

Letter to Editor

HEALTH BENEFITS OF ROTATOR WING AIRCRAFT OVER FIXED WING AIRCRAFT



Arvind Nath*

Ex-Scientist 'E', ICMR – National Institute of Malaria Research, Sector 8 Dwarka, New Delhi, India.

Corresponding Author*: Arvind Nath, Ex-Scientist 'E', ICMR – National Institute of Malaria Research, Sector 8 Dwarka, New Delhi, India

Email ID: arvindnath@rediffmail.com

DOI: <https://doi.org/10.59551/IJHMP/25832069/2025.6.2.108>

COPYRIGHT@ 2025, IJHMP| This work is licensed under a Creative Commons Attribution 4.0 International Licence

Received: 28 Sept, 2025, Decision for Acceptance: 21 Oct, 2025

**To,
The Editor,
Indian Journal of Health Care, Medical and Pharmacy Practice,
Jaipur.**

Sir,

Much has been written about the technical advantages of rotator-wing aircraft i.e., helicopters over fixed-wing aircraft i.e. aeroplanes. However, there is not much discussion on the health benefits of the former over the latter.

The purpose of this letter is to highlight the health benefits of helicopters over planes is that pilots do not have to suffer from sleep deprivation and is less compared to planes forcing the pilots to fly shorter distances in smaller intervals of time. Also, helicopters do not have to fly to great heights compared to planes thus reducing the effect of G-Force such as visual blackouts.

Moreover, the amount of bodily damage after a helicopter accident is less compared to that of an aeroplane since, after bailing out from a damaged helicopter, the distance of air to ground is shorter resulting in fewer fractures.

On combining the known technical advantages of helicopters over planes with the above- mentioned health benefits, it is imperative that the future of the flying industry will rest with helicopters and not planes.

The health benefits of flying helicopters over planes are immense. Both civil and military establishments will benefit from greater use of helicopters since their health advantages that apply to pilots will also apply to passengers. Aircraft carriers can replace their jet planes with fast-moving helicopters for deployment in difficult waters.

I thank those friends of mine in the Indian Air Force (who deal with helicopters only and not aeroplanes) for their valuable inputs used in this write-up. I also thank my acquaintances in the Army Aviation Unit of the Indian Army (which exclusively fly helicopters only and not aeroplanes) for contributing ideas used during the preparation of this document.

Yours sincerely

1. References

1. Hyeonsoo Yeo (2019): "Design and aeromechanics investigation of compound helicopters". Aerospace Science and Technology, Volume 88, Pages 158-173. <https://doi.org/10.1016/j.ast.2019.03.010>. (<https://www.sciencedirect.com/science/article/pii/S1270963818326579>)
2. Bustamante-Sánchez, Á.; Nikolaidis, P.T.; Clemente-Suárez, V.J. Body (2022): Composition of Female Air Force Personnel: A Comparative Study of Aircrew, Airplane, and Helicopter Pilots. *Int. J. Environ. Res. Public Health* 2022, 19, 8640. <https://doi.org/10.3390/ijerph19148640>
3. Ferguson, Kevin and Thomson, Douglas (2015): Performance comparison between a conventional helicopter and compound helicopter configurations. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 229 (13), pp. 2441-2456. (doi: 10.1177/0954410015577997)
4. Harris MR, Fein EC, Machin MA (2022): A Systematic Review of Multilevel Influenced Risk-Taking in Helicopter and Small Airplane Normal Operations. *Front Public Health*. 2022 May 12;10:823276. doi: 10.3389/fpubh.2022.823276. PMID: 35646790; PMCID: PMC9133595.
5. Francesco Castelluccio, Luigi Maritano, Salvatore Amoroso, Marco Migliore (2016): A comparative analysis between helicopter and seaplane for passenger transport. *Aircraft Engineering and Aerospace Technology: An International Journal* 4 July 2016; 88 (4): 580–590. <https://doi.org/10.1108/AEAT-01-2015-0024>

Cite this article Nath A. Health Benefits of Rotator Wing Aircraft Over Fixed Wing Aircraft. *Indian Journal of Health Care, Medical & Pharmacy Practice*. 2025;6(2):55-56.