



HAL
open science

Health Insurance Coverage in India

Bertrand Lefebvre

► **To cite this version:**

Bertrand Lefebvre. Health Insurance Coverage in India. Christophe Z Guilmoto. Atlas of Gender and Health Inequalities in India, 16, Springer Nature Switzerland, pp.175-182, 2023, Demographic Transformation and Socio-Economic Development, 10.1007/978-3-031-47847-5_17 . hal-04384064

HAL Id: hal-04384064

<https://hal.science/hal-04384064>

Submitted on 10 Jan 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Metadata of the chapter that will be visualized online

Chapter Title	Health Insurance Coverage in India
Copyright Year	2023
Copyright Holder	The Author(s), under exclusive license to Springer Nature Switzerland AG
Corresponding Author	Family Name Lefebvre Particle Given Name Bertrand Suffix Organization French Institute of Pondicherry Address Pondicherry, India Email bertrand.lefebvre@ifpindia.org

Abstract The chapter focuses on health insurance coverage with the help of NFHS-5 estimates. The analysis shows an increase in health insurance coverage to 41% of households, indicating the influence of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana scheme, especially in northeastern India. The study highlights variations in coverage at geographic levels and emphasizes the importance of government-led programs for achieving excellent coverage. It also mentions that states like Haryana, Maharashtra, and Punjab, where private insurers and Third-Party Administrators are involved, have not met expectations.

The uneven development of the private health insurance sector and the relative failure of government-sponsored schemes in northern India are attributed as possible reasons. The author emphasizes the need to bridge the gap between national objectives and local health systems to ensure the success of AB-PMJAY. Monitoring the scheme's usage, impact on out-of-pocket expenses, and health outcomes is crucial for assessment.

Chapter 17

Health Insurance Coverage in India

1
2

Bertrand Lefebvre

3

For the past 20 years, India has led an ambitious policy promoting health insurance. 4
At the national and state levels, programs have multiplied to improve the protection 5
and coverage of the population concerning health expenses. At the turn of the 2000s, 6
the level of out-of-pocket payment was exceptionally high in India, with 74% of the 7
total health expenditures according to WHO (2022) and 32.5 million persons falling 8
below the poverty line in 1999–2000 because of health expenses (Garg & Karan, 9
2009). The development of health insurance programs targeting the most econom- 10
ically vulnerable groups was seen in India as a priority to meet the Millennium 11
Development Goals (MDGs) and to encourage the development of Universal Health 12
Coverage (UHC). This policy, which materialized in 2008 with the launch of the 13
Rashtriya Swasthya Bima Yojana (RSBY), was not India's first attempt to develop 14
health insurance and social protection. Since the creation of the Employees' State 15
Insurance (ESI) in 1952 and the Central Government Health Scheme (CGHS) in 16
1954, the central government has aimed to develop social and health protection for 17
its citizens. At the time, these programs were seen as the first steps before an 18
extension to the entire population (Jeffery, 1988). Later, in the 1980s, 19
Community-Based Health Insurance schemes (CBHI) were created to provide better 20
protection for the rural population and the poor (Devadasan et al., 2004). 21

The 1980s and 1990s were also marked by the insurance sector's liberalization 22
and new private players' arrival (Purohit, 2001). By the mid-2000s, only 5% of 23
households were covered by health insurance (NFHS 3). The low penetration of 24
health insurance at that time could be explained by a lack of financial support from 25
the government, the substantial weight of the informal sector, and the difficulty in 26
developing a regulatory and legislative framework for integrating a fragmented care 27
system (patients, health services). In the 2000s, the development of 28

B. Lefebvre (✉)

French Institute of Pondicherry, Pondicherry, India

e-mail: bertrand.lefebvre@ifpindia.org

29 government-sponsored health insurance schemes (GSHIS) was seen as the best way
30 to meet the threefold challenge posed by the Indian health system: improving access
31 to care for the most economically marginalized patients, offering a wide range of
32 accessible care by reaching to the private health sector, and pooling financial
33 resources to ensure the budgetary sustainability of the system (La Forgia & Nagpal,
34 2012). Today, the NITI Aayog estimates that a health insurance program covers
35 nearly 70% of the population, with 700 million individuals covered by the
36 Ayushman Bharat—Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and state
37 government extension schemes (Sarwal & Kumar, 2021).

38 Questions remain about the actual expansion of health insurance coverage in the
39 population, while programs have multiplied at the national level (RSBY,
40 AB-PMJAY) or the state level. Moreover, the growth of government-sponsored
41 programs has not coincided with the same resources or model across India. The
42 NFHS-5 data make it possible to shed some light on the persistent inequalities in the
43 health insurance coverage of the population. They also make it possible to review the
44 sometimes complex trajectories of these national and local programs between
45 complementarity and competition.

46 **Data Source and Methods**

47 The NFHS has been measuring household health insurance coverage since
48 2005–06.¹ This period was critical as new health insurance programs were being
49 unrolled in India (launch in 2003 of the Yeshavini scheme in Karnataka and of the
50 Universal Health Insurance Scheme) and when governments at the local and national
51 levels initiated plans for ambitious health insurance programs to fight poverty and
52 improve social protection. In addition, Universal Health Coverage was also gaining
53 momentum in global health policies as health insurance programs were being
54 introduced in different regions of the world with promising results (like the
55 30-Baht scheme in Thailand in 2002).

56 The information collected in the NFHS questionnaires concerns the presence of a
57 member covered by health insurance and the type of insurance used (NFHS-3
58 questions 64–65, NFHS-4 questions 54–55, NFHS-5 questions 71–72). The health
59 insurance categories presented in the NFHS cover most national programs (ESIS,
60 CGHS) and increase from 7 to 9 categories, starting with NFHS-4 (2015–16) by
61 incorporating the RSBY and the State Health Insurance Scheme. These different
62 categories highlight the diversity of existing programs and the sector's fragmentation
63 between private health insurance, direct employer reimbursements, subsidized pro-
64 grams, and community-based programs.

65 There is no data on the actual use of these insurance programs in the NFHS
66 surveys, while questions are asked about the use of and access to health services or

¹The original NFHS dataset and the spatial analysis methodology are described in detail in Chap. 1.

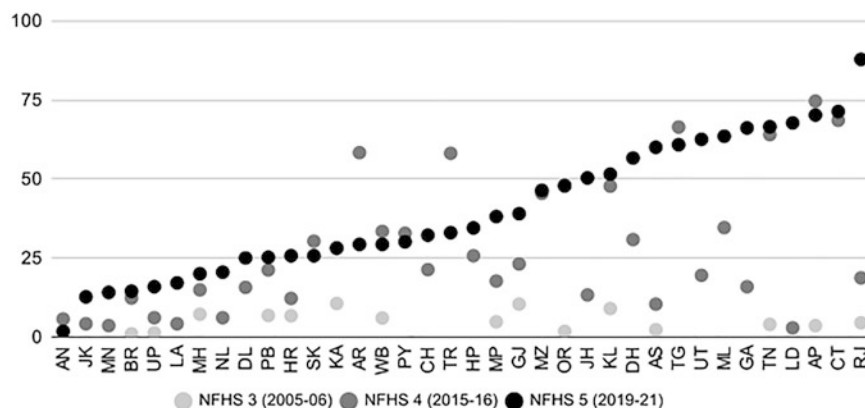


Fig. 17.1 Percentage of households covered by health insurance by state in 2005–21
Source: NFHS 3, NFHS 4, NFHS 5

AU1

other public health programs. It should also be noted that it is difficult to compare 67
results from different surveys for each state because of changes in the sampling 68
design in some small states. The recent roll-out of the AB-PMJAY at the time of the 69
NFHS-5 surveys (2019–21) might not have been adequately accounted for in some 70
states. Finally, the health insurance questions are at the household level, not the 71
individual level, preventing a more refined analysis of the coverage inequalities 72
among the population. 73

Results

74

At the national level, the latest NFHS-5 results confirm the rise of health insurance in 75
Indian households. From 29% in 2015–16 (NFHS-4), the share of households with at 76
least one member covered by health insurance has now climbed to 41%. Between the 77
NFHS-3 and NFHS-5, the share of households covered by health insurance 78
increased eight-fold nationally. However, there are gaps between rural (42%) and 79
urban (38%) households or between males (30%) and females (33%) aged 15–49 in 80
terms of health insurance coverage. The bottom income quintile remains with the 81
lowest proportion of households covered by health insurance (36.1%), but the 82
increase between NFHS-4 and NFHS-5 was more significant in this quintile than 83
in other income groups (+14.5 pt. vs. 12.3 pt.). A similar catch-up can be observed 84
over this period for the Scheduled Tribes households (+16 pt.), which now have the 85
highest coverage level (46.8%) compared to other groups (SC, OBC, Others). 86

However, this significant increase over the past 15 years appears to have partly 87
stalled between the NFHS-4 and NFHS-5 rounds. Estimates of health insurance 88
coverage point to diverging regional trajectories, ranging from sustained growth to 89
stagnation or even decline (Fig. 17.1). The impact of NFHS sample size must be 90

91 considered, especially in small states. The sharp decline in household coverage
92 between NFHS-4 and NFHS-5 (−33 pt.) in Tripura state is partly explained by the
93 creation of eight new districts and its effect on district-level sample size in this state
94 (IIPS and IFC, 2021). In Arunachal Pradesh (−29 pt.), the local government-
95 sponsored health insurance scheme (APCMUHIS), launched in 2014, was
96 discontinued at the end of 2016 because of administrative and funding difficulties.
97 It was not until late 2018, a few months before the start of NFHS-5 surveys in
98 Arunachal Pradesh, that a new AB-PMJAY-supported scheme re-emerged for
99 households in the state.

100 In several Southern states, such as Andhra Pradesh (70.2%), Telangana (60.8%),
101 and Tamil Nadu (66.5%), the already high level of household coverage recorded
102 during the NFHS-4 stagnated or fell back a few points in NFHS-5. Several large
103 states, such as Maharashtra (20%), Karnataka (28.1%), and West Bengal (29.3%),
104 have experienced no significant changes, and their coverage rates remain below the
105 national average. The same observation applies to the heavily populated and poorer
106 states of Bihar (14.5%) and Uttar Pradesh (15.9%), where the proportion of house-
107 holds covered by health insurance remains well below the national average. Other
108 states in the north and south stand out for their robust increase in household coverage
109 between NFHS-4 and NFHS-5. Rajasthan, Goa, Uttarakhand, and Assam present
110 spectacular gains of over 40 points in five years.

111 Only 318 of 707 districts have values above the mean (42.5%, Median 38.7%).
112 The standard deviation (0.239) and coefficient of variation (0.562) indicate signif-
113 icant differences at the district level. Mapping the share of households with at least
114 one member covered by health insurance by district gives us an even clearer picture
115 of the importance of considering the state level (Fig. 17.2). Along with the analysis
116 of the distribution of values (Fig. 17.3), the district map helps distinguish several
117 broad regional clusters. The high value of Moran's I index (0.737) suggests a solid
118 spatial autocorrelation. The distribution of High-High clusters (hot spots) and
119 Low-Low clusters (cold spots) broadly follows state boundaries. Tamil Nadu,
120 Andhra Pradesh, Telangana, and Chhattisgarh districts stand out for having a share
121 of households covered by health insurance ([51–90%]) distinctly above the national
122 mean and median. Local government-sponsored health insurance schemes cover
123 more than 70% of insured households in these states. Launched over 15 years ago,
124 programs such as the Aarogyasri Health Insurance Scheme in Andhra Pradesh or the
125 Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS) in Tamil
126 Nadu have allowed optimal coverage of the population and the territory. The
127 neighboring districts of Kerala, Odisha, and Jharkhand also have household cover-
128 age rates higher than the national average but to a lesser degree ([35–70%]). Over
129 70% of insured households in these states are covered by national health insurance
130 schemes (RSBY or AB-PMJAY). Three other High-High clusters have emerged
131 between the NFHS-4 and the NFHS-5 in Rajasthan, Uttarakhand, and Northeast
132 India (Assam, Meghalaya), again driven by local or national expansion of govern-
133 ment health insurance programs that cover more than 70% of insured households.
134 The gap with neighboring states in northern India is particularly notable.

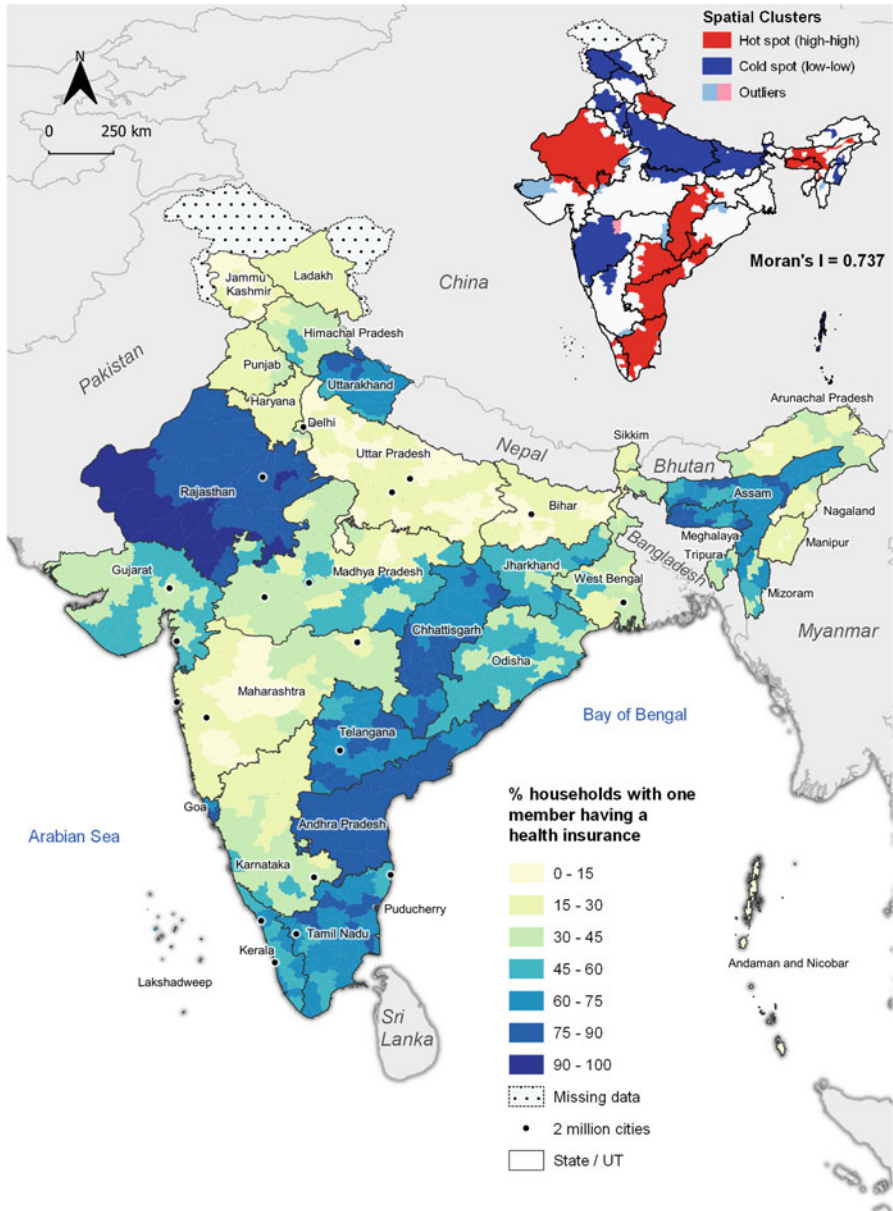


Fig. 17.2 Percentage of households with at least one member enrolled in health insurance
 Source: NFHS-5 2019–21. Map by CZ Guilmo

A large Low-Low cluster is emerging from Jammu and Kashmir through Punjab, 135
 Haryana, Delhi, and Uttar Pradesh to Bihar. No district in this vast cluster reaches 136
 the national average ([5–38%]). Thirty-nine of India's 50 worst-performing districts are 137

This figure will be printed in b/w

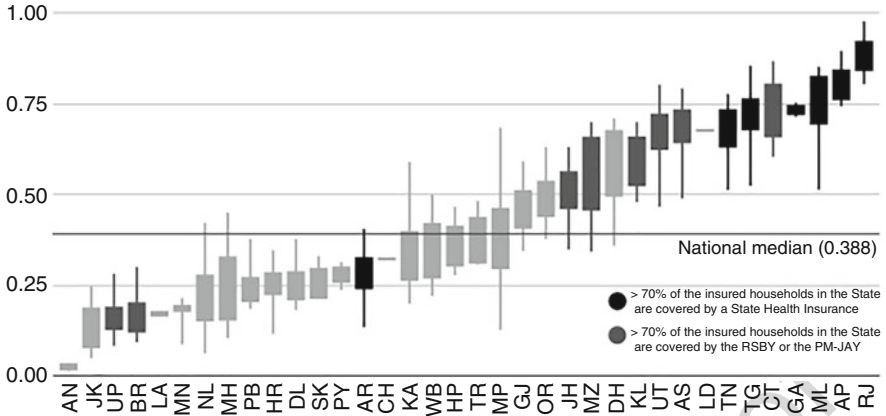


Fig. 17.3 Boxplot of health insurance coverage by district and by state
Source: NFHS 5

138 located in these states. While household coverage with health insurance is improving
 139 compared to NFHS-4 results, the gains remain small (+2.2 pt. in Bihar, +4 pt. in
 140 Punjab, +8.5 pt. in Jammu and Kashmir, +9.8 pt. in Uttar Pradesh), even lower than
 141 the national increase (+12 pt.). There is no catch-up effect with the rest of the
 142 country. The poor results obtained by states such as Bihar and Uttar Pradesh are
 143 particularly worrying and show how far India still has to go regarding health and
 144 social protection. In these two states, most insured households (88.1% in Bihar and
 145 85.4% in Uttar Pradesh) are covered by national programs (RSBY, AB-PMJAY).
 146 Local government programs are virtually absent in both states (less than 2% of
 147 insured households). While some states, such as Assam, Chhattisgarh, and Kerala,
 148 have been able to support a large-scale roll-out of the national health insurance
 149 scheme at the local level, there is no similar effect in Bihar and Uttar Pradesh. In
 150 several states like Madhya Pradesh and Himachal Pradesh, the move from the RSBY
 151 to the AB-PMJAY scheme was ongoing during the NFHS-5 survey. Nevertheless,
 152 the real impact of such a transition on the overall enrollment of households into
 153 health insurance schemes could not be fully assessed.

154 Finally, the particular position of the districts of Maharashtra and, to a lesser
 155 extent, of Karnataka should be noted. In contrast to other neighboring states in the
 156 south or west of India, the share of households covered by health insurance remains
 157 below the national average for most of these districts ([10–59%]). At the time of the
 158 NFHS-3 in 2005–06, these states occupied two of the top three spots regarding
 159 household health insurance coverage, albeit at low levels (<10% of the households
 160 surveyed). In addition, Karnataka supported the development of the Yeshasvini
 161 health insurance scheme targeted at informal sector workers. The progress of health
 162 coverage in Karnataka and Maharashtra remains below the national trend, while the
 163 registration of households living below the poverty line is high in both states.

Discussion and Conclusion

164

The NFHS-5 data comes at a pivotal time for health insurance coverage in India with the launch of the AB-PMJAY in 2018. It may have come too early to measure the real impact of AB-PMJAY on household health insurance coverage, especially for specific regions in northern India. Based on available results, AB-PMJAY seems to have boosted some small states, especially in northeastern India. As highlighted by some in-depth analysis of the NFHS-4 results (Khan et al., 2021), variations in health insurance coverage can be attributed to specific geographic level effects (State, District, communities) even after adjusting for household demographic and socio-economic differences. The excellent performance of the southern states shows that solid political stewardship coupled with government-led programs can help achieve excellent health insurance coverage results. In states such as Haryana, Maharashtra, and Punjab, where household registration and outreach activities have been left to private insurers and Third Party Administrators (TPAs), health insurance coverage has remained below expectations (Khetrapal & Acharya, 2019; Thakur, 2016; Wagle & Shah, 2017).

The uneven development of the private health insurance sector across India might also explain why the RSBY and other government-sponsored schemes that relied heavily on the involvement of private partners have failed in several parts of northern India. For example, in Kerala, the RSBY has been designed to cover more households beyond BPL ones and to support the redevelopment of public hospitals by bringing more revenues to them and improving the quality of medical care (Palacios et al., 2011). Bridging the gap between national objectives and local health systems realities will be essential for AB-PMJAY's success. Beyond improving household health insurance coverage, monitoring the scheme's usage and impact on OOPs and health outcomes will be essential to assess the AB-PMJAY. Based on the study of state-sponsored health insurance schemes in India, there is a lack of evidence that these schemes make a difference in improving access to health services or offering financial protection (Prinja et al., 2019; Garg et al., 2020).

References

193

- Devadasan, N., Ranson, K., Van Damme, W., & Criel, B. (2004). Community health Insurance in India: An overview. *Economic and Political Weekly*, 39(28), 3179–3183.
- Garg, C. C., & Karan, A. K. (2009). Reducing out-of-pocket expenditures to reduce poverty: A disaggregated analysis at rural-urban and state level in India. *Health Policy and Planning*, 24(2), 116–128. <https://doi.org/10.1093/heapol/czn046>
- Garg, S., Bebarta, K. K., & Tripathi, N. (2020). Performance of India's national publicly funded health insurance scheme, Pradhan Mantri Jan Arogya Yojana (PMJAY), in improving access and financial protection for hospital care: Findings from household surveys in Chhattisgarh state. *BMC Public Health*, 20(1), 949. <https://doi.org/10.1186/s12889-020-09107-4>
- International Institute for Population Sciences (IIPS) and ICF. (2021). *National family health survey (NFHS-5), India, 2019–21: Tripura*. IIPS.

- 205 Jeffery, R. (1988). *The politics of health in India*. University of California Press.
- 206 Khan, P. K., Perkins, J. M., Kim, R., Mohanty, S. K., & Subramanian, S. V. (2021). Multilevel
207 population and socioeconomic variation in health insurance coverage in India. *Tropical Med-*
208 *icine and International Health*, 26(10), 1285–1295. <https://doi.org/10.1111/tmi.13645>
- 209 Khetrapal, S., & Acharya, A. (2019). Expanding healthcare coverage: An experience from
210 Rashtriya Swasthya Bima Yojna. *The Indian Journal of Medical Research*, 149(3), 369–375.
211 https://doi.org/10.4103/ijmr.IJMR_1419_18
- 212 La Forgia, G., & Nagpal, S. (2012). *Government-sponsored health Insurance in India: Are you*
213 *covered?* The World Bank. <https://doi.org/10.1596/978-0-8213-9618-6>
- 214 Palacios, R., Das, J., & Sun, C. (2011). *Evidence from the early experience of the Rashtriya*
215 *Swasthya Bima Yojana*. Centre for Policy Research.
- 216 Prinja, S., Bahuguna, P., Gupta, I., Chowdhury, S., & Trivedi, M. (2019). Role of insurance in
217 determining utilization of healthcare and financial risk protection in India. *PLoS One*, 14(2),
218 e0211793. <https://doi.org/10.1371/journal.pone.0211793>
- 219 Purohit, B. C. (2001). Private initiatives and policy options: Recent health system experience in
220 India. *Health Policy and Planning*, 16(1), 87–97. <https://doi.org/10.1093/heapol/16.1.87>
- 221 Sarwal, R., & Kumar, A. (2021). *Health Insurance for India's missing middle* [Preprint]. Open
222 Science Framework. <https://doi.org/10.31219/osf.io/s2x8r>
- 223 Thakur, H. (2016). Study of awareness, enrollment, and utilization of Rashtriya Swasthya Bima
224 Yojana (National Health Insurance Scheme) in Maharashtra, India. *Frontiers in Public Health*,
225 3. <https://doi.org/10.3389/fpubh.2015.00282>
- 226 Wagle, S., & Shah, N. (2017). *Government funded health insurance scheme in Maharashtra: Study*
227 *of Rajiv Gandhi Jeevandayee Aarogya Yojana*. CEHAT.
- 228 World Health Organization. (2022). *Global Health Expenditure database*. Retrieved on January
229 30, 2022, <https://apps.who.int/nha/database>

Author Query

Chapter No.: 17 609625_1_En

Query Refs.	Details Required	Author's response
AU1	Figure source line have been moved to figure caption for Figs. 17.1–17.3. Please confirm.	

Uncorrected Proof