

A Study on the Trend in Semen Parameters of Males from Ahmedabad City (Gujarat), Over a Two-Decade Period

H. N. Highland, B. Kalaria and L.B. George

*Department of Zoology and Biomedical Technology, Gujarat University,
Ahmedabad 380 009, India*

Telephone: 079-26302362 ; FAX : 079-26303196, E-mail: hnh3007@yahoo.com

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ABSTRACT Current available literature shows that there is a definite declining trend in sperm counts in several countries across the globe leading to an increase in infertility in several regions. Even in several areas which economically belong to the third world of developing countries, there are reports of an increase in the number of infertility cases. In particular, most reports indicate a decline in sperm count and/or a decrease in semen quality. The present study was therefore carried out to determine the trend in sperm density and motility, which could result in a possible fertility decline among males in the areas in and around Ahmedabad city, Gujarat State. Data were obtained by evaluating semen parameters from samples collected from males of proven fertility, from a cross section of the normal population over a period of 20 years. The analysis was carried out as part of various research studies related to assessment of infertility and includes evaluation of physical characteristics of semen, sperm count, motility, viability and morphology of semen samples of donors of proven fertility, included as the Control/ Normal group. The data obtained in recent years (2000-2005) from our laboratory was compared to semen parameters obtained every five-seven years, over the last two decades (1983-2005). There appears to be no significant decline ($p < 0.2$) in semen parameters of normal individuals, as observed in other parts of world.