

Love and allergies in the city beautiful—Chandigarh, India

In the past few decades, deforestation has undergone an enormous growth to meet the increasing demands of a growing population due to urbanisation. The boom in industry and vehicular congestion has degraded ambient air quality in most urban areas. All these factors have contributed to various health hazards as highlighted by Dan Crouse and colleagues.¹ The authors showed the beneficial effects of increased urban greenness among urban Canadians, leading to a decrease in cause-specific mortality. In an accompanying Comment,¹ Matilda van den Bosch² highlighted that an inherent love for nature is a natural phenomenon and is useful in decreasing the stresses of urban life. However, there are two sides to each coin: an increase in greenery also leads to increase in pollens in the atmosphere leading to increase in allergic ailments. Thus, efforts should be focused on

planting those species of trees that shed less pollen and hence pose minimal health hazards for the population that lives in the surrounding area.

The beautiful city of Chandigarh, situated in the northern part of India, is a lush green city designed by the famous French architect Le Corbusier.³ It is one of a number of well planned cities in India, situated in the foothills of the Shivalik mountain ranges with abundant trees planted on either side of the roads and many well maintained parks. However, this design might have been a contributing factor in the increased incidence of allergic ailments seen among Chandigarh residents.⁴ Caution must therefore be exercised while making green zones in urban areas; one solution is that so-called perfect-flowering plants (which have male and female parts in same flower and as such are not highly allergenic) should be grown so that the pollination is relatively contained.⁵ Similarly, monoecious plants (male and female flowers that grow on same plant) also offer an added advantage compared with dioecious plants (which have male

and female plants, thus requiring pollen be spread more widely).⁵ Judicious plantation of urban cities is needed to provide a healthy allergen-free atmosphere.

We declare no competing interests.

Copyright © The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

Kapil Goyal, Mini P Singh
minipsingh@gmail.com

Department of Virology, Postgraduate Institute of Medical Education & Research, Chandigarh 160 012, India

- 1 Crouse DL, Pinault L, Balram A, et al. Urban greenness and mortality in Canada's largest cities: a national cohort study. *Lancet Planet Health* 2017; **1**: e289–97.
- 2 van den Bosch M. Live long in nature and long live nature! *Lancet Planet Health* 2017; **1**: e265–66.
- 3 Chandigarh Administration. About Chandigarh. http://chandigarh.gov.in/knowchd_general.htm (assessed Oct 29, 2017).
- 4 Kanwar S. Pollen allergies bloom in Chandigarh. <https://timesofindia.indiatimes.com/city/chandigarh/Pollen-allergies-bloom-in-Chandigarh/articleshow/34069060.cms> (assessed Oct 29, 2017).
- 5 FTD Fresh. The 24 best and worst plants for allergies. <https://www.ftd.com/blog/share/plants-allergies> (assessed Oct 29, 2017).

