraft safety, a culture of open reporting is essential. Pilots and other aviation employees must be able to raise any concerns if they have about their own or their coworkers' mental health without fear of repercussions.

**3. Psychological Assessments:** Psychological tests are frequently administered to pilots and air traffic controllers as part of the licensing and recertification procedures. These evaluations assist in finding any potential mental health problems that would limit their ability to perform in safety-critical professions.

**4. Support and Resources:** To encourage employees’ mental health, aviation firms should offer assistance and services. These covers having access to counseling, mental health education initiatives, and peer support groups.

**5. Fatigue Management:** Safety can be jeopardized by fatigue and mental health problems. To ensure that employees remain well-rested and attentive while on duty, the aerospace industry have stringent standards and fatigue management programs.

**6. Training and Awareness:** Training courses can assist aviation professionals in identifying warning signals of mental health problems in pilots and their coworkers. Campaigns for awareness can also lessen the stigma associated with mental health, enticing people to get treatment when they need it.

**7. Crisis Management:** Crisis management procedures must be in place for aviation organizations to handle personnel support needs and mental health emergencies.

**8. Impact on Decision-Making:** In aviation, mental health can affect how one makes decisions, solves problems, and perceives the environment. For the best performance in positions that require safety, maintaining excellent mental health is essential.

**9. Long-Term Effects:** Aerospace personnel' mental health should be considered for both their long-term career sustainability and immediate safety. A lack of skilled workers might result from attrition and ongoing stress.

**10. Post-Traumatic Stress Disorder (PTSD):** The people involved in aviation accidents or events may experience severe emotional distress. People who have experienced traumatizing events should have access to adequate psychological support.

Aviation industry should understand the significance of mental health and is constantly trying to enhance safety precautions, support, and awareness. Aviation personnel can be better prepared to handle the demands of their jobs by actively addressing mental health and promoting a culture of wellbeing, which will result in a safer and more effective aviation system.

**Factors Impact Pilots Mental and Physical Health**

Airline pilots frequently experience mental health issues, and seeking care may significantly impair their ability to perform their jobs. When a new symptom or condition is reported to the Directorate General of Civil Aviation (DGCA), a pilot runs the danger of losing their ability to work and fly, usually for a brief period. To keep their flying status active, pilots must adhere to certain medical standards. Particularly in the case of mental health issues. If a pilot report receiving regular talk therapy for even minor anxiety or depression, the DGCA prohibits them from operating aircraft. Depending on the premise that they pose an intolerable risk to safety, this might endure for months or even years. Pilots are really one of a very small number of occupations that need disclosure of any contact with the healthcare system, including visits for mental health.

While it makes sense to ground a pilot who is experiencing difficulties, the existing system frequently misses the dynamic and frequently situational character of mental health symptoms, which discourages pilots from seeking help. The costs of further medical evaluations that the DGCA requires frequently fall on the pilot, and time away from the job may have severe consequences like income loss and the necessity for repeat training. All these factors add up to a population of pilots operating the fleet who endure their misery in silence out of fear of receiving the support they require. Changes must be made to the system that discourages pilots from caring for their mental health as well as the definition of obtaining mental health assistance in the aviation industry.

This issue is projected to become more challenging due to the aviation industry's rising need for pilots and the world's COVID epidemic. In 2022, pilots are expected to do more and make longer and more frequent journeys to keep up with passenger demand, as their pay has increased. This comes into play with other airline occupations like maintenance and administrative employees experiencing severe staffing shortages, adding additional stress to a system already functioning at its limit. A larger need for mental health care services may result from pilots spending more time away from their loved ones because of increased demand. In other words, the need for mental health services for pilots is only going to increase in the future.

Although it would initially appear like expanding the pool of pilots will help, more pilots won't be able to address the system's current problems. The number of flight training programs is rising, and some airlines are even going so far as to start their own training facilities. A younger and more diverse group of student pilots are filling the expanding class sizes, but they might not be as willing to quietly endure as their forebears were. Emerging data indicate that the present pilots' willingness to forgo health insurance in exchange for job security (who are still primarily in the 40 to 60 age bracket) may not hold true for the following generation.

The lack of pilots may become even more acute as a new crop of Gen Z airline pilots, who are more willing to take time off from flying to seek mental health care, enters the workforce. It should also prompt industry to reconsider what it means for an airline pilot to be mentally healthy and what treatments they should be able to access while still operating the fleet. Meaningful change in the aviation industry needs to start with safety. It goes without saying that a pilot who has a serious mental health issue shouldn't be flying. Pilots with minor symptoms, however, have a chance. These high-achieving individuals may be dealing with one of life's common stressors, such as a divorce, a death in the family, or even just the ongoing stress of their jobs.

The DGCA's policy needs to be changed to allow pilots with minor symptoms to get professional, routine, and, if necessary, protracted talk therapy without losing their medical certification. Including therapy to stop symptom worsening and routine pilot evaluations by a qualified mental health specialist, such a modification would have significant positive effects for personnel on both sides of the flight deck door. Understanding that mental health is a dynamic spectrum and that many pilots might benefit from speaking with a qualified mental health professional at some time in their careers could keep pilots flying healthily while also enhancing system safety. By spreading awareness of the issue their pilots face and advocating for solutions, pilot unions and airlines should support this initiative.

The treatment of mental illness, according to Singleton et al. (2001), at least one in four persons will experience a mental health issue at some point in their lives. Of these, 20% will present in primary care settings. Mental illness is more common in some situations, according to the National Service Framework for Mental Health (Department of Health, 1999a). Stress, substance misuse, social marginalization, adverse early experiences, and unemployment are influencing elements that were stated at the beginning of this chapter. (In this context, incidence refers to the number of new cases of a disorder that develop within a population, during a particular time, whereas prevalence refers to the proportion of persons who have a certain disorder within a given community.) While neurotic disorders account for 1 in 6 cases of mental disease, major mental illness affects 1 to 2 persons out of every 100. The challenge of managing the public's mental health is a very real one. The World Health Organization (WHO) has issued a warning that deaths due to mental health illnesses would overtake natural causes of death by the year 2020. Although numerous, the causes of the rise in mental disease are yet unknown. There have been some findings drawn regarding the nature of modern mental disease (Freshwater, 2003). According to Tod Sloan (1996), contentment appears to be hard to come by. He makes the case, like Mirowsky (1989), that this is the price we pay for living in the so-called contemporary lifestyle. Emotional dissonance affects the majority of people to some extent.

In a 2017 review also published by the British Psychological Society, it was determined that several factors, including strenuous efforts for licensure and recruitment, such as extensive testing, medical certifications, simulator test flights, technical exams, safety and emergency procedure protocol, and even more to maintain their status, could have an impact on a pilot's mental and physical health.

Small work areas and lengthy shifts in the cockpit can be difficult, especially when combined with other factors like noise, smoky conditions, low oxygen levels, high altitudes, and others. It is true that jet lag, early starts and finishes, long hours, and regularly shifting schedules can make a person more vulnerable to both physical and mental illnesses. For pilots, job insecurity is frequently a top concern. The economy and other low-cost carriers make this industry riskier than it used to be. As a pilot must make choices to attempt and protect their safety and the safety of others, terrorist worries have grown increasingly prevalent.

It's incredibly challenging for pilots to keep up personal ties because of the lengthy hours and distance traveled. Arguments with family members over these requirements for a career can cause additional mental distress, which frequently results in mental diseases like melancholy and anxiety. Excessive demands may have a negative impact on a pilot's physical and mental health, jeopardizing their quality of life as well as their employment. If you've been seeing symptoms of a mental or physical condition, get the assistance you require right away.

In recent years, the aviation industry has made investments to reduce the stigma around mental health in the aviation sector and encourage pilots to seek therapy. This includes a) Increasing medical examiners' mental health training; b) Supporting industry-wide research and clinical studies on pilot mental health; c) Hiring more mental health professionals to increase in-house expertise and shorten wait times for decisions regarding return to flight; d) Starting clinical research to address the frequency of cognitive testing in airmen taking antidepressants. e) Stigmatization and labeling Mental illness are generally shrouded in mistrust and ignorance and is still strongly taboo despite the rising frequency and incidence of mental health issues.

The history of mental illness, according to Tudor (1996), is one of exclusion, division, distinction, and otherness. It is common knowledge that the stigma and prejudice linked to mental health conditions worsens this feeling of exclusion, loneliness, and distress (Mental Health Foundation, 2000). Attitudes toward people with mental health issues are frequently ambiguous and conflicting, according to the Department of Health publication Attitudes to Mental Illness from 2003. Stereotyping is pervasive and frequently results in prejudice manifested as intolerance and ignorance, which is the idea that all members of a particular group fit into an unjustifiably fixed mental image. The preconceptions in the media about people with mental illness who are sometimes presented as violent criminals add to this problem. Counselors and psychotherapists contribute significantly to challenging the popular myths about mental and psychiatric diseases. However, they could unintentionally keep spreading the false and harmful information that leads to labeling, stigmatization, and the consequent isolation. This can be because of a simple ignorance of the relationship between mental disease and their normal therapeutic practice. The chapters that follow are committed to promoting a deeper understanding of the larger influencing factors governing mental health so that counselors and other professionals working in psychological therapies can offer clients in mental distress a more comprehensive service.

**Suicide in Pilots**

The sensitive and complex subject of pilot suicide. It has been recorded in the past, although being relatively uncommon. People from many areas of life, including pilots, can be affected by suicide, which is a devastating and intensely personal issue. Airlines and aviation authorities have put in place stringent rules and screening processes to make sure that pilots are physically and psychologically capable of carrying out their jobs safely. These steps entail psychiatric assessments, physical exams, and continual mental health monitoring of pilots.

The aviation sector has put more emphasis on the physical and mental health of pilots recently. This is largely in response to widely reported events involving pilots who were struggling with their mental health. There have been initiatives to lessen the stigma attached to obtaining mental health treatment and to motivate pilots to speak out if they are having problems. To help pilots who might be struggling with stress, anxiety, or other mental health issues, the aviation sector has also introduced peer support programs and mental health resources. It's crucial to keep in mind that most pilots are committed professionals who adhere to strict safety requirements and take their duties seriously. Even though events involving mental health issues can be extremely upsetting, it's crucial to approach the situation sympathetically and supportively rather than stigmatizing or stereotyping pilots. There are numerous countries where people can call suicide prevention hotlines for urgent assistance and support.

Suicide by pilot refers to an incident involving aviation in which a pilot intentionally crashes or attempts to crash an aircraft as a suicide act, with or without the intent to injure other individuals on board or on the ground. It might qualify as a form of murder-suicide if other people are also killed. It has been identified as the root cause in certain crashes of commercial aircraft and is thought to have been a factor in others. For accident investigators, figuring out why a pilot purposefully turned off a recorder or did something else to obstruct an investigation can be difficult. Consequently, it may be challenging to prove pilot suicide incontrovertibly.

Investigators don't label incidents involving airplanes as suicides unless there is strong proof that the pilot planned to die by suicide. This proof may take the form of suicide notes, previous suicide attempts, overt threats of suicide, or a proven history of mental illness. To determine if the suicide was a terrorist act, police may occasionally work with terrorism experts to investigate possible ties to extremist organizations.

Timofei Shovkunov crashed an Aeroflot Antonov An-2 into his own Voroshilovgrad apartment on 27 March 1972. He was the lone victim in this crash. 23 March 1976, suicide bombing in Tokyo, using a rented Piper PA-28 Cherokee, movie star Mitsuyasu Maeno launched a Kamikaze attack against right-wing political figure Yoshio Kodama in Tokyo; Kodama was unharmed.

On 26 September 1976, Vladimir Serkov attempted to fly his Antonov An-2 aircraft into the Novosibirsk apartment of his ex-wife's parents while she and their young boy were on a visit; four people were killed (his wife survived). In another instance, an angry former Connellan Airways (Connair) employee crashed a Beechcraft Baron into the Connair complex at the Alice Springs Airport in the Northern Territory of Australia on 5 January 1977.

22 August 1979, a Satena Hawker-Siddeley HS-748 was stolen and crashed into a Bogota suburb by a 23-year-old airplane mechanic working at Bogota El Dorado Airport, killing 3. razilian pilot Mauro Milhomem realized his wife had cheated on him on 1 June 1980, and following a fight with his wife and mother-in-law, he attempted to crash his Embraer EMB 721 Sertanejo, which was also carrying four passengers, into a hotel owned by a family relative. Instead of hitting the hotel as planned, he struck several additional targets before crashing the plane into another structure. A few days later, his wife murdered herself. There were a total of seven fatalities and four injuries.

On 15 September 1982, student pilot Philip Henryk Wozniak hijacked a SOCATA Tobago and committed suicide by purposefully flying into Bankstown Airport in the City of Bankstown, New South Wales, Australia. Additionally, two airplanes on the ground were destroyed. On 23 March 1994, Bob Richards was dealing with personal issues including his marriage. His Piper Cherokee single-engine aircraft intentionally crashed to the ground. He was the sole death on board the aircraft. A Russian air force engineer stole an Antonov An-26 on 13 July 1994, at the Kubinka air base outside of Moscow. He circled the plane till its fuel ran out and it crashed. Flight 630 of Royal Air Maroc was deliberately crashed on 21 August 1994.

 6 September 1998, Flight instructor at Embry-Riddle Aeronautical University in Daytona Beach, Florida, purposely crashed while off duty. At Sir Seretse Khama International Airport in Gaborone, Botswana, on 11 October 1999, a pilot hijacked an Air Botswana plane before crashing it into a group of parked planes. This destroyed both the plane and the parked planes, effectively crippling the airline because they lost all their operational planes.

Phillip Daniel Rogers intentionally crashed his single-engine Beechcraft Bonanza light plane onto Stone Mountain's southern face on 16 September 2003, in Atlanta, Georgia, the United States. On 22 July 2005, a 39-year-old pilot intentionally brought his own little plane, a Platzer Kiebitz, down in a field in front of Berlin's Reichstag. On 18 February 2010, in Austin, Texas, the United States, Andrew Joseph Stack III intentionally crashed his single-engine Piper Dakota light aircraft into Building I of the Echelon complex, which housed the IRS headquarters.

17 July 2012, a Canadair CRJ200ER regional jet was stolen at St. George Regional Airport in Utah by a suspended SkyWest Airlines pilot who is being sought in connection with the fatal stabbing of a woman in his house. As it departed the gate, the plane crashed into the terminal building, and the pilot sped up to approach the parking lot. Then, while still inside the plane, he shot himself to death. On 22 July 2013, the pilot departed from Shannon Airport in Fredericksburg, Virginia, in a Cessna 172M. The pilot's fiancée called the police and reported that she and the pilot had argued before the flight and that the pilot had planned to commit suicide. Northwest of the runway, the plane entered a steep descent and crashed. The pilot deliberately brought the aircraft down on 29 November 2013.

10 August 2018, Richard "Beebo" Russell, a ground support worker for Horizon Air, departed without permission from Sea-Tac International Airport in a Bombardier Dash 8 Q400 and engaged in aerobatic acrobatics over the city and Puget Sound while being followed by fighter fighters. Russell intentionally crashed the aircraft into Ketron Island in the South Puget Sound, despite the air traffic controller's best efforts to persuade him to make a safe landing. 10 September 2021, an airplane was crashed into a field not far from Ashford, UK, by a man who had been given three months to live after receiving a fatal cancer diagnosis.

**Reasons for Pilots' Mental Health to Get Worse**

Multiple factors can contribute to worsening mental health, and multiple factors frequently combine to cause it. Some significant factors that may be involved with deteriorating mental health include:

**Stress:** Long-term high levels of chronic stress, whether they are caused by work, relationships, or other life events, can have a negative impact on mental health.

**Trauma**: Going through traumatic experiences, including being physically or emotionally abused, having an accident, or going through a natural disaster, can result in mental health problems. Aviation professionals may see or experience distressing occurrences like collisions or near misses. Post-traumatic stress disorder (PTSD), which is characterized by intrusive memories, emotional anguish, and anxiety, may be brought on by these events.

**Isolation and Loneliness**: Over the long term, social isolation and loneliness can have a detrimental effect on one's mental health. Isolation and loneliness can result from frequent travel and extended separation from loved ones. A person's mental health may be impacted by a lack of social support systems and difficulties sustaining close relationships.

**Financial Difficulties**: Having to deal with money issues and uncertainties can be extremely stressful and anxious.

**Genetics and Family History**: A family history of mental illness can raise the risk, and some people may be genetically predisposed to certain mental health issues.

**Physical Health Issues**: Both chronic physical and mental health disorders can have an impact on one another.

**Substance Abuse:** Abusing drugs or alcohol can aggravate pre-existing mental health conditions or create new ones.

**Workload and Burnout**: Stress and mental health issues can be brought on by high-stress work situations, an excessive workload, and burnout.

**Unhealthy Lifestyle Habits**: Mental health can be significantly impacted by poor food, insufficient exercise, and inadequate sleep.

**Major Life Changes**: Moving, getting divorced, losing a loved one, losing your career, and other major life changes can be difficult to handle and have an impact on your mental health.

**Environmental Factors**: Living in a noisy, polluted, or stressful environment might influence one's mental health.

**Media and social media**: Mental health may be impacted by media or social media exposure to bad or distressing content.

**Lack of Access to Mental Health Support**: People may be unable to receive the necessary assistance due to a lack of mental health resources and services. In aviation, mental health has received negative connotation and is undervalued. The underreporting and undermanagement of mental health issues are caused by a lack of access to mental health resources, inadequate training, and weak support networks.

It's critical to understand that mental health is a complicated topic, certain people may be more susceptible than others to causes. The prevention and management of deteriorating mental health can be significantly aided by seeking professional mental health assistance and keeping a healthy lifestyle. People should not be afraid to ask for help and support if someone is experiencing mental health problems (Bor and Hubbard, 2007). A comprehensive strategy is needed to address these issues, one that emphasizes the wellbeing of aviation workers above all else. This strategy should involve raising awareness of mental health issues, putting supportive workplace practices in place, facilitating access to mental health resources, and more (Gradwell, 2013).

**Strategies to enhance Mental Health among Pilots**

The following tactics can be used by employees in the aviation business to maintain a work-life balance and take care of their mental health:

**Establish distinct Boundaries:** Define specific times for rest, relaxation, and personal activities to establish clear boundaries between work and personal life. Keep work-related chores and stress out of personal time.

**Put self-care first:** Take pleasure in self-care activities like consistent exercise, enough sleep, and a balanced diet. According to research, mental and physical health are favorably correlated.

**Stress-Management Strategies:** Acquire knowledge about and put stress-management strategies, such as deep breathing exercises, mindfulness, and meditation, into practice. These methods have been demonstrated to be successful in lowering stress and fostering mental health.

**Effective communication:**  Inform your superiors and coworkers about the workload, stress levels, and personal requirements. Effective communication can support managing work-related demands and result in a fair workload distribution.

**Utilization of Mental Health Resources:** Make use of the mental health resources provided by aviation organizations, such as counseling services or employee help programs. These providers offer private help and direction.

**Interpersonal relationship:** Encourage relationships with coworkers, friends, and family to build a network of support. Stress can be reduced, and emotional support can be obtained by participating in social activities and upholding healthy relationships.

These tactics can help aviation sector workers better balance their professional and personal lives, manage stress, and give their mental health the attention it deserves, which will eventually improve their overall wellbeing and job satisfaction. For the welfare of aviation professionals and the safety of air travel, the aviation sector must give mental health priority. It is crucial to take preventative actions to address mental health issues because the profession is demanding and has its own set of difficulties and anxieties. The aviation sector can develop a healthier and more resilient workforce, ensuring safer skies for all, by putting into practice initiatives like encouraging work-life balance, offering support systems, raising awareness, and fostering a culture of mental well-being.

**Telemental Health in Aviation**

The DGCA has advised that organizations subject to secrecy requirements integrate mental health promotion within their safety management systems. The provision of mental health services remotely via telecommunications technology is referred to as telemental health, sometimes known as telepsychiatry or teletherapy. With this strategy, mental health providers can communicate with pilots over the phone, video call, text message, or other digital means. Due to its ability to overcome obstacles to conventional in-person mental health care, such as stigma, schedule conflicts, geographic distance, and mobility challenges, telemental health has grown significantly in popularity and recognition. The following are the primary facets of telemental health:

1. **Distant Therapy:** Through phone calls or video conferencing software, mental health experts hold therapy sessions with pilots. These sessions can include a variety of therapeutic modalities, including cognitive-behavioral therapy (CBT), psychoanalysis, mindfulness-based therapy, and others.
2. **Assessment and Diagnosis**: Various diagnostic tools, questionnaires, and interviews conducted over video calls or online platforms can be used to conduct mental health examinations and diagnoses remotely.
3. **Medication Management:** Through telemedicine platforms, psychiatrists and other medical specialists can offer medication management and consultations, ensuring that patients receive the right prescriptions and oversight.
4. **Crisis Intervention:** In times of crisis, telemental health services can be quite helpful since mental health specialists can provide instant assistance to people in need and aid in managing serious emotional difficulties.
5. **Approachability:** Telemental health makes mental health care more accessible to people who reside in rural locations, have restricted mobility, or have trouble getting around. It may also be an option for those who would rather receive therapy in the quiet of their own homes.
6. **Tractability:** Increased scheduling flexibility with telemental health services can be advantageous to both clients/patients and mental health specialists. Better treatment plan adherence may result from this.
7. **Ethical and Legal Considerations:** Telemental health services must abide by ethical standards and laws that are relevant to mental health care in the area in which the services are offered. Platforms for digital communication must be secure, private, and confidential.
8. **Technology requirements:** For successful telemental health sessions, you'll need dependable internet connectivity, the right tools, including PCs or cellphones, and a secluded, peaceful setting.

The fact that telemental health has drawbacks despite its many benefits should not be overlooked. Some people might not feel as comfortable using digital platforms for self-expression, and it might be harder to undertake some sorts of therapy remotely. Aside from that, not all mental health issues can be successfully treated with telemental health alone. Like with any kind of therapy, telemental health's success depends on the level of trust between the client/patient and the mental health expert as well as the requirements of the person seeking assistance.

**References**

"20001211X11123-20191201-232056". app.ntsb.gov. Archived from the original on December 25, 2021. Retrieved December 2, 2019.

 "ASN Aircraft accident Antonov An-2 CCCP-42621 Voroshilovgrad". aviation-safety.net. Retrieved February 11, 2023.

 "ASN Aircraft accident Antonov An-2P CCCP-79868 Novosibirsk". aviation-safety.net. Retrieved February 11, 2023.

 "ASN Aircraft accident Hawker Siddeley HS-748-260 Srs. 2A FAC-1101 Bogota-Eldorado Airport (BOG)". aviation-safety.net. Retrieved February 11, 2023.

"ASN Wikibase Occurrence # 33040 - Socata TB10 Tobago VH-BXC 16-SEP-1982". Archived from the original on March 2, 2020. Retrieved January 6, 2020.

"Germanwings Plane Crash Investigation". NewYorkTimes.com. April 3, 2015. Archived from the original on April 3, 2015. Retrieved April 4, 2015

"Horrific 'suicides by plane' that occurred in the USSR". September 10, 2019. Archived from the original on July 25, 2020. Retrieved April 1, 2020.

 "Japan rewind: 40 years since the porn star's kamikaze attack in Tokyo". June 10, 2016. Archived from the original on November 24, 2021. Retrieved March 14, 2022.

"N449QX Criminal Occurrence description". Aviation Safety Network. Archived from the original on August 11, 2018. Retrieved August 11, 2018.

 "No inquest on plane death, pg14, The Sydney Morning Herald, 09 February 1983". The Sydney Morning Herald. Newspapers.com. February 9, 1983. p. 14. Archived from the original on April 30, 2022. Retrieved July 11, 2016.

"The world health report 2001 – Mental Health: New Understanding, New Hope" (PDF). WHO. Retrieved 4 May 2014

 "VH-AEU. Douglas C-47-DL. c/n 6108. Badly damaged during crash of a suicidal pilot at Bankstown Airport". Archived from the original on September 23, 2015. Retrieved March 26, 2015.

 "Was it news? Some soul searching after the death of weatherman Bob Richards". Archived from the original on March 26, 2019. Retrieved October 5, 2019.

 "World: Africa Suicide pilot destroys Air Botswana fleet". BBC News. October 11, 1999. Archived from the original on March 29, 2015. Retrieved March 26, 2015.

 "WOZNIAK, Philip Henryk (death notice), pg30, The Sydney Morning Herald, 22 September 1982". The Sydney Morning Herald. Newspapers.com. September 22, 1982. p. 30. Archived from the original on April 30, 2022. Retrieved July 11, 2016.

(2003) "Stone Mountain Plane Crash".

“Mental health in the workplace,” Mental Health and Substance Use, Sep. 28, 2022. https://www.who.int/teams/mental-health-and-substance-use/promotion-prevention/mental-health-in-the-workplace

 2015, Aviation Safety News, List of aircraft accidents caused by pilot suicide Archived March 26, 2015, at the Wayback Machine. Retrieved March 26, 2015

2015, Aviation Safety News, List of aircraft accidents caused by pilot suicide Archived March 26, 2015, at the Wayback Machine. Retrieved March 26, 2015

Arghami, S. (2005). "Mental health in high-tech system" (PDF). Iranian Journal of Public Health. 34 (1): 31–37.

Berlin: Selbstmörder stürzt sich mit Flugzeug vor den Reichstag". Spiegel Online. July 23, 2005. Archived from the original on May 22, 2016. Retrieved May 27, 2018.

Bor, Robert; Field, Gaby; Scragg, & Peter (2002). "The mental health of pilots: An overview". Counselling Psychology Quarterly. 15 (3): 239–256. doi:10.1080/09515070210143471. S2CID 144508689.

Cooper, Cary; Sloan, & Stephen (1985). "Occupational and Psychosocial Stress Among Commercial Aviation Pilots". *Journal of Occupational and Environmental Medicine*. 27 (8) 570–575. [doi](https://en.wikipedia.org/wiki/Doi_%28identifier%29):[10.1097/00043764-198508000-00014](https://doi.org/10.1097/00043764-198508000-00014). [PMID](https://en.wikipedia.org/wiki/PMID_%28identifier%29) [4032093](https://pubmed.ncbi.nlm.nih.gov/4032093).

Gradwell, D. (2013) “Aviation Mental Health,” Occupational Medicine, 63(1), 81–82. doi: 10.1093/occmed/kqs196.

 Kramer, Tarla. "The Silent Grief of Alice Springs". BushMag. Retrieved November 20, 2010.

Manwell, L. A, Barbic, S. P, Roberts K, Durisko Z, Lee C, Ware E, & McKenzie, K. (2015). ["What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey"](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4458606).  *BMJ Open*. 5 (6). [doi](https://en.wikipedia.org/wiki/Doi_%28identifier%29):[10.1136/bmjopen-2014-007079](https://doi.org/10.1136/bmjopen-2014-007079). [PMC](https://en.wikipedia.org/wiki/PMC_%28identifier%29) [4458606](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4458606). [PMID](https://en.wikipedia.org/wiki/PMID_%28identifier%29) [26038353](https://pubmed.ncbi.nlm.nih.gov/26038353).

MHF (Mental Health Foundation). (2008). What works for you? London: MHF

NTSB Aviation Accident Final Report ERA13FA330". National Transportation Safety Board. Retrieved July 19, 2019

Bor, R. & Hubbard, T. (2007). Aviation Mental Health: Psychological Implications for Air Transportation. Gower Publishing Company, Limited.

 Sperry, T., Ahlers, & Mike M. (2012). "Police: Suspect in Colorado slaying tried to steal plane in Utah". CNN. Retrieved May 12, 2021

 Labaton, S. (1994). "Crash At The White House: The Defenses; Pilot's Exploit Rattles White House Officials - New York Times". The New York Times. Archived from the original on July 4, 2021. Retrieved September 8, 2008.

Stephens, M. (2022). "Professor with terminal cancer took his own life by crashing stolen plane". The Telegraph. ISSN 0307-1235. Retrieved June 3, 2022.

 Young, T., (2016). The Telegraph, could a four-year-old thriller unlock the mystery of flight MH370? Archived March 4, 2016, at the Wayback Machine. Retrieved March 26, 2015.

"Criminal Occurrence Description 26 September 1976". Aviation Safety Network. Archived from the original on March 29, 2015. Retrieved March 27, 2015.

 "Accident Description 22 August 1979". Aviation Safety Network. Archived from the original on December 13, 2016. Retrieved March 27, 2015.

 "Plane crashes at Bankstown, pg5, The Age, 16 September 1982". The Age. Newspapers.com. September 16, 1982. p. 5. Archived from the original on April 30, 2022. Retrieved July 11, 2016.

 "Accident Description 13 July 1994". Aviation Safety Network. Archived from the original on March 30, 2015. Retrieved March 27, 2015.

Richard Lloyd Parry, December 16, 2000, The Independent, Singaporean air crash that killed 104 was suicide by pilot, say investigators Archived September 25, 2015, at the Wayback Machine. Retrieved March 26, 2015, "...An airliner which crashed into an Indonesian swamp, killing all 104 people on board, was an apparent suicide attempt by the pilot, ... the cockpit voice and data recorders had been switched off half a minute before the aircraft began its descent."

Cronan, Carl (February 18, 2010). "Echelon Building Destroyed in Plane Crash". GlobeSt.com. Archived from the original on February 25, 2012. Retrieved February 18, 2010.

 "Bureau of Aircraft Accidents Archives 17 July 2012". Bureau of Aircraft Accidents Archives. Archived from the original on December 25, 2021. Retrieved July 17, 2012.

"Hijacking description". Aviation Safety Network. July 17, 2012. Archived from the original on July 23, 2012. Retrieved July 18, 2012.

 March 27, 2014, The New Zealand Herald, Flight MH370: Terrorism expert backs theory of pilot suicide flight Archived February 22, 2015, at the Wayback Machine. Retrieved March 27, 2015, "...University of Canterbury Professor Greg Newbold, who lectures on terrorism, said the only person who could have changed MH370's computerised flight plan and switched off its electronics was someone who was highly experienced...."*Lewis, Russell; Forster, Estrella; Whinnery, James; Webster, Nicholas (February 2014).*[*"Aircraft-Assisted Pilot Suicides in the United States, 2003-2012"*](http://ntl.bts.gov/lib/51000/51100/51188/201402.pdf)*(PDF). Civil Aerospace Medical Institute. NTL.BTS.gov. Federal Aviation Administration.*[*Archived*](https://web.archive.org/web/20150403234302/http%3A/ntl.bts.gov/lib/51000/51100/51188/201402.pdf)*(PDF) from the original on April 3, 2015. Retrieved March 29, 2015.*

 March 31, 2014, The Guardian, MH370: authorities release new account of pilot's final words: Malaysia's civil aviation authority say pilot's final words heard by air traffic control were 'good night Malaysian three seven zero' Archived April 10, 2017, at the Wayback Machine. Retrieved March 26, 2015, "...Malaysia says the plane, which disappeared less than an hour into its flight, was likely to have been diverted deliberately far off course. Investigators have determined no apparent motive or other red flags among the 227 passengers or the 12 Lewis, Russell; Forster, Estrella; Whinnery, James; Webster, Nicholas (February 2014). "Aircraft-Assisted Pilot Suicides in the United States, 2003-2012" (PDF). Civil Aerospace Medical Institute. NTL.BTS.gov. Federal Aviation Administration. Archived (PDF) from the original on April 3, 2015. Retrieved March 29, 2015.

 Jane Onyanga-Omara, January 19, 2015, USA Today, no evidence of terrorism in Air Asia crash Archived August 21, 2017, at the Wayback Machine. Retrieved March 27, 2015, "...Investigators have found no evidence so far that terrorism was involved in the crash of AirAsia Flight 8501.

 March 2015, The Independent, ... Co-pilot of crashed Germanwings flight 9525 'wanted to destroy plane in suicide and mass murder mission' Archived September 25, 2015, at the Wayback Machine

Charles Bremner (Paris), March 26, 2015, The Times, Locked door boosts pilot suicide theory Archived March 27, 2015, at the Wayback Machine. Retrieved March 26, 2015

 "Crash that killed 44 was pilot suicide Archived April 20, 2016, at the Wayback Machine." Associated Press at the Altus Times. Thursday August 25, 1994. p. 14. Retrieved November 5, 2013.

 Cinco mortos no choque do "Sertanejo" Archived December 29, 2017, at the Wayback Machine, Folha de S.Paulo (June 3, 1980)

Morrem feridos no acidente Archived December 29, 2017, at the Wayback Machine, Folha de S.Paulo (June 5, 1980)

 "FBI Completes Investigation into August 2018 Unauthorized Flight from Seattle-Tacoma Airport". Federal Bureau of Investigation. Archived from the original on November 10, 2018. Retrieved November 10, 2018.

Public Health Agency of Canada (2020-10-28). ["Public Health Agency of Canada"](https://www.canada.ca/en/public-health.html). *www.canada.ca*. Retrieved 2021-10-02.

About Mental Health". *www.cdc.gov*. 2021-11-23. Retrieved 2022-04-11.

 John, V. (February 18, 2022). "Professor given just three months to live stole plane from Kent airfield before crashing".