

## Characteristics and counseling strategies for physical activity used by primary health care professionals

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**Abstract** *This study aim to describe the characteristics and strategies of counseling for physical activity used by Primary Health Care (PHC) professionals. A survey was carried out with 587 (85.4% women) health professionals who work in PHC in Florianópolis, in the state of Santa Catarina, southern Brazil. Counseling carried out in the last 12 months was considered. Operational aspects related to counseling practices and strategies used for counseling were evaluated. The frequency of physical activity guidance was 86.2% (95%CI = 83.2-88.8%). Counseling was characterized as a brief practice, carried out in individual consultations, aimed at adults and the older adults and people with morbidities. The most used strategy was to guide users to participate in physical activity groups at the Health Center (89.5%) and in relation to the 5As method, giving some “advice” was the most used strategy (99.0%) and the least used. used was to follow strategies (22.6%). Counseling for physical activity has been based on a brief practice, carried out in individual consultations and focused on people with morbidities and on adults and the elderly. The strategies used do not seem to cover the full care of the advised users.*

**Key words** *Counseling, Primary health care, Health personnel, Motor activity*

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## Introduction

Physical activity represents an important factor for human development and health promotion<sup>1,2</sup>. Its practice is linked to a right that must be guaranteed to all people throughout life and therefore ways to promote it at population levels need to be thought of. One of the ways to promote physical activity in health services has been through the counseling strategy<sup>3-6</sup>.

Counseling for physical activity can be understood as a light, low-cost technology that is characterized as health education, based on a dialogued discussion process between the individual and the health professional, in the quest to train the subject so that he or she is empowered to make decisions about their health behavior, carried out actively and in line with the context and knowledge of the individual<sup>7,8</sup>. In this sense, counseling could be understood beyond the fact of providing general guidance for physical activity, as it requires that the strategies employed are aligned with comprehensive care for the user. All health professionals can provide counseling and, although it may be brief and more generic<sup>9</sup>, studies show that the use of systematic and specific strategies are more successful in counseling actions, such as the “five As” model (5As)<sup>10-13</sup>.

The 5As model corresponds to a globally recognized counseling system, based on theories of behavior change, based on evidence, applied to various health behaviors and feasible in PHC<sup>11,14-16</sup>. The structure of the 5As corresponds to the acronym formed by five words in the English language: *ask*, *assess*, *advise*, *assist* and *arrange* which mean respectively: ask, assess, advise, assist and follow up, and function as a framework to support health professionals in asking about behavior (“ask”), assessing readiness to change (“assess”), advising a change (“advise”), assist in setting goals (“assist”) and organize follow-up (“arrange”)<sup>14,17-20</sup>. Although several studies support the use of the 5As model, little is known about the use of these strategies to advise physical activity applied in the context of PHC in the *Sistema Único de Saúde* (SUS)<sup>13,21-23</sup>. A study carried out with professionals from the Expanded Center for Family Health and Primary Care (eNASF-AB) identified that the most reported counseling strategies were “advise”, “assist” and “ask”, with “arrange” being the least reported strategy<sup>24-28</sup>. However, it is necessary to understand how these strategies are used by the other professionals categories that make up the PHC.

Thus, when observing the counseling characteristics and strategies from the perspective of

the 5As model, this study seeks to outline how much the practice of PHC professionals is close to a systematized model or not, and whether it contemplates actions that consider the complexity of the behavior human. This can help to better understand the practice of counseling for physical activity, identify difficulties and more assertively direct the development of strategies to improve health care in the SUS. So, this study aims to characterize the practices and counseling strategies for physical activity carried out by PHC professionals in Florianópolis, SC, Brazil.

## Methods

Cross-sectional study with professionals from the Family Health Strategy and eNASF-AB of PHC in Florianópolis, SC, Brazil. This study is part of the research “Counseling for physical activity in PHC – Advise SUS, which aimed to investigate the practice of counseling for physical activity in PHC. Florianópolis has about 516,524 inhabitants, with an average per capita income of R\$ 1,798.12, Gini coefficient of 0.5474 and Human Development Index (HDI) of 0.847<sup>29</sup>.

### Participants

PHC in Florianópolis had, in 2018, approximately 1,056 professionals, distributed in 49 Health Centers in four health districts. Due to the possibility of collecting data in all locations, it was decided to carry out a census of health professionals. Losses were considered when the professional did not participate in the planning meeting, was away for health treatment and refusals when the professional was not interested in participating in the study.

### Data collect

Data collection took place between August and November 2018, during the planning meetings of the Health Centers, district meetings of the eNASF-AB and was carried out by a team composed of four researchers from the Advise SUS project, trained for this activity. There was a brief explanation about the research and instructions for completing the questionnaire. In order to reduce the loss rate, at least two data collection moments were carried out in each Health Center. All study procedures were approved by the Ethics Committee for Research with Human Beings of the Federal University of Santa Catarina (Seem 2,693,520).

### Instrument and variables

The instrument used for the research was a self-administered questionnaire composed of 49 objective questions organized into five blocks, respectively: block 1 – counseling for physical activity; block 2 – knowledge about physical activity recommendations; block 3 – level of leisure-time physical activity; block 4 – training and professional performance and block 5 – sociodemographic information.

The questionnaire was prepared by the research team based on a systematic review<sup>21</sup>, evaluated and approved by two specialists in the field of Physical Education with expertise in PHC; and tested with graduate students and health professionals.

#### Advice for physical activity

Conducting physical activity counseling was assessed using the question “during your consultations, in the last 12 months, did you provide physical activity counseling to users?”, with the option of answer (yes or no).

#### Characteristics of conducting counseling

The type of service in which counseling was carried out was assessed using a scale consisting of eight options (individual care, group care, consultations, during reception, pharmacy, home visit, reception/waiting room and others). Counseling time was evaluated in minutes for individual and collective counseling practices. The age group most frequently receiving counseling by the professional was evaluated (children, adolescents, adults and the elderly), with four response options (never, rarely, often and always). The frequency with which the professional advises individuals with certain health conditions was evaluated based on a four-point scale (never, rarely, often and always), for this variable ten health conditions were considered (diabetes, hypertension, dyslipidemia, bone diseases, respiratory diseases, mental illness, physical disability, neoplasia, pregnant women, overweight/obesity).

#### Counseling strategies

Counseling strategies on physical activity considered what the professional recommends for individuals on a dichotomous scale (no or yes), the following strategies were considered: providing educational material on physical activity, setting goals with the user, writing prescription exercises, recommending a group of physical activity at the Health Center, recommend a

specific place to perform physical activity. Those who received counseling on physical activity were asked which places were recommended for carrying out physical activity.

#### Counseling strategies according to the 5As model

Counseling strategies for physical activity were evaluated based on previous studies of the 5As model<sup>14,17-20</sup>. The items referred to: a) question about PA, b) assesses the level of physical activity and stage of behavior change; c) comments on the benefits of physical activity; d) comments on the physical activity recommendations; e) advises based on the characteristics of each individual (eg age, sex, health conditions); f) identifies the reasons that make it difficult or prevent the user from not performing physical activity; g) offers some solution to help the user regarding these difficulties; h) uses some strategy (ex: visits, calls, text message) to find out if the user has started to perform physical activity; i) use some strategy (ex: visits, calls, text message) to find out if the user is performing physical activity. To identify compliance with the Model 5As strategies, the items were grouped as follows: ask (item a), evaluate (item b), advise (item c, d, e), help (item f, g) and follow up (item h, i). If an item was marked as yes, it represented that this strategy was adopted by the professional. Based on this classification, a variable for the number of Model 5As strategies used in counseling by the health professional was also generated.

#### Characteristics of the participants

Finally, sociodemographic data, education and training, and work-related data in primary health care were collected. The sociodemographic variables were sex, age (20 to 29 years old, 30 to 39 years old, 40 to 49 years old and  $\geq 50$  years old) and education (without higher education, with higher education, with higher education and postgraduate). Professionals reported whether they had completed any postgraduate studies in the area of public health (yes or no). Regarding the performance of the professional in the PHC, the link (contestant - effective public servant, temporary - commissioned position, temporary contract, cooperative or resident health professional”), the time of activity ( $\leq 3$  years,  $\geq 3$  years), weekly workload ( $\leq 30$  hours/week,  $\geq 40$  hours/week), participation in matrix support for cases related to physical activity, carrying out technical-assistance actions (discussion of clinical cases) and/or technical-pedagogical (education on

topics relevant to the teams), with dichotomous categories: never/rarely or often/always.

### Data analysis

The data were digitized in the EpiData software version 3.1 and a double check was performed to identify possible typing errors. Errors were manually checked and corrected. For statistical analyses, the R software version 3.5.3 was used. The characteristics of the sample of health professionals are presented using descriptive statistics. Finally, practices and counseling strategies for physical activity are presented in a described manner according to professional categories. It was decided to present the description according to the work teams or proximity of the work relationship between the professionals, thus the categories were: Family Health Strategy Team (community health agent, nurse, nursing technician and doctor), Oral Health Team (dental surgeon and auxiliary/technician in oral health), eNASF-AB (social worker, nutritionist, physiotherapist, psychologist, pharmacist and physical education professional).

### Results

Professionals from 49 Health Centers in Florianópolis participated in the study. The refusal rate was 25.8% ( $n = 273$ ) and losses were 18.5% ( $n = 196$ ). Losses occurred due to incomplete completion of data ( $n = 23$ ; 3.7%) and due to absence from work (vacation or leave) during the data collection period ( $n = 173$ , 16.4%). Thus, the final number of participants was 587 professionals (85.4% women). Most respondents were between 30-49 years old (65.9%) and had university education (66.1%). In relation to the characteristics of professional activity, most had an effective job (61.8%), worked in PHC for more than three years (77.1%), with a workload equal to or greater than 40 hours per week (80.6%) and reported having frequently received/performed matrix support from eNASF-AB (62.5%). When observed from the perspective of professional categories, the characteristics were similar to those of professionals in general, differing only in quantitative terms, in which nurses ( $n = 193$ , 32.9%) and community health agents ( $n = 161$ ; 27.4%) were the professional categories with the highest participation (Table 1).

The frequency of counseling for physical activity was 86.2% (95%CI = 83.2-88.8%), being 100% among physical education professionals

and physicians. As for the practices of counseling for physical activity, most occur in individual sessions (72.1%), taking between one and five minutes (53.5%), and when carried out collectively, it is observed that 46.8% use between six to 15 minutes. Physical education professionals and community health agents reported a greater proportion of using more than 16 minutes for individual counseling. The most advised age groups were adults (90.5%) and the elderly (94.2%), with 37.6% and 53.6% reporting counseling for children and adolescents, respectively. Individuals with excess weight/obesity (94.1%), diabetes (92.9%), hypertension (92.6%) and dyslipidemia (79.5%) were the most advised users in the perception of health professionals (Table 2).

The most used counseling strategies among professionals were recommending participation in physical activity groups at the Health Center (89.5%) and indicating specific places to carry out activities (48.1%). Among the individuals who reported receiving an indication to go to a place, the Health Center (89.7%), parks and squares (88.3%), and outdoor gyms (83.0%) stand out. It is still observed that in relation to the 5As model, the most used strategy considering all professionals was “advise” (99.0%) and the least used was “accompany” the individual (22.6%). All physical education professionals reported using the “ask”, “advise” and “help” strategies, and half of the community health agents and physical education professionals reported “following” (56.1% and 50.0%). Regarding the number of strategies used, 44.4% of professionals reported using four strategies in counseling, and half of physical education professionals reported using the five strategies according to the 5As model (50%) (Table 3).

### Discussion

This study aimed to characterize the practice and counseling strategies for physical activity carried out by PHC professionals in Florianópolis, SC, Brazil. The main results indicate that approximately eight out of ten professionals provide some type of advice for physical activity, characterized as brief advice (up to five minutes), carried out in individual sessions, aimed at adult and elderly users, with some morbidity (excess of weight, diabetes and hypertension, mainly). The main counseling strategy was to recommend users to participate in physical activity groups and regarding the 5As model, the most used strategy

**Table 1.** Characteristics of the primary health care professionals participating in the Advice UHS study. Florianópolis, Santa Catarina, Brazil, 2018 (n = 587).

Variables	Categories	Total (n = 587)	eSF <sup>1</sup>			eSB <sup>2</sup>	eNASF-AB <sup>3</sup>	
			ACS <sup>4</sup> (n = 161)	Nursing team <sup>5</sup> (n = 193)	Doctor (n = 87)	Oral health team <sup>6</sup> (n = 74)	Others professions <sup>7</sup> (n = 56)	PEF <sup>8</sup> (n = 16)
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Gender	Man	80 (14.6)	4 (3.0)	18 (9.7)	31 (35.6)	19 (26.0)	6 (10.7)	2 (12.5)
	Woman	468 (85.4)	127 (96.9)	167 (90.3)	56 (64.4)	54 (74.0)	50 (89.3)	14 (87.5)
Age range	20 to 29 years old	82 (15.2)	1 (0.8)	28 (15.2)	12 (13.8)	10 (14.1)	27 (48.2)	4 (25.0)
	30 to 49 years old	356 (65.9)	71 (56.3)	136 (74.0)	60 (69.0)	50 (70.4)	27 (48.2)	12 (75.0)
	≥ 50 years old	102 (18.9)	54 (42.9)	20 (10.9)	15 (17.2)	11 (15.5)	2 (3.6)	0 (0.0)
Education	Without university education	223 (38.8)	138 (92.0)	63 (33.0)	0 (0.0)	21 (28.4)	1 (1.8)	0 (0.0)
	University education	99 (17.2)	9 (6.0)	34 (17.8)	19 (21.8)	13 (17.6)	21 (37.5)	3 (18.7)
	Postgraduate	252 (43.9)	3 (2.0)	94 (49.2)	68 (78.2)	40 (54.0)	34 (60.7)	13 (81.2)
Graduate in SC <sup>9</sup>	No	75 (29.9)	1 (33.3)	30 (31.6)	14 (20.6)	9 (23.7)	15 (44.1)	6 (46.1)
	Yes	176 (70.1)	2 (66.7)	65 (68.4)	54 (79.4)	29 (76.3)	19 (55.9)	7 (53.8)
Employment relationship	Temporary	218 (38.2)	137 (93.8)	20 (10.4)	18 (20.7)	11 (14.9)	25 (44.6)	7 (43.7)
	Public servant	353 (61.8)	9 (6.2)	172 (89.6)	69 (79.3)	63 (85.1)	31 (55.4)	9 (56.2)
Working time in PHC <sup>10</sup> *	≤ 3 years	122 (22.9)	3 (2.5)	48 (26.0)	23 (26.7)	14 (19.7)	27 (48.2)	7 (43.7)
	> 3 years	410 (77.1)	115 (97.5)	137 (74.0)	63 (73.3)	57 (80.3)	29 (51.8)	9 (56.3)
Worload <sup>11</sup>	≤ 30 hours	111 (19.4)	2 (1.4)	50 (25.9)	21 (24.1)	21 (28.8)	15 (26.8)	2 (12.5)
	≥ 40 hours	460 (80.6)	144 (98.6)	143 (74.1)	66 (75.9)	52 (71.2)	41 (73.2)	14 (87.5)
Received/ performed matrix support from eNASF- AB <sup>3</sup>	Never/rarely	203 (37.5)	49 (41.2)	84 (44.2)	24 (27.6)	32 (43.8)	12 (21.4)	2 (12.5)
	Often/always	338 (62.5)	70 (58.8)	106 (55.8)	63 (72.4)	41 (56.2)	44 (78.6)	14 (87.5)

<sup>1</sup>Family Health Team; <sup>2</sup> Oral Health Team; <sup>3</sup>Expanded Center for Family Health and Primary Care; <sup>4</sup>community health agent; <sup>5</sup> nurses and nursing technicians; <sup>6</sup> dentist and oral health assistant; <sup>7</sup> social worker, pharmacist, physiotherapist, nutritionist, psychologist; <sup>8</sup> physical education professional; <sup>9</sup> collective health; <sup>10</sup> primary health care. <sup>11</sup> weekly workload. \* Frequencies did not correspond to the total due to missing data (omission of respondents in the survey).

Source: Authors, based on data from the Research Advice SUS (Brazil).

was to advise and the least reported was to accompany the individual. It should be noted that this was a study that involved health professionals from different areas of basic training, including those who make up the Family Health team, Oral Health and the NASF-AB team, which can show a more real picture of the dynamics working at SUS. In addition, the study advances in the sense of trying to understand what are the counseling characteristics and strategies used by professionals beyond the statement that this counseling is carried out. This study considers some limitations: a) it is a cross-sectional and descriptive study, where the main focus was to describe practices and counseling strategies for physical activity, thus the extrapolation to other

contexts must be carried out with caution, considering the high ESF coverage rate in the municipality, the presence of a high number of resident professionals and the effective participation of the Florianópolis School of Public Health in the management of work and training processes; b) the measure of counseling for physical activity considered having received some counseling in the last twelve months. This fact may have contributed to a high frequency of counseling, as it is likely that many professionals talk about physical activity with some of their patients, especially those with a greater number of individual appointments, such as doctors, for example, c) another limitation may be the social desirability bias, which is the tendency to respond posi-

**Table 2.** Practices of counseling for physical activity carried out by Primary Health Care professionals. Florianópolis, Santa Catarina, Brazil, 2018 (n = 587).

Variables	eSF <sup>1</sup>		eSB <sup>2</sup>		eNASF-AB <sup>3</sup>		
	Total (n = 587)	ACS <sup>4</sup> (n = 161)	Nursing team <sup>5</sup> (n = 193)	Doctor (n = 87)	Oral health team <sup>6</sup> (n = 74)	Other professionals <sup>7</sup> (n = 56)	PEF <sup>8</sup> (n = 16)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Advises PA <sup>9</sup>							
No	81 (13.8)	25 (15.5)	27 (14.0)	0 (0.0)	27 (36.5)	2 (3.6)	0 (0.0)
Yes	506 (86.2)	136 (84.5)	166 (86.0)	87 (100.0)	47 (63.5)	54 (96.4)	16 (100.0)
Counseling context							
Individual service	364 (72.1)	30 (22.1)	138 (84.15)	87 (100.0)	44 (91.7)	49 (90.7)	16 (100.0)
Home visit	257 (50.9)	106 (77.9)	68 (41.5)	51 (58.6)	5 (10.4)	16 (29.6)	11 (68.7)
Reception	222 (44.0)	25 (18.4)	131 (79.9)	44 (50.6)	9 (18.7)	9 (16.7)	4 (25.0)
Groups	208 (41.2)	41 (30.1)	59 (36.0)	30 (34.5)	17 (35.4)	45 (83.3)	16 (100.0)
Interconsultations	141 (27.9)	5 (3.68)	54 (32.9)	40 (46.0)	5 (10.4)	24 (44.4)	13 (81.2)
Reception/waiting room	75 (14.8)	43 (31.6)	23 (14.0)	1 (1.1)	4 (8.3)	2 (3.70)	2 (12.5)
Pharmacy	39 (7.7)	0 (0.0)	25 (15.2)	0 (0.0)	1 (2.1)	10 (18.5)	3 (18.7)
Individual counseling time							
1 a 5 min.	223 (53.5)	16 (20.8)	78 (51.3)	74 (88.1)	25 (64.1)	29 (59.2)	1 (6.2)
6 a 15 min.	116 (27.6)	27 (35.1)	52 (34.2)	9 (10.7)	13 (33.3)	14 (28.6)	1 (6.25)
≥ 16 min.	78 (18.6)	34 (44.2)	22 (14.5)	1 (1.2)	1 (2.6)	6 (12.2)	14 (87.5)
Collective counseling time							
1 a 5 min.	61 (31.7)	6 (20.7)	15 (28.8)	16 (45.7)	9 (40.9)	13 (32.5)	2 (14.3)
6 a 15 min.	90 (46.8)	12 (41.4)	26 (50.0)	16 (45.7)	13 (59.1)	18 (45.0)	5 (35.7)
≥ 16 min.	41 (21.3)	11 (37.9)	11 (21.1)	3 (8.6)	0 (0.0)	9 (22.5)	7 (50.0)
Advised age groups*							
Children	158 (37.6)	28 (34.6)	45 (31.7)	47 (56.6)	11 (25.0)	25 (46.3)	2 (12.5)
Teenagers	228 (53.6)	38 (44.7)	75 (52.1)	69 (83.1)	12 (28.0)	30 (55.6)	4 (25.0)
Adults	419 (90.5)	96 (88.1)	141 (91.6)	78 (91.8)	37 (82.2)	51 (94.4)	16 (100.0)
Older Adults	389 (94.2)	88 (92.6)	132 (96.3)	75 (96.1)	29 (80.6)	49 (96.1)	16 (100.0)
Health condition of advised users*							
Overweight/obesity	370 (94.1)	74(91.4)	132(98.5)	78 (100.0)	31(91.2)	40(80.0)	15(93.8)
Diabetes	354 (92.9)	62(86.1)	132(98.5)	77(98.7)	27(81.8)	41(85.4)	15(93.7)
Hypertension	365 (92.6)	81(93.1)	128(96.2)	76 (98.7)	25(75.8)	39(81.2)	16(100.0)
Dyslipidemia	280 (79.5)	22(44.9)	114(87.0)	78(100.0)	18(56.2)	34(73.9)	14(87.5)
No morbidities	271 (73.4)	53(84.1)	98(75.4)	57(74.0)	12(35.3)	39(79.6)	12(75.0)
Bone diseases	246 (68.1)	33(54.1)	88(67.7)	69(92.0)	10(32.3)	32(66.7)	14(87.5)
Mental disease	239 (64.8)	25(41.7)	90(68.2)	60(76.9)	19(57.6)	36(72.0)	9(56.2)
Pregnant	234 (63.2)	42(61.8)	92(70.2)	54(72.0)	12(37.5)	28(58.3)	6(37.5)
Heart disease	224 (62.7)	17(28.3)	84(66.1)	68(90.7)	13(40.6)	28(59.6)	14(87.5)
Respiratory diseases	214 (58.3)	30(48.4)	81(60.9)	57 (74.0)	16(50.0)	21(44.7)	9(56.2)
Physical desability	122 (34.0)	18(29.5)	39(30.5)	38(50.7)	6(19.3)	17(35.4)	4(25.0)
Neoplasm	77 (21.6)	8(14.0)	23(17.8)	30(40.0)	2(6.4)	10(20.8)	4(25.0)

<sup>1</sup> Family Health Team; <sup>2</sup> Oral Health Team; <sup>3</sup> Expanded Center for Family Health and Primary Care; <sup>4</sup> community health agent; <sup>5</sup> nurses and nursing technicians; <sup>6</sup> dentist and oral health assistant; <sup>7</sup> social worker, pharmacist, physiotherapist, nutritionist, psychologist; <sup>8</sup> physical education professional; <sup>9</sup> physical activity. \*Frequencies did not correspond to the total due to missing data (omission of respondents in the survey).

tively to the questions as it is believed to be an expected practice of health professionals. On the other hand, this study is unprecedented in that it addresses characteristics and counseling strategies for physical activity by professionals from different teams (eNASF-AB, eSF and eSB), with a representative participation of PHC professionals from a Brazilian capital.

Counseling was characterized as a practice predominantly carried out in individual consultations and in relation to the brief type of time (between one and five minutes). No studies were found in Brazil on counseling time, however, among American physicians, it was observed that the counseling time for physical activity was between two and five minutes<sup>30</sup>. However, it is

**Table 3.** Counseling strategies for physical activity used by primary health care professionals. Florianópolis, Santa Catarina, Brazil, 2018 (n = 587).

Variables	eSF <sup>1</sup>		eSB <sup>2</sup>		eNASF-AB <sup>3</sup>		
	Total (n = 587)	ACS <sup>4</sup> (n = 161)	Nursing team <sup>5</sup> (n = 193)	Doctor (n = 87)	Oral health team <sup>6</sup> (n = 74)	Other professionals <sup>7</sup> (n = 56)	PEF <sup>8</sup> (n = 16)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Strategy used to advise							
Strategy used to advise							
Recommend PA9 SB <sup>10</sup>	434 (89.5)	11 (88.1)	135 (85.4)	79 (91.9)	42 (91.3)	52 (98.1)	15 (93.7)
Recommend specific							
location to perform PA <sup>9</sup>	233 (48.1)	73 (57.9)	69 (43.7)	38 (44.7)	18 (39.1)	25 (47.2)	10 (62.5)
Set goals with user	131 (27.0)	6 (4.8)	49 (31.0)	44 (51.2)	1 (2.2)	21 (39.6)	10 (65.2)
Provide educational							
materials	109 (22.5)	15 (11.9)	43 (27.2)	26 (30.2)	4 (8.7)	9 (17.0)	12 (75.0)
Prescribe exercises	47 (9.7)	3 (2.4)	7 (4.4)	23 (26.7)	0 (0.0)	7 (13.2)	7 (43.7)
Recommended place for users to PA9							
Healthy Center	420 (89.7)	112 (92.6)	129 (85.4)	73 (87.9)	38 (88.4)	52 (96.3)	16 (100.0)
Squares and parks	394 (88.3)	83 (81.4)	132 (88.0)	76 (91.6)	42 (95.4)	45 (88.2)	16 (100.0)
Outdoor gyms	370 (83.0)	88 (82.2)	130 (87.2)	66 (78.6)	36 (87.8)	39 (78.0)	11 (73.3)
Hiking trail	336 (78.0)	73 (75.3)	112 (77.8)	71 (84.5)	27 (69.2)	39 (76.5)	14 (87.5)
Beaches	284 (70.6)	58 (69.0)	95 (70.9)	60 (73.2)	26 (70.3)	35 (70.0)	10 (66.7)
Private gyms	283 (70.2)	52 (65.0)	97 (71.3)	64 (77.1)	24 (63.2)	34 (66.7)	12 (80.0)
Square and courts	205 (54.5)	36 (49.3)	72 (55.8)	48 (60.0)	16 (50.0)	25 (52.1)	8 (57.1)
Compliance with the 5As							
Method <sup>11</sup>							
Ask	418 (86.2)	86 (70.5)	149 (92.0)	82 (96.5)	37 (77.1)	48 (92.3)	16 (100.0)
Assess	279 (57.5)	59 (49.6)	95 (59.0)	70 (80.5)	13 (27.1)	30 (55.6)	12 (75.0)
Advice	500 (99.0)	132 (97.1)	164 (100.0)	87 (100.0)	48 (100.0)	53 (98.1)	16 (100.0)
Assistant	427 (86.3)	103 (79.8)	141 (86.5)	83 (95.4)	32 (98.1)	52 (98.1)	16 (100.0)
Arrange	112 (22.6)	73 (56.1)	18 (6.1)	7 (8.0)	2 (4.2)	11 (20.7)	8 (50.0)
Number of strategies used							
One	26 (5.1)	13 (9.6)	7 (4.3)	-	6 (12.5)	-	-
Two	71 (14.1)	31 (22.8)	20 (12.2)	2 (2.3)	13 (27.1)	5 (9.3)	-
Three	124 (24.5)	24 (17.6)	43 (26.2)	20 (23.0)	16 (33.3)	17 (31.5)	4 (25.0)
Four	224 (44.4)	34 (25.0)	86 (52.4)	60 (69.0)	13 (27.1)	27 (50.0)	4 (25.0)
Five	60 (11.9)	34 (25.0)	8 (4.9)	5 (5.7)	0 (0.0)	5 (9.3)	8 (50.0)

<sup>1</sup> Family Health Team; <sup>2</sup> Oral Health Team; <sup>3</sup> Expanded Center for Family Health and Primary Care; <sup>4</sup> Community health agent; <sup>5</sup> Nurses and nursing technicians; <sup>6</sup> Dentist and oral health assistant; <sup>7</sup> Social worker, pharmacist, physiotherapist, nutritionist, psychologist; <sup>8</sup> Physical Education Professional; <sup>9</sup> Physical activity; <sup>10</sup> health center; <sup>11</sup> Counseling system. \* Frequencies did not correspond to the total due to missing data (omission of respondents in the survey).

recommended that it not be used as a single intervention strategy, but that it be combined with the follow-up of more health professionals<sup>31</sup>, and monitoring strategies<sup>16,32,33</sup>. The time devoted to counseling is a fundamental point to understand the potential of this strategy at population levels, as health professionals report that lack of time is one of the main barriers to providing counseling in PHC<sup>21,27,34,35</sup>.

Counseling was more frequent in adults and the elderly, with overweight/obesity, diabetes and hypertension. These findings corroborate with other studies<sup>12,21,36-39</sup>, with the profile of users and pattern of use of PHC services, in which there is a predominance of outpatient consultations motivated by illness and search for medication<sup>40-44</sup>. This result may also show the relevance of promoting physical activity counseling from the perspective of health promotion and also including users who do not have comorbidities or risk factors, as well as children and adolescents through the strengthening of actions such as the Program Health at School<sup>45</sup>.

The most used strategies in counseling were recommending participation in physical activity groups at the Health Center and indicating a specific place to perform physical activity. The groups offered by the Health Centers have proven to be a relevant resource to promote physical activity in the context of Public Health, as it provides benefits to users and leads other health professionals and managers to recognize the important role of physical activity<sup>46</sup>. The recommendation of public leisure spaces for the practice of physical activity needs to consider environmental barriers such as lack of accessibility and public safety<sup>47</sup>, and the disparity in the presence and quality of these structures in areas with lower per capita income<sup>48</sup>. Therefore, it is important that this recommendation is always associated with knowledge of the territory and intersectoral actions focused on the environmental/community level, since interventions of this nature have increased levels of physical activity in high-income countries<sup>49,50</sup> and can promote improved access and urban design of these spaces. Also, the use of other counseling strategies, such as educational materials, monitoring technologies, agreeing goals with the user and prescribing exercises may be relevant to strengthen a support network for changing the user's behavior.

Considering the 5As model, the strategy most reported by professionals was "counseling". According to international studies, "advising" is among the strategies most mentioned by profes-

sionals<sup>15,17,18,24,51,52</sup>. Although "advising" includes the important function of commenting on the benefits and recommendations of physical activity to improve health, using it alone may not produce effective results<sup>53</sup>, mainly knowing that professionals have concentrated their counseling on recommending a group or place for physical activity, not diversifying resources and strategies for counseling. This may also be related to the barriers often cited by professionals for advising physical activity, such as lack of training and materials<sup>21,34,35</sup>, in addition to signaling the existence of confusion in the definition of counseling<sup>52</sup>.

Accompanying was the least reported strategy among professionals. This finding is similar in other studies<sup>15,17,24,50</sup>, and it signals a gap that has prevented the follow-up and recording of the results of physical activity counseling at population levels. It is possible that the difficulty in carrying out "follow-up" is linked to the barriers reported by the professionals, such as lack of time, lack of training and lack of resources and due to the absence of systematic counseling.<sup>21,27,34,35</sup>. According to the American College of Sports Medicine, behavioral programs should include different strategies, adjusted to individual motivations and be based on theories in order to increase the adoption and maintenance of physical activity<sup>50</sup>. Therefore, it is extremely necessary for PHC professionals to have access to mechanisms (strategies and tools) capable of evaluating the effectiveness and scope of counseling for physical activity<sup>24,50</sup>. This would also contribute to broaden the understanding of counseling for physical activity, moving from a simple generic orientation to a practice that considers the individual at the center of care and, through the creation of a bond that allows self-care supported in a longitudinal way, could be more effective in adoption of physical activity in your life. These proposals have been tested in other health systems, such as the Netherlands and Portugal<sup>16,51</sup>.

Additionally, more than half of the community health agents and physical education professionals reported having used "arrange". The peculiarities of the performance of each of these professionals seem to be a strong point to support this strategy of counseling for physical activity, since they demonstrate greater proximity with users and the community environment<sup>26</sup>. These data highlight the importance of thinking about decentralized advice from the doctor and disseminated by health professionals with different backgrounds. In this regard, Brazilian PHC has the potential to explore a decentralized coun-

seling model, as it has multidisciplinary teams that expand health care, but recent changes in the PHC funding policy may weaken this model<sup>52,53</sup>.

Investments in continuing education specific to the theme counseling for physical activity can help in the use and diversification of strategies. A scheme based on the 5As model would expand the range of strategies used to advise physical activity, promoting greater safety for professionals and organization of this practice. The physical education professional inserted in the PHC represents a potentiality of the Brazilian health system, promoting advice for physical activity both among other professional areas of health and users. In this sense, it is important that public policies recognize the importance of multidisciplinary action. Additionally, instrumentalizing the practice of counseling with new technologies and software that organize and register this practice in the territory can consolidate its insertion in the SUS and improve the processes of assistance to change the behavior of users. The culture of counseling for physical activity, adopted by PHC professionals, without specifying a profes-

sional area, strengthens health policies, especially the NHPP (National Health Promotion Policy). In addition, it is recommended that intervention research be carried out in the context of PHC for the development of support resources for professionals with a view to the practice of evidence-based physical activity counseling.

Finally, it can be concluded that counseling for physical activity is presented as a brief practice, carried out in individual sessions and focused on people with chronic conditions and on adults and the elderly. As there is no system applied to the SUS and only policy recommendations, counseling seems to occur without monitoring changes in users' behavior. The use of strategies such as the 5As model, together with other intersectoral actions, may contribute to strengthening counseling for physical activity in the organizational culture of the PHC and to provide opportunities for effective monitoring of users and evaluations of actions aimed at constant improvements in the promotion of physical activity in the public health scenario.

## Collaborations

SQ Moraes was responsible for planning, conducting data collection and analysis, and writing the manuscript. FT Paiva Neto worked on the planning and conduct of data collection and revision of the final draft. MR Loch and RC Fermino were responsible for the critical review of the data and of the entire manuscript. CR Rech participated in the initial conception of the study, data analysis, and critical review of the manuscript.

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Article submitted 04/02/2023

Approved 17/04/2023

Final version submitted 19/04/2023

Chief editors: Romeu Gomes, Antônio Augusto Moura da Silva