Medical students' exposure to and attitudes towards product promotion and incentives from the pharmaceutical industry in 2019: A national cross-sectional study in France.

Appendix: supplementary material

Table of contents

| Table 1: Sociodemographic characteristics of the respondents, supplementary material |
|---|
| Table 2: Sociodemographic characteristics of the respondents (raw data) and ofall French medical students |
| Table 3: Exposure of medical students to each type of pharmaceutical productpromotion and incentives.5 |
| Table 4: Appropriateness of gifts and promotional funding from thepharmaceutical industry according to students10 |
| Table 5: Students' scepticism about the influence of pharmaceutical productpromotion and incentives.12 |
| Table 6: multivariate linear model of the cumulative exposure score |
| Table 7: Comparison between 2012 (data source: Etain et al.1) and 2019 (currentstudy) of students' exposure and opinions.15 |
| Document 1: Questionnaire in French16 |

| Table | 1: | Sociodemographic | characteristics | of | the | respondents, | supplementary |
|---------|-----------|------------------|-----------------|----|-----|--------------|---------------|
| materia | <u>al</u> | | | | | | |

| | All n = 6280 | Clinical students n = 3549 | Primary care residents n = 1335 | Other residents n = 1396 |
|--|-----------------|----------------------------------|---------------------------------------|---------------------------------------|
| Year of study (n, % post-stratific | ation) | | | |
| Year 4 | 1000 (14.8%) | 1000 (33.9%) | - | - |
| Year 5 | 1217 (14.8%) | 1217 (34.0%) | - | - |
| Year 6 | 1332 (14.0%) | 1332 (32.1%) | - | - |
| Year 7 | 624 (14.4%) | - | 360 (33.0%) | 264 (19.7%) |
| Year 8 | 677 (14.2%) | - | 367 (29.6%) | 310 (21.7%) |
| Year 9 | 888 (14.0%) | - | 561 (32.8%) | 327 (18.6%) |
| Year 10 | 386 (9.4%) | - | 27 (2.6%) | 359 (27.8%) |
| Year 11 | 119 (3.7%) | - | 7 (1.0%) | 112 (10.9%) |
| Year 12 | 37 (0.6%) | - | 13 (0.9%) | 24 (1.3%) |
| Begion (n. % post-stratification) | | | | |
| lle-de-France | 1021 (20.4%) | 806 (22.9%) | 54 (9.9%) | 161 (25.2%) |
| Auvergne-Rhône-Alpes | 848 (11.9%) | 549 (12.1%) | 179 (16.7%) | 120 (8.0%) |
| Grand-Est | 678 (9.8%) | 395 (10.8%) | 138 (11.9%) | 145 (7.0%) |
| Hauts-de-France | 432 (9.5%) | 279 (10.2%) | 57 (7.7%) | 96 (9.9%) |
| Nouvelle Aquitaine | 491 (7.9%) | 208 (6.4%) | 141 (10.6%) | 142 (7.7%) |
| Occitanie | 359 (7.5%) | 163 (6.5%) | 105 (6.4%) | 91 (9.6%) |
| Provence-Alpes-Côte-d'Azur - | + 221 (6.6%) | 89 (6.4%) | 85 (9.2%) | 47 (4.7%) |
| Corse | | . , | . , | , , , , , , , , , , , , , , , , , , , |
| Pays-de-la-Loire | 687 (5.7%) | 290 (5.9%) | 191 (5.4%) | 206 (5.7%) |
| Normandie | 336 (5.7%) | 180 (5.3%) | 72 (6.6%) | 84 (5.4%) |
| Bretagne | 632 (5.2%) | 350 (5.0%) | 160 (6.3%) | 122 (4.5%) |
| Bourgogne-Franche-Comté | 288 (4.7%) | 98 (4.3%) | 76 (4.0%) | 114 (5.9%) |
| Centre-Val de Loire | 157 (2.9%) | 112 (3.3%) | 17 (1.6%) | 28 (3.3%) |
| Antilles Guyane | 64 (1.5%) | 30 (0.9%) | 15 (1.5%) | 19 (2.2%) |
| Ocean Indien | 66 (0.8%) | - | 45 (2.1%) | 21 (0.8%) |

Table 2: Sociodemographic characteristics of the respondents (raw data) and of all French medical students (data source: French Ministry of higher education and scientific research, French national health professional demographic observatory).

| | All | Clinical students | Primary care residents | Other residents |
|--------------------------------------|--|---|---|--|
| | n (sample) = 6 280 n (all) = 60 550 | n (sample) = 3 549 n (all) = 25 903 | <u>n (sample) = 1 335</u> n (all) = | n (sample) = 1 396 34 647 |
| Age in years (mean + SD | if available) | | | |
| Study sample | 25.8 ± 3.2 | 24.2 ± 2.6 | 27.9 ± 2.8 | 28.0 ± 2.6 |
| All | 24.5 | 23.3 | 27 | .2 |
| Gender (n, raw %) | | | | |
| Male Study sample All | 2 214 (35.3%) 25 437 (42.1%) | 1 259(35.5%) 10 599 (41.0%) | 405 (30.3%) 14 838 (| 550 (39.4%) (42.8%) |
| <u>Female</u> Study sample All | 4 066 (64.7%) 35113 (57.9%) | 2 290 (64.5%) 15304 (59.0%) | 930 (69.7%) 19809 (| 846 (60.6%) 57.2%) |
| Year of study (n, raw %) | | | | |
| <u>Year 4</u> Study sample All | 1000 (15.9%) 8767 (14.5%) | 1000 (28.2%) 8767 (33.8%) | : | - |
| Year 5 Study sample All | 1217 (19.4%) 8525 (14.1%) | 1217 (34.3%) 8525 (32.9%) | - - | - |
| Year 6 Study sample All | 1332 (21.2%) 8611 (14.2%) | 1332 (37.5%) 8611 (33.2%) | - | - |
| <u>Year 7</u> Study sample All | 624 (9.9%) 8868 (14.6%) | - - | 360 (27.0%) 8868 (2 | 264 (18.9%) 25.6%) |
| Year 8 Study sample All | 677 (10.8%) 7465 (12.3%) | - - | 367 (27.5%) 7465 (2 | 310 (22.2%) 21.5%) |
| <u>Year 9</u> Study sample All | 888 (14.1%) 10849 (17.9%) | - | 561 (42.0%) 10849 (| 327 (23.4%) 31.3%) |
| Year 10 Study sample All | 386 (6.1%) 5180 (8.6%) | - - | 27 (2.0%) 5180 (1 | 359 (25.7%) 14.9%) |
| Year 11 Study sample All | 119 (1.9%) 2285 (3.8%) | - | 7 (0.5%) 2285 (| 112 (8.0%) 6.6%) |
| Year 12 Study sample All | 37 (0.6%) ? | - | 13 (1.0%) | 24 (1.7%) |
| Medical School, study sa | ample (n, raw %) | | | |
| Paris Rennes Angers Nancy | 1021 (16.3%) 445 (7.1%) 417 (6.6%) 349 (5.6%) | 806 (22.7%) 251 (7.1%) 180 (5.1%) 260 (7.3%) | 54 (4.0%) 109 (8.2%) 141 (10.6%) 62 (4.6%) | 161 (11.5%) 85 (6.1%) 96 (6.9%) 27 (1.9%) |

| | All | Clinical students | Primary care residents | Other residents |
|----------------------------|--------------|-------------------|------------------------|-----------------|
| Bordeaux | 303 (4.8%) | 137 (3.9%) | 85 (6.4%) | 81 (5.8%) |
| Grenoble | 272 (4.3%) | 194 (5.5%) | 68 (5.1%) | 10 (0.7%) |
| Nantes | 270 (4.3%) | 110 (3.1%) | 50 (3.7%) | 110 (7.9%) |
| Amiens | 263 (4.2%) | 209 (5.9%) | 7 (0.5%) | 47 (3.4%) |
| Lyon | 222 (3.5%) | 149 (4.2%) | 52 (3.9%) | 21 (1.5%) |
| Besançon | 201 (3.2%) | 93 (2.6%) | 53 (4.0%) | 55 (3.9%) |
| Montpellier | 195 (3.1%) | 55 (1.5%) | 103 (7.7%) | 37 (2.7%) |
| Reims | 195 (3.1%) | 52 (1.5%) | 36 (2.7%) | 107 (7.7%) |
| Brest | 187 (3.0%) | 99 (2.8%) | 51 (3.8%) | 37 (2.7%) |
| Clermont-Ferrand | 186 (3.0%) | 112 (3.2%) | 31 (2.3%) | 43 (3.1%) |
| Caen | 175 (2.8%) | 86 (2.4%) | 34 (2.5%) | 55 (3.9%) |
| Lille | 169 (2.7%) | 70 (2.0%) | 50 (3.7%) | 49 (3.5%) |
| Saint-Etienne | 168 (2.7%) | 94 (2.6%) | 28 (2.1%) | 46 (3.3%) |
| Toulouse | 164 (2.6%) | 108 (3.0%) | 2 (0.1%) | 54 (3.9%) |
| Rouen | 161 (2.6%) | 94 (2.6%) | 38 (2.8%) | 29 (2.1%) |
| Tours | 157 (2.5%) | 112 (3.2%) | 17 (1.3%) | 28 (2.0%) |
| Limoges | 150 (2.4%) | 71 (2.0%) | 27 (2.0%) | 52 (3.7%) |
| Strasbourg | 134 (2.1%) | 83 (2.3%) | 40 (3.0%) | 11 (0.8%) |
| Nice | 113 (1.8%) | 30 (0.8%) | 55 (4.1%) | 28 (2.0%) |
| Aix-Marseille | 108 (1.7%) | 59 (1.7%) | 30 (2.2%) | 19 (1.4%) |
| Dijon | 87 (1.4%) | 5 (0.1%) | 23 (1.7%) | 59 (4.2%) |
| La Réunion/Indian Ocean | 66 (1.1%) | - | 45 (3.4%) | 21 (1.5%) |
| Antilles-Guyane | 64 (1.0%) | 30 (0.8%) | 15 (1.1%) | 19 (1.4%) |
| Poitiers | 38 (0.6%) | 0 (0.0%) | 29 (2.2%) | 9 (0.6%) |
| Region, study sample (n, | raw %) | | | |
| lle-de-France | 1021 (16.3%) | 806 (22.7%) | 54 (4.0%) | 161 (11.5%) |
| Auvergne-Rhône- Alpes | 848 (13.5%) | 549 (15.5%) | 179 (13.4%) | 120 (8.6%) |
| Pavs-de-la-Loire | 687 (10.9%) | 290 (8.2%) | 191 (14.3%) | 206 (14.8%) |
| Grand-Est | 678 (10.8%) | 395 (11.1%) | 138 (10.3%) | 145 (10.4%) |
| Bretagne | 632 (10.1%) | 350 (9.9%) | 160 (12.0%) | 122 (8.7%) |
| Nouvelle Aquitaine | 491 (7.8%) | 208 (5.9%) | 141 (10.6%) | 142 (10.2%) |
| Hauts-de-France | 432 (6.9%) | 279 (7.9%) | 57 (4.3%) | 96 (6.9%) |
| Occitanie | 359 (5.7%) | 163 (4.6%) | 105 (7.9%) | 91 (6.5%) |
| Normandie | 336 (5.4%) | 180 (5.1%) | 72 (5.4%) | 84 (6.0%) |
| Bourgogne-Franche- | | | | |
| Comté | 288 (4.6%) | 98 (2.8%) | /6 (5./%) | 114 (8.2%) |
| Provence-Alpes- | 001 (0 50) | 00 (0 50() | 05 (0.40() | |
| Côte-d'Azur + Corse | 221 (3.5%) | 89 (2.5%) | 85 (6.4%) | 47 (3.4%) |
| Centre-Val de Loire | 157 (2.5%) | 112 (3.2%) | 17 (1.3%) | 28 (2.0%) |
| Indian Ocean | 66 (1.1%) | - | 45 (3.4%) | 21 (1.5%) |
| Antilles Guyane | 64 (1.0%) | 30 (0.8%) | 15 (1.1%) | 19 (1.4%) |

Table 3: Exposure of medical students to each type of pharmaceutical product promotion and incentives. Each student was asked to assess the frequency of exposure to each of the situations presented.

| Situations (n, % post-stratification, 99% CI) | All n = 6280 | Clinical studentsPrimary care residentsOther residentsn = 3549n = 1335n = 1396 | P value |
|--|----------------------------------|--|---------|
| Meeting with a pharmaceutical rep | resentative (<u>since</u> | beginning of studies) | < .001 |
| Never | 1140 (14.6%) (14.2% to 15.0%) | 1038 (29.0%)37 (2.5%)65 (4.3%)(28.3% to 29.7%)(2.1% to 2.8%)(3.9% to 4.7%) | |
| Once to 5 times | 2859 (42.8%) (42.2% to 43.3%) | 2038 (58.0%) 408 (33.3%) 413 (29.1%) (57.2% to 58.8%) (32.3% to 34.3%) (28.2% to 30.0%) | |
| 6 to 10 times | 1053 (17.1%) (16.7% to 17.5%) | 344 (9.3%) 392 (26.9%) 317 (20.4%) (8.8% to 9.7%) (25.9% to 27.9%) (19.6% to 21.1%) | |
| More than 10 times | 1228 (25.5%) (25.0% to 26.0%) | 129 (3.7%) 498 (37.4%) 601 (46.2%) (3.4% to 4.1%) (36.3% to 38.4%) (45.3% to 47.2%) | |
| Meeting with a pharmaceutical rep | resentative (<u>within</u> | the last six months) | < .001 |
| Never | 2735 (37.6%) (37.1% to 38.2%) | 2119 (58.2%) 291 (19.6%) 325 (23.4%) (57.4% to 59.0%) (18.7% to 20.4%) (22.6% to 24.2%) | |
| Once to 5 times | 2957 (49.9%) (49.4% to 50.5%) | 1372 (40.3%) 807 (61.5%) 778 (54.2%) (39.5% to 41.1%) (60.4% to 62.5%) (53.3% to 55.2%) | |
| 6 to 10 times | 376 (7.9%) (7.7% to 8.2%) | 43 (1.2%) 164 (13.1%) 169 (13.2%) (1.0% to 1.4%) (12.4% - 13.9%) (12.5% to 13.8%) | |
| More than 10 times | 212 (4.5%) (4.3% to 4.7%) | 15 (0.3%) 73 (5.8%) 124 (9.2%) (0.2% to 0.4%) (5.3% to 6.3%) (8.7% to 9.8%) | |
| Drug presentation card from a PR | (since beginning c | of studies) | < .001 |
| Never | 1246 (16.3%) (15.9% to 16.7%) | 1141 (31.5%)30 (2.3%)75 (6.2%)(30.7% to 32.3%)(2.0% - 2.6%)(5.7% to 6.6%) | |
| Once to 5 times | 2850 (42.1%) (41.6% to 42.6%) | 1928 (54.4%) 432 (33.1%) 490 (32.2%) (53.5% to 55.2%) (32.1% to 34.1%) (31.3% to 33.1%) | |
| 6 to 10 times | 1015 (18.0%) (17.5% to 18.4%) | 346 (10.4%) 366 (26.1%) 303 (22.0%) (9.9% to 10.9%) (25.2% to 27.1%) (21.3% to 22.8%) | |
| More than 10 times | 1169 (23.7%) (23.2% to 24.1%) | 134 (3.8%) 507 (38.4%) 528 (39.6%) (3.5% to 4.1%) (37.4% to 39.5%) (38.7% to 40.5%) | |
| Drug presentation card from a PR | (within the last six | months) | < .001 |
| Never | 2874 (40.0%) (39.5% to 40.5%) | 2182 (60.1%) 305 (20.2%) 387 (27.6%) (59.3% to 60.9%) (19.3% to 21.1%) (26.8% to 28.5%) | |
| Once to 5 times | 2752 (47.1%) (46.6% to 47.7%) | 1264 (37.1%) 737 (56.4%) 751 (53.8%) (36.3% to 37.9%) (55.3% to 57.5%) (52.9% to 54.8%) | |
| 6 to 10 times | 428 (8.3%) (8.0% to 8.6%) | 78 (2.0%) 182 (14.4%) 168 (12.3%) (1.8% to 2.2%) (13.7% to 15.2%)(11.7% to 13.0%) | |
| More than 10 times | 226 (4.5%) (4.3% to 4.8%) | 25 (0.8%) 111 (9.0%) 90 (6.2%) (0.6% to 0.9%) (8.4% to 9.6%) (5.8% to 6.7%) | |

| Situations (n, % post-stratification, 99% CI) | All n = 6280 | Clinical students | Primary care residents | Other residents | P value |
|--|----------------------------------|----------------------------------|-------------------------------------|--------------------------------|---------|
| | | 11 = 0040 |) | 11 - 1000 | 004 |
| Reception of advertising gift with lo | w value (since be | ginning of studie | <u>is)</u> | 040 (15 00() | < .001 |
| never | (21.4% to 22.3%) | (29.9% to 31.4%) | 196 (14.8%)) (14.0% to 15.6%) (| 14.6% to 16.0%) | |
| Once to 5 times | 3163 (48.2%) (47.7% to 48.7%) | 1926 (54.1%) (53.3% to 54.9%) | 630 (45.8%)) (44.7% to 46.8%)(| 607 (42.0%) 41.0% to 42.9%) | |
| 6 to 10 times | 944 (16.8%) (16.4% to 17.2%) | 385 (10.6%) (10.1% to 11.1%) | 285 (22.2%)) (21.3% to 23.1%)(| 274 (21.1%) 20.3% to 21.8%) | |
| More than 10 times | 667 (13.2%) (12.8% to 13.6%) | 170 (4.7%) (4.4% to 5.1%) | 224 (17.2%) (16.4% to 18.1%)(| 273 (21.7%) 20.9% to 22.5%) | |
| Reception of advertising gift with lo | w value (<u>within th</u> | e last six months | <u>s)</u> | | < .001 |
| Never | 3564 (53.5%) (52.9% to 54.0%) | 2280 (63.9%) (63.2% to 64.7%) | 627 (44.9%)) (43.8% to 46.0%)(| 657 (45.7%) 44.8% to 46.7%) | |
| Once to 5 times | 2457 (41.3%) (40.8% to 41.8%) | 1208 (34.1%) (33.3% to 34.9%) | 616 (47.7%)) (46.6% to 48.7%)(| 633 (46.3%) 45.3% to 47.3%) | |
| 6 to 10 times | 184 (3.7%) (3.5% to 3.9%) | 43 (1.5%) (1.3% to 1.7%) | 67 (5.3%) (4.9% to 5.8%) | 74 (5.5%) (5.1% to 6.0%) | |
| More than 10 times | 75 (1.5%) (1.4% to 1.6%) | 18 (0.5%) (0.4% to 0.6%) | 25 (2.1%) (1.8% to 2.4%) | 32 (2.4%) (2.2% to 2.7%) | |
| Meal offered by drug company (sin | ce beginning of st | udies) | | | < .001 |
| Never | 2001 (26.3%) (25.9% to 26.8%) | 1662 (44.9%) (44.1% to 45.7%) | 213 (15.7%)) (14.9% to 16.5%) | 126 (9.0%) (8.5% to 9.6%) | |
| Once to 5 times | 3091 (48.9%) (48.3% to 49.4%) | 1667 (48.2%) (47.4% to 49.1% | 806 (58.6%)) (57.5% to 59.6%) (| 618 (42.1%) 41.2% to 43.1%) | |
| 6 to 10 times | 675 (12.4%) (12.1% to 12.8%) | 168 (4.9%) (4.5% to 5.2%) | 205 (16.1%) (15.4% to 17.0%)(| 302 (19.9%) 19.1% to 20.7%) | |
| More than 10 times | 513 (12.4%) (12.0% to 12.7%) | 52 (2.0%) (1.7% to 2.2%) | 111 (9.6%) (8.9% to 10.2%)(| 350 (29.0%) 28.1% to 29.8%) | |
| Meal offered by drug company (wit | hin the last six mo | onths) | | | < .001 |
| Never | 3924 (56.6%) (56.1% to 57.1%) | 2673 (74.1% (73.4% to 74.8%) | 779 (55.2%)) (54.2% to 56.3%)(| 472 (33.6%) 32.7% to 34.5%) | |
| Once to 5 times | 2162 (38.8%) (38.3% to 39.3%) | 850 (24.9%) (24.2% to 25.7%) | 521 (41.4%)) (40.3% to 42.4%)(| 791 (55.9%) 54.9% to 56.8%) | |
| 6 to 10 times | 139 (3.1%) (3.0% to 3.3%) | 22 (0.9%) (0.7% to 1.0%]) | 26 (2.6%) (2.3% to 3.0%) | 91 (6.6%) (6.2% to 7.1%) | |
| More than 10 times | 55 (1.5%) (1.3% to 1.6%) | 4 (0.1%) (0.1% to 0.2%) | 9 (0.8%) (0.6% to 1.0%) | 42 (3.9%) (3.6% to 4.3%) | |
| Grand rounds sponsored by drug of | ompany (<u>since be</u> | ginning of studie | es) | | < .001 |
| Never | 4033 (56.8%) (56.2% to 57.3%) | 3254 (92.1%) (91.7% to 92.6%) | 540 (44.0%)) (43.0% to 45.1%)(| 239 (17.9%) 17.2% to 18.6%) | |
| Once to 5 times | 1764 (32.7%) (32.2% to 33.2%) | 284 (7.6%) (7.1% to 8.0%) | 720 (51.4%) (50.3% to 52.4%)(| 760 (52.7%) 51.7% to 53.7%) | |
| 6 to 10 times | 292 (5.7%) (5.4% to 5.9%) | 8 (0.2%) (0.1% to 0.3%) | 59 (3.5%) (3.1% to 3.9%) (| 225 (14.9%) 14.2% to 15.6%) | |
| More than 10 times | 191 (4.9%) (4.7% to 5.1%) | 3 (0.1%) (0.0% to 0.2%) | 16 (1.1%) (0.9% to 1.3%) (| 172 (14.5%) 13.8% to 15.2%) | |
| | | | | | |

6

| Situations (n, % post-stratification, 99% CI) | All n = 6280 | Clinical students n = 3549 | Primary care residents n = 1335 | Other residents n = 1396 | P value |
|--|----------------------------------|---|---------------------------------------|----------------------------------|---------|
| Grand rounds sponsored by drug c | ompany (<u>within th</u> | e last six month | <u>s</u>) | | < .001 |
| Never | 4969 (73.3%) (72.9% to 73.8%) | 3447 (96.8%) (96.5% to 97.1%) | 958 (72.5%)) (71.5% to 73.5%) | 564 (41.6%) (40.6% to 42.5%) | |
| Once to 5 times | 1267 (25.7%) (25.3% to 26.2%) | 100 (3.1%) (2.8% to 3.4%) | 370 (26.9%) (25.9% to 27.9%) | 797 (56.1%) (55.1% to 57.0%) | |
| 6 to 10 times | 32 (0.6%) (0.6% to 0.7%) | 1 (0.0%) (0.0% to 0.1%) | 5 (0.4%) (0.3% to 0.6%) | 26 (1.7%) (1.4% to 1.9%) | |
| More than 10 times | 12 (0.3%) (0.2% to 0.3%] | 1 (0.0%) (0.0% to 0.1%) | 2 (0.2%) (0.1% to 0.3%) | 9 (0.7%) (0.5% to 0.9%) | |
| Reception of advertising gift with hi | gh value (<u>since b</u> e | eginning of studi | <u>es</u>) | | < .001 |
| Never | 4210 (66.0%) (65.5% to 66.5%) | 2542 (72.7%) (71.9% to 73.4% | 700 (52.7%)) (51.6% to 53.8%) | 968 (67.2%) (66.3% to 68.1%) | |
| Once to 5 times | 1931 (31.5%) (31.0% to 32.0%) | 963 (26.1%) (25.4% to 26.9%) | 578 (42.8%)) (41.7% to 43.9%) | 390 (30.0%) (29.1% to 30.8%) | |
| 6 to 10 times | 101 (1.8%) (1.7% to 2.0%) | 38 (1.0%) (0.8% to 1.2%) | 42 (3.5%) (3.1% to 3.9%) | 21 (1.6%) (1.4% to 1.9%) | |
| More than 10 times | 38 (0.7%) (0.6% to 0.8%) | 6 (0.2%) (0.2% to 0.3%) | 15 (1.0%) (0.8% to 1.3%) | 17 (1.2%) (1.0% to 1.4%) | |
| Reception of advertising gift with hi | gh value (<u>within tł</u> | ne last six month | <u>ıs</u>) | | < .001 |
| Never | 5549 (87.9%) (87.5% to 88.2%) | 3194 (89.9%) (89.4% to 90.3%) | 1106 (82.6%)) (81.7% to 83.4%) | 1249 (89.3%) (88.7% to 89.9%) | |
| Once to 5 times | 705 (11.6%) (11.3% to 12.0%) | 346 (9.9%) (9.4% to 10.4%) | 218 (16.6%) (15.8% to 17.4%) | 141 (10.1%) (9.6% to 10.7%) | |
| 6 to 10 times | 18 (0.3%) (0.3% to 0.4%) | 5 (0.1%) (0.1% to 0.2%) | 8 (0.6%) (0.5% to 0.8%) | 5 (0.5%) (0.4% to 0.6%) | |
| More than 10 times | 8 (0.1%) (0.1% to 0.2%) | 4 (0.2%) (0.1% to 0.2%) | 3 (0.2%) (0.1% to 0.3%) | 1 (0.0%) (0.0% to 0.1%) | |
| Free medical demonstration device | (since beginning | of studies) | | | < 0.001 |
| Never | 4631 (70.9%) (70.4% to 71.4%) | 3019 (85.4%) (84.9% to 86.0%) | 696 (52.6%)) (51.5% to 53.7%) | 916 (65.2%) (64.3% to 66.1%) | |
| Once to 5 times | 1526 (26.6%) (26.1% to 27.1%) | 519 (14.4%) (13.8% to 15.0%) | 594 (43.8%)) (42.7% to 44.9%) | 413 (30.0%) (29.2% to 30.9%) | |
| 6 to 10 times | 86 (1.6%) (1.4% to 1.7%) | 9 (0.1%) (0.1% to 0.2%) | 37 (2.9%) (2.5% to 3.3%) | 40 (2.6%) (2.3% to 2.9%) | |
| More than 10 times | 37 (0.9%) (0.8% to 1.0%) | 2 (0.0%) (0.0% to 0.1%) | 8 (0.7%) (0.5% to 0.9%) | 27 (2.2%) (1.9% to 2.5%) | |

| Situations (n, % post-stratification, 99% CI) | All n = 6280 | Clinical students n = 3549 | Primary care residents n = 1335 | Other residents n = 1396 | P value | | | |
|--|----------------------------------|---|---------------------------------------|----------------------------------|---------|--|--|--|
| Free medical demonstration device (within the last six months) < - | | | | | | | | |
| Never | 5457 (84.7%) (84.3% to 85.1%) | 3333 (94.0%) (93.6% to 94.4%) | 985 (72.7%) (71.7% to 73.7%) | 1139 (81.3%) (80.6% to 82.1%) | | | | |
| Once to 5 times | 791 (14.5%) (14.1% to 14.9%) | 212 (5.9%) (5.5% to 6.3%) | 343 (26.7%) (25.7% to 27.7%) | 236 (16.9%) (16.2% to 17.7%) | | | | |
| 6 to 10 times | 17 (0.5%) (0.4% to 0.5%) | 2 (0.0%) (0.0% to 0.1%) | 5 (0.5%) (0.3% to 0.6%) | 10 (1.1%) (0.9% to 1.3%) | | | | |
| More than 10 times | 15 (0.3%) (0.2% to 0.3%) | 2 (0.1%) (0.0% to 0.1%) | 2 (0.1%) (0.1% to 0.2%) | 11 (0.7%) (0.5% to 0.9%) | | | | |
| Free drug sample (since beginning | of studies) | | | | < 001 | | | |
| Never | 4930 (76.8%) (76.3% to 77.3%) | 3052 (86.4%) (85.9% to 87.0%) | 800 (61.1%) (60.1% to 62.2%) | 1078 (75.7%) (74.9% to 76.6%) | 2.001 | | | |
| Once to 5 times | 1142 (18.8%) (18.4% to 19.2%) | 473 (12.9%) (12.4% to 13.5%) | 451 (31.9%) (30.9% to 32.9%) | 218 (16.6%) (15.9% to 17.3%) | | | | |
| 6 to 10 times | 121 (2.5%) (2.3% to 2.6%) | 20 (0.5%) (0.4% to 0.6%) | 65 (5.6%) (5.1% to 6.1%) | 36 (2.7%) (2.4% to 3.0%) | | | | |
| More than 10 times | 87 (2.0%) (1.8% to 2.1%) | 4 (0.1%) (0.1% to 0.2%) | 19 (1.4%) (1.1% to 1.6%) | 64 (5.0%) (4.6% to 5.4%) | | | | |
| Free drug sample (within the last s | <u>ix months</u>) | | | | < .001 | | | |
| Never | 5566 (87.0%) (86.6% to 87.4%) | 3327 (94.0%) (93.6% to 94.4%) | 1032 (76.4%) (75.4% to 77.3%) | 1207 (85.6%) (84.9% to 86.3%) | | | | |
| Once to 5 times | 641 (11.5%) (11.1% to 11.8%) | 213 (5.8%) (5.4% to 6.1%) | 281 (21.7%) (20.8% to 22.6%) | 147 (11.4%) (10.8% to 12.1%) | | | | |
| 6 to 10 times | 46 (0.9%) (0.8% to 1.0%) | 6 (0.2%) (0.1% to 0.3%) | 18 (1.6%) (1.4% to 1.9%) | 22 (1.3%) (1.1% to 1.6%) | | | | |
| More than 10 times | 27 (0.6%) (0.5% to 0.7%) | 3 (0.1%) (0.0% to 0.1%) | 4 (0.3%) (0.2% to 0.5%) | 20 (1.6%) (1.4% to 1.9%) | | | | |
| Funding to attend conferences or c | arand rounds (sinc | e beginning of st | tudies) | | < .001 | | | |
| Never | 5541 (84.4%) (84.0% to 84.7%) | 3473 (97.9%) (97.6% to 98.1%) | 1228 (91.8%) (91.2% to 92.3%) | 840 (60.0%) (59.0% to 60.9%) | | | | |
| Once to 5 times | 661 (13.9%) (13.6% to 14.3%) | 68 (2.0%) (1.8% to 2.2%) | 101 (7.8%) (7.2% to 8.4%) | 492 (35.2%) (34.2% to 36.1%) | | | | |
| 6 to 10 times | 60 (1.4%) (1.3% to 1.5%) | 5 (0.1%) (0.0% to 0.1%) | 5 (0.4%) (0.3% to 0.5%) | 50 (4.0%) (3.6% to 4.4%) | | | | |
| More than 10 times | 18 (0.3%) (0.3% to 0.4%) | 3 (0.1%) (0.1% to 0.2%) | 1 (0.1%) (0.0% to 0.2%) | 14 (0.9%) (0.7% to 1.1%) | | | | |
| Funding to attend conferences or g | grand rounds (<u>with</u> | in the last six mo | onths) | | < .001 | | | |
| Never | 5817 (90.2%) (89.9% to 90.6%) | 3524 (99.3%) (99.2% to 99.5%) | 1275 (95.4%) (94.9% to 95.8%) | 1018 (73.7%) (72.8% to 74.5%) | | | | |
| Once to 5 times | 451 (9.5%) (9.2% to 9.8%) | 23 (0.6%) (0.5% to 0.7%) | 56 (4.3%) (3.9% to 4.7%) | 372 (25.9%) (25.1% to 26.7%) | | | | |
| 6 to 10 times | 8 (0.2%) (0.2% to 0.2%) | 0 | 3 (0.3%) (0.2% to 0.4%) | 5 (0.4%) (0.3% to 0.6%) | | | | |
| More than 10 times | 4 (0.1%) (0.0% to 0.1%) | 2 (0.1%) (0.0% to 0.1%) | 1 (0.1%) (0.0% to 0.2%) | 1 (0.0%) (0.0% to 0.1%) | | | | |

| Situations (n, % post-stratification, 99% CI) | All n = 6280 | Clinical students n = 3549 | Primary care residents n = 1335 | Other residents n = 1396 | P value |
|--|----------------------------------|---|---------------------------------------|----------------------------------|---------|
| Medical journal subscription offered | l by drug compan | y (<u>since beginnir</u> | ng of studies) | | < .001 |
| Never | 6089 (96.6%) (96.4% to 96.8%) | 3467 (97.5%) (97.3% to 97.8%) | 1271 (95.2%) (94.7% to 95.7%)(| 1351 (96.4%) (96.1% to 96.8%) | |
| Once to 5 times | 181 (3.2%) (3.0% to 3.4%) | 76 (2.3%) (2.0% to 2.5%) | 62 (4.6%) (4.1% to 5.0%) | 43 (3.3%) (3.0% to 3.7%) | |
| 6 to 10 times | 5 (0.1%) (0.1% to 0.2%) | 2 (0.1%) (0.0% to 0.1%) | 1 (0.0%) (0.0% to 0.1%) | 2 (0.2%) (0.2% to 0.4%) | |
| More than 10 times | 5 (0.1%) (0.1% to 0.1%) | 4 (0.1%) (0.1% to 0.2%) | 1 (0.2%) (0.1% to 0.3%) | 0 | |
| Medical journal subscription offered | l by drug compan | y (<u>within the last</u> | six months) | | < .001 |
| Never | 6168 (98.2%) (98.0% to 98.3%) | 3503 (98.6%) (98.4% to 98.8%) | 1292 (96.6%) (96.2% to 97.0%)(| 1373 (98.8%) (98.6% to 99.0%) | |
| Once to 5 times | 104 (1.7%) (1.6% to 1.9%) | 41 (1.3%) (1.1% to 1.5%) | 40 (3.2%) (2.9% to 3.6%) | 23 (1.2%) (1.0% to 1.4%) | |
| 6 to 10 times | 6 (0.1%) (0.0% to 0.1%) | 3 (0.1%) (0.0% to 0.1%) | 3 (0.2%) (0.1% to 0.3%) | 0 | |
| More than 10 times | 2 (0.0%) (0.0% to 0.1%) | 2 (0.1%) (0.0% to 0.1%) | 0 | 0 | |

Table 4: Appropriateness of gifts and promotional funding from the pharmaceutical industry according to students. Each student was asked to assess whether they found it acceptable to receive each proposal.

| Proposals | All n = 5992 | Clinical students | Primary care residents | Other residents | P value |
|------------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|---------|
| (n, % post-stratification, 99% CI) | | n = 3333 | n = 1306 | 11 - 1000 | |
| Gift with lower value than €50 | | | | | < .001 |
| Strongly disagree | 2256 (36.9%) (36.4% to 37.5%) | 1223 (36.3%) (35.5% to 37.1%) | 590 (42.4%) (41.3% to 43.4%) | 443 (33.5%) (32.6% to 34.4%) | |
| Disagree | 1747 (29%) (28.5% to 29.5%) | 956 (28.3%) (27.6% to 29.1%) | 379 (29.9%) (28.9% to 30.9%) | 412 (29.1%) (28.2% to 30.0%) | |
| Agree | 1550 (26.6%) (26.1% to 27.1%) | 907 (27.8%) (27.0% to 28.5%) | 281 (22.8%) (21.9% to 23.8%) | 362 (28%) (27.2% to 28.9%) | |
| Strongly agree | 439 (7.5%) (7.2% to 7.8%) | 247 (7.6%) (7.2% to 8.1%) | 56 (4.9%) (4.4% to 5.4%) | 136 (9.3%) (8.8% to 9.9%) | |
| Gift with higher value than €50 | | | | | < .001 |
| Strongly disagree | 3484 (57.8%) (57.3% to 58.4%) | 1903 (57.2%) (56.4% to 58.0%) | 887 (65.1%) (64.0% to 66.1%) | 694 (52.9%) (51.9% to 53.9%) | |
| Disagree | 1630 (27.7%) (27.3% to 28.2%) | 926 (27.6%) (26.9% to 28.4%) | 301 (25.3%) (24.4% to 26.3%) | 403 (29.8%) (28.9% to 30.7%) | |
| Agree | 574 (9.2%) (8.9% to 9.5%) | 342 (10.1%) (9.6% to 10.6%) | 77 (5.9%) (5.4% to 6.4%) | 155 (10.6%) (10.0% to 11.2%) | |
| Strongly agree | 304 (5.2%) (5.0% to 5.5%) | 162 (5.1%) (4.7% to 5.5%) | 41 (3.7%) (3.3% to 4.1%) | 101 (6.7%) (6.2% to 7.2%) | |
| Free meal | | | | | < .001 |
| Strongly disagree | 1332 (21.1%) (20.6% to 21.5%) | 743 (21.1%) (20.4% to 21.8%) | 402 (29.7%) (28.7% to 30.7%) | 187 (14.2%) (13.5% to 14.9%) | |
| Disagree | 1283 (20.9%) (20.5% to 21.4%) | 711 (21.4%) (20.7% to 22.1%) | 317 (24.2%) (23.3% - 25.2%) | 255 (17.7%) (17.0% to 18.4%) | |
| Agree | 2392 (40.6%) (40.0% to 41.1%) | 1349 (41.7%) (40.9% to 42.6%) | 462 (36.1%) (35.0% to 37.1%) | 581 (42.6%) (41.6% to 43.5%) | |
| Strongly agree | 985 (17.5%) (17.0% to 17.9%) | 530 (15.8%) (15.2% to 16.4%) | 125 (10.1%) (9.4% to 10.7%) | 330 (25.5%) (24.7% to 26.4%) | |
| Funding to attend conferences or | grand rounds | | | | < .001 |
| Strongly disagree | 1213 (20%) (19.6% to 20.5%) | 629 (18.6%) (18.0% to 19.3%) | 418 (30.9%) (29.9% to 31.9%) | 166 (13.3%) (12.6% to 14.0%) | |
| Disagree | 969 (16.6%) (16.2% to 17.1%) | 517 (16.9%) (16.3% to 17.5%) | 287 (22.6%) (21.7% to 23.5%) | 165 (11.6%) (11.0% to 12.3%) | |
| Agree | 2348 (38.2%) (37.6% to 38.7%) | 1369 (40%) (39.2% to 40.9%) | 429 (32.4%) (31.4% to 33.5%) | 550 (40.2%) (39.3% to 41.2%) | |
| Strongly agree | 1462 (25.1%) (24.7% to 25.6%) | 818 (24.4%) (23.7% to 25.1%) | 172 (14.1%) (13.3% to 14.9%) | 472 (34.9%) (33.9% to 35.8%) | |

| Proposals (n, % post-stratification, 99% CI) | All n = 5992 | Clinical students n = 3333 | Primary care residents n = 1306 | Other residents n = 1353 | P value |
|--|----------------------------------|---|---------------------------------------|---------------------------------|---------|
| Free medical device | | | | | < .001 |
| Strongly disagree | 1463 (23.9%) (23.4% to 24.3%) | 761 (22.6%) (21.9% to 23.3%) | 437 (31.9%) (30.9% to 32.9%) | 265 (19.3%) (18.5% to 20.0%) | |
| Disagree | 1298 (22.1%) (21.6% to 22.5%) | 703 (21.3%) (20.6% to 22.0%) | 320 (25.0%) (24.0% to 25.9%) | 275 (20.8%) (20.0% to 21.6%) | |
| Agree | 2305 (38.5%) (37.9% to 39.0%) | 1351 (41%) (40.2% to 41.9%) | 421 (32.4%) (31.4% to 33.4%) | 533 (39.9%) (38.9% to 40.8%) | |
| Strongly agree | 926 (15.6%) (15.2% to 16.0%) | 518 (15%) (14.4% to 15.7%) | 128 (10.8%) (10.1% to 11.4%) | 280 (20.1%) (19.3% to 20.9%) | |

<u>Table 5: Students' scepticism about the influence of pharmaceutical product promotion</u> <u>and incentives. Students were asked whether they agreed or disagreed with the</u> <u>proposals.</u>

| Proposals (n, % post-stratification, 99% CI) | Total n = 5980 | Clinical students n = 3324 | Primary care residents n = 1304 | Other residents n = 1352 | P value |
|---|----------------------------------|---|---------------------------------------|---------------------------------|---------|
| Information provided by pharmaceutical representative is often interesting and educative. | | | | | < .001 |
| Strongly disagree | 461 (7.8%) (7.5% to 8.1%) | 251 (7.6%) (7.2% to 8.1%) | 134 (10.7%) (10.0% to 11.3%) | 76 (5.7%) (5.3% to 6.2%) | |
| Disagree | 2067 (34.2%) (33.7% to 34.7%) | 1143 (34.4%) (33.6% to 35.2%) | 505 (36.3%) (35.2% to 37.3%) | 419 (32.3%) (31.4% to 33.2%) | |
| Agree | 3298 (54.7%) (54.2% to 55.3%) | 1868 (55.9%) (55.0% to 56.7%) | 645 (50.8%) (49.7% to 51.9%) | 785 (56.4%) (55.4% to 57.3%) | |
| Strongly agree | 160 (3.3%) (3.1% to 3.5%) | 67 (2.1%) (1.8% to 2.3%) | 21 (2.3%) (2.0% to 2.6%) | 72 (5.7%) (5.2% to 6.1%) | |
| Information provided by pharmaceutical | l representative is us | eful to learn about n | ew drugs. | | < .001 |
| Strongly disagree | 633 (10.4%) (10.1% to 10.8%) | 339 (9.7%) (9.2% to 10.2%) | 183 (14.1%) (13.4% to 14.9%) | 111 (8.4%) (7.8% to 8.9%) | |
| Disagree | 1678 (28%) (27.5% to 28.5%) | 916 (27.5%) (26.8% to 28.3%) | 396 (29.0%) (28.0% to 30.0%) | 366 (27.8%) (26.9% to 28.6%) | |
| Agree | 3404 (56.9%) (56.4% to 57.5%) | 1924 (58.2%) (57.4% to 59.1%) | 697 (54.6%) (53.5% to 55.7%) | 783 (57%) (56.0% to 57.9%) | |
| Strongly agree | 271 (4.7%) (4.5% to 4.9%) | 150 (4.5%) (4.1% to 4.8%) | 29 (2.3%) (2.0% to 2.7%) | 92 (6.9%) (6.4% to 7.4%) | |
| Receiving gifts or free meals makes me more likely to prescribe the company's drugs. | | | | | |
| Strongly disagree | 1821 (30.3%) (29.8% to 30.8%) | 1015 (30.1%) (29.3% to 30.9%) | 338 (26%) (25.0% to 26.9%) | 468 (34.1%) (33.2% to 35.1%) | |
| Disagree | 1966 (32.8%) (32.3% to 33.4%) | 1067 (32.1%) (31.3% to 32.8%) | 410 (30.9%) (29.9% to 32.0%) | 489 (35.4%) (34.5% to 36.3%) | |
| Agree | 1542 (26.3%) (25.8% to 26.8%) | 873 (26.9%) (26.2% to 27.7%) | 365 (28%) (27.1% to 29.0%) | 304 (24.1%) (23.2% to 24.9%) | |
| Strongly agree | 653 (10.5%) (10.2% to 10.9%) | 371 (11%) (10.4% to 11.5%) | 191 (15.1%) (14.3% to 15.9%) | 91 (6.4%) (6.0% to 6.9%) | |
| Contacts between medical students and drug companies should be banned. | | | | | |
| Strongly disagree | 1147 (19.5%) (19.1% to 20.0%) | 562 (16.4%) (15.8% to 17.0%) | 213 (15.5%) (14.7% to 16.3%) | 372 (26.9%) (26.1% to 27.8%) | |
| Disagree | 2058 (35.2%) (34.7% to 35.7%) | 1129 (33.9%) (33.1% to 34.7%) | 389 (31.7%) (30.7% to 32.7%) | 540 (39.8%) (38.8% to 40.7%) | |
| Agree | 1582 (26.1%) (25.6% to 26.6%) | 924 (28.6%) (27.9% to 29.4%) | 383 (29%) (28.1% to 30.0%) | 275 (20.3%) (19.5% to 21.1%) | |
| Strongly agree | 1194 (19.2%) (18.7% to 19.6%) | 710 (21.1%) (20.4% to 21.8%) | 319 (23.7%) (22.8% to 24.7%) | 165 (13%) (12.4% to 13.7%) | |

| Proposals (n, % post-stratification, 99% CI) | Total n = 5980 | Clinical students n = 3324 | Primary care residents n = 1304 | Other residents n = 1352 | P value |
|--|----------------------------------|----------------------------------|---------------------------------------|---------------------------------|---------|
| Information provided by drug companies is often biased. | | | | | |
| Strongly disagree | 50 (0.7%) (0.6% to 0.8%) | 34 (0.9%) (0.8% to 1.1%) | 6 (0.2%) (0.1% to 0.3%) | 10 (0.8%) (0.6% to 1.0%) | |
| Disagree | 473 (8.6%) (8.3% to 8.9%) | 228 (6.9%) (6.5% to 7.3%) | 93 (8.2%) (7.6% to 8.8%) | 152 (11.1%) (10.5% to 11.8%) | |
| Agree | 2777 (45.8%) (45.2% to 46.3%) | 1570 (45.9%) (45.1% to 46.7%) | 528 (39.2%) (38.2% to 40.3%) | 679 (50.7%) (49.8% to 51.7%) | |
| Strongly agree | 2681 (44.9%) (44.4% to 45.5%) | 1493 (46.3%) (45.4% to 47.1%) | 677 (52.3%) (51.2% to 53.4%) | 511 (37.4%) (36.4% to 38.3%) | |
| If other residents or physicians receive | gifts or free meals, it | makes them more li | kely to prescribe the | company's drugs. | < .001 |
| Strongly disagree | 568 (10.1%) (9.8% to 10.5%) | 291 (9.0%) (8.6% to 9.5%) | 88 (7.3%) (6.7% to 7.9%) | 189 (13.8%) (13.2% to 14.5%) | |
| Disagree | 2160 (36.2%) (35.7% to 36.7%) | 1149 (33.8%) (33.0% to 34.6%) | 416 (31.7%) (30.7% to 32.8%) | 595 (42.9%) (42.0% to 43.9%) | |
| Agree | 2344 (38.8%) (38.3% to 39.4%) | 1365 (41.2%) (40.3% to 42.0%) | 538 (41.1%) (40.0% to 42.1%) | 441 (34.0%) (33.0% to 34.9%) | |
| Strongly agree | 908 (14.8%) (14.4% to 15.2%) | 519 (16.0%) (15.4% to 16.6%) | 262 (19.9%) (19.1% to 20.8%) | 127 (9.3%) (8.7% to 9.9%) | |
| Anyone giving a lecture to medical students should expose their conflict of interests with the pharmaceutical industry beforehand. | | | | | |
| Strongly disagree | 144 (2.3%) (2.2% to 2.5%) | 90 (2.6%) (2.4% to 2.9%) | 18 (1.6%) (1.3% to 1.9%) | 36 (2.5%) (2.2% to 2.8%) | |
| Disagree | 397 (7.0%) (6.7% to 7.3%) | 222 (7.1%) (6.6% to 7.5%) | 73 (5.5%) (5.0% to 6.0%) | 102 (8.2%) (7.7% to 8.7%) | |
| Agree | 1778 (29.5%) (29.0% to 30.0%) | 970 (28.9%) (28.1% to 29.7%) | 360 (28.0%) (27.0% to 29.0%) | 448 (31.4%) (30.5% to 32.3%) | |
| Strongly agree | 3663 (61.2%) (60.7% to 61.7%) | 2043 (61.4%) (60.6% to 62.2%) | 854 (64.9%) (63.9% to 66.0%) | 766 (57.9%) (57.0% to 58.9%) | |

<u>Table 6: multivariate linear model of the cumulative exposure score. The names of the</u> regions were recoded with letters to avoid inappropriate comparison between them (see discussion in the main text).

| Effect | Estimation | Standard error | P value |
|-----------------------|------------|----------------|---------|
| Intercept | 1.6932 | 0.2025 | < .001 |
| Region | | | < .001 |
| A | -0.5864 | 0.2209 | |
| В | -0.7410 | 0.3961 | |
| С | -1.2861 | 0.2323 | |
| D | -1.1962 | 0.2137 | |
| E | -1.2482 | 0.2640 | |
| F | -2.3819 | 0.2581 | |
| G | -1.1362 | 0.3112 | |
| Н | -1.3756 | 0.1971 | |
| I | -0.9721 | 0.2343 | |
| J | -0.1837 | 0.2229 | |
| К | -1.6248 | 0.2510 | |
| L | -1.3765 | 0.5224 | |
| Μ | -2.3017 | 0.2536 | |
| Ν | reference | | |
| Year of study | 1.4793 | 0.02115 | < .001 |
| Appropriateness score | 0.3058 | 0.02592 | < .001 |

<u>Table 7: Comparison between 2012 (data source: Etain et al.¹) and 2019 (current study) of students' exposure and opinions.</u>

| Situation or assertion | Clinical students | Residents | | | | |
|---|-------------------|---------------|--|--|--|--|
| Meeting with a pharmaceutical representative (n, %) | | | | | | |
| <u>2012</u> Yes (raw, n = 1 405) | 778 (79.4%) | 627 (96.6%) | | | | |
| $\frac{2019}{\text{Yes (post-stratification, n = 6 280)}}$ | 3 549 (71.0%) | 2 731 (96.9%) | | | | |
| Receiving of promotional gift (n, %) | | | | | | |
| <u>2012</u> Yes (raw, n = 1 405) | 778 (71.8%) | 627 (89.9%) | | | | |
| $\frac{2019}{\text{Yes (post-stratification, n = 6 280)}}$ | 3 549 (69.4%) | 2 731 (74.9%) | | | | |
| Receiving gifts or free meals could influence student' prescriptions (n, %) | | | | | | |
| <u>2012</u> Yes (raw, n = 1 405) | 778 (2.0%) | 627 (3.7%) | | | | |
| <u>2019</u> Yes (post-stratification, n = 5 980) | 3 324 (37.4%) | 2 656 (35.8%) | | | | |

^{1.} Etain B, Guittet L, Weiss N, Gajdos V, Katsahian S. Attitudes of Medical Students towards Conflict of Interest: A National Survey in France. PLOS ONE. 26 march 2014;9(3):e92858.

Document 1: Questionnaire in French

Caractéristiques socio-démographiques

Vous êtes : *

Veuillez sélectionner une seule des propositions suivantes : Une femme / Un homme

Année de naissance : *

Votre réponse doit être comprise entre 1960 et 2000

Année ou semestre en cours (veuillez indiquer votre année ou semestre actuel, si vous êtes en disponibilité ou en césure, veuillez indiquer la dernière année ou le dernier semestre validé) : *

Veuillez sélectionner une seule des propositions suivantes : DFASM 1/2/3 ou Interne semestre 1/2/3/4/5/6/7/8/9/10/11/12

Quelle est votre faculté actuelle ? * (Seulement proposée aux externes)

Veuillez sélectionner une seule des propositions suivantes : Aix-Marseille / Amiens / Angers / Antilles-Guyane / Besançon / Bordeaux / Brest / Caen / Clermont-Ferrand / Dijon / Grenoble / La Réunion / Lille 2 / Lille (Université Catholique) / Limoges / Lyon Sud / Lyon Est / Montpellier / Nancy / Nantes / Nice / Paris V Descartes / Paris VI UPMC / Paris VII Diderot / Paris XI KB / Paris XII Créteil / Paris XIII Bobigny / Paris Ouest / Poitiers / Reims / Rennes / Rouen / Saint-Etienne / Strasbourg / Toulouse Purpan / Toulouse Rangueil / Tours

Quelle est votre faculté d'origine ? * (si interne)

Veuillez sélectionner une seule des propositions suivantes : Aix-Marseille / Amiens / Angers / Antilles-Guyane / Besançon / Bordeaux / Brest / Caen / Clermont-Ferrand / Dijon / Grenoble / La Réunion / Lille 2 / Lille (Université Catholique) / Limoges / Lyon Sud / Lyon Est / Montpellier / Nancy / Nantes / Nice / Paris V Descartes / Paris VI UPMC / Paris VII Diderot / Paris XI KB / Paris XII Créteil / Paris XIII Bobigny / Paris Ouest / Poitiers / Reims / Rennes / Rouen / Saint-Etienne / Strasbourg / Toulouse Purpan / Toulouse Rangueil / Tours / Autre

Quelle est votre ville d'internat ? * (si interne)

Veuillez sélectionner une seule des propositions suivantes : Aix-Marseille / Amiens / Angers / Antilles-Guyane / Besançon / Bordeaux / Brest / Caen / Clermont-Ferrand / Dijon / Grenoble / La Réunion – Océan Indien / Lille / Limoges / Lyon / Montpellier / Nancy / Nantes / Nice / Paris / Poitiers / Reims / Rennes / Rouen / Saint-Etienne / Strasbourg / Toulouse / Tours

Quelle est votre spécialité : * (proposé si interne)

Veuillez sélectionner une seule des propositions suivantes : DES Allergologie / DES Anatomie et cytologie pathologiques / DES Anesthésie et réanimation / DES Biologie médicale / DES Dermatologie et vénéréologie / DES Endocrinologie, diabète, maladies métaboliques / DES Génétique médicale / DES Gériatrie DES Gynécologie médicale / DES Hématologie / DES Hématologie / DES Médecine et Santé au travail / DES Máladies infectieuses et tropicales / DES Médecine cardiovasculaire / DES Médecine d'urgence / DES Médecine et Santé au travail / DES Médecine générale / DES Médecine intensive-réanimation / DES Médecine interne et immunologie clinique / DES Médecine légale et expertises médicales DES Médecine nucléaire / DES Médecine physique et de réadaptation / DES Médecine vasculaire / DES Néphrologie / DES Neurologie DES Oncologie / DES Pédiatrie / DES Pneumologie / DES Chirurgie mádicale / DES Chirurgie orale / DES Chirurgie générale / DES Chirurgie orale / DES Chirurgie générale / DES Chirurgie orale / DES Chirurgie générale / DES Chirurgie pédiatrique / DES Chirurgie plastique, reconstructrice et esthétique / DES Chirurgie vasculaire / DES Chirurgie viscérale et digestive / DES Gynécologie o DES Chirurgie vasculaire / DES Chirurgie viscérale et digestive / DES Gynécologie / DES Neurochirurgie / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DES Neurochirurgie / DES Chirurgie vasculaire / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DES Chirurgie distrique / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DESC Médecine d'urgence / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DESC Médecine / DES Chirurgie cervico-faciale / DES Stomatologie / DES Urologie / DESC Médecine / DE

Concernant vos relations avec l'industrie pharmaceutique :

Depuis le début de votre cursus, avez-vous déjà reçu ou participé à : *

Choisissez la réponse appropriée pour chaque élément :

| | Jamais | Entre 1 et 5 fois | Entre 6 et 10 fois | fois |
|---|--------|-------------------|--------------------|------|
| Discussion avec un visiteur médical : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Cadeau publicitaire "non médical" de faible valeur : stylo, matériel de bureau, carnet de note, gadget publicitaire, autre | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Matériel médical (réglette ECG, marteau réflexe, stéthoscope,) offert par un laboratoire pharmaceutique : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Remise d'une fiche de présentation d'un médicament par un visiteur médical : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Repas offert par un laboratoire pharmaceutique : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Soirée ou séminaire de formation sponsorisé par un laboratoire pharmaceutique : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Remboursement de frais de congrès par un laboratoire pharmaceutique (inscription, voyage, hôtel) : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Abonnement à une revue médicale offert par un laboratoire pharmaceutique : | | | | |
| Et dans les 6 derniers mois ? | | | | |
| Remise d'un échantillon gratuit de médicament par un laboratoire pharmaceutique : | | | | |
| Et dans les 6 derniers mois ? | | | | |

т,

Plus de 10

Selon vous...

Trouvez-vous approprié qu'un médecin reçoive de la part de l'industrie pharmaceutique : *

Choisissez la réponse appropriée pour chaque élément :

| | Complètement d'accord | Plutôt d'accord | Plutôt pas d'accord | Pas du tout d'accord |
|--|--------------------------|-----------------|---------------------|-------------------------|
| Un cadeau de faible valeur (moins de 50 euros) ? | | | | |
| Un cadeau d'une valeur de plus de 50 euros ? | | | | |
| Un repas gratuit ? | | | | |
| Un remboursement de frais de congrès/séminaire ? | | | | |
| Du matériel médical ? | | | | |
| Que pensez-vous des propositions suivante | es : * | | | |
| Choisissez la réponse appropriée pour chaque e | élément : | | | |
| | Complètement d'accord | Plutôt d'accord | Plutôt pas d'accord | Pas du tout d'accord |
| La plupart des informations fournies par les représentants de l'industrie sont intéressantes et formatrices. | | | | |
| Les informations des visiteurs médicaux sont utiles pour se former sur les nouvelles thérapeutiques. | | | | |
| Recevoir des cadeaux ou participer à un repas offert par un laboratoire augmente les chances que je prescrive le médicament de ce laboratoire. | | | | |
| Les contacts entre l'industrie pharmaceutique et les étudiants en médecine devraient être interdits. | | | | |
| Les informations fournies par l'industrie pharmaceutique sont souvent biaisées en faveur du médicament ou du produit du laboratoire en question. | | | | |
| Recevoir des cadeaux ou participer à un repas offert par un laboratoire augmente les chances que d'autres collègues prescrivent le médicament de ce laboratoire. | | | | |
| Toute personne effectuant une présentation devant des étudiants de médecine à la faculté devrait énoncer ses liens d'intérêt avec l'industrie avant son cours. | | | | |

Concernant la formation à la critique de la promotion pharmaceutique :

Avez-vous déjà bénéficié lors de votre formation initiale (avant l'internat) d'une formation sur les relations médecinsindustrie pharmaceutique et/ou sur la promotion pharmaceutique? * (proposé si interne)

Veuillez sélectionner une seule des propositions suivantes : oui / non

Avez-vous déjà bénéficié à la faculté d'une formation sur les relations médecins-industrie pharmaceutique et/ou sur la promotion pharmaceutique? *

Veuillez sélectionner une seule des propositions suivantes : oui/non

Cette formation était-elle obligatoire dans votre cursus ? *

Veuillez sélectionner une seule des propositions suivantes : oui/non

Vous estimez-vous suffisamment formé(e) pour gérer vos relations avec l'industrie pharmaceutique? *

Veuillez sélectionner une seule des propositions suivantes : Oui, tout à fait / Oui, plutôt / Non, pas vraiment / Non, pas du tout

Souhaiteriez-vous plus de cours à la faculté sur la notion de conflit d'intérêt, et sur la critique de la promotion pharmaceutique ? *

Veuillez sélectionner une seule des propositions suivantes : Oui, tout à fait / Oui, plutôt / Non, pas vraiment / Non, pas du tout

Pensez-vous avoir le droit de recevoir seul un représentant de l'industrie pharmaceutique ? *

Veuillez sélectionner une seule des propositions suivantes : oui / non / ne sait pas

Dernière étape : sur le plan institutionnel

La fréquence de vos contacts avec les délégués médicaux dépend le plus souvent de (plusieurs réponses possibles) : * Veuillez choisir toutes les réponses qui conviennent :

- Votre volonté ou non de discuter avec eux
- Des habitudes ou de l'organisation du service ou de votre maitre de stage
- Du risque d'être jugé par vos maitres de stage ou vos collègues
- De votre emploi du temps
- De la gentillesse et la générosité des délégué(e)s médica(-les)ux
- De la qualité de leurs prestations passées
- Autre

Précisez : * (si autre)

Durant votre cursus, vos formateurs, vos médecins séniors ou vos maitres de stages reçoivent-ils des visiteurs médicaux en votre présence : *

Veuillez sélectionner une seule des propositions suivantes : Jamais / Une fois par mois / Une fois par semaine / Plusieurs fois par semaine

Durant votre cursus, vos formateurs, vos médecins séniors ou vos maitres de stages vous ont-ils encouragé à participer à des rencontres (rendez-vous, staffs, repas...) avec des représentants de laboratoires pharmaceutiques ? *

Veuillez sélectionner une seule des propositions suivantes : Jamais /Rarement/Assez souvent/Souvent

En dehors de vos cours (faculté ou DES), vos médecins séniors, ou vos maitres de stage, vous ont-ils procuré des conseils pour vous former à la critique de la promotion pharmaceutique ? *

Veuillez sélectionner une seule des propositions suivantes : Jamais / Rarement / Assez souvent / Souvent

Existe-t-il, à votre connaissance, une politique stricte qui encadre les interactions entre étudiants en médecine et industrie pharmaceutique dans votre faculté et/ou de votre CHU ? *

Veuillez sélectionner une seule des propositions suivantes : oui/non

Avez-vous connaissance de la Charte éthique et déontologique rédigée en 2017 par la Conférence des doyens de médecine et d'odontologie? *

Veuillez sélectionner une seule des propositions suivantes : oui/non