

PSYCHOLOGICAL TRAINING AND COUNSELING FOR THE INCREASE OF PERSONNEL WELL-BEING AND FLIGHT SAFETY

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Abstract: *Mental health and well-being of the flight personnel is very important to flight security. Statistics shows that in Europe 1 of 3 people suffer from mental problems. In 2020 depression will be the most frequent disease according to World Health Organization. Measures should be implemented to reduce the risk of human error affecting flight safety. Therefore I propose to establish a compulsory psychological examination for flight personnel. This examination should take place at the beginning of the contract, then periodically, once a year as a minimum, preferably every six months. Preventive measures can also be put in place. Training and counseling can be offered to flight personnel to enable them to use stress reduction techniques and improving emotional balance. Qualified psychologists should be available to give professional advice and spot signs of mental illness. The benefits will go beyond the psychological level, down to physical health, since the two are closely connected.*

Keywords: *flight, safety, psychological, training, health, stress, well-being,*

1. INTRODUCTION

Flight security is a very important matter. This issue is directly linked to human personality and the potential for human errors. Therefore I suggest that a compulsory psychological examination for flight personnel is really necessary, especially since statistics show a significant percentage of the general population is affected by mental problems.

At the moment, personnel selection in the aviatic industry only considers visible psychopathological signs, the already manifested mental disease.

The psychological examination can show latent psychological problems, psychopathological potential or atypical personalities, and not just manifested psychological problems.

This psychological examination should be completed by qualified psychologists. Such a measure would improve flight personnel's health and well-being.

2. STATISTICS AND DEFINITIONS

Optimizing working conditions is an important issue for individuals and professional groups and also a public concern, prompted by both humanitarian and economic considerations. Work health and safety is one of the main objectives of the EU social policy, according to consolidated versions of its Treats [17]. An essential element of work performance is a safe and healthy working environment, closely related with diminishing stress and decreasing work accidents.

Work-related stress, depression and anxiety is defined as “a harmful reaction people have to undue pressures and demands placed on them at work”, according to HEALTH AND SAFETY EXECUTIVE, (HSE) U.K. [14]

Hans Selye defined stress as a “non-specific response of the body to any demand of change”, according to the website [4] and more modern definition shows a link between the environmental demands and our response, as I have showed in the previous paragraph. “There is a difference between pressure and stress. Pressure can be positive and a motivating factor, and is often essential in a job.

It can help us achieve our goals and perform better. Stress occurs when this pressure becomes excessive. Stress is a natural reaction to too much pressure.” [14] Stress is a normal response, is not himself an illness or a disease, but if the everyday stress reaction occurs too often, too severely, or if it becomes long-term, then a range of other physical or psychological illness can be produced.

The socio-economic impact of the stress work is huge, according to the website [1, 11,]

- 300 billion of dollars from productivity and work disabilities,
- increasing with 50% of the health system’s costs,
- 80% from the personnel declare that they are confronted with work stress in U.S.

LABOR FORCE SURVEY (L.F.S., from U.K.) [12] show that in 2014:

- The total number of cases of work-related stress, depression or anxiety in 2013/2014 was 487 000 (39%) out of a total of 1 241 000 cases for all work-related illnesses.
- The number of new cases of work-related stress, depression or anxiety in 2013/14 was 244 000.
- The total number of working days lost due to stress, depression or anxiety was 11.3 million in 2013/14, an average of 23 days per case of stress, depression or anxiety.

In E.U. the occupational stress is the second between health risk factors.

The most stressful jobs in 2015 according to an American study made by the organization CAREER CAST [7] are:

- firefighter
- enlisted military personnel
- military general
- airline pilot
- police officer

According WORLD HEALTH ORGANIZATION (WHO)’ document [21], in 2005 in the world 27% suffered from a mental disease in a year and the most frequent was depression and anxiety.

Deaths by suicide numbers are higher than car accidents, crime or HIV / AIDS deaths added together. 1 million deaths every year are linked to depression. [20] In 2008, at the conference “Together for Mental Health and Well-being”, Belgium, Brussels [8], it was shown that 11% of people are suffering from mental disease, with an increasing number of depressions. Depression accounts for 13% for the total burden of diseases. A study estimated that the cumulative global impact of mental disease in terms of economic lost output will be almost US\$ 16.3 million between 2011-2030. [18] Suicide is the second cause of death among young people worldwide. [19] At its worst, depression can lead to suicide. From a study we find out that in U.E. suicide represents a significant cause of death merely through men: from 55.000 persons who commits suicides, three quarters are men. [16] The number of people suffering from depression is currently double compared to 40 years ago. Statistics show that in Europe 1 of 3 people suffer from mental problems, among which depression, anxiety and insomnia were the most frequent. [6] By now 350 million people are depressed and in 2020 depression will be the most frequent disease according to WHO. Just one in three depressed persons received the necessary treatment. [2]

There is a powerful link between stress and mental disease or physical or psychological conditions.

If a psychological problem is underestimated or neglected it can become chronic, it can exacerbate or lead to serious illness.

WHO’ studies show that in Romania there is an increase of 25% in mental disease patients over the last few years. In Romania the incidence of depression is 9% to 10%. This statistic places Romania in third place among European countries. [5, 15]

3. RESULTS

In view of the above statistics, it is necessary to take a responsible attitude towards testing and selecting flight personnel, so that adequate measures can be taken to limit human error and risks affecting flight safety.

It is time to give proper consideration to mental conditions and stress as risk factors in physical or psychological illness. The benefits will be shown both on a psychological and physical health level because these areas are interdependent. Emotional problems can lead to psychological disease or to physical illness, as shown by both medical and psychological studies. [3, 5]

Therefore I propose to establish a compulsory psychological examination for flight personnel. It is important for flight personnel to consult a psychologist - a specialist who can deploy scientific methods to identify early signs of mental illness and psychopathological potential.

At present, medical specialists have the task of noticing if their patients have psychological problems and will refer patients to a psychiatric clinic if necessary. There are some problems with this approach. [9]

First, the doctor is focused on the patients' physical sign of illness and pays no attention or too little attention of other problems.

Second, the doctor has very little or no psychological training and may be not qualified to spot all psychological conditions.

Third, the doctor does not deploy any psychological tests and has no other scientific methods to elicit possible psychological problems.

Fourth and the most significantly, some psychological conditions are unlikely to show any visible signs at a routine medical control.

At present, only visible psychopathological signs or expressed mental disorders are considered i.e. the ones that are already manifested.

The psychological examination can show latent psychological problems, dysfunctional tendencies, atypical personalities, psychopathological potential, socio-pathological signs, anxiety, not just manifested psychological problems.

Some psychological problems are difficult to identify, that is why the psychologist must have an up to date collection of tests, scientific methods and training.

Even if the patient wants and makes efforts to hide some personal psychopathological tendencies, a well trained and experienced psychologist will be able to identify the problems and will lead the patient to a psychiatric examination if necessary.

The logical steps are: first, a psychological examination and second, if the mental problems are more serious, the psychiatric / neurological examination.

The psychological examination should take place at the beginning of the contract, then periodically, once a year as a minimum, preferably every six months because a psychological problem can occur any time.

It is the patients' and employer organization' benefits to have the psychological examination because that can improve physical and psychological personnel health and well-being and can diminish the working problems, sick leaves days, teams' conflicts, accidents at work etc.

This is especially true for flight personnel as they are responsible for the health and safety of many others.

As I have highlighted before, occupational stress is one of the most important health risk factors. Work-related stress or occupational stress is the response people may have when presented with work demands and pressures that are not matched to their expectation, knowledge and abilities and which challenge their resilience. Stress can occur in a wide range of work circumstances but is often made worse when employees feel they have little support from supervisors and co-workers, as well as little control over work processes.

Occupational or other type of stress can be expressed through various signs [3, 6].

Body signs of stress: headaches, nausea, fatigue, aches, pains etc.

Mind sign of stress: worries, anxiety, depression, panic attacks, negatives thinking...

Behavior sign of stress: agitation, forgetfulness, tics, restlessness, changes in usual behavior, lack of attention etc.

Stress can lead to various physical illnesses: psoriasis or other skin problems, asthma, HTN, cord problems, tachycardia, stomach pains, digestion problems, muscular contractures, hair problems, sexual problems etc.

Every single health problem can increase stress levels and can lead to a more complicated situation for the patient.

Working as an airline pilot was considered one of the most stressful jobs in 2015 in one American study, therefore training and counseling can be offered to flight personnel to enable them to use stress reduction techniques to improve their emotional balance. Qualified psychologists should be available to give counseling and professional advice and spot signs of mental illness.

The first steps in counseling are finding out one's stress level, determining the specific stress factors and attitude to stress. Based on these, the level of stress vulnerability can be established. Specialized questionnaires can be deployed for this purpose.

A set of tools can be offered to diminish stress, according to the circumstances and personality of each individual. These tools can empower people to take action in order to diminish stress levels in the long term, improving resilience and the capacity to cope. Specific muscular and mental relaxation exercises, breathing exercises, thinking techniques can be used in order to diminish stress, to empower a positive way to approach the problems, to find inner resources, to raise assertiveness etc.

Follow-up sessions are used to discuss how the agreed stress-reduction tools are applied by each individual. The psychologist can offer further feed-back and guidance.

The exercises for occupational stress reduction can be done either individually or in groups.

Training and counseling provided by specialized psychologist will contribute to an increase in mental and physical health for flight personnel and also to increase health and safety at work, in accordance to WORLD HEALTH ORGANIZATION definition [13].

A healthy work environment is one where the requirements for employees are appropriate in relation to their competencies and personal resources, to the amount of control they have over their work, and to the support they receive from manager and colleagues. To improve working condition is an important European objective. [23]

With psychological support, flight personnel can reduce the work place stress and increase individual resilience and can accomplish a better health. According to World Health Organization, health is not merely the absence of disease or infirmity but a positive state of complete physical, mental and social well-being [22]. Well-being is defined as a good or satisfactory condition of existence, a state characterized by health, happiness and prosperity, welfare. [10] In Merriam-Webster dictionary well-being is defined as the state of being happy, healthy or prosperous.

Stress-reduction counseling helps people realize their potential, cope with every day stresses of life, and increase work efficiency.

Psychologists are able not only to offer psychotherapy and counseling for psychological conditions, but also to enrich patient/client's personal abilities and contribute to the patient's personal development.

CONCLUSION

In this article I have emphasized the synergy between many different factors which can contribute to both psychological and physical health for the flight personnel and ways to improve well-being.

My objective for this study is to raise awareness about the existing Romanian and world mental statistics and forward-looking statements on this subject. This study also analyses the factors which affect flight safety for both flight personnel and passengers and advance interventional modalities in order to prevent and limit existing human flight risks.

Flight security can be improved through measures proposed in this paper, like session trainings provided by specialized psychologists on the subject of stress management which can include relaxation exercises, increase of assertiveness and resilience.

I sustain that through the proposed measures: introduction of a compulsory psychological exam and stress management sessions training provided by specialized psychologists will accomplish two targets: the increase of flight safety and flight personnel' mental and physical health state improvement. I am confident that through the measures I propose in this paper the rising flight safety target will be attained based on the specified statistics and specialized studies. For these presumptions to be confirmed it is necessary that the advanced measures from this study to be implemented for the flight personnel. Addressing these issues would have great benefits, principally diminishing the risk of work accidents during aeronautical journeys. Mental health and well-being of the flight personnel is very important to flight security.

Work-related stress, depression and anxiety are very common in our society. Statistics shows that in Europe 1 of 3 people suffer from mental problems, including depression, anxiety and insomnia as the most frequents. 350 million people are depressed according to current statistics [21]. By 2020, depression will be the most frequent disease according to WORLD HEALTH ORGANIZATION.

Measures should be implemented to reduce the risk of human error affecting flight safety. Therefore I propose to establish a compulsory psychological examination for flight personnel in order to identify the vulnerable persons and offer them counseling and tools that will enable them to cope with everyday work pressures. The examination should take place at the beginning of their contract, then periodically, once a year as a minimum, preferable every six month if possible.

At the moment, personnel selection in the flight industry only considers visible psychopathological signs, the already manifested mental disease in the possible, non-compulsory psychiatric examination established by the doctor during generally medical examination. Psychological examination will go deeper, by showing latent psychological problems, atypical personalities, mental illness tendencies, psychopathological potential, not just manifested psychological problems.

The latent psychological tendencies can lead any time at manifest mental disease, so it is very important to increase awareness about this aspect.

Working as an airline pilot was considered one of the most stressful jobs by an American study conducted in 2015.

Therefore training and counseling can be offered to flight personnel to teach them how to use stress reduction techniques and improving their health and well-being. Qualified psychologists should be available to give counseling and professional personalized advice in order to increase stress resilience and individuals' capacity to cope with work and life pressures and accomplish a good physical and psychological health.

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