Understanding primary care in Argentina:

A survey on primary care physicians' view on their practice.

A Brief Report

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BACKGROUND: General practitioners are the first contact providers of health care systems and contribute to improve access and continuity of care for patients and their families.

Strong primary care is associated with better health outcomes and lower costs. Moreover, much of the current healthcare spending in Argentina is unnecessary, and there is also inequity. We believe there are patients receiving too much unnecessary and harmful medical care and other people receiving insufficient care, representing the case of the inverse care law.

All these suggest that better management could be possible in order to achieve better health results. The view of primary care physicians is important because they are in a unique position to monitor most of the care patients receive and also are responsible for initiating the cascade of health care utilization. In this context, we believe it is important to recognize the way physicians deliver health care and factors that influence their decisions in our setting.

OBJETIVES: To learn about primary care physicians' practice style and factors that influence it. To translate and adapt an original survey to assess primary care physician's practice style.

METHODS:

Type of study: Cross-sectional study, descriptive.

We translated an original survey¹ used for the same purpose in the US from English to Spanish. (Sirovich BE, Woloshin S, Schwartz, LM. Too little? Too much? Primary care physicians' view on US health care: a brief report). We also adapted it to our culture and setting.

Afterwards, between November 2012 and July 2013, we conducted a national self-administered survey. The survey was administrated and completed either electronically (via e-mail or facebook) or handwritten, to a convenience sample of primary care physicians, pertaining to the three Argentinean health care sub-systems. The protocol has been approved by an Institutional Review Board.

RESULTS: Nearly twenty six percent (25,92%) of primary care physicians believe that patients in their own practice are receiving too much care.

The most important factors that influence medical decision making identified by practitioners as leading them to practice more aggressively were: malpractice concerns (42.06%), problems when communicating with other physicians about the patient (35,73%), and inadequate time to expend with patients (35,01%).

Physicians also believe that financial incentives encourage aggressive practice: 75,39% said diagnostic testing would be reduced if it did not generate revenue for medical subspecialists (and 56,31% when talking about primary care physicians).

Almost all physicians (91,63%) believe that they vary in what they would do for identical patients. Almost all physicians are interested in learning how aggressive or conservative their own practice style is (82,80%), compared with that of other physicians in their community (84,05%).

There was a trend toward conservative practice physicians develop their practice in the rest of the country, compared physicians to develop their practice in urban settings (CABA federal district), with significant

difference (OR 0.58, p < .04). It seems that physicians develop their practice in urban areas tend to be more aggressive.

CONCLUSIONS:

Many Argentinean primary care physicians believe that their own patients are receiving too much medical care. Physicians are interested in feedback on their practice style, suggesting they may be receptive to change. Almost all physicians believe that they vary in what they would do for identical patients, which would reflect the heterogeneity of the health system and health care. There are differences and variation in practice in different workplaces, this could confirm our hypothesis on inequality of health care provided to our patients in Argentina.

Almost half of surveyed physicians (49.61%) believe their patients think they are not well evaluated unless they request studies. This means that today, when we talk about the overmedicalization and overdiagnosis, would need to educate our patients about the fact that "more is not always better".

KEY WORDS: Primary Health Care, Primary Care Physicians, Argentina, Public Health, Cost Control

----- INTRODUCTION -----

Health spending in Argentina and in the rest of the world suffers large increase year after year. When analyzing the per capita expenditure it is verified a general world trend towards a steady increase. This is due to several factors including technological advancement. However, much of health care spending could be due to an excess amount of unnecessary care that patients receive².

General practitioners in most countries constitute the basis of health care systems and provide access and continuity of care for patients and their families.

Research shows that strong primary care is associated with good results and lower health care costs^{3,4,5}. Other factors such as aging population, the prevalence of chronic diseases and the increasing ability to care outside the hospital complex have led to redesign primary care to improve outcomes and efficiency. It is believed that much of the current health spending is unnecessary and also harmful, suggesting that it would be necessary to implement a strategy towards the rational use of resources. Many worry that controlling medical costs inevitably would lead to the rationing of effective services.

Strong primary care is associated with better health outcomes and lower costs. Moreover, much of the current healthcare spending in Argentina is unnecessary⁶, and there is also inequity. The characteristics of heterogeneity and fragmentation of the health system in Argentina characterize a condition of varied levels of coverage and access to health services⁷. We believe there are patients receiving too much unnecessary and harmful medical care and other people receiving insufficient care, representing the case of the inverse care law.

What do practicing physicians believe? The views of primary care physicians—the frontline of health care delivery—are not known. The opinion of primary care physicians is important because they are in a unique position to monitor most of the care patients receive. From the management of their own patients, are the source of most referrals to other

medical specialists and indirectly responsible for initiating the cascade of health services utilization (up studies, treatments and hospitalizations)^{8,9}.

We do not know primary care physicians' opinion in our country about their mode of practice and factors influencing it.

----- **METHODS** -----

Study Design: Cross-sectional study, descriptive.

Instrument: We translated an original survey¹ used for the same purpose in the US from English to Spanish. (Sirovich BE, Woloshin S, Schwartz, LM. Too little? Too much? Primary care physicians' view on US health care: a brief report). The instrument was translated to Spanish by two investigators whose mother tongue is Spanish in an independent way. After that, we obtained a unique version in Spanish that was backtranslated to English by a collaborative native. We also adapted it to our culture and setting. After that process, the survey was submitted for peer review and cognitive testing. And was piloted in a sample of thirty physicians.

Data sources: Between November 2012 and July 2013, we conducted a national self-administered survey. The survey was administrated and completed either electronically (via e-mail or facebook) or handwritten, to a convenience sample of primary care physicians, pertaining to the three Argentinean health care sub-systems.

We collected 417 surveys in total, but 34 have been excluded after applying pre-defined criteria. Therefore, we included a total of 383 surveys for analysis (**Figure 1**).



Figure 1

The protocol has been approved by an Institutional Review Board in September 2012. Because participation was voluntary, we assumed that participation implied consent by the participants. The survey was anonymous and results are reported as a group.

Statistical Analysis: All analyses were carried out in STATA 8.0.

---- RESULTS -----

PHYSICIAN CHARACTERISTICS

Respondents were mostly female (67.10%) and graduates from public medical schools (90.6%); 97% graduated in Argentina. Mean age of participants was 38.63 (DS 8.79).

Primary care participants were divided between family medicine the vast majority (78.38%), internal medicine (13.51%) and pediatrics (7.21%).

They reported seeing outpatients for 25 hours a week (IIC25-75=16-36). They had a median of 9 years in practice (IIC25-75=4-16).

Nearly 80% of respondents had received residency training (it is not required by law to carry out this practice in Argentina).

Most of them were practicing in a central urban setting: CABA (federal district) and province of Buenos Aires 56.14%. The remaining 41.25% pertain to different provinces in Argentina (rest of country). (**Table 1 & Figure 2**)

CHARACTERISTICS	N = 383	
Female	67.10% (257)	
Age	Mean 38.63 years (DS 8.79)	
Public medical school	90.6% (347)	
Graduated in Argentina	97.6% (373)	
Physycian training		
Yes	Residence 86.47% (294)	
90.79% (345)	Concurrence 5.88% (20)	
	Other 7.65% (26)	
No 9.21% (35)		
Type of General Practitioner		
Family medicine	78.38%	
General internist	13.51%	
Pediatrics	7.21%	
Years in practice	Median 9 years	
	(IIC 25-75: 4-16)	
Outpatients hours attention	-	
	(IIC 25-75: 16-36)	
Workplace		
CABA	36.73% (137)	
Buenos Aires	20.91% (78)	
Rest of country	42.36% (158)	
Health care subsector		
Public	51.75% (192)	
Private	39.08% (145)	
Social security	9.17% (34)	

Table 1. Characteristics of respondents

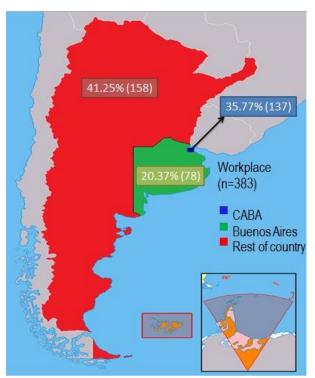


Figure 2. Illustrative map of geographic distribution of respondents

Argentinean health care service is divided into three sub-sectors: public, private and social security. Inside each subsector, health care is also very fragmented. Surveyed physicians develop their practice: 51.76% in the public sub-sector, 39.08% in the private and 9.17% in the social security subsector.

BELIEFS ABOUT THE INTENSITY OF MEDICAL PRACTICE

About 26% of primary care physicians believed that patients within their own practice were receiving too much medical care; 27.75% believed that their patients were receiving too little care, 46.34% thought that the amount was just right. (**Figure 3**)

Just 26.26% said they themselves were practicing more aggressively than they would ideally like to be, almost identical to the proportion (24.14%) who believed that other primary care physicians in their community were practicing too aggressively.

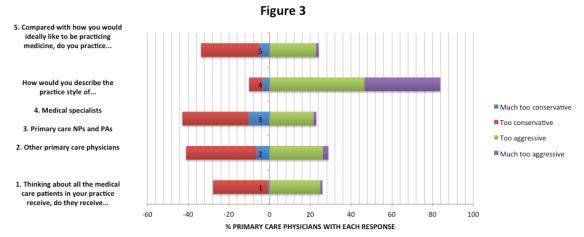


Figure 3. The neutral category (eg, "just about right") is omitted from this figure.

Respondents were much more likely to report that mid-level primary care providers (nurse practitioners and physician assistants) (42.85%) and primary care physicians (41.01%) were more conservative; while medical subspecialists (83.77%) tend to practice more aggressive. (**Table 2**).

	Mean	Std Error	95% CI
Primary care physicians	0.28	0.02	0.24 - 0.33
Mid level primary care providers	0.22	0.02	0.18 - 0.27
Subspecialists	0.83	0.01	0.79 - 0.87

Table 2. Aggressive practice in different levels of attention

Compared to other areas of the country the 64.74% of physicians believed that patients were receiving too much medical care.

Almost half of surveyed physicians (49.61%) believe their patients think they are not well evaluated unless they request studies. Many of them (40.16%) estimated that at least 1 in 10 patients they see on a typical day could be handled in ways other than a physician visit (eg, by telephone, e-mail, or nonphysician staff such as nurses).

FACTORS INFLUENCING THE INTENSITY OF TESTING AND REFERRAL

Physicians identified three factors causing them to practice more aggressively: malpractice concerns (42.06%), problems when communicating with other physicians about the patient (35.73%), and inadequate time to expend with patients (35.01%) (**Figure 4**).

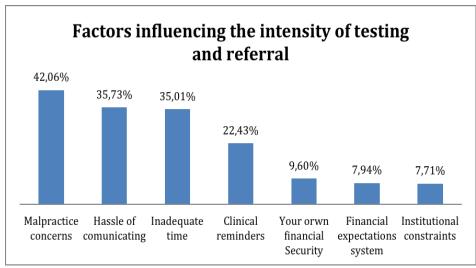


Figure 4. Factors that influence physicians to do more

The way that malpractice concerns lead to more aggressive practice was clear: 44.24% of physicians thought they could easily be sued for failing to order a test that was indicated, but only 17.8% thought they could be sued for ordering a test that was not indicated.

While few physicians believed that financial considerations influenced their own practice style (leads to do more in 9.6%), most thought they affected other physicians. Specifically, 56.31% believed that other physicians would order more diagnostic tests if such tests did generate extra revenue; almost 75.39% said that medical subespecialists would cut back on testing in the absence of a financial incentive.

VARIATION IN PRACTICE

Respondents overwhelmingly believed (91.63%) that primary care physicians vary in their testing and treatment decisions for similar patients.

Most of them (82.80%) were interested in learning about their own practice style compared with other physicians.

Physicians working in the private sector think of themselves as being more aggressive (31.72%) in their medical practice than other primary care physicians, while only 21.69% in the public sector and 21.21% in social security subsector do.

Compared with the ideal way in which physicians would like to practice medicine, 32.42% of physicians working in the private sector think they tend to be more aggressive. Whereas only 18.09% in the public sector and 24.24% in the social security sector think that.

There was no significant difference in the analysis of each sub-sector in terms of aggressive practice, although there is a slightly pronounced trend towards a more aggressive behavior in the private sector (table 3 & 4).

Healthcare subsector	OR	P value	95% CI
Public	1	-	-
Social security	0.97	0.95	0.39 - 2.39
Private	1.67	0.03	1.02 - 2.74

Table 3. Aggressive practice in different healthcare subsectors

Health care subsector	OR	P value	95% CI
Public	1	-	-
Social security	1.4 4	0.4	0.60 - 3.48
Private	2.17	0.003	1.3 - 3.61

Table 4. Aggressive practice compared to ideally in different healthcare subsectors

Whereas the public health sector and social security have a similar behavior in terms of aggressive medical practice, analysis was performed comparing private versus non-private subsector (associating two categories: public and social security) with significant results (p $\langle 0.030 \rangle$ (**Table 5**).

Subsector	Aggressive practice		TOTAL
	NO	YES	
No Private (public and social security)	174	48	222
	78.38	21.62	100.00
	63.74	51.06	60.49
Private	99	46	145
	68.28	31.72	100.00
	36.26	48.94	39.51
TOTAL	273	94	367
	74.39	25.61	100.00
	100.00	100.00	100.00

Table 5. Aggressive practice private subsector vs non private subsector (public and social security).

Physicians working in CABA and Buenos Aires reported a more aggressive style of practicing medicine (29.72%), compared with 16.77% that reported the same style in the rest of the country.

Compared with the ideal way in which physicians would like to practice medicine, 29.72% of physicians working in CABA and GBA think they tend to be more aggressive. Whereas only 16.77% in rest of country think that.

Results also show that physicians developing their practice in rest of country tend to be more conservative, with significant difference (table 6 & 7).

Workplace	OR	P value	95% CI
CABA	1	-	-
Buenos Aires	0.75	0.38	0.40 - 1.42
Rest of country	0.58	0.04	0.34 - 0.99

Table 6. Aggressive practice in different workplaces

Workplace	OR	P value	95% CI
CABA	1	-	-
Buenos Aires	0.57	0.09	0.30 - 1.10
Rest of country	0.39	0.001	0.22 - 0.69

Table 7. Aggressive practice compared to ideally in different workplaces

When comparing practice style among fields, there is also variability. Family physicians believe they are more aggressive in 24.42% of the cases, pediatricians in 25%, while internal medicine physicians believe that in 37.78%.

We could also find differences in terms of "aggressive practice" in the analysis of different types of generalists. General internists appear to practice more aggressively than family physicians or pediatricians, who behave similarly (**Table 8**).

GP	OR	P value	95% CI
Family physicians	1	-	-
Pediatricians	1.03	0.94	0.39 - 2.71
General internists	1.87	0.06	0.96 - 3.65

Table 8. Aggressive practice in different primary care physicians

----- COMMENTS -----

Most of primary care physicians (91.63%) affirm that their behavior vary with patients with similar characteristics. They overwhelmingly believe that their testing and treatment decisions are not the same for similar patients. This clearly reflects the heterogeneity of health care's practice.

Regarding health care spending, it suffers large increase year after year in Argentina and the rest of the countries. When analyzing the expenditure per capita, a worldwide trend towards a steady increase is verified. Asking opinions of primary care physicians concerning the type of care they provide and the variables affecting it, is a very valuable resource for health policy and rationalization strategies. Medical consultations to primary care providers are the source of most referrals to other medical specialists and they are indirectly responsible for initiating the cascade of health services utilization (up studies, treatments and hospitalizations).

About 26% of primary care physicians believe that patients within their own practice are receiving too much medical care.

Just 26.26% answered their behavior is more aggressive than they would like to, and almost an identical proportion (24.14%) believe that other primary care physicians in their community are practicing too aggressively.

Respondents also reported that mid-level health care providers, including nurse practitioners and physician assistants (42.85%), as well as primary care physicians (41.01%) behave in a more conservative way; while medical subspecialists (83.77%) tend to practice more aggressively (statistically significant results).

Physicians identify three factors that make them behave more aggressively: malpractice concerns (42.06%), problems when communicating with other physicians about the patient (35.73%), and insufficient time to spend with patients (35.01%).

While general practitioners say that financial incentives have no influence in their practice, they do believe they influence others. According to the results, it is shown that financial incentives change the behavior when making medical decisions.

Physicians also believe that financial incentives encourage aggressive practice: 75,39% say diagnostic testing would be reduced if it did not generate revenue for medical subspecialists (and 56,31% when talking about primary care physicians).

Results also show that physicians developing their practice in urban areas tend to be more aggressive. A statistically significant difference was found between physicians of rest of the country, considered to practice more conservative than physicians working in CABA (OR 0.58, p < .04).

As a conclusion, it can be clearly inferred that physicians are interested in receiving feedback on their own practice style, suggesting they may be eager to change. Most of them (82.80%) are interested in learning about their behavior and compare it with the one of others physicians.

Almost half of the surveyed physicians (49.61%) believe their patients think they are not well evaluated despite of the fact their physicians request studies. This indicates that today, we should talk about overmedicalization and overdiagnosis, and educate our patients about the fact that "more is not always better".

----- DISCUSSION -----

The surveyed population was very young population, being 38 years participants' average age. Participants' median time in practicing medicine was 9 years. Both facts can be explained by the way the sample was collected (facebook or e-mail, handwritten surveys at conferences and courses).

We recognize as a limitation of this study the way the sample was collected. As we lack of a nationwide database of physicians, we could not do random sampling. Instead, we conducted the survey using a purposing sample.

Probably because of the limited sample size, there was no significant difference found between physicians working in the private health sector and public or social security subsector, although there is a slightly pronounced trend towards a more aggressive behavior in the private sector. The same happened with the trend towards a more aggressive practice of general internists, compared with pediatricians or family physicians.

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