WG 2 (Preventive Medicine and Healthcare Policies)

Decentralizing Pharmacies: How Outsourcing Dispensation Improves Drug Access

Maya Fischman, Costa Bell, Jawad Salame, Ido Aldar, Yaron Cohen, Shira Gelman, Eli Pinchevsky, Aya Bardugo, Avishai M. Tsur, Meir Schechter, Avi Shina, Yaniv Elzam.
Medical Branch, Medical Corps Research Institute, Israel Defense Forces Medical Corps.

Background:
In October 2023, the Israel Defense Forces (IDF) restructured its pharmacy services by outsourcing to civilian pharmacy chains. This reform expanded service locations and extended hours to reduce logistical barriers and improve prescription fulfillment.
Purpose:
This study examines how decentralization affected pharmaceutical consumption, assessing whether increased access led to higher utilization.
Methods:
A retrospective analysis compared pharmacy dispensing records from October 2014 to September 2024. Total prescription dispensation before and after decentralization was compared and specific therapeutic categories were examined. The average annual growth rate during the centralized pharmacy system was calculated, along with 95% confidence intervals (CIs), and compared to the growth rate in the year following decentralization.
Results:
Decentralization expanded pharmacy service points from 9 to 297 locations. The annual prescription growth rate before decentralization was 8.81% (95% CI: -0.34%-17.97%), rising to 405.41% post-reform. Specific medication categories saw notable increases: oral contraceptives from 2.42% (95% CI: -10.82%-59.12%) to 288.84%; asthma inhalers from 1.91% (95% CI: -26.34%-30.16%) to 323.46%; and stimulants from 8.64% (95% CI: -7.79%-25.06%) to 978.07%.
Conclusions:
Decentralization significantly increased prescription dispensation, especially for chronic medications. Findings suggest access barriers previously limited demand, and their removal boosted utilization. Further research is needed to assess clinical and economic impacts, including long-term health benefits and financial sustainability.

WG 2 (Preventive Medicine and Healthcare Policies)

Asthma Exacerbation Among Soldiers: Enhancing Preventive Care by Risk Factor Identification

Mor Zarfati Schneider, Meir Schechter, Doron Yaya Stupp, Sharon Ohayon, Shai Herzberger, Shoham Dabbah, Adi Horesh, Omer Belsky, Adam Uziel, Niv Fono, Asaf Nebenzal, Aya Bardugo.
Medical Corps Research Institute, Israel Defense Forces Medical Corps.

Background:
Asthma affects 5–10% of young adults and presents challenges to operational readiness due to potential exacerbations.
Purpose:
Early identification and targeted interventions of soldiers at high risk can maintain soldier fitness and prevent severe outcomes.
Methods:
We utilized a large dataset of risk factors associated with asthma exacerbations among active Israel Defense Forces personnel. Recruits underwent medical evaluations to assess fitness, with asthma diagnoses based on personal history, clinical presentation, and lung function tests. Asthma severity was classified into inactive (a history of childhood asthma), mild, moderate, severe (asthma-related hospitalization), and disqualified from service. Asthma worsening during service was defined as any worsening of asthma severity. The Wilson score interval was used to calculate 95% confidence intervals for proportion estimates.
Results:
As of January 2025, 5.9% of IDF active-duty personnel had asthma. Between 1996 and 2016, there were 97,411 recruits with a history of asthma: 17,446 were classified as inactive, 28,957 as mild, 43,593 as moderate, and 7,415 as severe at recruitment. During active service, 3,228 (3.3%) experienced a worsening of their asthma status. Worsening occurred in 312 (1.8%) inactive cases, 1,807 (6.2%) mild cases, 965 (2.2%) moderate cases, and 144 (1.9%) severe cases. Among recruits with mild to moderate asthma (N=72,550), 1,329 (1.8% [95% CI 1.7, 1.9]) progressed to severe asthma during their service. Furthermore, 340 soldiers (0.3% [95% CI 0.3, 0.4]) with asthma at recruitment were discharged due to severe asthma.
Discussion:
These findings emphasize the need for early identification of soldiers at risk for asthma worsening. Efforts are underway to develop an AI-assisted model to help physicians detect high-risk individuals in real time, improving outcomes and operational readiness.
Conclusions:
The findings reveal that a notable percentage of recruits with mild to moderate asthma experience worsening conditions during their service, which can lead to severe asthma and potential discharge.