

# Primary Care Research: Attitudes and Hindrances Perceived by Our Doctors

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**Objectives.** To discover how much research doctors in our area do; to describe their attitudes to research; and to evaluate the hindrances to developing research that they found.

**Design.** Cross-sectional, descriptive study.

**Setting.** Area 7 of Primary Care, Madrid.

**Participants.** Area 7 doctors.

**Main measurements.** An anonymous self-administered questionnaire was designed in order to gather the following information: age, gender, professional details, training in research methodology, research activity, questions from a previously validated questionnaire for finding attitudes towards research (scores from 0 to 80), and a question for assigning a value to 6 hindrances to research.

**Results.** 174 were returned (49.4% response). 65.9% of the doctors were women, with an average age of 43.23±7.33 years; and 55.5% were specialists in Family and Community Medicine. Over the last 5 years, 49.4% had published a scientific paper and 38% had given reports at congresses. The mean score on attitudes to research was 53.49±10.59.

Hindrances to research were given in the following order, from greatest to least: case-load, lack of time, structural deficiencies, absence of multi-centred research lines, lack of incentives, lack of training, no motivation.

**Conclusions.** The research activity of our doctors is similar to that found in other studies. Attitude to research is no better than "acceptable." The main hindrances stated were: case-load and lack of time.

**Key words:** Primary care. Research. Attitude. Hindrances.

## INVESTIGACIÓN EN ATENCIÓN PRIMARIA: ACTITUD Y DIFICULTADES PERCIBIDAS POR NUESTROS MÉDICOS

**Objetivo.** Conocer de forma cuantitativa la actividad investigadora de los médicos de nuestra área, describir su actitud hacia la investigación y valorar las dificultades encontradas para el desarrollo de la investigación.

**Diseño.** Estudio descriptivo transversal.

**Emplazamiento.** Área 7 de atención primaria de Madrid.

**Participantes.** Médicos del Área 7.

**Mediciones principales.** Se diseñó un cuestionario anónimo autoadministrado en el que se recogieron la edad, el sexo, los datos profesionales, la formación en metodología de investigación, la actividad investigadora, las preguntas de un cuestionario previamente validado para conocer la actitud hacia la investigación (puntuación entre 0 y 80) y una pregunta con 6 dificultades para realizar actividades investigadoras para asignar un valor.

**Resultados.** Se recibieron 174 cuestionarios (49,4% de respuestas). El 65,9% de los que respondieron fue mujer, con una edad media de 43,23 ± 7,33 años, y el 55,5% era especialista en medicina familiar y comunitaria (MFyC). En los últimos 5 años, el 49,4% había publicado un trabajo científico y el 38% había presentado comunicaciones a congresos.

La media de la actitud hacia la investigación fue 53,49 ± 10,59. Las dificultades para la investigación a las que otorga un mayor valor fueron, en orden decreciente, la presión asistencial, la escasez de tiempo, las deficiencias estructurales, la ausencia de líneas de investigación multicéntricas, la falta de incentivos y preparación, y la ausencia de motivación.

**Conclusiones.** La actividad investigadora de nuestros médicos es semejante a la de otros estudios. La actitud hacia la investigación es sólo aceptable. Las principales dificultades declaradas son la presión asistencial y la escasez de tiempo.

**Palabras clave:** Atención primaria. Investigación. Actitud. Dificultades.

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## Introduction

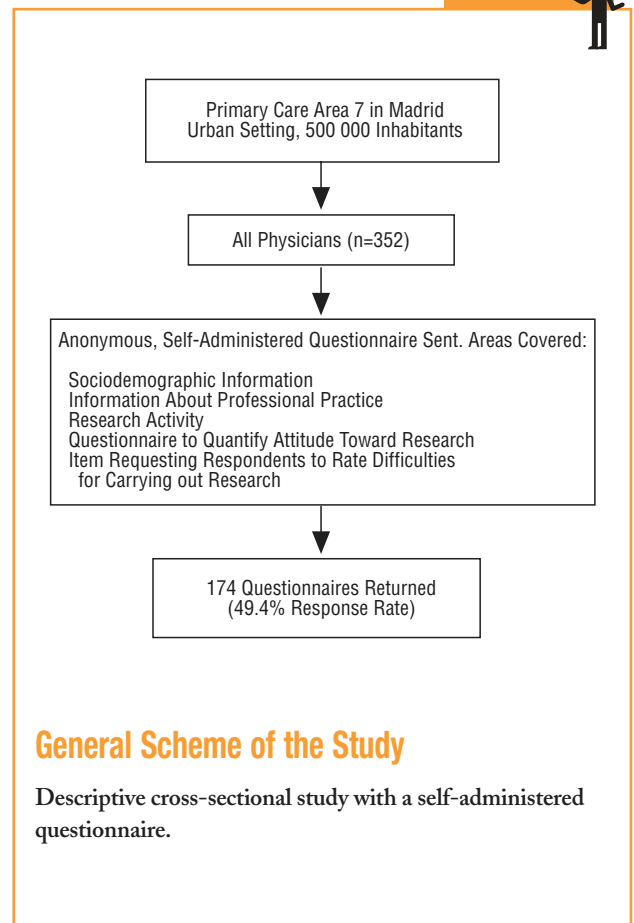
Research in primary care is seen as one of the basic functions of primary care teams<sup>1</sup> along with their clinical and teaching activities. While necessary for the credibility and development of family medicine as a discipline,<sup>2</sup> and to provide a scientific basis for health care,<sup>3-5</sup> research also adds quality, effectiveness, and efficiency to clinical practice.

Thus research is of interest to patients (as it improves the quality of care, decreases variability in clinical practice and reinforces the principle of equity in health care), to health care professionals (as it improves their training, consolidates their professional activity, and increases motivation and professional satisfaction), and to managers and planners.<sup>3,5</sup>

A number of reasons support the benefits of carrying out research within the primary care setting. One noteworthy factor is the availability of data on the population for which the results of research are to be applied. Because patients are followed in primary care throughout their lifetime, the most prevalent diseases can be detected in earlier stages—which increases our knowledge of the natural history of these entities. Access to an entire population means that causal agents and risk practices for certain diseases can be studied, along with the influence on health status of psychosocial and familial factors.<sup>4-8</sup> In Spain, research in primary care settings lacks the benefits of long-standing tradition or a significant body of research experience.<sup>9</sup> However, recent years have seen signs of change and sustained growth.<sup>10</sup> During the period from 1990 to 1997, the number of research articles on primary care topics (identified on the basis of the first author's affiliation with a primary care center), according to MEDLINE, rose from 88 to 154 documents.<sup>11</sup> Even so, a bibliometric analysis by the Fondo de Investigación Sanitaria for the period 1994-2000 showed primary care to be all but nonexistent: only 0.4% of all citable items under "health centers" were from primary care centers.<sup>12</sup> Moreover, research in primary care is still rarely mentioned in research projects sponsored by the pharmaceutical industry.<sup>13</sup> Spain is not the only country in this situation, also seen in other European countries.<sup>14-16</sup>

In order to devise strategies to foment research, it is first appropriate to determine the current state of research activity in the primary care setting, physicians' attitudes toward research, and factors that facilitate or impede research.<sup>2</sup> The aims of our study were to *a)* obtain quantitative information on research activity among physicians who work in Primary Care Area 7 (Madrid, central Spain) during the last 5 years and analyze associated factors; *b)* describe attitudes toward research among our physicians; and *c)* evaluate the obstacles encountered to carrying out research.

## Material and methods



## Material and Methods

This was a descriptive, cross-sectional study in which the population consisted of all primary care physicians in Health Care Area 7 in Madrid, Spain. This entirely urban area serves a population of approximately 500 000 inhabitants. The period of study was June and July, 2003.

Information was collected with an anonymous, self-administered questionnaire that was sent by internal e-mail to each physician on two occasions 15 days apart to increase uptake. A covering letter explained the objectives of the study and the procedure for returning the completed questionnaire to the Training and Research Unit.

The questionnaire (see supplementary material in internet) contained items covering sociodemographic variables (age and sex), information about professional practice, training in research methods, and research activity. To obtain information about physicians' attitude toward research we included items from a previously validated questionnaire,<sup>2</sup> i.e., 20 closed items, 18 to be scored from 0 to 4 on a 5-point Likert-like scale and 2 dichotomous items scored 0 or 4. Overall score for each questionnaire was calculated as the sum of the scores on each item. Total scores ranged from 0 to 80 points; the higher the score, the better the physician's attitude toward research.

An item was added that inquired about six obstacles to research identified in other studies.<sup>5,6,8,16-19</sup> Participants were asked to assign to each factor a score from 1 (least difficulty) to 5 (greatest difficulty).

The data were processed and analyzed with the SPSS (v. 10). Mean values and standard deviations were calculated for quantitative variables, and absolute and relative frequencies were calculated for qualitative variables. For bivariate analyses the chi-squared test was used to compare proportions, and Student's *t* test and analysis of variance were used to compare mean values. For multivariate analysis we used forward stepwise logistic regression with publication of at least one research article in the last 5 years as the dependent variable. Variables found to be statistically significant in the bivariate analysis were added successively to the model.

## Results

Of 352 questionnaires that were e-mailed, a total of 174 were received (49.4% response rate). Mean age of the respondents was 43.2 (7.3) years, and two thirds (65.9%) were women. Slightly more than half (55.5%) were specialists in family and community medicine (FCM), and of this proportion, 79.1% had completed a residency program in FCM. Mean number of years in practice was 15.4 (7.9), and 18.3% of the respondents held a PhD. Most (84.7%) worked as members of a primary care team, 12.4% were employed at centers administered under a "traditional" management model (i.e., the recent reforms in primary health care administration had not yet been implemented at their center), and 2.9% were in practice at primary care emergency services. About one third (36.2%) of the physicians we surveyed belonged to health centers that carried out training activities, and 21.4% were tutors of residents. Patient load was 31 to 40 per day for 45.8%, from 41 to 50 for 29.2%, and more than 50 for 12.5% of the respondents. Nearly two thirds (64.9%) had completed at least one course in research methodology.

The results for research activity by participants showed that 86 (49.4%) had published at least one article during the preceding 5 years. Table 1 shows how publications were distributed according to type of publication.

More than one third (38%) had given presentations at congresses,

and 29.2% has taken part in clinical trials. Nearly two thirds (63.2%) had been or were involved in a research project, although only 24.9% were so involved at the time of the study.

The bivariate analysis detected statistically significant differences for having published at least one research article, male sex, specialization in FCM, holding a doctorate, having been in practice for 15 years or more, working at a health center where training activities were performed, being a tutor for residents, and having completed a course in research methodology (Table 2). The multivariate analysis showed the variables associated with having published at least one research article to be specialization in FCM (OR, 4.1; 95% CI, 1.8-11.4), holding a doctorate (OR, 7.0; 95% CI, 1.5-32.7) and having completed a course in research methodology (OR, 3.4; 95% CI, 1.1-9.4).

Attitude toward research was evaluated in the 156 questionnaires that had been fully completed. Mean score was 53.5, with a standard deviation of 10.6 and a range of 10 to 76. Table 3 shows the mean scores for each variable.

Difficulties for performing research that were scored highest were, in decreasing order, patient load, structural deficiencies, lack of multicenter research projects, lack of incentives, lack of training, and lack of motivation (Table 4).

**TABLE 1** Distribution of Published Research Articles According to Dissemination and Type of Publication (n=86)\*

	Number of Publications						Mean (SD)
	0	1	2	3	4	>4	
<b>Dissemination</b>							
National	4 -4.70%	20 (23.2%)	15 -17.40%	16 -18.60%	9 -10.50%	22 -25.60%	3.3 (2.06)
International	79 -91.90%	5 -5.70%	1 -1.20%	1 -1.20%	0 0%	0 0%	0.12 (0.45)
<b>Article type</b>							
Original	34 -39.50%	27 (31.4%)	9 -11.60%	10 -4.70%	4 -2.30%	2	1.17 (1.32)
Review	59 -68.60%	10 (11.6%)	8 -9.30%	3 -3.50%	3 -3.50%	3 -3.50%	0.76 (1.45)
Editorial	82 -95.30%	1 -1.20%	2 -2.30%	1 (1.2%)	0 0%	0 0%	0.09 (0.45)
Letter	77 -89.50%	7 -8.10%	1 -1.20%	1 (1.2%)	0 0%	0 0%	0.14 (0.46)
Metaanalysis	85 -98.80%	1 -1.20%	0 0%	0 0%	0 0%	0 0%	0.01 (0.11)
Clinical guidelines	67 -77.90%	16 (18.6%)	3 3.50%	0 0%	0 0%	0 0%	0.26 (0.51)
Book chapter	45 -52.30%	21 (24.4%)	12 -14%	3 -3.50%	3 -3.50%	2 -2.30%	1.06 (1.95)

\*SD indicates standard deviation. Absolute frequencies are shown, with relative frequencies in parentheses.

**TABLE 2** Factors Associated With Publication. Univariate Analysis\*

Variables	Other Publications in the Last 5 Years	P
Sex		
Male	38 (64.4%)	<.05
Female	48 (42.1%)	
Specialty		
FCM	64 (66.7%)	
General practice	12 (25.5%)	
Pediatrics	8 (30.8%)	<.05
Other	1 (25%)	
FCM specialization via		
Residency	50 (73.5%)	.14
Transfer of credentials	10 (55.6%)	
Doctorate		
Yes	16 (84.2%)	<.05
No	41 (48.2%)	
Years in practice		
≤15	53 (58.2%)	<.05
>15	29 (39.7%)	
Professional practice in		
PCT	74 (51.4%)	
TM	6 (28.6%)	<.05
PCES	3 (60%)	
Teaching health center		
Yes	36 (65.5%)	<.05
No	42 (43.3%)	
Tutor for residents		
Yes	25 (80.6%)	<.05
No	50 (43.9%)	
Number of patients		
<20	0 (0%)	
20-30	9 (50%)	
31-40	36 (46.8%)	.21
41-50	26 (53.1%)	
>50	14 (66.7%)	
Training in methodology		
Yes	67 (59.3%)	<.05
No	19 (31.1%)	

\*PCT indicates primary care team; TM, traditional model; PCES, primary care emergency service. Absolute frequencies are shown, with relative frequencies in parentheses.

## Discussion

Although the percentage response rate was low, it was similar to that reported in other published studies based on the same methods.<sup>8,15,16</sup> When we compared respondents

**TABLE 3** Mean Score for Attitude Toward Research According to Different Variables\*

Variables	Total	Mean (SD)	P
Sex			
Male	54	52.8 (12.5)	.53
Female	102	53.9 (9.5)	
Specialty			
FCM	87	56.4 (10.6)	<.05
General practice	43	50.4 (9.9)	
Pediatrics	22	49 (9.2)	
Other	4	48.7 (7.1)	
FCM specialization via:			
Residency	64	56.4 (10.7)	.42
Transfer of credentials	15	54.1 (9.7)	
Doctorate			
Yes	18	58.7 (10.6)	.05
No	78	53.2 (11.3)	
Years in practice			
≤15	83	55.1 (9.9)	<.05
>15	65	50.3 (10.7)	
Professional practice in			
PCT	130	54.2 (9.9)	<.05
TM	19	47.9 (12.4)	
PCES	4	54 (14.6)	
Teaching health center			
Yes	48	56.5 (9.6)	<.05
No	89	52.3 (11.0)	
Tutor for residents			
Yes	30	58.2 (9.9)	<.05
No	103	52.4 (10.7)	
Number of patients			
<20	3	40.3 (3.1)	
20-30	43	52.2 (10.3)	
31-40	22	53.1 (11.7)	.25
41-50	4	54.3 (8.8)	
>50	4	54.5 (10.5)	
Training in methodology			
Yes	103	56.7 (9.9)	<.05
No	53	47.2 (9)	
Publications in the last 5 years			
Yes	77	57.4 (10.8)	
No	79	49.7 (8.9)	<.05
Congress presentations			
Yes	59	58.1 (10.0)	<.05
No	95	50.6 (9.8)	
Clinical trial experience			
Yes	47	56.4 (10.9)	<.05
No	107	52.2 (10.2)	

\*SD indicates standard deviation. Absolute frequencies are shown, with relative frequencies in parentheses.

**TABLE 4**  
**Value Assigned to Each Difficulty From 1 to 5\***

Difficulty	n	Mean SD
Patient load	168	4.42 (0.98)
Lack of time	168	4.36 (0.91)
Lack of training in research methods	164	3.07 (1.24)
Lack of multicenter research projects	163	3.29 (1.12)
Structural deficiencies (library, computers, etc)	163	3.33 (1.41)
Lack of motivation	166	2.99 (1.42)
Insufficient recognition for research	162	3.25 (1.34)

\*SD indicates standard deviation

to the entire study population for the variables sex, age, and whether they worked at a “traditional” health center or as part of a primary health care team, we found that responders were younger and that a larger percentage worked in primary care teams. This difference, together with earlier findings of higher response rates among professionals with a publication record,<sup>8,13,15</sup> might have lead to overestimation of research activity and attitude toward research on the part of the professionals studied here. One of the limitations of our study was that we relied on self-reported information regarding publications, as did other studies.<sup>15,16,18,20</sup> This might have affected how publications were quantified, although it would have had less of an effect on other factors associated with having a publication record.

About half of the participants (49.4%) had published at least one research article in the last 5 years. Similar percentages were reported in earlier studies,<sup>15,18</sup> although in some cases the figures ranged from 4% to 11%.<sup>16,20,21</sup> In comparison to an earlier study<sup>17</sup>, fewer participants reported having given congress presentations. At the time of the study only one fourth of the participants (24.9%) were involved in research, and although this value is low, it is higher than the figure given in other studies.<sup>14,20</sup>

Factors associated with having a publication record in the last 5 years were specialization in FCM, having completed work toward a PhD, and having completed a course in research methods. These factors are similar to the ones noted in earlier studies.<sup>8,15</sup> We note, however, that some studies also found working at a teaching center was a factor associated with publishing.<sup>8,16</sup> In the present study this variable was found to be associated with publication in the bivariate analysis but not in the multivariate analysis. This may reflect the fact that working at a teaching center is related with specialization, holding a doctorate, or having completed a course in research methodology, all of which are also associated with publication.

The mean overall score for attitude toward research, 53.5 (10.6), was similar to the figure reported in the only

### What Is Known About the Subject

- Research is one of the basic functions that primary care teams should carry out.
- In Spain, research in primary care settings lacks the benefits of long-standing tradition or a significant body of research experience, although recent years have seen a tendency toward change and sustained growth.
- Primary care physicians noted a number of obstacles to carrying out research.

### What This Study Contributes

- Research activity by primary care physicians in Area 7 (Madrid) is similar to or even more extensive than activities in other settings, and their attitude toward research is encouraging.
- The variables associated with publication were specialization in family and community medicine, having completed work toward a doctorate, and having received training in research methodology.
- The greatest difficulties to research were identified as patient load and lack of time.

other study that used the same questionnaire<sup>2</sup> (52.0 [9.1]). That study surveyed only physicians who were working at teaching centers. In comparison to the figure we obtained when we considered only physicians in the present study who were working at teaching centers (56.5; SD, 9.6), the difference was somewhat greater. Given that the range of scores attainable in the questionnaire was from 0 to 80, the overall score in the present study seems acceptable.

When we examined the difficulties encountered to research activity, the highest scores (greatest difficulty) were for patient load and lack of time, followed by structural deficiencies and lack of multicenter research projects. The lack of time and patient load are problems that have been identified previously.<sup>8,15-17</sup> However, of the studies that emphasized these factors, we found that the main obstacles were lack of money to finance research<sup>17</sup> and lack of support staff for data collection.<sup>16</sup>

This study found that research activity among the physicians we surveyed was similar to or more extensive than in other settings, and that the overall attitude toward research was acceptable. The difficulties identified



here will help us to establish areas of improvement in planning research in our health care area. It would be advisable to complement this research with other studies based on qualitative methods to obtain more detailed information on practitioners' opinions regarding research.

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## COMMENTARY

# We Need More, Better Research in Primary Care

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Research is necessary for progress in all areas of medicine, including primary health care (PHC). Since the reforms in the Spanish PHC system got under way, there have been repeated calls from many sectors to foment research in PHC. Since the 1980s, when research was so meager as to be all but nonexistent, the number of publications and congress presentations from authors at health centers and

other PHC professionals has increased considerably.<sup>1,2</sup> However, it is still worthwhile to examine whether the increase in quantity has been accompanied by an increase in the quality and relevance of research. Although these aspects have shown some improvement, this has probably been insufficient to fulfill initial expectations. Most such research has been purely descriptive, has been performed

## Key Points

- Research is necessary in primary care.
- The quantitative increase seen since reforms in the primary health care got under way has not been paralleled by an increase in the quality and relevance of the research.
- Primary health care should be capable of generating evidence that can be used as the basis for clinical practice.
- Although there are substantial obstacles to research in primary health care, they should be faced squarely and organizational strategies should be devised to instill a culture favorable to research.

in isolation, and has been limited in many cases to the replication of other studies.

As a result we are still far from attaining a degree of research development that reflects the importance of PHC within the health care system.

There is increasing talk of basing our practice work on scientific evidence, but rarely do we have the evidence we need. Much of the research done is of limited generalizability and the results cannot always be extrapolated very far, and as a result we lack information on such basic things as the frequency of many health problems in the community, the usefulness of diagnostic tests in our setting, or the efficacy of treatments in the population and the conditions under which these treatments are generally used.

If we all agree that we need this information, why do we continue to base our decisions and recommendations on research done in other levels of health care and under circumstances that differ markedly from those that typify our usual practice? Why haven't we been able to generate the information we need, in our own setting, with our own patients and under actual conditions of practice, so that we can use this information in our decision-making processes and to develop the recommendations and clinical guidelines we follow? Why haven't we been doing more, better research? Why are studies that examine the real information needs of PHC professionals so scarce?

If we truly wish to help improve the health and well-being in the population we serve, we must surely have at our disposal the right information to make the best decisions for our patients, and for improving the quality and efficiency of the care we provide. This information should come from methodologically sound research aimed at issues of

interest, and that provides results we can extrapolate to professional practice in PHC. We should not resign ourselves to reliance on information generated by studies from other health care settings and done under conditions that can hardly be considered applicable to our own practice. Instead, we should commit to facing the challenge of performing high-quality research on the main health problems in the population we serve and on the different manners in which these problems can be managed. This research should be oriented pragmatically so that the results can be applied to daily practice in PHC. It should not be forgotten that society demands that health care resources be used as efficiently as possible to allow optimization, sustainability and equity in the national health system.

There are, to be sure, substantial obstacles to the development of research in PHC, but there are also advantages.<sup>3</sup> Primary health care offers a magnificent opportunity to do research, as it is at this level where the most prevalent diseases are managed in their earliest stages, and where most of the motives for consulting are successfully handled. Furthermore, the longitudinal nature of primary care, its ability to reach the entire population, and the fact that the family and community context is involved all make PHC the most appropriate level for research into a multitude of health problems. However, increasing patient loads mean that less and less time is left for other types of activity, to say nothing of research.

This is why the publication of studies that aim to analyze professionals' attitudes toward research is good news. Studies such as the one, although done within the limited setting of a single health care area in Madrid, call attention to the problem and offer data that may help deal with some problems, or at least improve the situation.

On the subject is research, one important issue that arises is the best way to measure research activity in PHC. The usual process is to count publications and congress presentations but to ignore their quality or relevance. In many cases these communications do not even report on actual research. Considering quantity over quality and relevance often has the opposite effect to the desired one, since it actually creates incentives to perform small, straightforward studies that can be completed in little time and that are often carried out at a single center, instead of fomenting rigorous multicenter studies broad enough in scope to provide reliable data that will help answer relevant questions. Some findings reported by Cevallos García and colleagues merit commentary. The low response rate appears to reflect a certain lack of interest in the topic on the part of professionals. Although the figure may be considered acceptable and customary for this type of study, it nonetheless biases the results, which probably overestimated the degree of primary care physicians' interest in research. In addition, the mean score for physicians who responded was 53 points out of a maximum of 80; although the authors considered this "acceptable" and similar to the score reported in an earlier

study with the same instrument, it could be considered insufficient, particularly if we consider the likely positive bias that resulted from the low response rate. Moreover, this mean score did not vary significantly with a number of other characteristics of the respondents. Should we therefore consider Spanish primary care professionals to be apathetic in general about research? This would be painful to admit, and we should hope that it is not the case.

The results regarding obstacles to research in primary care identified are common difficulties:<sup>4</sup> large patient loads, lack of time, structural deficiencies, lack of training, etc. These are, to be sure, important obstacles, but we should ask ourselves whether they reflect, in many cases, excuses rather than truly insurmountable difficulties. We should squarely face these problems and admit that promoting research should not be limited to running methodology courses, but should also comprise the design and implementation of organizational strategies aimed at fomenting and implanting a culture favorable to research among PHC professionals. Efforts are needed to promote research activities and disseminate their achievements, through actions such as recognition for research, time set aside specifically for research activities, and recognition for researchers. Also needed are research infrastructure and support units, training and enabling plans that facilitate exchanges between professionals, the creation of stable research groups and networks that collaborate with other levels of health care, and collaboration

with universities at all levels. In this connection, administrative recognition for research activities is fundamental. Managers should not see research as a luxury or an “extra” for some professionals, but as a necessity that will lead to improvements in the quality and efficiency of the system, and that should thus be fomented and rewarded. Although promising initiatives are already under way, there is still a long road ahead. It is to be hoped that with everyone’s efforts and cooperation, we will soon be able to speak of research as an achievement in the present rather than a hope for the future.

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**ANNEX  
1** Questionnaire Used  
in This Study

Sex:	Male <input type="checkbox"/>	Female <input type="checkbox"/>	Age: _____
Postgraduate degree			
Specialist in FCM: <input type="checkbox"/>	General practitioner <input type="checkbox"/>		
Pediatrics <input type="checkbox"/>			
Other specialty: <input type="checkbox"/>	Please specify _____		
Doctorate: <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Type of employment:			
Health center with training activities: Yes <input type="checkbox"/>	No <input type="checkbox"/>		
Tutor for residents: Yes <input type="checkbox"/>	No <input type="checkbox"/>		
Mean number of patients seen per day:			
<20 <input type="checkbox"/>	20-30 <input type="checkbox"/>	30-40 <input type="checkbox"/>	>40 <input type="checkbox"/>
Have you completed any courses on research methodology?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Have you published any research articles in the last 5 years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Number of publications			
National publications (Num.) _____	International publications: (Num.) _____		
Type of publication (number of publications):			
Original research: _____	Review: _____	Editorial: _____	Letter: _____
Clinical guidelines: _____	Book chapter: _____	Thesis: _____	
Other (please specify): _____			
Have you given any congress presentations in the last 5 years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Have you participated in the last 5 years in any clinical trials?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
I am currently involved in a research project:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
I have been involved in research in the past:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
The administration should encourage research:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
Only professionals who are going to undertake research need training in research:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
I consider myself capable of undertaking research in collaboration with other colleagues:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
In the future I would like to get actively involved in a research project:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
If there were a research group where I work, I would take part in the group:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
High-quality research is possible only at hospitals:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
If enough resources were provided to carry out a study, I would get involved in it:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
My training in research methods is adequate to undertake a study:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
Clinical activity at the workplace prevents me from carrying out any research:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
I refuse to devote time to research outside working hours:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			
You need to be exceptionally bright to do research:			
Strongly disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>	Agree <input type="checkbox"/>
Strongly agree <input type="checkbox"/>			

(Continue in the next page)

**ANEXO  
1**

**Questionnaire Used  
in This Study (Continuation)**

You need to be exceptionally bright to do research:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

Training in research methods is not needed to carry out the activities of a primary care physician:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

I dislike research activity:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

In the future I will broaden my training in research methods:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

Doing research is within the grasp of any primary care professional:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

I am not curious about studies done where I work:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

Doing research is just another part of the primary care physician's job:

Strongly disagree       Disagree       Undecided       Agree       Strongly agree

Please rate from 1 to 5 the following obstacles encountered to research activity: (1, less of a problem; 5, more of a problem)

Patient load \_\_\_\_\_

Lack of time \_\_\_\_\_

Lack of training in research methodology \_\_\_\_\_

Research not customary \_\_\_\_\_

Structural deficiencies (library, computers, etc) \_\_\_\_\_

Lack of motivation \_\_\_\_\_

Lack of recognition for research \_\_\_\_\_