

## Paris' medical residents' sexual health before the SARS-CoV-2 burden

To date, there are no data available on the sexual health of junior medical staff (residents) in France. We conducted a study among residents in Paris to evaluate sexual satisfaction, to compare it between men and women, and attempt

to identify other determinants of their sexual health.

We used an anonymous 107-item questionnaire based on the most recent national survey on sexual health.<sup>1</sup> If a submitted questionnaire was less than 60% complete, it was not analysed.

During the period 3–5 April 2019, 550 questionnaires were distributed and 409 (74.4%) were returned complete. The sample had a mean age of  $28.2 \pm 3$  years and the male/female

(M/F) ratio was 2:3; further characteristics of the sample are summarised in table 1.

High sexual satisfaction (score  $\geq 3$  on a Likert scale of 1 to 4: "very satisfied" (4), "somewhat satisfied" (3), "not very satisfied" (2) or "not at all satisfied" (1)) was found in 82.7% of respondents without any gender difference (M: 91%, F: 73%,  $p=0.6$ ). The results for sexual satisfaction are similar to other studies, such as an extensive Canadian

**Table 1** Main characteristics of the study sample

Sociodemographic characteristics	Total	Males	Females
Participants (n)	409	158	251
Sex (%)	—	38.6	61.4
Age (years)	$28.2 \pm 3.0$	$28.6 \pm 3.3$	$28.0 \pm 2.7$
Outpatient residency	210 (51.3)	78 (49.3)	132 (52.6)
Night shifts ( $\geq 1$ /month)	179 (45.6)	79 (52.3)	100 (41.5)
Chronic diseases	64 (15.6)	19 (12.0)	45 (17.9)
Obesity*	11 (2.7)	2 (1.3 %)	9 (3.6 %)
Couple	280 (69.3)	102 (64.6)	178 (70.9)
Less than a year in a couple	38 (13.6)	16 (15.7)	22 (12.4)
Married couples	47 (16.8)	14 (13.7)	33 (18.5)
Common-law couples	27 (9.6)	12 (11.8)	15 (8.4)
Couples with children ( $\geq 1$ )	32 (11.4)	15 (14.7)	17 (9.6)
Current pregnancy (n (%))	—	—	16 (6.4)
<b>Self-reported sexual behaviour</b>			
Virgin	33 (8.1)	12 (7.6)	21 (8.4)
Age at first sexual intercourse (years)	$18.3 \pm 2.9$	$18.1 \pm 2.8$	$18.4 \pm 3.0$
Self-reported homosexuality	8 (3.4)	5 (3.2)	3 (1.2)
Self-reported bisexuality	7 (1.7)	1 (0.6)	6 (2.4)
Self-reported sexual attraction for women only	141 (34.5)	139 (88.0)	2 (0.8)
Self-reported sexual attraction for men only	195 (47.7)	4 (2.5)	191 (76.1)
Masturbation (sometimes to often)	228 (55.7)	120 (75.9)	108 (43.0)
More than one partner in the last year	52 (12.7)	26 (16.4)	26 (10.4)
Use of dating apps	114 (27.9)	58 (36.7)	56 (22.3)
Alcohol use before the last intercourse	24 (11.7)	10 (13.3)	14 (10.8)
Cannabis or drug use before the last intercourse	5 (2.3)	3 (3.75)	2 (14.4)
<b>Global health and well-being during residency</b>			
Feeling depressed	192 (47.9)	70 (45.2)	122 (49.6)
Received treatment for depression	27 (6.6)	7 (10.4)	20 (16.5)
Occasional or frequent migraines	144 (44.9)	52 (32.9)	128 (52.0)
Routine gynaecology attendance for check-up (<2 years)	—	—	173 (68.9)
Pap test screening within 2 years	—	—	126 (50.2)
HIV screening during residency	197 (48.2)	53 (33.5)	144 (57.3)
Emergency contraception (women or partners of male students)	56 (13.7)	12 (7.6)	44 (17.5)
Self-reported abortion during residency	8 (2.0)	2 (1.3)	6 (2.4)

Results are expressed as mean  $\pm$  SD or n (%) unless otherwise indicated.

\*Defined as body mass index (BMI)  $\geq 30$  kg/m<sup>2</sup>.

study involving individuals aged 18–29 years from various social backgrounds, although satisfaction was higher in men (M: 81% vs F: 72%).<sup>2</sup>

Furthermore, in our study, 81% of the residents had attained orgasm during their most recent episode of sexual intercourse, regardless of gender.

Residents on average reported one instance of intercourse every 4 days ( $7.7 \pm 6.5$  times per month) with a mean number of current partners of  $0.9 \pm 1.6$  (in the past year:  $2.6 \pm 5.4$  partners for men vs  $1.4 \pm 1.8$  for women,  $p=0.011$ ). This frequency is similar to the 24–35 years age group in France.

Whereas sexual satisfaction was similar in both genders, we identified differences in its determinants. Sexual satisfaction was higher in male residents undergoing hospital training (H) compared with males in an outpatient clinic (OC), despite the extended working hours and night shifts (M in H: 90.6% vs M in OC: 75%,  $p=0.034$ ). Women reported higher sexual satisfaction when their global well-being was “good” or “very good” (80% vs 62.5%,  $p=0.019$ ), regardless of training location, as described previously.<sup>3</sup>

Beyond sexual satisfaction, we noticed high rates of sexual desire disorders in both genders as compared with individuals with equivalent qualifications.<sup>4</sup> The most frequent problem for men was a lack of sexual desire (51.3% “very frequently” or “often”) and for women a difficulty in attaining orgasm (68.1%). Paradoxically, only 58 (14.2%) residents reported that these disorders impacted on their sexuality. Residents also reported stressful conditions (73.3% “yes, a lot” or “yes, a little”) and 74.1% reported physical tiredness. One-quarter (27.4%) of respondents exceeded the maximum level of 48 hours/week of work, especially in hospital residency (H:  $51.1 \pm 8.7$  hours vs OC:  $36.2 \pm 9.6$  hours,  $p<0.001$ ). Moreover, 47.9% of residents declared that they had felt depressed in the previous 6 months. The same rates were found in American residents (47%–49%).<sup>5</sup>

During the previous semester, 148 (36.2%) residents consumed alcohol frequently (“every day” and “more than once a week” on a five-item scale). Among them, 64 (17%) drank before their most recent episode of sexual intercourse. Male residents in a hospital residency drank significantly more than those in an outpatient clinic (H: 57.9%

vs OC: 32.4%,  $p=0.003$ ). Eighty-three residents reported smoking cannabis, four times a month on average, and 69 (16.9%) had used other drugs in the previous 6 months.

Despite high levels of self-reported stress, long working hours and sexual desire disorders, medical residents in Paris reported high levels of sexual satisfaction. The factors affecting sexual satisfaction are clearly more complex than those investigated in this study.

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**Author note** In France, a resident (also called an “interne”) is a junior doctor, qualified to practise and paid but still in postgraduate training.

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## REFERENCES

- 1 Bajos N, Bozon M, Beltzer N, *et al.* Changes in sexual behaviours: from secular trends to public health policies. *AIDS* 2010;24:1185–91.
- 2 Lambert G, Mathieu-Chartier S, Maurais E. *The PIXEL study – sexual health in young adults in Quebec, 2013–2014 - Portrait de la santé sexuelle des jeunes adultes au Québec*. Institut National de Santé Publique Université du Québec Montréal, 2013.
- 3 Davison SL, Bell RJ, LaChina M, *et al.* The relationship between self-reported sexual satisfaction and general well-being in women. *J Sex Med* 2009;6:2690–7.
- 4 Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. *JAMA* 1999;281:537–44.
- 5 Dyrbye LN, Thomas MR, Massie FS, *et al.* Burnout and suicidal ideation among U.S. medical students. *Ann Intern Med* 2008;149:334–41.