# Is the motivation to quit smoking greater if the smoker is going to quit smoking of their own free will or when advised by a health professional?

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# Dear Editor,

As a complement to a previous study by our group whose data and methodology have already been published<sup>1,2</sup>, we hypothesize that the motivation to quit smoking could be greater if the subject is going to quit smoking of their own free will (OFW) than if they are sent on the advice of a health professional.

The aim of the study was to check whether the degree of motivation to quit smoking is different depending on who refers the smoker to the smoking treatment consultation, considering three sources of remission (variable 'referred by'): primary care (PC), medical specialist (OS) or by OFW.

For this analysis, the subjects finally included were 292 [72.1%; 155 women (53.1%); mean age 51.1  $\pm$  11.0 years (range: 25–77)]. Ninety-nine subjects (33.9%) attended our smoking clinics on PC advice, 116 (29.7%) subjects on OS advice, and 77 subjects (26.4%) on OFW. We have used four motivational tests to quit smoking (MTQS): Richmond Test (RT), the Henri Mondor Paris Motivation Test (HMPMT), Khiwji-Watts test (KWT) and the visual analogue scale (VAS)<sup>1</sup>.

Supplementary file Table 1 shows the distribution of the three categories of the variable 'referred by' for all participants and by sex, and we found no significant differences. Table 1 shows the mean age values for all participants, by sex, and by each category of the variable 'referred by'. There were no statistically significant differences between the mean ages of the different categories. Table 1 also shows the mean values of the scores of the MTQS according to the categories of the variable 'referred by', for all participants and by sex. Only in the HMPMT were there significant differences between PC versus OS, but this was only for men.

A previous study concluded that smoking cessation is motivated by concern for self-health and family's health, family's support, and social pressures<sup>3</sup>. In some studies, promptings by doctors were reported as being a reason for quitting by only 13% of respondents, and only one quarter of respondents received cessation-related awareness from their doctors<sup>4</sup>. It is known that personal willpower is an essential feature of the 5As model in 'Treating Tobacco Use and Dependence'<sup>5</sup>, of which the first three As build towards willingness to quit and the last two As facilitate those willing to quit to take the final decision to quit<sup>5</sup>. This suggests how personal motivation that arises from within the individual is more likely to lead to successful cessation than when it arises externally<sup>3</sup>, but also, it is known, that a specific referral to a smoking cessation program can increase participation by patients<sup>6.7</sup>.

So, we cannot demonstrate differences in the scores of the analyzed smoking cessation motivation scales depending on who refers the subject. Subjects who

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# **KEYWORDS**

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# Table 1. Description of the quantitative variables for all participants, by sex, and by 'referred by'

Characteristics	All	Males	Females	p
Total, n	292	137	155	
Age (years), mean $\pm$ SD (range)	51.1 ± 11.0 (25–77)	51.5 ± 11.1 (27–77)	50.7 ± 10.9 (25-76)	0.522
Referred by	Primary Care	Other Specialties	Own Free-Will	
Total, n				
All	99	116	77	
Males	45	61	31	
Females	54	55	46	
Age (years), mean $\pm$ SD (range)				
All	50.0 ± 10.9 (29-77)	53.0 ± 10.9 (25-77)	48.7 ± 10.9 (26-72)	0.084
Males	51.4 ± 11.0 (29-77)	53.6 ± 10.6 (28-77)	47.8 ± 11.7 (27-66)	0.122
Females	48.9 ± 10.8 (29-70)	52.3 ± 11.3 (25-76)	50.9 ± 10.3 (26-72)	0.248
Motivation scales (scores), mean ± SD (range)				
All				
RT	7.9 ± 1.6 (3-10)	7.8 ± 1.5 (4–10)	8.2 ± 1.4 (5-10)	0.340
НМРМТ	13.8 ± 2.4 (6-18)	12.6 ± 2.7 (3–18)	13.5 ± 2.9 (5–18)	0.003
KWT	11.6 ± 2.6 (5–15)	11.2 ± 2.6 (5–15)	11.7 ± 2.4 (7–15)	0.302
VAS	8.1 ± 1.8 (0-10)	7.7 ± 2.1 (0-10)	8.2 ± 1.7 (0-10)	
MD (SE) (95% CI)*		1.2 (0.4) (0.3–2.1)		
Males				
RT	7.9 ± 1.6 (3-10)	7.9 ± 1.5 (4–10)	8.5 ± 1.3 (6-10)	0.122
НМРМТ	14.2 ± 2.3 (10–18)	12.7 ± 2.7 (7–18)	13.5 ± 3.1 (7–18)	0.021
KWT	11.3 ± 2.6 (7–15)	10.9 ± 2.6 (5–15)	12.3 ± 2.6 (7–15)	0.054
VAS	8.3 ± 1.9 (0-10)	7.9 ± 1.9 (2-10)	8.5 ± 1.6 (4–10)	0.216
MD (SE) (95% CI)*		1.5 (0.5) (0.2–2.8)		
Females				
RT	7.9 ± 1.7 (4–10)	7.8 ± 1.6 (4–10)	7.9 ± 1.4 (5–10)	0.890
НМРМТ	13.4 ± 2.5 (6–18)	12.4 ± 2.8 (3–18)	13.5 ± 2.7 (5–18)	0.068
KWT	11.8 ± 2.7 (5–15)	11.5 ± 2.7 (5–15)	11.3 ± 2.3 (7–15)	0.475
VAS	8.0 ± 1.7 (3-10)	7.5 ± 2.3 (0-10)	8 ± 1.7 (0-10)	0.733

RT: Richmond Test. HMPMT: Henri Mondor Paris Motivation Test. KWT: Khiwji-Watts Test. VAS: Visual Analogue Scale. SD: standard deviation. MD: means differences. SE: standard error. \*Primary Care versus Other Specialties for HMPMT.

attend smoking cessation clinics of their OFW do not have higher scores on the motivation questionnaires used when compared to those who attend on the advice of their PC or OS.

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#### **CONFLICTS OF INTEREST**

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# ETHICAL APPROVAL AND INFORMED CONSENT

Ethical approval and informed consent were not required for this study.

### DATA AVAILABILITY

Data sharing is not applicable to this article as no new data were created.

# **AUTHORS' CONTRIBUTIONS**

All authors have introduced patients to the study in our smoking cessation clinics. JIGO: conception and design of the study, writing the core content of the study, analysis and interpretation of data, drafting the article and revising it critically for important intellectual content. JFPL: statistical analysis and interpretation of data, preparation and critical review of the manuscript. SAS, SSR, MGR, MAMM, LLA, DB, RP, SL, ICA, and CAJR: critical review of the manuscript. All authors approved the current version of the manuscript.

## PROVENANCE AND PEER REVIEW

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