



FDI POLICY STATEMENT

Antibiotic Stewardship in Dentistry

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2 **CONTEXT**

3 Within the global threat of antimicrobial resistance (AMR), the spread of antibiotic
4 resistance presents a world-wide major health risk due to prolonged illnesses, longer
5 hospital stays and mortality, with the prospect of antibiotics becoming ineffective in the
6 treatment of even simple infections¹. It is calculated that 700,000 people already die
7 each year as a result of AMR and it is predicted the rate will rise to 10 million deaths
8 globally by 2050 if effective steps are not taken². The wide availability of low-quality
9 medicinal products, self-medication, inappropriate or unnecessary antibiotic
10 prescribing and poor infection prevention and control all contribute to the development
11 and spread of antibiotic resistance. Attention is now being given to this very serious
12 situation by human and animal health communities, agriculture, manufacturing and
13 research communities and, increasingly, by wider society.

14 Dentists are responsible for about 10% of antibiotic prescribing for humans (depending
15 on the country). Studies have shown that despite efforts to reduce the number of
16 unnecessary or inappropriate prescriptions, too many are still being written by dental
17 professionals³. The dental profession thus has a vital responsibility, globally and
18 nationally, to contribute to the reduction of antibiotic resistance.

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20 **SCOPE**

21 This policy statement highlights the crucial role that dentists, their teams, and National
22 Dental Associations (NDAs) have in proactive engagement in antibiotic stewardship to
23 ensure appropriate use of antibiotics.

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25 **DEFINITIONS**

26 **Antibiotic resistance**

27 **ABR**

28 Change of bacteria, when exposed to antibiotic, in ways that render ineffective those
29 previously efficient antibiotics.

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31 **Antibiotic stewardship**

32 **ABS**

33 Coherent set of actions which promote appropriate use of antibiotics, i.e. in ways that
34 ensure sustainable access to effective therapy for all who need them.

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36 **Antibiotic stewardship programme**

37 **ABS Programme**

38 Detailed set of actions/interventions planned and implemented by all stakeholders,
39 aiming at promoting and improving the appropriate use of antibiotics by targeting the
40 diagnostic, prescribing and behavioural steps of the whole infection management
41 process.

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43 **Infection prevention and control programme**

44 Detailed set of actions/interventions in health care planned and implemented by all
45 stakeholders aimed at preventing infections and reducing the transmission of micro-
46 organisms and their resistance genes to patients and health workers⁴

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48 **PRINCIPLES**

49 The One Health principle proposed and adopted by many agencies to tackle antibiotic
50 resistance worldwide in all sectors (humans, animals, environment) requires the active
51 engagement, commitment and contribution of the dental profession.

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53 There is an overwhelming case for improved antibiotic stewardship, with the aim of
54 restricting the use of antibiotics to that which is strictly necessary. This will require the
55 development of government policy and clear guidance on antibiotic prescribing
56 coupled with effective surveillance and more studies on antibiotic stewardship.

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58 It has been demonstrated that antibiotic stewardship programmes in dentistry can be
59 effective in optimizing antibiotic prescribing⁵.

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61 **POLICY**

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- 63 • FDI supports the improvement of knowledge and understanding of antibiotic
64 resistance and stewardship through further research, better information,
65 intelligence and data, and the promotion of epidemiological work at regional and
66 national levels
 - 67 • FDI encourages research and development of additional solutions for prevention
68 and treatment of dysbiosis of oral microbiota.
 - 69 • FDI acknowledges that dentists should ensure their knowledge is up to date on
70 antibiotic resistance and stewardship and that their antibiotic prescribing is in line
with best practice.

- 71 • FDI encourages the development of educational programmes on antibiotic
72 resistance, prescribing and stewardship that are suitable for the continuum of the
73 professional lives of dentists and dental teams.
- 74 • FDI strongly encourages dentists to provide the necessary information for their
75 patients regarding antibiotic resistance and appropriate use of antibiotics.
- 76 • FDI acknowledges that, along with antibiotic stewardship programmes, infection
77 prevention and control programmes should be implemented as fundamental
78 components of good clinical practice.
- 79 • FDI encourages and supports NDAs to actively engage in their AMR national
80 action plan framework and to plan and implement antibiotic stewardship
81 programmes in dentistry at local and national levels. NDAs can assist the
82 improvement of dentists' antibiotic prescribing practices by making scientific
83 evidence available to them.
- 84 • FDI encourages NDAs to advocate their policy makers to ensure that a robust
85 national action plan to tackle antibiotic resistance is in place.
- 86 • FDI encourages major stakeholders (pharmaceutical companies, scientific
87 journals, policy makers, NDAs) to provide information and communicate about
88 antibiotic resistance and stewardship, in particular in scientific and professional
89 journals but also at the practice and patient levels.

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91 **KEYWORDS**

92 Antibiotic resistance; antibiotic stewardship; antimicrobial resistance; antimicrobial
93 stewardship; One Health

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95 **DISCLAIMER**

96 The information in this Policy Statement was based on the best scientific evidence
97 available at the time. It may be interpreted to reflect prevailing cultural sensitivities and
98 socio-economic constraints.

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