

**Title:****The importance of using herbal medicines in flight personnel****Authors:****Reza Eslami**

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**Introduction:** Pilots and air crews are exposed to various stresses and hazards in the flight environment such as hypoxia, G forces, and disorientation. It is required to observe several safety tips for overcoming these stresses to maintain the health of employees who work in this environment. One of the most important issues in flight safety is the use of medicines. There is a tendency to consider herbal medicines safer than chemical ones, with the misconception that these medicines with fewer side effects are less harmful. This is not true, especially in the air environment. This belief may lead to the use of herbal medicines in flight personnel without consulting the flight surgeon which may lead to dysfunction and air accidents.

**Data collection:** In this review, related articles in reputable national and international databases in the period 2005 to 2022 were found by searching keywords like pilot, herbal medicine, flight surgeon, flight safety.

**Findings:** Flying with an aircraft or its controlling on the ground requires very precise operation that may be performed in an unsuitable environment or in exposing to various stressful conditions. Therefore, it is important for aviation personnel (e.g. pilots, cabin crew, and air traffic controllers) to consider the effects of herbal medicines on their performance. Ideally, the flight crew on duty should not take any medication. If necessary, prescribing herbal medicines should only be

done by a physician familiar with the unique challenges in the aviation environment, as well as one who know how the use of these medicines may affect the pilot's ability for a safe flight.

**Discussion and Conclusion:** Today, we are facing the expansion of the use of herbal medicines as well as many advertisements that introduce them without any side effect. These products are widely available in most societies and even may easily be reached without a physician's prescription. This belief may lead to the use of herbal medicines in flight personnel without consulting a flight surgeon. Studies show that their consumption is not without side effects even on the ground, and it may have serious side effects on flight crews in high-risk environments that may lead to reduce the level of flight safety and endangering people's lives. Therefore, full awareness about the side effects of these medicines is of particular importance and it is necessary for the pilots and other flight personnel to be trained by flight surgeons in this field. The studies about the effects of herbal medicines on the flying environment are insufficient. Self-medication with herbal medicine in aircrews should be discontinued and replaced by honestly reporting information by the pilots about the use of any medication and their consumption should be performed with full caution after consulting a flight surgeon and under his supervision.

**Keywords:** pilot, aircrew, herbal medicine, flight surgeon, flight safety