



Use and attitudes towards telephone and e-mail communication between doctors and patients: a survey of general practitioners working in Matosinhos Local Health Unit

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ABSTRACT

Introduction: Remote contact between general practitioners and patients is a key component of accessibility to primary care.

Objective: This study aims to determine the frequency of (and attitudes towards) the use of telephone and e-mail between general practitioners working in Matosinhos and their patients.

Methods: A census of general practitioners working in Matosinhos was invited to participate in a cross-sectional survey-based study. An anonymous, paper, self-administered questionnaire was applied, and descriptive data analysis was used.

Results: Eighty-one completed questionnaires were obtained (90.0% response rate). All general practitioners reported communicating with patients by telephone but one-third never/rarely exchanged e-mails with them. Most considered that the use of the telephone and e-mail is an overload for which they do not have enough time but acknowledged that both tools facilitate the management of patient lists and appointments. Participants stated that they would use both tools more often if interactions could be recorded in real-time and that they would use the telephone more often if it was accounted for in their performance evaluation. General practitioners with larger lists more often reported telephone calls with their patients. General practitioners working in 'Model B' practices more often used e-mail with their patients. General practitioners that use e-mail less often considered that it represents an overload and has a negative risk/benefit ratio, they less often agree that it facilitates the management of patient lists and appointments and wouldn't increase the frequency of use even if it was accounted for in their performance evaluation.

Conclusion: All general practitioners have telephone calls with patients but express several negative attitudes towards this type of remote contact. General practitioners who are frequent e-mail users more often express positive attitudes, compared to the ones who are not regular e-mail adopters. Organizational policies should consider general practitioners' attitudes.

Keywords: General practice; Health services accessibility; Electronic mail; Telephone.

INTRODUCTION

Accessibility can be defined as the easiness with which a person can obtain needed healthcare, from the practitioner of choice and within a timeframe appropriate to the urgency of the problem.¹

Accessibility to the general practitioner (GP) is a defining characteristic of family medicine/general prac-

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tice, but in Portugal, it has been poorly studied and measured focusing on face-to-face consultations, which is reductive. A study evaluating the strengths of primary health care in European countries identified barriers to telephone and e-mail access to healthcare.²

Taking into account the epidemiological transition (aging population and multimorbidity), the Organization for Economic Co-operation and Development (OECD) recommends the diversification of communication channels with GPs.³ For OECD, telemedicine (including telephone and e-mail contacts) enables the partial transfer of healthcare tasks to patients and their caregivers, empowering them and keeping them active, and in their own homes.

Accessing the GP by telephone is a current practice in Portugal and is recommended to potentiate accessibility.⁴⁻⁵ Telephone consultations are contemplated in the recommendations of the Legal Medical Council,⁶ in the accreditation process of primary care centers,⁷ and in the evaluation of patient satisfaction.⁸ The EUROPEP questionnaire evaluates patient satisfaction with telephone access to GPs and to family practices, as part of the dimension of organizational quality of the questionnaire.⁸ In the last EUROPEP survey, in 2015, family practices in Matosinhos achieved an overall satisfaction score of 79.5%, but telephone access reached only 48.1%.⁹ In a similar way, at the national level, an overall satisfaction score of 77.8% was achieved, while satisfaction with telephone access reached 60.7%.¹⁰

In a multicentre study in Portugal, most (85%) GPs reported having telephone calls with their patients, spending an average of 6.3 minutes per day doing so.¹¹ Time spent on patient calls accounted for 4% of the more than two hours that GPs spent daily on tasks other than face-to-face consultations.¹¹

Troubles with telephone accessibility are inherent in synchronous communication because it is difficult to synchronize patient calls and the availability of busy GPs.¹² Other contributing factors include telephone calls not being accounted for in performance evaluations, and the absence of allocated time slots. Another obstacle is the impossibility to register the patient contact in real time⁶ because the software used in Portugal for electronic health records requires the intervention of non-medical staff prior to the entry of any data. Other causes are obsolete telephone switchboards and

the shortage of staff to operate telephones in many family practices.

E-mail access to GPs has been recommended by OECD and by the Institute of Medicine,¹³ it is a current practice in Canada,¹⁴ mandatory in Denmark since 2009,¹⁵ and strongly recommended in England.¹⁶ E-mail access is very variable across countries, practices, and GPs.¹⁷

E-mail access to GPs is feasible in Portugal, where 74.1% of households have internet access¹⁸ and reports on its use between GPs and their patients showed satisfaction of GPs and good patient adherence, without increased work overload.¹⁹⁻²¹ A multicentre study in Portugal found that 19% of GPs used e-mail with their patients, spending an average of 48 seconds per day on this task.¹¹

In other countries, reported results are also positive.^{16,22-24} Studies confirm that e-mail can act as a vehicle for emotional support and to strengthen therapeutic relationships.^{22,25} Several studies point out the advantages of written communication for some patients to address sensitive issues.¹⁷ One study mentioned that writing allows patients to organize their problems, which is often impaired by the spontaneity of the face-to-face consultation.¹⁷

Obstacles to the use of e-mail between physicians and patients have been identified, including: unaccounted or unpaid work; the possibility of overuse and overload of work; eventual depersonalization of the doctor-patient relationship; issues of confidentiality and security.²⁶⁻²⁸

E-mail access to the GP is not evaluated by any validated instrument, nor tracked by any performance indicator in Portugal. We did not identify any Portuguese study exploring the perceptions and attitudes of GPs and/or patients concerning the use of doctor-patient e-mail.

Matosinhos Local Health Unit provides health care services to approximately 175,000 inhabitants and it includes 14 family practices of one of three organizational types. 'Model B' units are on a mixed salaried, capitation and pay for performance scheme; 'Model A' units are on a salaried scheme only but are applying to 'Model B'; and 'UCSP', units on a salaried scheme and not applying for Models A or B. In 2017, there were 101 GPs working in the 14 family practices in Matosinhos, all provided with work mobile phones and work e-mail



addresses. In these family practices, most telephone switchboards are obsolete and only a few centers have a nominated telephone operator.

The aim of this study is to determine how GPs working in Matosinhos family practices use telephone and e-mail to communicate with their patients and their attitudes towards this use.

METHODS

Study design: Descriptive cross-sectional study.

Selection of study subjects: Census to GPs working in Matosinhos family practices ($n=101$). The principals of the 14 family practices were approached with the invitation to participate, and the principals themselves advertised the study among the GPs in each unit, delivering them the questionnaire forms and securing a closed ballot box for the anonymous return of filled questionnaires. Later, on a predefined date, the researchers collected the closed boxes.

Measurements: Paper, self-administered, structured anonymous questionnaire, applied between January 9 and February 21, 2017. The questionnaire (Annex 1), non-validated, was developed by the researchers based on similar studies and included 23 Likert scale multiple choice questions and four multiple choice questions for demographic and professional characterization purposes. A pilot study was carried out and no need for corrections was detected.

Statistical analysis: Proportions and 95% confidence intervals (95% CI) were determined.

To ensure anonymity, no informed consent was requested from participants. No personal data were collected from participants or patients.

RESULTS

Ninety questionnaires were delivered in 13 units, including 6 Model B, five Model A, and two UCSP. The principal of one family practice (UCSP type), with two GPs, did not respond to the researcher's contact and so no questionnaires were delivered there. Nine GPs, from 6 of the 13 participating units, were on leave at the time of the study.

Eighty-one completed questionnaires were received, accounting for a 90.0% response rate and 80.2% of the target population. Most participants (79.0%) were female and the prevailing age group was 31-40 years

(43.2%). Most GPs (50.6%) worked in a Model B unit and 54.3% had patient lists sized between 1751 and 1900 patients.

The distribution by age, gender, and type of family practice of participating GPs overlapped the overall distribution of the target population. Compared to the population of GPs in Portugal, the study sample had a lower representation of males, was younger, and more often worked in Model B units (Table 1).

Use of telephone and e-mail

All GPs (100%) said they answered calls from their patients, most of them (51.9%) «during working hours and according to availability» and 42.0% «at a specific time slot». Most participants (74.1%) stated that they receive calls from patients «every day» or «almost every day». All GPs reported returning calls to their patients who phoned but could not reach them, and near half of the GPs (46.9%) reported doing so «every day» or «almost every day» (Table 2).

Among the respondents, 46.9% stated they never give their personal mobile number to patients and 45.7% do it seldom or only to some patients, while 3.7% give their mobile phone number to every patient.

Most (75.3%) GPs reported that, in a typical week, they would have telephone calls with patients daily, and 19.8% estimated the number of calls to be six or more per day.

Never giving their e-mail address to patients on their own list was the option of 12.3% of participants, while 35.8% did it «to every patient, even if they don't request it». Half (53.1%) of the GPs reported receiving e-mails from patients daily and 43.2% reported replying to e-mails «every day» or «almost every day». A minority (4.9%) of participants stated they never receive e-mails from patients and 6.2% never reply to patients' e-mails (Table 2).

Of participating GPs, 34.6% reported having telephone calls with patients and replying to patients' e-mails every day or almost every day. Of these, 23 (82.1%) worked in Model B units and 20 (71.4%) have patient lists sized between 1751 and 1900 patients.

Attitudes towards the use of telephone and e-mail

Most GPs (76.5%) stated they feel comfortable with the use of e-mail in general.



TABLE 1. Demographic and professional characteristics of the participating general practitioners ($n=81$) and comparison with the population of Matosinhos and of Portugal

	Study		Matosinhos	Portugal
	<i>n</i>	%	%	%
Female sex	64	79.0	79.2 ^a	60.3 ^c
Age (years)				
≤ 30	3	3.7	3.0 ^a	18.7 ^d
31-40	35	43.2	43.6 ^a	
41-50	17	21.0	18.8 ^a	67.4 ^d
≥ 51	26	32.1	34.7 ^a	
Unit type				
UCSP	12	14.8	16.8	48.9 ^e
Model A	28	34.6	31.7	26.2 ^e
Model B	41	50.6	51.5	24.9 ^e
List (no. of patients)				
< 1500	2	2.5	7.9 ^b	
1500-1750	35	43.2	45.6 ^b	
1751-1900	44	54.3	45.6 ^b	
> 1900	0	0.0	1.0 ^b	

Notes: UCSP = Family practices on salaried scheme that have not applied for other schemes; Model A = Family practices applying to 'Model B', but not approved yet; Model B = Family practices on a mixed salaried, capitation and pay for performance scheme.

^a Source: Matosinhos Local Health Unit, Human Resources Service, on 31/12/2016.

^b Source: 'Power BI'. Available from: <https://app.powerbi.com/> [cited 2017 Jun 15].

^c Source: National Statistical Institute, data from 2015. Available from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=257779974&PUBLICACOESmodo=2 [cited 2017 Jun 15].

^d Source: Central Administration of Health Systems, data from 2014. Available from: [http://www.acss.min-saude.pt/publicacoes/Recursos_Humanos/Inventario_Pessoal_Setor_Saude/Invent%C3%A1rio%20de%20Pessoal%20do%20Setor%20da%20Sa%C3%BAde%20\(2014\).pdf](http://www.acss.min-saude.pt/publicacoes/Recursos_Humanos/Inventario_Pessoal_Setor_Saude/Invent%C3%A1rio%20de%20Pessoal%20do%20Setor%20da%20Sa%C3%BAde%20(2014).pdf) [cited 2017 Jun 15]; different age ranges available for Portugal: < 40 and ≥ 40.

^e Source: Monitorização da satisfação dos utilizadores das USF e de uma amostra de UCSP.¹⁰ Available from: http://www.acss.min-saude.pt/wp-content/uploads/2016/11/Estudo_CSP.pdf [cited 2017 Jun 15].

Most GPs agreed that telephone (64.2%) and e-mail (74.1%) contacts with patients increase their workload.

Participants consider that they do not have enough time to «answer and/or return patients' calls» (54.3%) nor to «read and/or reply to patients' e-mails» (66.7%) (Table 3).

Regarding the perception of telephone overuse by patients, GPs were equally distributed among agreement, neutral, and disagreement, but they predominantly disagreed that e-mail was overused (40.7%). Most GPs consider that telephone contacts (66.7%) and the use of e-mail (53.8%) between GPs and patients favour the management of the patient list and appointments. As for the possibility of an unfavorable risk/benefit ratio, 51.9% of GPs disagree in the case of telephone contacts and 44.4% disagree in the case of e-mail use (Table 3).

Most GPs stated that if they could record their notes in the patient's health record in real-time, they would make more use of telephone and e-mail contacts with patients (65.8% and 54.3%, respectively). Most participants also reported that if these tasks were accounted for in their performance evaluation, they would use both telephone (57.0%) and e-mail (48.1%) more often (Table 3).

Relationship between use and work context

Among the 41 GPs who work in Model B units, 68.3% (IC95%: [53.0-80.4]) reply to patient e-mails «every day» or «almost every day». This proportion is significantly higher than that amongst the 28 GPs who work in Model A units, who reached 17.9% (IC95%: [7.9-35.6]) and the 12 GPs who work in UCSP units who reached 16.7% (IC95%: [4.7-44.8]).

Of the 44 GPs with lists with more than 1750 patients, 88.6% (IC95%: [76.0-95.0]) reported using phone calls with patients on a daily basis. This proportion is significantly lower amongst the 37 GPs with patient lists comprising less than 1750 users: 59.5% (IC95%: [43.5-73.7%]).

Relationship between use and attitudes

Comparing GPs who use the telephone with their patients on a daily *versus* non-daily basis, more frequent users of the telephone with patients were those who revealed more negative attitudes, but the differences have no statistical significance (Table 4).

TABLE 2. Frequency of telephone calls and e-mails between general practitioners and their patients

	How often do you		
	receive calls	return calls	reply to e-mails
	from patients on your list?		
	n (%)		
Never	0	0	5 (6.2)
Seldom	7 (8.6)	14 (17.2)	20 (24.7)
Almost every week	14 (17.3)	29 (35.8)	21 (25.9)
Almost every day	35 (43.2)	19 (23.5)	17 (21.0)
Every day	25 (30.9)	19 (23.5)	18 (22.2)
Total	81 (100.0)	81 (100.0)	81 (100.0)

Regarding the use of e-mail with patients, GPs who reported seldom or no use differed from the ones who reported daily use, more often agreeing that e-mail is an overload, less often agreeing that it facilitates the management of the patient list and appointments, less often disagreeing that the risk/benefit ratio is unfavorable, and less often agreeing that they would use it more even if it was accounted for in their performance evaluation (Table 5).

DISCUSSION

To our knowledge, this is the first study in Portugal focusing on the telephone and e-mail access to GPs. The census of all GPs in a Local

TABLE 3. General practitioners' attitudes regarding the use of telephone and e-mail with their patients

	(strongly) agree n (%)	Neither agree nor disagree n (%)	(strongly) disagree n (%)	no answer n
Work overload				
telephone	52 (64.2)	14 (17.3)	15 (18.5)	0
e-mail	60 (74.1)	7 (8.6)	14 (17.3)	0
Not enough time				
telephone	44 (54.3)	18 (22.2)	19 (23.5)	0
e-mail	54 (66.7)	13 (16.0)	14 (17.3)	0
Patients overuse				
telephone	26 (32.1)	28 (34.6)	27 (33.3)	0
e-mail	23 (28.4)	25 (30.9)	33 (40.7)	0
Facilitates management patient list and consultation				
telephone	54 (66.7)	18 (22.2)	9 (11.1)	0
e-mail	43 (53.8)	23 (28.8)	14 (17.5)	1
Clinical risk outweighs benefit				
telephone	13 (16.0)	26 (32.1)	42 (51.9)	0
e-mail	20 (24.7)	25 (30.9)	36 (44.4)	0
Would use more often if could register in real time				
telephone	52 (65.8)	15 (19.0)	12 (15.2)	2
e-mail	44 (54.3)	17 (21.0)	20 (24.7)	0
Would use more often if accounted for in performance				
telephone	45 (57.0)	14 (17.7)	20 (25.3)	2
e-mail	39 (48.1)	22 (27.2)	20 (24.7)	0



TABLE 4. Attitudes of general practitioners towards telephone use with their patients, according to frequency of use

	daily use <i>n</i> =61	non-daily use <i>n</i> =20
	% (95% CI)	
Work overload		
agrees	68.9 (56.4;79.1)	50.0 (29.9;70.1)
disagrees	16.4 (9.2;27.6)	25.0 (11.2;46.9)
Not enough time		
agrees	55.7 (43.3;67.5)	50.0 (29.9;70.1)
disagrees	19.7 (11.6;31.3)	35.0 (18.1;56.7)
Patients overuse		
agrees	36.1 (25.2;48.6)	20.0 (8.1;41.6)
disagrees	31.1 (20.9;43.6)	40.0 (21.9;61.3)
Facilitates management patient list and appointments		
agrees	65.6 (53.0;76.3)	70.0 (48.1;85.5)
disagrees	11.5 (5.7;21.8)	10.0 (2.8;30.1)
Clinical risk outweighs benefit		
agrees	14.8 (8.0;25.7)	20.0 (8.1;41.6)
disagrees	50.8 (38.6;62.9)	55.0 (34.2;74.2)
Would use more often if could register in real time*		
agrees	65.0 (52.4;75.8)	65.0 (43.3;81.9)
disagrees	15.0 (8.1;26.1)	15.0 (5.2;36.0)
Would use more often if accounted for in performance*		
agrees	60.0 (47.4;71.4)	45.0 (25.8;65.8)
disagrees	21.7 (13.1;33.6)	35.0 (18.1;56.7)

* 1 missing

Health Unit and the high response rate are strengths of this study, but we cannot generalize the results to GPs working in other locations in Portugal. The study has limitations. First, a non-validated questionnaire was used. Nonetheless, it was built upon a literature search, a pilot study was done, and most questions got a balanced distribution of answers among the available options. Although answering all the questions of the questionnaire was not mandatory, only six missing answers were identified (<0.3%). A significant proportion of answers «not agree nor disagree» were identified in questions assessing GPs' attitudes like concerns about

overuse and risk/benefit ratio. This may highlight a suboptimal formulation of these questions. Second, in survey-based studies, information bias must be considered. Besides recall bias, under-reporting may arise in questions addressing practices that, even under anonymity, may contribute to an undesirable collective picture.

The higher use of telephone between GPs and patients, when compared to e-mail, was also found in a Portuguese study in which 85% of the GPs reported using the telephone and only 19% reported using e-mail to communicate with patients.¹¹ This is in



TABLE 5. General practitioners' attitudes regarding the use of e-mail with their patients, according to frequency of use

	(almost) every day n=35	(almost) every week n=21	never/seldom n=25
	% (IC 95%)		
Work overload			
agrees	57.1 (40.9;72.0)	81.0 (60.0;92.3)	92.0 (75.0;97.8)
disagrees	28.6 (16.3;45.1)	14.3 (5.0;34.6)	4.0 (0.7;19.5)
Not enough time			
agrees	60.0 (43.6;74.4)	71.4 (50.0;86.2)	72.0 (52.4;85.7)
disagrees	28.6 (16.3;45.1)	9.5 (2.7;28.9)	8.0 (2.2;25.0)
Patients overuse			
agrees	40.0 (25.6;56.4)	28.6 (13.8;50.0)	12.0 (4.2;30.0)
disagrees	40.0 (25.6;56.4)	38.1 (20.8;59.1)	44.0 (26.7;62.9)
Facilitates management patient list and consultation*			
agrees	85.3 (69.9;93.6)	47.6 (28.3;67.6)	16.0 (6.4;34.7)
disagrees	5.9 (1.6;19.1)	19.0 (7.7;40.0)	32.0 (17.2;51.6)
Clinical risk outweighs benefit			
agrees	11.4 (4.5;26.0)	38.1 (20.8;59.1)	32.0 (17.2;51.6)
disagrees	65.7 (49.2;79.2)	38.1 (20.8;59.1)	20.0 (8.9;39.1)
Would use more often if could register in real time*			
agrees	68.6 (52.0;81.4)	57.1 (36.5;75.5)	40.0 (23.4;59.3)
disagrees	17.1 (8.1;32.7)	14.3 (5.0;34.6)	36.0 (20.2;55.5)
Would use more often if accounted for in performance*			
agrees	60.0 (43.6;74.4)	57.1 (36.5;75.5)	24.0 (11.5;43.4)
disagrees	25.7 (14.2;42.1)	23.8 (10.6;45.1)	24.0 (11.5;43.4)

Note: * 1 missing

keeping with the findings that GPs in Portugal seem to use the internet less than their European counterparts.²⁹ A study in Israel found that GPs preferred to give patients their telephone number rather than their e-mail address.³⁰ In Switzerland, a similar proportion of GPs used the telephone (74%) and e-mail (72%).³¹

Previous research on GPs' attitudes towards the use of telephone with patients has found the same concerns found in this study: unfavorable risk/benefit ratio, work overload, non-inclusion in performance evaluation, and overuse by patients.^{29,32-33} As for the advan-

tages in the management of the patient list seen by most GPs, they were also seen in previous research.³¹ Of note, however, is the fact that different studies have found opposite effects of telephone contacts on the overall number of consultations.³⁴ As for e-mail, previous research has also found similar concerns to those found in the current study: unaccounted and/or unpaid work, overuse, overload, and clinical risk.^{17,27-28,35} The benefit of the use of e-mail with patients on the management of the patient list and appointments seen by participating GPs had also been described before,²⁶ but a



Cochrane review found studies pointing out an associated increase in the number of consultations.¹⁷

Participating GPs reporting higher use of e-mail with patients showed more positive attitudes. The same association was found in a study with physicians with very frequent use of e-mail, who reported e-mail as an enabler for better care and improved relationships with patients.²⁴ This may mean that e-mail has advantages that infrequent users are still unaware of.

Although not statistically significant, GPs who reported more frequent use of the telephone with their patients were those who revealed more negative attitudes. Given that, overall, there are more favorable attitudes regarding telephone use compared to e-mail, the more negative attitudes towards the telephone reported by the more frequent users may reveal some saturation of the GPs' ability to manage telephone calls, but this hypothesis needs to be confirmed in studies designed for this purpose.

In the future, the questionnaire applied could be reviewed, eliminating redundant questions about frequency of use, standardizing the options for better comparisons between telephone and e-mail, and it could be applied to a national sample.

The motivation potential of GPs that more often use e-mail with their patients and exhibit more positive attitudes could be explored on interventions to encourage and guide less experienced GPs with less positive attitudes towards using e-mail with patients.

Finally, in view of the potential advantages to GPs and patients, it is essential to ensure that the use of telephone and e-mail does not overburden GPs who are already working to the limits of their capacity. For this, these tasks must be part of performance evaluation and be considered in the planning of appointments. Moreover, family practices must secure appropriate human and physical resources for remote access and include the possibility of real-time data entry in patients' electronic health records.

CONCLUSION

The use of telephone between GPs and their patients is generalized amongst GPs working in Matosinhos Local Health Unit, but the same is not observed regarding e-mail use. The attitudes most often expressed by GPs were overload, lack of time, better management of the

patient list, and the perception that these types of contacts would be used more often if the real-time entry of clinical notes into the patient's health record was possible and if they were accounted for in performance evaluation. GPs who most often use e-mail are those who have more positive attitudes towards this type of contact. GPs with larger lists use the telephone with their patients more often, while those working in Model B units use the e-mail significantly more.

More research is needed to support with evidence the use and development of telephone and e-mail modalities of remote access to GPs. The experience of more experienced users should also be explored to further development on the ground. Organizational policies should consider remote access.

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RESUMO

UTILIZAÇÃO E ATITUDES FACE AOS CONTACTOS TELEFÓNICOS E POR *E-MAIL* ENTRE MÉDICOS E PACIENTES: QUESTIONÁRIO AOS MÉDICOS DE FAMÍLIA DA UNIDADE LOCAL DE SAÚDE DE MATOSINHOS

Introdução: Os contactos não presenciais entre médicos de família e pacientes são componente chave da acessibilidade aos cuidados.

Objetivos: Determinar a frequência de utilização do telefone e *e-mail* entre os médicos de família de Matosinhos e os seus pacientes, bem como as atitudes perante este tipo de contactos.

Métodos: Estudo transversal sobre um censo aos médicos de família de Matosinhos, por aplicação de questionário anónimo, de autopreenchimento, em papel. Tratamento de dados com estatística descritiva.

Resultados: Obtiveram-se 81 questionários preenchidos (taxa de resposta de 90,0%). Todos os médicos de família referem usar o telefone com pacientes, mas 1/3 nunca/raramente usa o *e-mail*. A maioria considera que o uso do telefone e *e-mail* com pacientes é uma sobrecarga, que não tem tempo para esses contactos, mas que facilita a gestão da lista/consulta. A maioria considera também que usaria mais o telefone e o *e-mail* se pudessem fazer registos em tempo real e que usaria mais o telefone se fosse contabilizado no desempenho. Médicos de família com listas maiores trocam mais telefonemas com pacientes. Médicos de família em USF-B usam mais *e-mail* com pacientes. Os médicos de família que menos usam o *e-mail* são os que mais consideram que é uma sobrecarga e que o risco do seu uso é superior ao benefício, sendo também os que mais discordam que o *e-mail* facilita a gestão da lista/consulta e os que mais afirmam que não usariam mais o *e-mail* se tal fosse contabilizado no desempenho.

Conclusão: Todos os médicos de família usam telefone com pacientes, mas expressam várias atitudes negativas. Os médicos de família que mais usam *e-mail* têm atitudes mais positivas perante essa prática que aqueles que o usam raramente ou não usam. As políticas organizativas devem considerar as atitudes dos médicos de família.

Palavras-chave: Medicina geral e familiar; Acesso aos cuidados de saúde; Correio eletrónico; Telefone.

ANNEX 1

Questionnaire

Use and attitudes towards telephone and e-mail communication between doctors and patients: a survey of general practitioners working in Matosinhos Local Health Unit

1. Do you answer telephone calls from patients on your list?

Never / at a specific time slot / during working hours and according to availability / at any time during working hours

2. How often do you usually receive calls from patients on your list?

Never / seldom / almost every week / almost every day / every day

3. When patients on your list call you but cannot reach you, do you return the phone calls?

Never / seldom / almost every week / almost every day / every day

4. Do you give your personal mobile number to the patients on your list?

To none / seldom / to some of them / to those who request it / to every patient, even if they don't request it

5. What is the estimated average number of calls that you have with patients on your list, in a typical week?

0 / < 1/day / 1 to 2/day / 3 to 5/day / >5/day



6. Do you give your e-mail contact to patients on your list?

To none / seldom / to some of them / to those who request it / to every patient, even if they don't request it

7. What is the estimated average number of e-mails that you receive from patients on your list?

0 / < 1/day / 1 to 5/day / 6 to 10/day / >10/day

8. Do you reply to e-mails from patients on your list?

Never / seldom / almost every week / almost every day / every day

9. Telephone contacts with patients are an overload.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

10. I do not have enough time to answer and/or return patients' calls.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

11. Patients overuse the telephone to contact their general practitioners.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

12. Telephone contact between general practitioners and patients facilitates the management of the patient list and appointments.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

13. Telephone contact between general practitioners and patients has a negative risk/benefit ratio.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

14. I would use telephone to contact patients more often if I could register it on the patient's electronic health record in real time.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

15. I would use the telephone to contact patients more often if this task was accounted for in my performance evaluation.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

16. In general, I do not feel comfortable using e-mail.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

17. Exchanging emails with patients is an overload.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

18. I do not have enough time to read and/or reply to patients' e-mails.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

19. Patients overuse the e-mail to contact their general practitioners.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

20. The use of e-mail between general practitioners and patients facilitates the management of the patient list and appointments.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

21. The use of e-mail between general practitioners and patients has a negative risk/benefit ratio.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

22. I would use e-mail more often if its content was automatically entered on the patient's electronic health.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

23. I would use e-mail to contact patients more often if this task was accounted for in my performance evaluation.

Strongly agree / agree / neither agree nor disagree / disagree / strongly disagree

Would you please tell us:

24. Your gender

male / female

25. Your age (years)

≤ 30 / 31-40 / 41-50 / ≥ 50

26. Your type of practice

UCSP / Model A / Model B

27. Approximate patient list dimension

< 1500 / 1500-1750 / 1751-1900 / > 1900