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Analysis of Expectations in Routine Appointments: A Cross-Sectional Study in Portugal

Análise das Expectativas em Consultas de Rotina: Estudo Transversal em Portugal

Maria Manuel BICA TAVARES[1], Inês ROSENDO CARVALHO E SILVA[2,3], Luiz Miguel SANTIAGO✉[2,4]
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ABSTRACT

Introduction: Preventive medicine is a subject of study due to the increasing evidence that it can cause more harm than good, and the population's interest in routine appointments is widely recognized. The main objective of this study was to understand users' expectations regarding routine appointments in primary health care and compare them to doctors' perceptions regarding these expectations.

Methods: We carried out a cross-sectional observational study in 2023 through the application of two questionnaires: one for adult patients and another for family physicians. The invitations to answer the questionnaire via Google Forms were shared on specific social networks. For elderly patients, the questionnaire was conducted in-person by one of the researchers. It consisted of 25 questions about preventive attitudes during appointments, analytical tests and their frequency, and recommendations based on sex and age, differing in the language used.

Results: A sample of 225 patients and 100 general and family medicine doctors was obtained. The patients selected an average of 7.8 ± 9.7 preventive attitudes during the consultation, and the doctors judged that they would have selected 4.6 ± 2.9 (p = 0.001). Cardiac and pulmonary auscultation (82.6%), physical exercise quantification (74.7%), and smoking habits assessment (72.9%) were the most selected measures, the most selected tests being blood glucose measurement (81.8%), lipid profile (80.4%), and urine analysis (75.1%). For 68.2% of patients, routine check-ups should be annual, with 88.0% of doctors believing that patients would want this frequency. The socioeconomic level of the population did not significantly influence the results.

Conclusion: It is important that general practitioners / family doctors are aware of patients' expectations. In this sample, patients revealed a greater appreciation for a higher number of preventive medical measures during consultations and more periodic analytical testing than thought by the doctors. Doctors also judged that users would show greater interest in the frequent implementation of screening programs.

Keywords: Appointments and Schedules; Evidence-Based Medicine; General Practice; Preventive Medicine; Primary Health Care

RESUMO

Introdução: A medicina preventiva é tema de estudo dada a crescente evidência de poder causar mais dano que benefício, sendo amplamente reconhecido o interesse da população em ter consultas de rotina. O objetivo principal deste estudo foi conhecer as expectativas dos utentes relativamente às consultas de rotina nos cuidados de saúde primários e compará-las às perceções dos médicos relativas a essas expectativas.

Métodos: Foi realizado um estudo observacional transversal, em 2023, aplicando dois questionários: um para utentes adultos e outro para médicos de família. Os convites para resposta ao questionário via Google Forms foram disseminados em redes sociais específicas. Para utentes idosos, realizou-se aplicação presencial por um dos investigadores. O questionário era composto por 25 questões sobre atitudes preventivas na consulta, exames analíticos e sua periodicidade e recomendações de acordo com o sexo e a idade, diferindo na linguagem utilizada.

Resultados: Obteve-se uma amostra de 225 utentes e 100 médicos de medicina geral e familiar. Os utentes selecionaram em média 7,8 ± 9,7 atitudes preventivas na consulta e os médicos julgaram que eles teriam selecionado 4,6 ± 2,9 (p = 0.001). A auscultação cardíaca e pulmonar (82,6%), a quantificação de exercício físico (74,7%) e a avaliação de hábitos tabágicos (72,9%) foram as medidas mais selecionadas pelos utentes, sendo os exames mais selecionados a medição da glicemia (81,8%), o perfil lipídico (80,4%) e a análise da urina (75,1%). Para 68,2% dos utentes, a consulta de rotina deveria ser anual, tendo 88,0% dos médicos julgado que os utentes pretenderiam essa periodicidade. O nível socioeconómico populacional não influenciou significativamente os resultados.

Conclusão: É importante que os médicos de medicina geral e familiar tenham conhecimento das expectativas dos utentes. Nesta amostra, os utentes demonstraram valorizar um maior número de atitudes médicas preventivas na consulta e mais testagem periódica analítica do que o antecipado pelos médicos. Os médicos acreditaram ainda que os utentes demonstrariam maior interesse na realização frequente de programas de rastreio.

Palavras-chave: Agendamento de Consultas; Cuidados de Saúde Primários; Medicina Baseada na Evidência; Medicina Geral e Familiar; Medicina Preventiva

1. Faculdade de Medicina. Universidade de Coimbra. Coimbra. Portugal.
2. Clínica Universitária de Medicina Geral e Familiar. Faculdade de Medicina. Universidade de Coimbra.
3. Unidade de Saúde Familiar Coimbra Centro. Unidade Local de Saúde de Coimbra. Coimbra. Portugal.
4. Centro de Estudos e Investigação em Saúde (CEISUC). Universidade de Coimbra. Coimbra. Portugal.

✉ **Autor correspondente:** Luiz Miguel Santiago. luizmiguel.santiago@gmail.com

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KEY MESSAGES

- The patients' expectations regarding routine appointments and the acknowledged expectations by general practitioners were analysed.
- Better doctor-patient relationships are required, based on a lower level of acknowledgment of patients' expectations.
- The use of this knowledge by doctors and/or management organisations should ensure that preventative medicine is properly valued, preventing requests that are not based on evidence, leading to overdiagnosis, with its consequences.

INTRODUCTION

The promotion of a healthy life into old age is a key objective of healthcare systems.[1] Preventative medicine (PM) - "the study of disease prevention and healthcare promotion to reduce early morbidity and mortality" - is a crucial tool for achieving this goal.[2] Different actions are involved, at five levels: 1) primordial, 2) primary, 3) secondary, 4) tertiary and 5) quaternary.[3-6]

PM is now a subject of study, considering the growing knowledge that it can cause more harm than good.[7,8] Given that PM is aimed at both people who are considered healthy and those suffering from some illness, the term 'user' was selected to describe those who attend routine appointments (RA) with a doctor. Quaternary prevention aims to avoid medical interventions leading to overdiagnosis, overtreatment and iatrogenesis.[9] By identifying and treating something that would never have any consequences, PM can turn healthy people into sick people, forgetting that each patient has a personal interpretation of each word.[1] Disease prevention and healthcare promotion are basic components of primary healthcare and are part of the tasks of general practitioners (GP).[10]

A Portuguese study showed that users were very involved in preventive measures and the frequent use of healthcare services.[11] This led to the need to investigate the concept of RA, defined as a "medical appointment, requested by patients, with the expectation of establishing an early diagnosis, preventing illness or just for reassurance, since patients obtain information about their health status".[12]

During the consultation, and according to the risk factors, GPs can carry out physical examinations, requesting laboratory tests and/or providing medical advice on lifestyle changes.[12] There is evidence that RA with GPs do not specifically reduce morbidity/mortality and could increase overdiagnosis, overtreatment and iatrogenesis instead.[1,7,9,13]

In preventive healthcare services, periodic medical appointments are suggested - as the most appropriate approach - according to age, gender, pathologies and individual problems, aimed at an early identification of diseases and managing health preventively.[14] Annual routine examinations are no longer recommended by the College of Family Physicians of the Portuguese Medical Association (*Ordem dos Médicos* - OM) for asymptomatic adults, with no risk factors and no diagnosed healthcare problems.[15]

A study carried out in 2015 showed that the Portuguese population overestimates the benefits obtained from preventive screenings and treatments, assigning a high level of relevance to laboratory and diagnostic tests, and underestimating any medical advice on how to maintain a healthy lifestyle.[16]

In 2016, 15 preventive measures were presented to users and 60% of these have considered 14 of these as relevant on a regular basis.[11] Two studies involving the Portuguese population have shown that 99.2% of respondents have considered that blood and urine tests should be carried out annually, and a 7.5 average level of relevance (on a 1 - 10 scale) was assigned to chest X-rays.[11,16] There were differences between users' expectations and the recommendations based on scientific evidence at the time.[11,16,17]

The reasons why users often attend RA are that users consider that a greater number of interventions corresponds to better health outcomes (which is perceived as psychologically comforting), unaware of which tests are evidence-based and of the concept of 'risk individualisation'.[15-17] Socioeconomic factors have been shown as having an influence on population perspectives, as the importance attributed to preventive services was higher among female users aged 40 - 79, users with basic education and those who were retired or unemployed.[16,18]

In 2019, an enquiry on this issue has been made to the physicians registered with the OM, which was acknowledged by 95% of the respondents. Half of these have described being asked by users to prescribe unnecessary tests at least once a week, and 65% have described that patients have accepted medical advice without carrying out such tests.[19]

It would therefore seem necessary to develop strategies for "*primum non nocere*".[20]

Different organisations, including the United States Preventive Services Task Force (USPSTF), have developed and continue to produce strategies for better implementation of PM, drafting recommendations based on systematic reviews with meta-analysis regarding the level of

advice for each preventive measure, and there is currently a restrained recommendation regarding RA.[21]

In 2018, the OM's College of Family Medicine joined and emphasized the "Choosing Wisely Portugal" program, which was later adopted by the OM.[19,20] It is argued that the implementation of user-oriented approaches will be more successful and facilitated by conducting studies on the population's perspectives on PM.[11]

However, the perspective of Portuguese family medicine physicians on users' expectations of RA is unknown. This study was mainly aimed at the description of users' expectations regarding RA and to compare these with the doctors' perceptions of these expectations. As a secondary objective, the influence of socioeconomic status on user expectations was analysed.

METHODS

This was a cross-sectional observational study, reported according to the STROBE checklist, between October 15 and November 15, 2023, involving Portuguese adult users and family physicians (registrars and consultants).

This study was approved by the Ethics Committee of the *Administração Regional de Saúde do Centro*.

Two questionnaires were developed, one for users and one for doctors, using different language, with simple terms for users and technical terms for doctors. Users were asked to respond according to their expectations, while doctors were asked to respond about their perceptions of the users' expectations.

Both questionnaires were validated in person by 15 users and five doctors, to find out any suggestions, criticisms, doubts, comprehensibility and completion time.

Participants were asked to give their informed consent, ensuring confidentiality, secrecy and anonymity.

The hypothetical case of a patient with no symptoms who appointed for a RA with the family physician was included in the questionnaire.

The current guidelines on the US Preventive Services Task Force website were complied with.[21,22]

A total of 11 preventive approaches were suggested and users were asked to select the ones they would expect to be carried out during the consultation, including: body mass index (BMI) calculation, abdominal circumference measurement, cardiac and pulmonary auscultation, full physical examination, vaccination status, eating, drinking and smoking habits assessment, physical exercise quantification and medical inquiry regarding anxiety and depression.

Respondents were then asked about the frequency of the following tests, if selected: electrocardiogram (ECG), chest X-ray, urine analysis, lipid profile, blood glucose measurement, prostate specific antigen (PSA) test and faecal occult blood test (FOBT).

Respondents were also asked on which recommendations for preventive activities they would expect to be made according to gender and age: colon and rectal, prostate, breast and cervical cancer screening; vaccination status update; regular physical activity promotion and integration into social activities.

The expected frequency of a routine consultation (every six months, every year, every two years or every three years) was also defined.

Finally, the contexts were determined, particularly the demographic: age, then coded into age groups (ordinal variable up to 34 years old, young group, 35 - 64, adult group, and 65 years old and older, elderly group) and gender; socioeconomic status (household, educational status and monthly income), and Socioeconomic Deprivation Index (SEDI) score calculation. This was obtained with the sum of the responses to each parameter: living alone (1) or accompanied (2); with education up to 4th grade (1) or greater than or equal to 4th grade (2), regarding those aged over 64, educational status up to 6th grade (1) or greater than or equal to 6th grade (2) for those aged under 63 and up to the national minimum wage (1) or greater or equal to the minimum national wage (2), regarding the monthly income.[23,24]

Physicians were asked about gender, medical grading (registrar or consultant) and type of work unit (model B family health unit, model A family health unit or primary healthcare unit).

The questionnaire was developed in Google Forms and was disclosed through specific family physician chat networks, "*MGF XXI*" and "*Redes de Internos de MGF*", and, for the user population, through the researchers' Facebook pages, with a request for disclosure by the respondents' networks. To avoid under-representation of elderly users, the questionnaire was also administered in person at the *Coimbra Sul* and *Rainha Santa Isabel* family healthcare units in Coimbra, always using the same methodology, by one of the researchers, for logistical reasons.

Considering the number of sections in the questionnaire, a sample size of 10 respondents for each of the four chapters (n = 40) for both users and doctors has been calculated.[25]

The expectations of users and doctors were compared by the doctor/user ratio; the higher the ratio more it showed that family physicians acknowledged the expectations of users.

A descriptive statistical analysis of data was carried out: frequency (n) and percentages (%) for categorical variables and mean and standard deviation for continuous variables. Chi-square test, Student's t-test for the normal distribution of the variable using the Kolmogorov Smirnov test, and Mann-Whitney's non-parametric U-test for ordinal variables were used for inferential analysis. Pearson's correlation

was also performed to assess the relationship between the SEDI score and the total value of preventive measures, tests and recommendations selected by users.

The data were analysed using IBM® SPSS, version 26 and *p*-values < 0.05 were considered statistically significant.

RESULTS

Quality check has shown that no suggestions were made and four minutes was the time taken to fill in the form for users and three minutes for doctors.

As shown in Table 1, 225 responses were obtained from users (56.0% female and 48.4% aged 35-64). A 5.4 ± 0.8 average SEDI score was obtained for women and 5.6 ± 0.7 for men ($p = 0.056$); 100 responses were received from doctors (77.0% consultants, 76.6% female, 49.0% working in model B USF and 32.0% in UCSP).

As shown in Table 2, heart and lung auscultation (82.6%), physical activity quantification (74.7%) and smoking habits assessment (72.9%) were mostly selected by users. The measures "assessment of depressive symptoms" and "abdominal circumference assessment" were less acknowledged by doctors, while the measures "heart and lung auscultation" and "body mass index (BMI) calculation" were mostly selected by doctors as mostly expected by users; 7.8 ± 9.7 was the average number of measures selected by users, while 4.6 ± 2.9 was the average for doctors, $p < 0.001$.

As shown in Table 3, blood glucose measurement (90.7%), lipid profile (89.3%) and urine analysis (86.2%), carried out once a year, were mostly selected by users. Based on the responses obtained from doctors and users, a doctor/user ratio > 1 was obtained for urine analysis, lipid profile analysis, blood glucose measurement, PSA screening tests and FOBT every two years (those that were mostly expected by users); 6.3 ± 2.5 (users) and 5.6 ± 1.4 (doctors), $p = 0.002$ were the average total number of tests selected.

As shown in Table 4, and regarding the preventive recommendations according to gender and age, doctors had described that users would most often select breast screening (100.0%), cervical cytology (92.0%) and prostate cancer screening (97.0%) and vaccination status (62.0%). Users most frequently selected the promotion of regular physical activity (42.7%) and participation in social activities (24.4%). A lower ratio was found by doctors for these last two recommendations.

As for the suggested frequency of a RA, annual (68.2%)

Table 1 – Study sample by gender, according to age group, educational status, household and monthly income, description and differentiation

Users (n = 255)		**Gender** n (%)		**Total** n (%)	***p***
		Female (n = 126) n (%)	Male (n = 99) n (%)		
Age group*	< 34	39 (31.0)	16 (16.2)	55 (24.4)	< 0.001
	35 - 64	65 (51.6)	44 (44.4)	109 (48.4)	
	≥ 65	20 (15.9)	37 (37.4)	57 (25.3)	
Educational status**	Up to 9th grade	15 (11.9)	12 (12.1)	27 (12.0)	0.555
	9th grade and over	109 (86.5)	85 (85.9)	194 (86.2)	
Household**	Living alone	13 (10.3)	14 (14.1)	27 (12.0)	0.247
	Living accompanied	111 (88.1)	83 (83.8)	194 (86.2)	
Monthly income**	Up to NMW	41 (32.5)	14 (14.1)	55 (24.4)	< 0.001
	NMW and over	83 (65.9)	83 (83.8)	166 (73.8)	
SEDI score ♀ (n = 124) ♂ (n = 97)***		5.4 ± 0.8	5.6 ± 0.7	5.5 ± 0.7	0.153
Physicians (n = 100)		**n = 77**	**n = 23**		
Medical grading**	Registrar	18 (23.4)	5 (21.7)	23 (23.0)	0.546
	Consultant	59 (76.6)	18 (78.3)	77 (77.0)	
Type of health unit*	UCSP	15 (19.5)	4 (18.2)	19 (19.0)	0.848
	USF A	24 (31.2)	8 (34.5)	32 (32.0)	
	USF B	38 (49.4)	11 (47.8)	49 (49.0)	

*: U de Mann-Whitney
**: Chi-square
***: Student's t-test

Table 2 – Absolute and relative frequency of users and the perspective of family physicians regarding the selected preventive measures to be carried out by physicians throughout a RA

		Users n (%)	Physicians n (%)	Doctor/user ratio
Body mass index calculation	**Yes**	135 (60.0)	59 (59.0)	0.983
Abdominal circumference assessment	**Yes**	87 (38.7)	14 (14.0)	0.361
Heart and lung auscultation	**Yes**	186 (82.6)	85 (85.0)	1.029
Full medical examination	**Yes**	124 (55.1)	45 (45.0)	0.817
Vaccination status checking	**Yes**	122 (54.2)	24 (24.0)	0.443
Physical activity quantification	**Yes**	168 (74.7)	45 (45.0)	0.602
Nutritional habit assessment	**Yes**	147 (65.3)	40 (40.0)	0.612
Drinking habit quantification	**Yes**	146 (64.9)	51 (51.0)	0.786
Smoking habit assessment	**Yes**	164 (72.9)	53 (53.0)	0.727
Anxiety symptoms assessment	**Yes**	145 (64.4)	29 (29.0)	0.450
Depressive symptoms assessment	**Yes**	129 (57.3)	18 (18.0)	0.279

was the most frequent response from users, followed by biennial (22.2%) and every six months (7.4%). Doctors thought that users would respond in favour of annual frequency with a ratio of 1.290, as shown in Table 5.

The SEDI score showed a very weak non-significant negative correlation for all the measures selected, according to socioeconomic status (r = - 0.056, p = 0.399); a very weak non-significant correlation for all the tests selected (r = 0.088, p = 0.488) and a very weak non-significant negative correlation for all the preventive recommendations selected (r = - 0.013, p = 0.919) have been found.

DISCUSSION

According to literature, this study is, to the best of our knowledge, the first held in Portugal assessing users' expectations of RA and the level of awareness of these expectations by family physicians.[12]

In the sample of users (obtained by convenience), mainly female (56.0%), a 5.5 out of 6.0 SEDI score has been obtained, non-significantly different between genders.

The results seem to show a need for reflection by family physicians and, at the same time, the presence of suboptimal health literacy, which will be the responsibility of Family Medicine healthcare teams, the National Health System (*Sistema Nacional de Saúde*) and also the media.[25-27]

Heart and lung auscultation was mostly selected by users, perhaps since the stethoscope is the symbol associated with medical practice.[21,28] However, there is no evidence

Table 3 – Absolute and relative frequency of users and the perspective of family physicians regarding selected tests that should be requested in consultation, its frequency by users and doctor/user ratio

Diagnostic testing n (%)		Users n (%)	Physicians n (%)	Doctor/user ratio
Electrocardiogram 172 (76.4)	**Annually**	107 (62.2)	58 (73.4)	1.180
	Biennially	65 (37.8)	21 (26.6)	0.624
Chest X-ray 101 (44.9)	**Annually**	19 (26.8)	25 (46.3)	2.733
	Biennially	105 (73.2)	29 (53.7)	1.727
Urinalysis 194 (86.2)	**Annually**	169 (87.1)	82 (96.5)	1.107
	Biennially	25 (12.9)	3 (3.5)	0.271
Lipidic profile 201 (89.3)	**Annually**	181 (90.1)	94 (94.0)	1.043
	Biennially	20 (9.9)	6 (6.0)	0.606
Glucose 204 (90.7)	**Annually**	184 (90.2)	95 (95.0)	1.053
	Biennially	20 (9.8)	5 (5.0)	0.510
Prostate specific antigen (PSA) 137 (60.9)	**Annually**	93 (67.9)	79 (92.9)	1.368
	Biennially	44 (32.1)	6 (7.1)	0.221
Faecal occult blood test (FOBT) 145 (64.4)	**Annually**	65 (44.8)	18 (34.0)	0.759
	Biennially	80 (55.1)	35 (66.0)	1.197

Table 4 – Absolute and relative frequency of users and the perspective of family physicians regarding selected preventive recommendations, by gender, age and doctor/user ratio

		Users n (%)	Physicians n (%)	Doctor/user ratio
Breast screening	**Acknowledged**	139 (61.8)	100 (100.0)	1.618
Uterine cytology	**Acknowledged**	138 (61.3)	92 (92.0)	1.500
Colo-rectal cancer screening	**Acknowledged**	115 (51.1)	62 (62.0)	1.213
Prostate cancer screening	**Acknowledged**	144 (64.0)	97 (97.0)	1.515
Vaccination status	**Acknowledged**	120 (53.3)	62 (62.0)	1.163
Promotion of regular physical activity	**Acknowledged**	96 (42.7)	31 (31.0)	0.726
Participation in social activities	**Acknowledged**	55 (24.4)	6 (6.0)	0.246

Table 5 – Absolute and relative frequency of users and the perspective of family physicians regarding the selected frequency of a routine appointment and doctor/user ratio

		Users (n = 223; 99.1%) n (%)	Physicians (n = 100; 100%) n (%)	Doctor/user ratio
Routine appointment frequency	**Annually**	152 (68.2)	88 (88.0)	1.290
	Biennially	45 (20.2)	10 (10.0)	0.495
	Every six months	22 (9.8)	2 (2.0)	0.204
	Triennially	4 (1.8)	0 (0.0)	0

of its use in screening or diagnostic confirmation, as a subjective and low-sensitivity technique.[29]

Patients have considered as relevant different preventive measures to be carried out in the consultation, which is in line with other studies.[11,16]

Lifestyle habits assessment was mostly described by patients, which is in line with the USPSTF's recommendations.[21] The patients' perspectives regarding these types of measures were assessed in isolation by a Portuguese study, showing the importance of their application in consultation, despite the constraints in identifying scientific recommendations that corroborate them.[16,30]

Mental health attitudes were selected by users, probably related to the COVID-19 pandemic, which triggered the implementation of measures to prevent and mitigate psychological symptoms.[21,31]

Measures including cardiac and pulmonary auscultation were less selected by doctors, assuming that a prior knowledge from contact with the patients was taken into account.[16] The current accessibility to information based on scientific evidence, which is widely available, and an availability bias due to the fact that the options are set out in the questionnaire, could also be a reason underlying this different response environment.[21,31] The development of programs could be beneficial for health literacy.[16,21,32]

Regarding the prescription of tests, doctors anticipated a greater interest than what was shown by users. Blood glucose, lipid profile and annual urinalysis were mostly selected by users. The ECG was considered by 62.2% and the chest X-ray by 55.1% of users, with a doctor/user ratio of 1.180 and 2.733, respectively. A 2013 Portuguese study also found similar figures for routine and annual urine tests in a stratified sample of 1,000 patients.[11] However, their preventive use is not recommended by the USPSTF.[21,33,34]

The users have recognized the importance of screenings currently implemented in Portugal.

Family physicians thought that users would have more likely described screenings to be prescribed in consultations, apart from the promotion of physical activity and participation in social activities. As in previous studies, it's worth noting that 64.0% of patients have described prostate cancer screening.[11,16] This population screening, as shown in a previous study with a higher level of importance than colorectal cancer screening (7.72 *vs.* 7.40), is not in line with the USPSTF recommendations, which have been updated and are currently grade C for patients aged 55 - 69 and grade D for those aged over 70.[16,35] An approach aimed at disclosing the benefits of colorectal cancer screening, the most recent population-based screening, is still required.[36]

Physical activity promotion and involvement in social activities were much less described by physicians. Whether this is due to a lack of knowledge of the recommendations, medical technicality, or their devaluation, is a subject for further studies, and these results may be biased by doctors' perceptions of users' knowledge.[16,37]

Even though there is no official recommendation regarding the frequency of RA in Portugal and the evidence suggests that periodic medical appointments should be defined according to the patients' age, gender and specific underlying pathologies, the expectation of annual medical appointments seems to be strongly implemented in Portuguese society, as shown by other studies.[11,14,16] These results may have been biased by the need for doctors to meet performance indicators related to the number of preventative consultations.[36]

The doctor/user obtained in this study suggests that doctors underestimated the users' perceptions of the preventative activities to be carried out by physicians in RA. The reasons underlying this result should now be studied and could have been related to not believing in which measures should be carried out, not having the time or not knowing the recommendations.

Doctors considered that (i) users would ask for more tests than what was actually found, (ii) population-based preventive measures would be more valued and (iii) they would prefer annual RAs, valued less recommendations on physical activity and participation in social activities.

This discordant environment could have consequences in the outcome of RA and users' health. Therefore, investment should be made in fostering doctor-user relationships, patient-centred medicine and quaternary prevention, since the lack of these practices can have harmful consequences.[38-41]

The socioeconomic status of patients, shown by the SEDI score, did not show any significant differences in the total value of measures to be carried out in the consultation and in the tests and recommendations selected by patients. Large-scale studies could confirm these results.

The method used to administer the questionnaire could be considered a source of bias as an active Google account was required, a measure taken to prevent more than one response per user. This method of application may also reflect socioeconomic biases, since users' monthly income and academic background will have an impact on their ability to participate. Memory bias, voluntarism and social desirability may also have influenced the results. In addition, there is the possibility that sources of information could have been consulted by participants.

This method of application was due to the search for larger sample sizes, with a view to reaching population groups that are less likely to attend consultations and have little availability to fill in questionnaires in healthcare institutions.

The population expectations may be due to reasons such as past experiences with preventative services, an appreciation of their overall health status and the presence of risk factors.

Despite the limitations of this study, these results contribute to a better understanding of the current expectations of the population regarding RA, as well as the perspective of the binomial user and doctor regarding what should be included in a RA.[38-41]

The generalist model of primary care should be abandoned, with the adaptation of the activity to users and their circumstances.[38,39,41]

CONCLUSION

In this sample, a high number of preventive medical approaches were valued by both users and doctors. The identification of healthy lifestyle habits, cancer screening and mental health screening were more frequently acknowledged by users than by doctors.

In this sample, there was the need to improve the perception of the timing of a RA. There was also the need for doctors to provide information on the frequency of testing and to discuss the problem of prostate cancer screening.

The patient's socioeconomic status did not interfere with the number of approaches to be included in the consultation, the tests to be requested and the preventive recommendations selected by users.

Family physicians were less aware of the population's expectations regarding preventive approaches in RA, tests to be carried out and their frequency, promotion of regular physical activity and participation in social activities.

AUTHOR CONTRIBUTION

MBC: Concept; Methodology; Validity; Research; Resources; Production of results; Original manuscript; Revision and edition; Visualization.

IRCS: Concept; Methodology; Validity; Resources; Original manuscript – writing, revision and edition; Visualization; Project management.

LMS: Concept; Methodology; Software; Validity; Formal analysis; Research; Resources; Data management; Production of results; Original manuscript - writing, revision and edition; Visualization; Supervision; Project management.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the 2013 update of the Helsinki Declaration of the World Medical Association.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working centre regarding patients' data publication.

COMPETING INTERESTS

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MBC declare not having any conflicts of interest related to the manuscript.

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