

Interdisciplinary health consultations for older people in Portugal: primary care and hospitals

Consulta interdisciplinar de saúde para pessoas idosas em Portugal: atenção primária e hospital

Consulta interdisciplinaria de salud para personas mayores en Portugal: atención primaria y hospitalaria

Maria Clara Duarte Monteiro^a 

Maria Manuela Ferreira Pereira da Silva Martins^{a,b} 

Soraia Dornelles Schoeller^c 

How to cite this article:

Monteiro MCD, Martins MMFPS, Schoeller SD. Interdisciplinary health consultations for older people in Portugal: primary care and hospitals. *Rev Gaúcha Enferm.* 2023;44:e20220275. doi: <https://doi.org/10.1590/1983-1447.2023.20220275.en>

ABSTRACT

Objective: To analyze the perspective of doctors, nurses, and social workers about practices for older people health in primary care and in hospitals; to create guidelines for the practice of interdisciplinary consultations.

Method: Cross-sectional study involving 291 professionals from public institutions in the northern region of Portugal. Data were collected between May/2018 and March/2019, using a questionnaire which was then subjected to descriptive and analytical statistical analysis.

Results: The usefulness of scales for elderly people showed no differences between hospital and primary care. Hospital professionals collected the following data: eyesight/hearing; medication; direct contact or contact by writing between professionals; daily team meetings; need to share information among colleagues. Primary care professionals, in turn, valued: weight/height, swallowing; the need for home visits; direct contact or via e-mail between professionals; weekly team meetings.

Conclusion: The practices of the professionals suggested an intervention model with common aspects in both groups, but with specificities for both primary and hospital care.

Descriptors: Health services for the aged. Patient care team. Primary care. Primary health care. Hospitals. Nursing.

RESUMO

Objetivo: Analisar a visão de médicos, enfermeiros e assistentes sociais, sobre práticas na assistência a idosos na atenção primária e hospital; criar orientações para a prática de consultas interdisciplinares.

Método: Estudo transversal, envolvendo 291 profissionais de instituições públicas da região norte de Portugal. Dados coletados entre maio/2018 e março/2019, mediante questionário e submetidos à análise estatística descritiva e analítica.

Resultados: A utilidade de escalas para pessoas idosas não mostrou diferenças entre hospital e atenção primária. Enquanto os profissionais do hospital coletaram os dados: visão/audição; medicação; contato direto entre profissionais ou por escrito; reuniões de equipe diárias; necessidade de partilhar informações entre colegas; os profissionais da atenção primária valorizaram: peso/altura, deglutição; necessidade de visita domiciliar; contato direto entre profissionais ou por e-mail; reuniões de equipe semanais.

Conclusão: Práticas dos profissionais apontaram para um modelo de intervenção com aspectos comuns nos dois grupos, mas com especificidades para atenção primária e hospital.

Descritores: Serviços de saúde para idosos. Equipe de assistência ao paciente. Atenção primária à saúde. Hospitais. Enfermagem.

RESUMEN

Objetivo: Analizar la visión de médicos, enfermeros y asistentes sociales, sobre las prácticas de atención al anciano en la atención primaria y hospitalaria; crear directrices para la práctica de consultas interdisciplinares.

Método: Estudio transversal, con la participación de 291 profesionales de instituciones públicas de la región norte de Portugal. Se recogió los datos entre mayo de 2018 y marzo de 2019, a través de un cuestionario, y se los sometió a un análisis estadístico descriptivo y analítico.

Resultados: La utilidad de las escalas para las personas mayores no mostró diferencias entre la atención hospitalaria y la atención primaria. Mientras que los profesionales hospitalarios recogieron los datos sobre visión/audiación; medicación; contacto directo o por escrito entre profesionales; reuniones de equipo diarias; y necesidad de compartir información entre colegas, los profesionales de atención primaria valoraron: peso/altura, deglución; necesidad de visita domiciliar; contacto directo o por correo electrónico entre profesionales; reuniones de equipo semanales.

Conclusión: Las prácticas de los profesionales sugieren un modelo de intervención con aspectos comunes en ambos grupos, pero con especificidades tanto para la atención primaria como para la hospitalaria.

Descriptor: Servicios de salud para ancianos. Grupo de atención al paciente. Atención primaria de salud. Hospitales. Enfermería.

^a Universidade do Porto (UP). Instituto de Ciências Biomédicas de Abel Salazar. Porto, Portugal.

^b Escola Superior de Enfermagem do Porto (ESEP). Porto, Portugal.

^c Universidade Federal de Santa Catarina (UFSC). Departamento de Enfermagem. Florianópolis, Santa Catarina, Brasil.

■ INTRODUCTION

Interdisciplinary health care for older persons has increasingly gained attention in the context of primary and hospital care. Professionals recognize it as an important tool to provide integral care, allowing continued attention and prioritizing health care. However, despite advancements in the field, the different disciplines in health are often divided, reducing the possible responses from services, especially when it comes to more vulnerable populations⁽¹⁾.

The population of Portugal, like in many other countries, has become older. The rates of older persons are expected to double from 2015 to 2080, from 147 to 317 elders per 100 youths⁽²⁾. However, longevity and quality of life after 65 has not been uniform, which has become a problem even to health workers and can have devastating repercussions in the short term.

Despite being faced with a progressive increase in life expectancies, the current logic of health practices does not differentiate assistance to older persons from assistance to adults⁽³⁾. Furthermore, health care is still focused on the cure of a disease and has an eminently therapeutic role, provided in a classic model which is divided according to pathology; work in teams is encouraged, with infrequent contact between health professionals. Other factors also play a role, such as the fragmentation of the health system and the absence of a specific, targeted model, all of which is made worse by the lack of human resources and a social lack of respect for old age⁽³⁾; often, the needs of older persons are not attended well.

There is a considerable discoordination and discontinuity in health care, with a biomedical approach to Primary Care (PC) and a growing number of consultations and specialties in hospitals. In Portugal, a research team carried out studies with physicians, nurses, and social workers, finding that certain data necessary to follow up the cases of older persons were not being screened by any workers; the sharing of information during care, when it happened, was due to diseases or changes in the social context⁽⁴⁾. Concerning the evaluation of older persons, it was found that it is based on a number of instruments, requiring the sharing of information⁽⁵⁾.

Currently, behavioral risk factors are responsible for a significant increase in diseases and death rates. These challenges encourage society to think of a better way to provide adequate care to this population. An appropriate response requires a team approach, including medicine, social services, and nursing, and contemplating health care as a whole⁽⁶⁾. Therefore, it is necessary to overcome the fragmentation that can be found in PC and in hospitals nowadays, as well as in

the articulation between these two levels of care. Previous research⁽¹⁾ showed that, through interdisciplinary work, health orientations were more efficient and broad, not limiting themselves to treating the disease, but including social practices to promote the health of the older population.

It has also been found, in literature, that professionals who work with the elderly have limited experience and confidence when it comes to teamwork⁽⁷⁾. These circumstances contribute to gaps in their teamwork, brought about by the fragmented perspective of workers regarding the elderly, and their inability to provide them with integral care. In addition, the education of professional health team workers regarding aging is still incipient⁽⁸⁾.

Considering these fragilities, we propose the creation and/or implementation of interdisciplinary health consultations for older persons, consultations that bring together physicians, nurses, and social workers. This could contribute to improving the quality of life and the inequalities in health, prevent diseases and disabilities, and promote the health and wellbeing of these persons, seeking excellence in care. However, we are aware that interdisciplinary consultations would require determining a set of directives to redesign the structure and process of care provided to older patients⁽⁹⁾, since these consultations do not exist in Portugal's National Health Service. In this regard, active aging is a paradigm of intervention that can invert the nefarious tendencies of the models currently being used. Our proposal, then, is based on national and international policies of attention to older persons^(10,11).

As a result, our research question is: "What are the practices developed by physicians, nurses, and social workers in the exercise of their function with elders, in primary care and in hospitals, which contribute for the construction of interdisciplinary consultations?" Our goal was to analyze the perspective of physicians, nurses, and social workers regarding practices in the care of assistance to older patients in primary care and in hospitals, and to create orientations for the practice of interdisciplinary consultations.

■ METHOD

This is a cross-sectional study. Data collection took place in primary care institutions and hospitals from the NHS in the north of Portugal, with physicians, nurses, and social assistants that work with the older population. While primary health care is focused on disease prevention and health promotion, hospitals are specialized in responding to acute diseases and/or to acute events in chronic diseases. Estimates suggest that this population includes 10.730 health workers, although it

was not possible to find data showing what percentage of these professionals have worked with elders for more than 6 months. The sample was non-probabilistic, by convenience, including a total of 291 participants. Considering the estimated population and a confidence level of 95%, we found an error margin of 5.67%, with 71 (24.4%) of physicians, 192 (66%) nurses, and 28 (9.6%) social workers.

Inclusion criteria were: being a physician/nurse/social worker who has worked with older persons for more than six months in health institutions from the Portugal's NHS. The study excluded the physicians/nurses/social workers who worked in psychiatric or cancer hospitals – fields which have different demands and require specific intervention strategies.

As a data collection instrument, the authors created the self-applying instrument “Interdisciplinary health care assessment of the older population”, to determine the perspective of health and social workers about the multi-disciplinary care to older people, distinguishing individual work and teamwork. The content of the questions emerged from categories found in a study⁽⁴⁾ about “Models used in the assistance to older persons”, based on interviews to eight physicians, eight nurses, and eight social workers who attended older patients in primary care. The questionnaire has two parts: the first has sociodemographic and professional characterization questions; the second has questions about teamwork and the intervention of

each professional group with the seniors. Data collection took place from May 2018 to March 2019.

For data analysis, we used absolute and relative frequencies to evaluate the association between the workplace and the variables. We used the chi-squared test when its assumptions were verified (less than 20% of cells with an expected value below 5). When the test assumptions could not be verified, it was not possible to reach any conclusions. We considered a significance level of 5% ($p < 0.05$) for all analyses. The software used for analysis was the *Statistical Package for the Social Sciences (SPSS)*, version 27.0.

For the operationalization of the variables, we used the following specification: sociodemographic characterization variables (sex, age, schooling, professional category, time in the service, professional experience in gerontology, continued education in gerontology, academic education in gerontology, and place of employment) and variables related to the health care practices of the professionals, when it comes to aged persons (Chart 1).

This study followed the orientations of the tool Strengthening the Reporting of Observational Studies in Epidemiology (STROBE). We followed all ethical directives in force in the country, and all participants signed an informed consent. The investigation was approved by the Health Ethics Committee at the Regional Health Administration North, I.P. (Opinion No. 154/2017), at the hospitals and community health institutions involved.

Chart 1 – Operationalization of the variables – north. Portugal, 2018 to 2019

Variables	Perception in the questionnaire	Further adjustments for analysis
<p>Usefulness of scales for clinical practice</p>	<p>Likert Scale: useless, of little use, useful, very useful, and essential for clinical practice. Items: dependency for self-care – Barthel; functional capabilities Lawton & Brody; cognition – <i>Mini Mental State Examination</i> (MMSE); risk of pressure injury – Braden; body balance – Tinetti; nutrition – <i>Mini Nutritional Assessment</i> (MNA); family functionality – Family Apgar; family structure – Genogram; social support – Ecomap; lifestyle – Lifestyle Profile (LP); depression – Geriatric Depression Scale (GDE); physical, social, and emotional overburden of the informal caregiver – Questionnaire for the Evaluation of the Overburden of the Informal Caregiver (QASCI); stress of the caregiver – Zarit; fragility in the elder person – Edmonton Frail Scale (EFE).</p>	<ul style="list-style-type: none"> – Useless (little to no usefulness) – Useful (useful, very useful, or essential for clinical practice)

Chart 1 – Cont.

Variables	Perception in the questionnaire	Further adjustments for analysis
Physical examination	Likert Scale: never, rarely, sometimes, almost always, and always. Items: weight/height; eyesight/hearing; swallowing; teguments; mobility/exercise; balance/gait; nutrition state; vital signs; condition of intestinal/bladder discharge; assessment of the conditions to execute daily-life activities (DLA).	<ul style="list-style-type: none"> – No consistency in the assistance to older patients (never, rarely, sometimes) – Consistent in the assistance to older patients (almost always, always)
Information shared between workers	Likert Scale: never, rarely, sometimes, almost always, and always. Items: Need for home visits; changes in the situation of an illness; changes in situations of dependency; requests for collaboration to for health care continuity; medication; adherence to the therapeutic regime; and social conditions.	
Strategies to share information	Yes or no response. Items: direct contact; via e-mail; via paper; via phone; SClinical and team meetings.	Does not apply.
Important activities for teamwork in health	Likert Scale: not important, of little importance, important, very important, and essential. Items: evaluation of the ill patient; consultations; home visits; information sessions in groups; health surveillance; and education.	<ul style="list-style-type: none"> – Not important for the practice of care (not important or of little importance) – Important for the practice of care (important, very important, essential)
Interventions in accordance with the PNSPI	Likert Scale: not important, of little importance, important, very important, and essential. Items: education; daily meetings; weekly meetings. biannual meetings; joint activities; and case discussions;	
Task Interdependence Scale ⁽¹²⁾	Likert Scale: completely disagree, partially disagree, do not agree nor disagree, partially agree, completely agree Items: Sharing of information, materials and instruments; help and support; teamwork; and colleague performance.	<ul style="list-style-type: none"> – Disagreement in tasks (completely or partially disagree) – Agreement in tasks (partially or completely agree)

Source: Elaborated for this study.

RESULTS

The 291 professionals were mostly female (80.4%), with a mean age of 42.3 years (SD=9.6 years). Regarding education, 209 (71.8%) were licensed; 78 (26.8%) were MSs; 3 (1%) had bachelor's degrees; and 1 (0.3%) had a PhD. The mean time in the service was 17.9 years (SD = 9.9 years); 185 (64.5%) had professional experience in gerontology and 47 (16.4%) had continued education in gerontology. Regarding university education in gerontology, 39 (48.1%) reported having

studied during their licensing studies; 20 (24.7%) during their post-graduation; 14 (17.3%) during their MS; 7 (8.6%) during their bachelor's degree; and 1 (1.2%) during their PhD. Regarding the place of employment, most participants worked in PC (n = 217; 74.6%).

Evaluation of the older person

Regarding the usefulness of scales to apply to older persons, there was no significant association between the

hospital and PC in any scale ($p > 0.05$). Despite a similar distribution among professionals, our results showed that the scales PC professionals felt were useful in their practices were: Barthel (91.8%), MMSE (90.3%), Braden (89.6%), QASCI (87.9%), EDG (86.7%), EFE (86%), MNA (83.8%), Genogram (83.4%), Lawton & Brody (80.8%), Family Apgar (78.1%), Tinetti (77.7%), Ecomap (76%), Zarit (75%), and the LP (74.7%). For those who work in hospitals the useful scales were: Braden (96.7%), Barthel (96.4%), MMSE (93.2%), QASCI (92.6%), MNA (90.9%), Family Apgar (86.5%), EFE (86.3%), EGD (84.9%), Genogram (80.8%), Lawton & Brody (79.2%), Zarit (73.3%), Tinetti and LP (71.7% each), and the Ecomap (67.3%). In addition, the ecomap was considered to be more useful by

PC workers (76%) than by hospital workers (67.3%), while the Family Apgar had higher results among hospital workers (86.5%) than among the other professionals (78.1%).

Teamwork

Regarding the most common physical examination data (Table 1), 93.9% of PC professionals reported conditions for the execution of DLAs, followed by vital signs and mobility/exercise (90.1%). In the case of hospital workers, they mentioned the condition to execute DLAs (94.4%) and the conditions of intestinal/bladder evacuation, vital signs, and balance/gait (93% each).

Table 1 – Distribution of the differences in the assistance to older persons by primary care and hospital professionals – North region. Portugal, 2018 to 2019

Variables	Dimensions	Primary care	Hospital	P-value*
		n (%)	n (%)	
Physical examination				
Weight/height	Inconsistent	45 (21.1)	33 (47.1)	<0.001
	Consistent	168 (78.9)	37 (52.9)	
Eyesight/hearing	Inconsistent	95 (45.5)	15 (21.4)	<0.001
	Consistent	114 (54.5)	55 (78.6)	
Swallowing	Inconsistent	62 (29.7)	10 (14.3)	0.017
	Consistent	147 (70.3)	60 (85.7)	
Teguments	Inconsistent	44 (21.2)	11 (15.5)	0.388
	Consistent	164 (78.8)	60 (84.5)	
Mobility/exercise	Inconsistent	21 (9.9)	5 (7.1)	0.649
	Consistent	191 (90.1)	65 (92.9)	
Balance/gait	Inconsistent	23 (10.9)	5 (7)	0.477
	Consistent	188 (89.1)	66 (93)	
Nutritional state	Inconsistent	43 (20.5)	11 (15.5)	0.455
	Consistent	167 (79.5)	60 (84.5)	

Table 1 – Cont.

Variables	Dimensions	Primary care	Hospital	P-value*
		n (%)	n (%)	
Vital signs	Inconsistent	21 (9.9)	5 (7)	0.635
	Consistent	192 (90.1)	66 (93)	
Intestine/bladder evacuation	Inconsistent	35 (16.7)	5 (7)	0.070
	Consistent	175 (83.3)	66 (93)	
Conditions to carry out DLAs	Inconsistent	13 (6.1)	4 (5.6)	1.000
	Consistent	199 (93.9)	67 (94.4)	
Information shared between workers				
Need for home visits	Inconsistent	25 (11.6)	34 (47.9)	<0.001
	Consistent	191 (88.4)	37 (52.1)	
Changes in the situation of an illness	Inconsistent	36 (16.7)	12 (16.7)	1.000
	Consistent	179 (83.3)	60 (83.3)	
Changes in dependency	Inconsistent	23 (10.6)	4 (5.6)	0.294
	Consistent	193 (89.4)	68 (94.4)	
Request for collaboration to continue assistance	Inconsistent	37 (17.1)	7 (9.7)	0.190
	Consistent	180 (82.9)	65 (90.3)	
Medications	Inconsistent	67 (31.5)	9 (12.5)	0.003
	Consistent	146 (68.5)	63 (87.5)	
Adherence to the therapeutic regime	Inconsistent	46 (21.3)	12 (16.9)	0.529
	Consistent	170 (78.7)	59 (83.1)	
Social conditions	Inconsistent	38 (17.5)	14 (19.4)	0.847
	Consistent	179 (82.5)	58 (80.6)	
Strategies to share information				
Direct contact	No	4 (1.9)	5 (7.2)	0.045
	Yes	204 (98.1)	64 (92.8)	

Table 1 – Cont.

Variables	Dimensions	Primary care	Hospital	P-value*
		n (%)	n (%)	
Via e-mail	No	42 (23.1)	35 (64.8)	<0.001
	Yes	140 (76.9)	19 (35.2)	
On writing (paper)	No	98 (63.2)	10 (16.9)	<0.001
	Yes	57 (36.8)	49 (83.1)	
Via telephone	No	33 (17.6)	14 (21.9)	0.574
	Yes	154 (82.4)	50 (78.1)	
SClinical	No	27 (14.9)	6 (8.8)	0.292
	Yes	154 (85.1)	62 (91.2)	
Team meetings	No	30 (16.6)	12 (19.4)	0.760
	Yes	151 (83.4)	50 (80.6)	

Source: Elaborated by the current study *P-value < 0.05

There was a statistically significant association between weight/height ($p < 0.001$) and swallowing ($p = 0.017$) for PC workers, a percentage superior to that of hospital workers. There was also a statistically significant association between eyesight/hearing ($p < 0.001$), but, in this regard, the percentage among PC professionals was lower than that of their hospital counterparts.

Regarding the answers about the information shared between workers (Table 1), we found that changes in the situation of dependency, the need for home visits, and the change in the situation of an illness (89.4%, 88.4%, and 83.3%, respectively) are determinants of the health care practices of PC workers. In turn, changes in dependency (94.4%), requests for collaborations to continue assistance (90.3%), and medication (87.5%) were some of the most important information for the hospital workers.

We found statistically significant differences between the need of home visits ($p < 0.001$), with PC workers showing a higher percentage than hospital professionals. We also found significant differences when it comes to medication

($p = 0.003$), with PC professionals presenting lower percentages than hospital workers.

When asked about strategies to share information (Table 1), we found that 98.1% of PC workers and 92.8% of hospital workers used direct contact, according to the SClinical (85.1% and 91.2%, respectively). There was a statistically significant association between direct contact ($p = 0.045$) and communication via e-mail ($p < 0.001$), with PC workers presenting more answers “Yes” than hospital ones. There was a statistically significant association between communication in writing (paper) $p < 0.001$, with hospital workers presenting a higher percentage than their PC counterparts.

For activities important for teamwork, even when there is no significant association ($p > 0.05$) between hospital and PC, for all questions. Regarding other activities, we found very similar percentages among professionals from both levels of care; all of them had values of 90% or more of importance.

Regarding the interdependence of tasks among the elements of the work team, the highest values of agreement for both professionals were related with the sharing

of information by their colleagues: 80.6% in hospitals; and 60.5% in PC. Regarding the disagreements, the most representative was the performance of colleagues, with 41.1% in the PC and 30.5% in the hospital; material and instruments presented values of 40.6% for PC and 27.8% for the hospital.

Disagreement values were superior for all tasks of PC workers when compared with hospital workers. Regarding the response “do not agree nor disagree”, more than 30% of PC workers chose this response for all options. There was a statistically significant association between PC workers and the sharing of information by colleagues ($p=0.026$), with a lower percentage of agreement in the group of hospital workers.

The interventions mentioned by PC workers which are in agreement with the National Program for the Health of Older Persons (PNSPI) were education (99.1%), followed by

case discussion (98.1%); hospital workers, in turn, mentioned case discussion and joint activities (100%), followed by education (97.3%). (Table 2).

There was a statistically significant association between PC professionals and weekly meetings ($p=0.041$), with a higher percentage in this group than among hospital workers. There was also a statistically significant association between daily meetings ($p<0.001$) and PC workers, who showed a lower percentage than that of hospital workers.

In summation, the results of this study show, in Chart 2, orientations for professional practice with older persons in primary care and in hospitals.

As a result, with the support of the data found, we could present an Interdisciplinary Model for Consultations with Older Persons that is different for each area of assistance (Figure 1).

Table 2 – Distribution considering interventions in accordance with PNSPI by primary care and hospital workers – North. Portugal, 2018 to 2019

Interventions in accordance with the PNSPI	Dimensions	Primary care	Hospital	P-value*
		n (%)	n (%)	
Education	Unimportant	2 (0.9)	2 (2.7)	0.268
	Important	212 (99.1)	71 (97.3)	
Daily meetings	Unimportant	147 (70.3)	25 (34.2)	<0.001
	Important	62 (29.7)	48 (65.8)	
Weekly meetings	Unimportant	56 (26.7)	10 (13.9)	0.041
	Important	154 (73.3)	62 (68.1)	
Biannual meetings	Unimportant	39 (18.8)	13 (18.1)	1.000
	Important	169 (81.3)	59 (81.9)	
Joint activities	Unimportant	6 (2.8)	0 (0.0)	0.343
	Important	207 (97.2)	73 (100)	
Case discussion	Unimportant	4 (1.9)	0 (0.0)	0.575
	Important	210 (98.1)	73 (100)	

Source: Elaborated for this study. *P-value<0,05

Chart 2 – Orientations for professional practice with older persons – North. Portugal, 2018 to 2019

PRIMARY CARE	HOSPITAL
Usefulness of scales for clinical practice	
Barthel, MMSE, Braden, QASCI, EGD, Edmonton, MNA, Genogram, Lawton & Brody, Family Apgar, Tinetti, Ecomap, Zarit and PEV.	Braden, Barthel, MMSE, QASCI, MNA, Family Apgar, Edmonton, EGD, Genogram, Lawton & Brody, Zarit, Tinetti e PEV.
Physical examination	
Conditions for the performance of ADLs Mobility/exercise Vital signs Balance/gait Intestine/bladder evacuation Nutritional state Weight/height (p<0.001) Teguments Swallowing (p=0.017)	Conditions for the performance of ADLs Balance/gait Vital signs Intestine/bladder evacuation Mobility/exercise Swallowing (85.7%) Teguments (84.5%) Nutritional state (84.5%) Eyesight/hearing (p < 0.001)
Information shared between workers	
Changes in dependency Need for home visits (p<0.001) Changes in the situation of an illness Request for collaboration to continue assistance Social conditions Adherence to the therapeutic regime	Changes in dependency Request for collaboration to continue assistance Medication (p = 0.003) Changes in the situation of an illness Adherence to the therapeutic regime Social conditions
Strategies of information sharing between professionals	
Direct contact (p = 0.045) SClinical Team meetings Communication via phone Communication via e-mail (p<0.001)	Direct contact SClinical Written communication (paper) (p<0.001) Team meetings Communication via phone
Important activities for teamwork in health	
Evaluation of the diseased Home visits Health surveillance Consultations Education Sessions of group information	Evaluation of the diseased Home visits Health surveillance Education Consultations Sessions of group information
Interventions in accordance with the PNSPI	
Education Case discussion Joint activities Biannual meetings Weekly meetings (p = 0.041)	Case discussion (100%) Joint activities (100%) Education (97.3%) Biannual meetings (81.9%) Daily meetings (< 0.001)

Source: Elaborated by the authors.

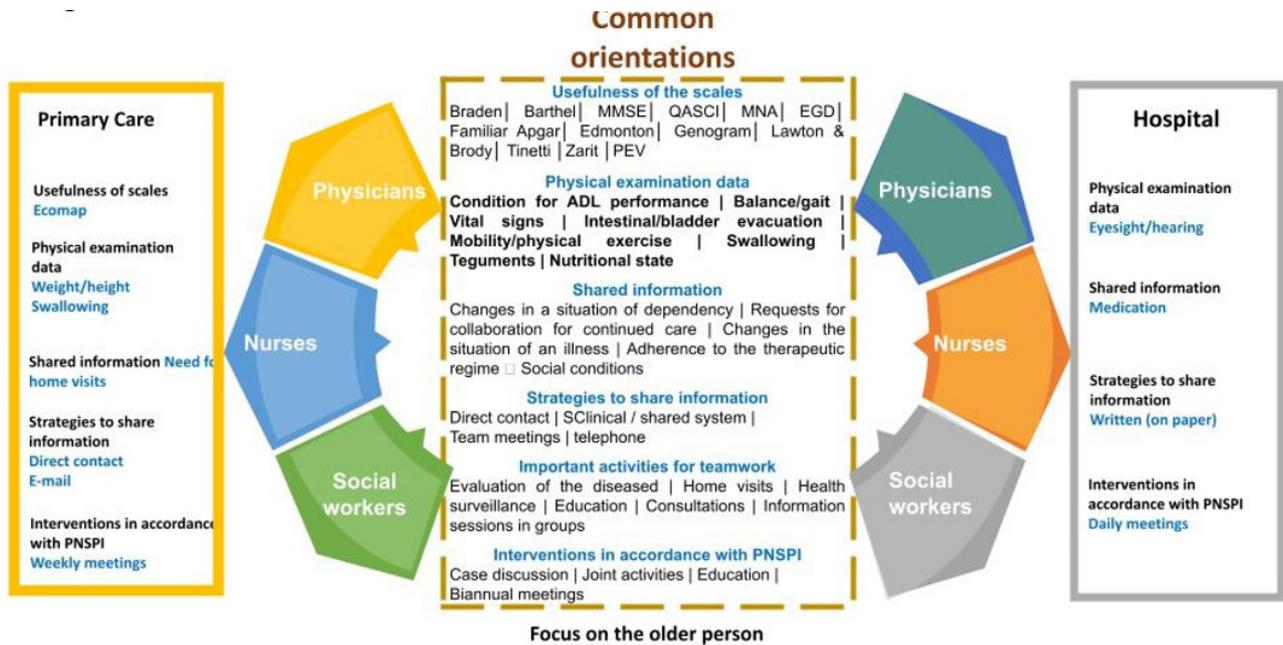


Figure 1 – Interdisciplinary Model for Consultations with Older Persons – north region. Portugal, 2018 to 2019
 Source: created by the authors.

DISCUSSION

The predominance of females in this study is in accordance with literature, as it is widely known that most workers in the field of health are women⁽¹³⁾. The results found are in accordance with the Social Report from the Ministry of Health and the NHS, where nurses are the most representative category⁽¹³⁾.

There were no significant differences between the two groups of workers (hospital and PC) when it comes to the usefulness of instruments for the provision of health care to older persons, and there was a similar distribution of the instruments between these groups. These results are not in line with our expectations, since the scope of the interventions carried out by each group is considerably different. A scaled consensus study⁽¹⁴⁾ carried out by the same researches of this paper found eight scales that could be used by physicians, nurses, and social workers. However, those that were rejected (ecomap, genogram, Zarit, family Apgar, and lifestyle profile) are part of the public policies for the older population. We are dealing with practices that compromise a holistic care to the older person, since all professionals evaluate the same dimensions, leaving other, essential ones, uncovered.

Regarding the Braden scale, considered to be the most useful by hospital workers, another study corroborate this finding, stating that it is the most used scale worldwide⁽¹⁵⁾, and that its application in older populations is a consensus in the elderly. Similarly to our study, other research show its particularities when it comes to identifying the risk for pressure injuries in a hospital context⁽¹⁶⁾. In addition, this scale is one of the most commonly used in nursing practice⁽⁵⁾. In Portugal, the Braden scale is integrated into the clinical information system in all hospitals, making its application during hospitalizations mandatory.

Barthel's index, on the other hand, is the most useful in the practice of PC workers, which is not in accordance with a study which considers it adequate for application in hospitalized older persons and people in rehabilitation programs for strokes⁽¹⁷⁾. However, it is one of the most used instruments worldwide, and, in Chile, its use in people with dependencies by PC workers, corroborating the findings of this study⁽¹⁸⁾.

Regarding physical examination data, the statistically significant relationship between swallowing and PC workers is in accordance with international directives for older persons, indicating nutritional evaluations as an integral part of the daily work of these professionals⁽¹⁹⁾. Similar results found by

another study state that, when the risk of nutritional changes associated with old age is greater, a nutritional evaluation of the senior in the PC is warranted⁽²⁰⁾. On the other hand, the significant relationship found between weight/height and PC workers is in accordance with the search for data about the nutritional state, since these anthropometric measures are considered essential for the calculation of the body mass index (BMI) and for the application of instruments. Therefore, the data from this study is in accordance with evidence of good health practices. Furthermore, it should be noted that the early identification of impaired swallowing is essential for an individualized intervention, in order to promote the health of the older person.

Our findings also showed that eyesight/hearing presented a significant statistical association with hospital professionals, which can be explained by the worsening of these functions as age advances, in association with hospitalization and, later, with an increased risk of falls. These data are corroborated by a study carried out in Brazil, which found that changes in eyesight are a factor associated with a higher risk for falls in 40% of the participants⁽²¹⁾. However, this is not in accordance with international orientations, which state that these functions should be evaluated by PC workers⁽¹⁹⁾.

Changes in situations of dependency were the most commonly shared information for all workers. Similar results were found in a study mentioned above⁽⁵⁾, showing that assistance to older persons is concerned with situations of disease/dependency, and that professionals worry about the prevention of complications and about training the older person and/or their caregivers to be able to perform self-care. An investigation⁽²²⁾ showed that functional losses in older persons are a focal point for health care, potentially leading to complications related with the immobility caused by the aging process, such as fractures, increased dependency for self-care, depression, and isolation.

The statistically significant association between medications and hospital workers can be explained by the association of older persons with comorbidities and the use of multiple drugs, with safe drug management being a key process for the prevention against adverse events⁽²³⁾. Regarding the statistically significant association between the need for home visits and PC professionals, the explanation could be in the fact that this is a practice inherent to primary health care, and 74.6% of the workers have PC roles. A research carried out in Chile identified integral home visits as an essential activity of PC workers, a result also found by this study; there are benefits in the sphere of self-care promotion, biopsychosocial evaluations, interventions in the person and the family, and

rehabilitation, bringing access to health care and support networks closer⁽²⁴⁾. It is worth noting that preventing adverse effects of medication and providing home care are part of the national health policies for older persons⁽¹³⁾.

The strategy professionals used the most to share information was "direct contact". A previous study, mentioned above⁽⁶⁾, found different results, showing different ways in which physicians, nurses, and social workers shared information. Nurses use the clinical information system (SClinical[®]), written messages, and/or protocol calls more often, while physicians prefer direct dialogue; social workers prefer conversations in person or via telephone. Since there is a consensus regarding the needs of all workers in the health team to access clinical information, we ask: Should direct contact, during practice, be the most used strategy to share information in the team? The answer is no. Verbal, contextually specific information, unavailable in the clinical process, leads to implications in the scope of decision making and of the continuity of care. The needs of the older population are multidimensional, meaning that teamwork is extremely important to attend to the needs of this population. As a result, a single and electronic clinical information system is an essential tool.

Regarding direct contact and contact via e-mail, there was little association with PC workers. In national literature, there are no studies about the strategies used to share information between physicians, nurses, and social workers, which is a justification for the present work. However, considering the physical structures and the dynamics of PC attention, as well as the allocation of the different professionals in offices with computers, the use of e-mails to share information seems to be an accessible, simple, and fast strategy. In this study, we also found that the strategy of writing on paper was common among hospital workers. Other authors partly corroborate these findings, showing that the health workers of a hospital use shift transfers and written communication to share information⁽²⁵⁾. At this point, the computerization of health services and the interoperability between informatics systems still need improvements, which can explain the use of paper.

PC and hospital workers had a consensus in regard to the fact that the evaluation of the older patient must be carried out by a team. This ratifies another research which showed the importance of a broad geriatric evaluation, which allows a medical, social, functional, and psychological assessment. These constructs are all determinants of the health of the older person⁽⁶⁾. In turn, a study carried out in Belgium indicates that, in several countries, hospital consultations carried out by interdisciplinary teams promote a complete geriatric evaluation in several⁽¹⁰⁾.

It is widely known that the growing prevalence of chronic diseases in the older population requires more collaboration between different health care providers, in all contexts and sectors. In turn, the ability to collaborate has an influence on the decision making of the members of the interprofessional team⁽²⁶⁾. Regarding the interdependence of tasks between professionals, this study found different perceptions. These results are in line with a research⁽²¹⁾ that included 384 health workers in the context of a hospital, analyzing the quality of the interaction and of the influences of the collaboration to find that the medical personnel had different values than the technical support personnel.

Furthermore, more than half the sample of hospital workers has a greater perception of the capacity for collaboration in all tasks, when compared to PC workers. On the other hand, the disagreement between the latter group is also higher. These results corroborate others, according to which collaborative interprofessional practices are a new term, seldom explored in PHC⁽²⁷⁾. However, we must consider that health workers often have a hard time collaborating in practice, due to the differences in their education, ideas, and in the role each profession is supposed to have⁽²⁸⁾. This could be an explanation of the data found here.

A statistically significant relationship between hospital workers and the dependence on the information shared by colleagues may eventually be explained by different models of assistance that characterize PC and hospital care. The latter are provided in a place where users usually visit due to illnesses, and to treat and receive guidance about complementary diagnosis and exams. Since hospital care is more unique, they, at first, require clinical information to be shared between workers from many different specialties.

Regarding the National Program for the Health of older Persons, it states that the specificities of this group should be catered for, and there should be actions to promote active and healthy aging, while helping maintain or rehabilitate functional capacity. This policy prescribes that assistance should respond to health needs, and gives support to the development of environments to capacitate and allow an interprofessional logic to inform the work⁽¹³⁾.

For the participants of this study, their education, case discussion, and joint activities were considered to be important to develop in a team, when it comes to providing care for older persons. This is in line with the findings of a recent study⁽²⁹⁾, where the interprofessional education and the joint discussion of care plans promoted professional development and collective responsibility over the care provided. There was a consensus between professionals

regarding the importance of the aging process, but the practices carried out in this regard left something to be desired. A study mentioned above reiterates the disagreement between what is considered useful and interesting, and what is actually applied in practice⁽¹⁶⁾. Regarding weekly meetings, they were associated with PC workers, as opposed to a study⁽²⁹⁾ developed in the Netherlands, in which there are six interprofessional meetings every four weeks. Another variable observed were daily meetings, though these were associated with hospital workers. A study from the United States⁽³⁰⁾ states that hospitals must schedule frequent interprofessional meetings to analyze the care plans of the client and their families.

Research into this topic showed that there are few publications available in literature that discuss team health care between nurses, physicians, and social workers, in order to provide holistic care to the older patient.

Limitations of this study include the impossibility of generalizing its results, considering its regional limitations and the disproportional number of professionals. The results of this study contribute to the organization of a consultation to provide assistance to the elderly, resorting to a practice of interdisciplinary planning. The process of change, based on the principle of interdisciplinarity, requires a unique health management, one that takes into account the management and sizing of the time of the several workers involved. The fragilities of this study show that it must be replicated in other regions of the country, or even abroad. It has also become clear that the care for older persons must be included in the education process of these professionals. This is especially true for strategies for consultations involving older persons and their more common issues, and for the specific aspects of hospital care and PC.

■ CONCLUSION

Hospital and primary care workers evaluated similarly the usefulness of scales for application in the older population. However, there was no difference in data collected from the physical examination. In primary care, professionals highlighted mobility/exercise, weight/height, and swallowing, while in hospitals they focused on intestinal/bladder evacuation, balance/gait, and eyesight/hearing. There were also differences in the information shared by primary care and hospital workers, and in the strategies these workers use to share said information. In primary care, home visits, direct contact between workers, and e-mails were the most common, while at the hospital, medication, direct contact

between professionals, and written communication were the most common. Furthermore, team meetings take place every week in primary care and every day at the hospital.

Based on an analysis of the perspectives of the professional categories from the hospitals and from primary care, this study found that the interdisciplinary assistance provided for the older population is heterogeneous, which contributed for the elaboration of orientations to examine older patients and carry out team interventions, and for the creation of an Interdisciplinary Model for Consultations with Older Persons that is adequate for the national setting. We expect these orientations to serve as a starting point for future research, and to help refine this field of study and practice.

REFERENCES

- Oliveira CB, Florêncio CM, Silva JE, Leite GJ, Matos GR. A importância da intersectorialidade para a atenção primária em vulnerabilidade. *REMS*. 2021;2(4):62. doi: <https://doi.org/10.51161/rem/2818>
- Instituto Nacional de Estatística (PT). Projeções de população residente [Internet]. Lisboa: Instituto Nacional de Estatística; 2017 [cited 2021 Mar 01]. Available from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=277695619&DESTAQUESmodo=2&xlang=PT
- Coelho LP, Motta LB, Caldas CP. Rede de atenção ao idoso: fatores facilitadores e barreiras para implementação. *Physis*. 2012;28(4):e280404. doi: <http://doi.org/10.1590/S0103-73312018280404>
- Monteiro MCD, Martins MM, Schoeller SD, Antunes L. Elder health care: interdisciplinary health team. *Rev Baiana Enferm*. 2021;35:e36702. doi: <https://doi.org/10.18471/rbe.v35.36702>
- Monteiro MCD, Martins MM, Schoeller SD. Evaluation of the health level of the elderly: patient care team considerations. *Rev Bras Enferm*. 2022;75(1):e20201277. doi: <https://doi.org/10.1590/0034-7167-2020-1277>
- Ellis G, Sevdalis N. Understanding and improving MDT working in geriatric medicine. *Age Ageing*. 2019;48(4):498-505. doi: <https://doi.org/10.1093/ageing/afz021>
- Owen L, Steel A, Goffe K, Fleming J, Sampson EL. A multidisciplinary simulation programme to improve advance care planning skills and engagement across primary and secondary care. *Clin Med*. 2022;22(1):51-7. doi: <https://doi.org/10.7861/clinmed.2021-0240>
- Lima RRT, Vilar RLA, Costa TPT, Castro JL, Lima KC. Educação em saúde no contexto do envelhecimento: em foco, os conteúdos curriculares. *Res Soc Dev*. 2018 [cited 2022 Feb 28];7(10):e15710587. Available from: <https://rsdjournal.org/index.php/rsd/article/view/587>
- Deschodt M, Claes V, Grootven BV, Van den Heede K, Flamaing J, Boland B, Milisen K. Structure and processes of interdisciplinary geriatric consultation teams in acute care hospitals: a scoping review. *Int J Nurs Stud*. 2016;55:98-114. doi: <http://doi.org/10.1016/j.ijnurstu.2015.09.015>
- Direção-Geral da Saúde (PT). Estratégia nacional para o envelhecimento ativo e saudável 2017-2025 [Internet]. Portugal. 2017 [cited 2021 Nov 12]. Available from: <https://www.sns.gov.pt/wp-content/uploads/2017/07/ENEAS.pdf>
- World Health Organization. Global strategy and action plan on ageing and health [Internet]. Geneva: WHO; 2017 [cited 2022 Jan 23]. Available from: <https://www.who.int/publications/i/item/9789241513500>
- Siqueira MM. Medidas de comportamento organizacional: ferramentas de diagnóstico e de gestão. São Paulo: Artmed; 2013.
- Serviço Nacional de Saúde (PT). Relatório social do ministério da saúde e do serviço nacional de saúde [Internet]. 2018 [cited 2022 Jan 28]. Available from: https://www.sns.gov.pt/wp-content/uploads/2019/09/Relat%C3%B3rio-Social-MS_SNS-2018-002.pdf
- Monteiro MCD, Martins MMFPS, Schoeller SD. Consensus on scales for an interdisciplinary health assessment tool for the elderly population. *Rev Rene*. 2022;23:e78471. doi: <https://doi.org/10.15253/2175-6783.20222378471>
- Cabral JVB, Vasconcelos LM, Oliveira MM. Conhecimento dos enfermeiros e uso escala de Braden em unidade de terapia intensiva: análise da produção científica brasileira. *Rev Bras Multidisc*. 2021;24(1):166-74. doi: <https://doi.org/10.25061/2527-2675/ReBraM/2021.v24i1.782>
- Morales Ojeda M, Gómez MI, Morales Morales Ojeda I, Cerda Aedo B, Meriño MA. Úlceras por presión: riesgo, factores predisponentes y pronóstico hospitalario en pacientes mayores de 65 años. *Rev Virtual Soc Parag Med Int*. 2021;8(2):23-33. doi: <https://doi.org/10.18004/rvspmi/2312-3893/2021.08.02.23>
- Aminalroaya R, Mirzadeh FS, Heidari K, Alizadeh-Khoei M, Sharifi F, Effatpanah M, et al. The validation study of both the modified Barthel and Barthel index, and their comparison based on Rasch Analysis in the hospitalized acute stroke elderly. *Int J Aging Hum Dev*. 2021;93(3):864-80. doi: <https://doi.org/10.1177/0091415020981775>
- Muñoz Silva CA, Rojas Orellana PA, Marzuca-Nassr GN. Criterios de valoración geriátrica integral en adultos mayores con dependencia moderada y severa en Centros de Atención Primaria en Chile. *RevMed Chile*. 2015;143(5):612-8. doi: <https://doi.org/10.4067/S0034-98872015000500009>
- World Health Organization. Integrated care for older people: guidelines on community-level interventions to manage declines in intrinsic capacity [Internet]. Geneva: WHO; 2017 [cited 2022 May 23]. Available from: <https://www.who.int/publications/i/item/9789241550109>
- Muñoz Díaz B, Martínez De La Iglesia J, Romero-Saldaña M, Molina-Luque R, Arenas de Larriva AP, Molina-Recio G. Development of predictive models for nutritional assessment in the elderly. *Public Health Nutr*. 2021;24(3):449-56. doi: <https://doi.org/10.1017/S13688980020002153>
- Vieira CP, Gomes BC, Marinho GS, Avelino FVSD, Galiza FT. Fatores associados ao risco de quedas em pessoas idosas hospitalizadas. *Rev Enferm Atual In Derme*. 2022 [cited 2022 Jun 16];96(38):e-021258. Available from: <https://revistaenfermagemactual.com/index.php/revista/article/view/1370>
- Saraiva LB; Santos SNA, Oliveira FA, Moura DJM, Barbosa RGB, Almeida ANS. Avaliação geriátrica ampla e sua utilização no cuidado de enfermagem a pessoas idosas. *J Health Sci*. 2017 [cited 2022 Jun 16];19(4):262-7. Available from: <https://docs.bvsalud.org/biblioref/2018/01/877795/10-avaliacao-geriatrica-ampla.pdf>
- Kostas T, Knoebel R, Levine S. Medication management in older adults and interprofessional education: a needs assessment. *Gerontol Geriatr Educ*. 2020;41(1):100-8. doi: <https://doi.org/10.1080/02701960.2018.1487297>
- Glasiñovic A, Canessa J, Sancy D, Sotomayor F. Buenas prácticas en la visita domiciliaria integral en atención primaria chilena. *Rev Med Clin Condes*. 2021;32(4):414-9. doi: <https://doi.org/10.1016/j.rmcl.2021.01.011>
- Coifman AHM, Pedreira LC, Jesus APS, Batista REA. Interprofessional communication in an emergency care unit: a case study. *Rev Esc Enferm USP*. 2021;55:e03781. <https://doi.org/10.1590/S1980-220X2020047303781>
- Soko TN, Jere DL, Wilson LL. Healthcare workers' perceptions on collaborative capacity at a referral hospital in Malawi. *Health AS*. 2021;26:1561. doi: <https://doi.org/10.4102/hsag.v26i0.1561>

27. Previato GF, Baldissera VDA. Portraits of interprofessional collaborative practice in the primary health care teams. *Rev Gaúcha Enferm.* 2018;39:e20170132. doi: <https://doi.org/10.1590/1983-1447.2018.2017-0132>
28. Asakawa T, Kawabata H, Kisa K, Terashita T, Murakami M, Otaki J. Establishing community-based integrated care for elderly patients through interprofessional teamwork: a qualitative analysis. *J MultidiscipHealthc.* 2017;10:399-407. doi: <https://doi.org/10.2147/JMDH.S144526>
29. Van Lierop M, Van Dongen J, Janssen M, Smeets H, Van Bokhoven L, Moser A. Jointly discussing care plans for real-life patients: The potential of a student-led interprofessional team meeting in undergraduate health professions education. *Perspect Med Educ.* 2019;8(6):372-7. doi: <https://doi.org/10.1007/s40037-019-00543-6>
30. Washington KT, Guo Y, Albright DL, Lewis A, Parker OD, Demiris G. Team functioning in hospice interprofessional meetings: an exploratory study of providers' perspectives. *J InterprofCare.* 2017;31(4):455-62. doi: <https://doi.org/10.1080/13561820.2017.1305950>

■ **Authorship contributions:**

Formal analysis: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

Concept: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

Data selection: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins.

Writing – original draft: Maria Clara Duarte Monteiro.

Writing – revision and editing: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

Investigation: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

Methodology: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

Resources: Maria Clara Duarte Monteiro.

Software: Maria Clara Duarte Monteiro.

Supervision: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins.

Validation: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

Visualization: Maria Clara Duarte Monteiro, Maria Manuela Ferreira da Silva Martins, Soraia Dornelles Schoeller.

The authors declare there are no conflicts of interest.

■ **Corresponding author:**

Maria Clara Duarte Monteiro

E-mail: claramonteir@gmail.com

Received: 09.16.2022

Approved: 06.12.2023

Associate editor:

Jéssica Teles Schlemmer

Editor-in-chief:

João Lucas Campos de Oliveira