# AN ANALYSIS OF MEDICAL CONDITIONS IMPACTING FITNESS IN FEMALE AIRCREW OF THE INDIAN AIR FORCE 

UNE ANALYSE DES CONDITIONS MÉDICALES IMPACANT L'APTITUDE À L'AÉRONEF FEMME DE LA FORCE AÉRIENNE INDIENNE

S Nair, P Renjhen<br>Indian Air Force, Bengaluru, Karnataka, India<br>kpsadhna55@gmail.com

Introduction: Studies providing data and analysis of health issues affecting female military aircrew are practically nonexistent, especially in developing countries. Currently, women are employed only as officers in the Indian Air Force. The aim of this study was to analyse various medical conditions impacting fitness to fly, in serving women aircrew of the Indian Air Force and compare these trends with those in female ground duty and male aircrew officers.

Methods: This cross sectional study involved collation and analysis of medical data in respect of all serving women aircrew of the IAF. Records of a total of 108 women aircrew in the age group of 23 to 40 years, were reviewed and analysed between Oct 2015 to Jan 2016. Of these, 93 were from the Transport and Helicopter stream and 15 from the Navigator stream. These were then compared with trends in female ground duty and male aircrew officers, who ranged between 21 to 60 yrs of age. The data was statistically analysed.

Results: $21.29 \%$ ( $n=23$ ) of female aircrew were in low medical category (classification). When compared to low medical category trends in female ground duty and male aircrew officers across all age groups, this difference was statistically not significant. However, when compared to male aircrew officers of similar age group, i.e., 20 to 40 yrs , the difference was statistically significant ( $p=0.0015$ ). The leading cause of medical unfitness in women aircrew was pregnancy (35\%), followed by diseases due to endocrine causes, PIVD, injuries and anaemia.

Conclusion: In a highly male-dominated aviation industry, little is known about specific health issues impacting women aircrew. This study highlights a significant difference in medical fitness of female aircrew viz a viz male aircrew in the age group of 20 to 40 years. Continuing trend analysis is essential to understand health issues affecting female military pilots so as to enable formulation of suitable human resource and training policies worldover.

