

## View of the Public Health System users regarding Proctology

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**ABSTRACT:** Proctology is a specialty of extreme importance due to the high prevalence of anorectal diseases in the population. Despite this fact and its history from the origin of humanity, it is marked by insufficient knowledge, prejudice and teasing. **Objective:** Evaluate the degree of knowledge about Proctology, obtaining data, which may guide and emphasize the need for campaigns to disseminate the specialty. **Method:** An ecological study was conducted on the people's degree of knowledge about the specialty of Proctology. We interviewed 200 patients from August 2008 to January 2009, who came to the outpatient clinic of the Unified Health System, in five different medical specialties in the city of Itajaí (SC). **Results:** Among the interviewees, 86% did not know what proctology was. Of the 28 (14%) respondents that said they knew it, only 21 (10.5%) answered correctly when they were asked what the specialty was about. **Conclusion:** Despite the high prevalence of anorectal diseases, a great percentage of the population is unaware of the specialty. This fact could be due to the social prejudice and the lack of information provided by health professionals.

**Keywords:** proctology; Unified Health System; patient care.

**RESUMO:** A Proctologia trata-se de uma especialidade de extrema importância devido à alta prevalência de doenças anorretais na população. Apesar de tal fato e de sua história, desde as origens da humanidade, é marcada por déficit de conhecimento, preconceitos e chacotas. **Objetivo:** Avaliar o grau de conhecimento sobre a Proctologia, obtendo dados, os quais poderão guiar e enfatizar a necessidade de campanhas dirigidas para a divulgação da especialidade. **Método:** Foi realizado um estudo ecológico sobre o grau de conhecimento das pessoas sobre a especialidade de Proctologia. Foram entrevistados 200 pacientes, no período de agosto de 2008 a janeiro de 2009, que frequentavam o ambulatório do Sistema Único de Saúde da Unidade de Saúde da Família e Comunitária e Posto de Atendimento Médico, em cinco especialidades médicas distintas, no município de Itajaí (SC). **Resultados:** Dentre os entrevistados, 86% referiram não saber o que é proctologia. Dos 28 (14%) que responderam saber, apenas 21 (10,5%) responderam corretamente quando questionados sobre o que se tratava a especialidade. **Conclusão:** Apesar da grande prevalência das doenças anorretais, grande parcela da população desconhece a especialidade. Esse fato pode-se dever ao preconceito da sociedade, bem como a própria falta de informação dos profissionais de saúde.

**Palavras-chave:** proctologia; SUS; assistência ao paciente.

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## INTRODUCTION

Proctology, from the Greek *proktos* that means anus<sup>1</sup>, is a medical specialty that deals with disorders of the anus and rectum. As a medical specialty, its history is 5000 years old, with a number of surgical techniques and several surgical instruments developed by ancient people. The history of proctology is marked by several important names and events that expanded and highlighted the specialty, changing it into a defined and recognized specialty<sup>2,3</sup>.

The disorders that affect the lower segment of the digestive tract were first described in 2750 B.C. through Egyptian hieroglyphs. The medical specialties in those days included the Pharaoh's *Guardian of the Anus*. Medical sciences were founded on deities and their God was Thoth, who, according to the legend, became an ibis, so he could use his beak to introduce water in the anus of a physician that bathed in the Nile, showing him the benefits of enemas. In 1300 B.C., the Chester Beatty papyri, written by physician Iri, from the 19<sup>th</sup> dynasty of Egypt, is the first publication exclusively dedicated to anorectal diseases<sup>4,5</sup>.

The father of Medicine, Greek physician Hippocrates, born in 460 B.C., included the treatment of hemorrhoids and anal fistula in his compendiums. In around 165 A.D., Galen described in his book *The epidemics* several proctologic topics, highlighting: the description of anal muscles, the treatment of hemorrhoids and the use of a specific scalpel in fistula surgeries<sup>6</sup>.

In the medieval period, in 1349 A.D., John Arderne published his *Practica Magistri Johannes de Arderne* (in Latin), all about proctologic topics<sup>3,7</sup>.

The period of Modern Medicine started in the 19<sup>th</sup> century, bringing developments to the proctologic surgery<sup>4</sup>. In Brazil, Proctology started in 1914, with physician Raul Pitanga Santos, from the state of Pernambuco. Pitanga Santos (1892–1984) was the first Brazilian physician to treat anorectal diseases in the country. In 1930, he created the Faculdade de Ciências Médicas with other renowned professors, when the first cathedra of Proctology was instituted in Brazil. He created and manufactured several instruments for the anal surgery practice, e.g., anoscopes, rectoscopes, specula, sclerosis needles, among others that are still used by specialists<sup>8</sup>.

In Brazil, proctologists were not well considered by their colleagues from other specialties, who said they were scientifically limited and frequently made jokes and teased them. The most frequent surgical interventions until the 1940s were abscess drainage, anal skin tag removal and fistula with curettage or cauterization to remove so-called hemorrhoid “warts”<sup>9</sup>.

Today, it is one of the most important specialties<sup>10</sup>. However, this importance is not recognized by most people, due to poor knowledge of this branch, which is observed not only in non-experts, but also in health professionals. The similarity of procto (from proctology) to prostate many times make physicians “confused” and they mistakenly prescribe a proctologic, rather than a urological, evaluation. This “confusion” incurs costs to the health system and the patient, as it takes the patient more time to receive the proper treatment from the specialist.

Considering the importance of this specialty and the poor awareness of the population, as well as the lack of scientific studies analyzing the population's view of proctology, the purpose of this study was to verify the patients' knowledge of this specialty.

## MATERIALS AND METHODS

The purpose of this study was to evaluate the variables related to the population's knowledge of the specialty of Coloproctology.

The study was conducted in the city of Itajaí (SC), between August 2008 and March 2009, interviewing 200 people, 100 of them from the outpatient clinic of the Family and Community Health Service (USFC) at the Universidade do Vale do Itajaí (UNIVALI) and 100 from outpatient clinics of health care facilities, all of them were patients of the Unified Health System.

The study was conducted at the Services of General Surgery, Family and Community Medicine, Urology, Gynecology, Gastroenterology of the USFC at the UNIVALI and at outpatient clinics of the same specialties in public health care facilities in Itajaí. In each specialty, 20 individuals were interviewed, totaling 100 individuals from each outpatient clinic.

The interviewees were randomly selected to answer the study questionnaire. In the first instance, they were informed about this investigation, and then

they were invited to answer the questionnaire, voluntarily and anonymously.

The inclusion criteria were: patients who came to the outpatient clinic of the specialties described above and who fully answered the questionnaire.

The exclusion criteria were: incorrectly or incompletely answered questionnaires, patients who already knew the study, people accompanying any interviewee or who were present during the interview with another patient.

Knowledge of the specialty was considered present when the patient mentioned the specialty concept or any related pathology.

The ethical principles of the National Health Council established in Resolution 196 of 1996 were observed while conducting this study.

Mean and standard deviation values were calculated for the description of quantitative variables. The categorical variables were described through absolute (N) and relative (%) frequencies, using the confidence interval of 95% (95%CI). The association between the specialty knowledge and the studied variables was analyzed using Pearson's  $\chi^2$  test or Fisher's exact test.

The differences were considered significant when the value was  $p \leq 0.05^{11}$ . The analyses were performed using Microsoft Excel and EpiInfo 6.04.

## RESULTS

Among the 200 individuals interviewed, 172 (86%) said that they did not know what proctology was. Among the 28 interviewees who answered that they knew what it was, only 21 (10.5% of total) answered correctly when they were asked what the specialty was about ( $p \leq 0.001$ ). Among the 7 individuals who gave an incorrect answer to the ques-

tion, 6 (85.71%) said it was related to prostate and 1 (14.29%) said it was related to the urinary system. Table 1 shows the profile of the interviewees.

The 28 patients who said that they knew the specialty were asked about the source of information (Table 2). The options were: media, physician, health professional, literature or others. Among them, 10 (35.7%) people said they had other sources of information, such as a relative and spouse, and 9 actually knew the specialty concept. Media was the second most mentioned source of information; among the 8 (28.57%) interviewees who mentioned it, only 2 answered it correctly. All interviewees who mentioned physician, health professional and literature as their source of information, i.e. 5, 4 and 1 individuals, respectively ( $p \leq 0.001$ ), answered it correctly.

**Table 1.** Profile of users interviewed at the outpatient clinics from the Unified Health System in the city of Itajaí (SC).

	n	%	95%CI
Age			
<25	31	15	10.8–21.3
25–40	51	25.5	19.6–32.1
40–60	76	38	31.2–45.1
>60	42	21	15.6–27.3
Gender			
Female	126	63	55.9–69.7
Male	74	37	30.3–44.1
Educational level			
None	8	4	1.7–7.7
Primary education	112	56	48.8–63.0
High school	59	29	23.3–36.3
Higher education	21	10.5	6.6–15.6
Physician in the family			
Yes	23	11.5	7.4–16.8
No	177	88.5	83.2–92.6

**Table 2.** Relation between the source of information of users interviewed at the outpatient clinics from the Unified Health System in the city of Itajaí (SC) and the knowledge of Proctology.

Source of information	Yes		No		Total sample		p-value (Pearson)
	n	%	n	%	n	%	
Media	2	25	6	75	8	28.57	0.004
Physician	5	100	0	0.00	5	17.86	
Health professional	4	100	0	0.00	4	14.29	
Literature	1	100	0	0.00	1	3.57	
Others	9	90	1	10	10	35.71	
Total	21	75	7	25			

Among the interviewees, 18 individuals had already seen a proctologist; but only 14 (77.78%;  $p \leq 0.001$ ) of them actually knew what Proctology was (Table 3).

The interviewees who used the Service of General Surgery and Gynecology were those with better information about Proctology (Table 4), corresponding to 6 (15%) people of each service ( $p=0.492$ ).

In the study, 35 people had previously consulted more than 5 specialties; 6 (17.14%) of them knew what Proctology was. Among the 68 patients who had previously consulted from 2 to 5 specialties, only 7 (10.29%) were aware of the specialty. The patients who had previously consulted only 1 specialty totaled 85 individuals and only 7 (8.24%) of them answered it correctly. Therefore, people who have already consulted more than 5 specialties have two-fold chances of knowing what Proctology is, if compared to those who have consulted up to 2 specialties ( $p=0.353$ ).

The relation between the specialty knowledge and the age group was not statistically significant ( $p=0.322$ ).

Among the 200 interviewees, 126 (63%) were females, and 12 (9.52%) of them answered it correctly. Among the 74 (27%) men, 9 (12.16%) knew the specialty ( $p=0.635$ ).

As demonstrated in Table 5, the individuals without school education, 8 (4%) of the interviewees, presented higher chance of knowing what Proctology was, when compared to the 112 (56%) primary education patients. The high school patients represented 59 (29.5%) of the interviewees and the higher education patients represented 21 (10.5%) of the interviewees. Among them, those who actually knew it were: 11 (18.64%) and 4 (19.05%) individuals, respectively ( $p=0.017$ ).

Among the interviewees, 23 (11.5%) had a physician in the family and 5 (21.74%) of them knew

**Table 3.** Relation between previous appointment with a Proctologist and the knowledge of Proctology among users interviewed at the outpatient clinics from the Unified Health System in the city of Itajaí (SC).

Previous appointment with a proctologist	Yes		No		Total sample		p-value (Pearson)
	n	%	n	%	n	%	
Yes	14	77.78	4	22.22	18	9.00	
No	7	3.85	175	96.15	182	91.00	
Total	21	10.50	179	89.50	200	100	<0.001

**Table 4.** Relation between previously consulted specialties and the knowledge of Proctology among users interviewed at the outpatient clinics from the Unified Health System in the city of e Itajaí (SC).

Variables Specialty	Yes		No		Total sample		p-value (Pearson)
	n	%	n	%	n	%	
General Surgery	6	15	34	85	40	20	
Gynecology	6	15	34	85	40	20	
Urology	4	10	36	90	40	20	
Gastroenterology	3	7.5	37	92.5	40	20	
Family Medicine	2	5	38	95	40	20	
Total	21	10.5	179	89.5	200	100	0.513

**Table 5.** Relation between the knowledge of users interviewed at the outpatient clinics of the Unified Health System in the city of Itajaí (SC) regarding Proctology.

Educational level	Yes		No		Total sample		p-value (Pearson)
	n	%	n	%	n	%	
No school education	1	12.50	7	87.50	8	4.00	
Primary education	5	4.46	107	95.54	112	56.00	
High school	11	18.64	48	81.36	59	29.50	
Higher education	4	19.05	17	80.95	22	10.50	
Total	21	10.50	179	89.50	200	100	0.008

what Proctology was, and these interviewees presented a tendency to have two-fold chances of knowing the concept of Proctology ( $p=0.062$ ).

## DISCUSSION

Proctology was recognized as a specialty much later it should be, despite its 5000-year-old history. In addition, the specialty was marked by prejudice and teasing. This way, the poor knowledge of the specialty, as observed in this study, can be one of the consequences of the history of this specialty<sup>3</sup>.

In this study, 14% of the interviewees said that they knew what Proctology was and only 10.5% answered correctly when they were asked what Proctology was about. This result confirms the population's lack of knowledge about the specialty that treats very prevalent diseases. And it can be a result of the fact that the health professionals do not have knowledge of the specialty and, therefore, are not prepared to refer patients to the Coloproctologist. Another probable reason is that the most prevalent diseases, such as hemorrhoids and fissures, are clinically treated possibly by a general practitioner, and not necessarily by a specialist.

The results of this study can also be attributed to the lack of information among the interviewees. This lack of information can be a result of a communication problem between health professionals and between health professionals and patients.

Acquiring information means having it permanently available. Regardless of the acquisition process, the informed individual becomes more complex, with his/her elements better differentiated and organized, promoting a negentropic evolution<sup>12</sup>.

The information cannot be disconnect from its meaning and it is valid only if producing effects on the receptor. But, to make it happen, the receptor has to be prepared to effectively answer the transmitted information<sup>13</sup>.

Obviously, the information should not be transmitted in an exhaustive manner, but otherwise be adjusted to each patient's needs, to reduce the anxiety about and fear of the unknown. A better informed and less anxious seeks for health services more easily and in a correct manner, and are more collaborative during the treatment<sup>13</sup>.

Most patients who answered incorrectly when they were asked what the specialty was about said that their source of information was the media.

The way scientific and non-expert media help construct symbolic contents in health is a cause of concern, as this situation involuntarily collaborates to disinformation, prejudice and, depending on the circumstances, unnecessary alarmist reactions<sup>14</sup>.

Colorectal cancer is the second most prevalent cancer worldwide, after breast cancer, with estimated 2.4 million alive people with diagnosis in the last 5 years. The tendency shows around 943,000 new cases a year<sup>15</sup>.

As the incidence and prevalence of anorectal diseases are high, requiring the colon cancer screening in all population, a great percentage of this population should, at a certain moment, have at least one appointment with a Coloproctologist. However, having such appointment does not ensure knowledge of this specialty if a good physician-patient relation is not real, based on communication, information and empathy. In our study, the patients who reported previous appointment with a Proctologist (22.22%) said that they did not know what Proctology was.

The physical examination at a coloproctologic appointment should include the anus and digital rectal exam, and it is an obligation of the physician to inform the patient how it will be performed and its importance, and the patient should provide the permission. According to article 24 of the Code of Medical Ethics<sup>16</sup>, the physician should ensure the patient's right to freely decide about him/herself and his/her well-being and use his/her authority to limit it, as well as the patient's right to freely decide about it (art. 31) after receiving detailed information (art. 34). Then, the Coloproctologist, during the appointment, should ensure the information to the patient, answering any doubt about the specialty and its related diseases.

In this study, the investigators also observed that the patients from the Gynecology and General Surgery outpatient clinics presented better knowledge of the specialty. It can be explained by the fact that evaluating the anus and bowel habit is part of the clinical evaluation performed in these specialties.

Although primary education patients had less information about the specialty than patients without school education, most interviewees who actually knew it were high school and higher education patients. This information shows the relevance of school education and access to information of the specialty.

Proctology has an old history as a specialty, marked by prejudice and poor knowledge of its real importance. Despite some decades of recognition and statistics confirming the high prevalence of morbidity and mortality of anorectal disease, the poor knowledge of this specialty still remains, due to either prejudice, taboo or low school education level.

Regarding taboo, the main prohibition is against touching related not only to the immediate physical contact, but it has as broad extension as the metaphorical use of the expression 'get in contact with'. Anything that directs the patient's thought to the forbidden object, placing it in an intellectual contact, is as forbidden as the direct physical contact<sup>17</sup>.

No other area of the contemporaneous life is so full of prohibitions and taboos as the area that deals with hygiene training and typical behaviors of the anal stage<sup>17</sup>.

## CONCLUSION

Based on the analysis of data presented in this study, we can conclude that a great percentage of the patients from the Unified Health Service outpatient clinics in the city of Itajaí (SC) does not know what Proctology is. This result probably reflects the Brazilian population profile.

The study indicated that the media was the main source of information of the patients who answered

incorrectly about the specialty concept. When analyzing such data, the media, many times prejudicial and alarmist, creates symbolic contents in health, promotes taboos and acts as a means of disinformation, instead of having an educational character.

During the study, the investigators observed that the patients had some difficulty in addressing a theme related to the anus. The taboo around this theme ends up in prohibitions and restrictions that contribute to lack of communication freedom and, consequently, education to the population.

All patients that said that they had physicians or health professionals as their source of information answered correctly when they were asked about the specialty. This fact shows the importance of communication between health professionals and population, as between the health professionals, who should have a broad view of the service provided to the patient, highlighting the relevance of their role of instructors. This role is only effective when the receptor acquires the knowledge and is prepared to benefit from it.

Then, we believe that, to start an education process to the population, taboos should be demystified, first among the health professionals, so they can be able to educate the population through a dialog free of prejudice, with access to questioning and exchange of information between health professionals and the population.

## REFERENCES

1. Rey L. Dicionário de termos técnicos de medicina e saúde. 2a ed. Rio de Janeiro: Guanabara Koogan; 1999.
2. Marti MC. The past and future of proctology. *Schweiz Rundsch Med Prax* 1990;79:889-91.
3. Entralgo L. História universal de la medicina. Madrid: Sanvat; 1976.
4. Quilici FA. Colo-proctologia: estórias da História. *Rev Bras Coloproct* 1994;14(1):43-8.
5. D'Ávila S. Proctologia como especialidade. *Rev Bras Coloproct* 1995;15(2):78-80.
6. Inglis B. A history of medicine. New York: World; 1965.
7. Lyons A, Petrucelli R. Historia de la Medicina. Barcelona: Doyma; 1984.
8. Cruz GMG. Nomes que fazem a história da coloproctologia. *Rev Bras Coloproct* 2009;29(3):98-105.
9. Silveira GM. História da coloproctologia na Bahia. *Rev Bras Coloproct* 2004;24(1):75-7.
10. Rivera CA. História da coloproctologia. *Rev Bras Coloproct* 1989;9(1):28-31.
11. Kirkwood BR. Essentials of medical statistics. London: Blackwell; 1988.
12. Abreu JL. O espaço e o tempo nos signos. *Revista Interações* 1997;5:43-64.
13. Rodrigues VMCP. Transmissão e obtenção de informação em saúde. *Ciênc Saúde Coletiva* 2010;15(5):2639-46.
14. Castiel LD. Insegurança, ética e comunicação em saúde pública. *Rev Saúde Pública* 2003;37(2):161-7.
15. Inca. Estimativa 2010: Incidência de câncer no Brasil. Rio de Janeiro: Instituto Nacional do Câncer [cited 2010 Out]. Available from: <http://www.inca.gov.br>
16. Brasil. Conselho Federal de Medicina. Código de ética médica. Brasília (DF); 2010.
17. Freud S. Edição standard brasileira das obras psicológicas completas de Sigmund Freud. Rio de Janeiro: Imago; 1913.

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