



EXAMINING CD133, C-MYC, AND AXL EXPRESSION IN COLON ADENOCARCINOMAS: PROGNOSTIC VALUE AND CLINICAL ASSOCIATIONS

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Abstract:

Background: CD133 and AXL are recognized as markers for tumor stem cells, while c-MYC is a crucial player in colon cancer (CRC) as a cellular regulator.

Objective: This study aimed to evaluate the utility of AXL, c-MYC, and CD133 as prognostic indicators and their association with clinical or pathological characteristics in colon adenocarcinomas and adenomas.

Methods: A total of 156 individuals with colon adenomas (n=34) and UICC staging I–IV adenocarcinomas (n=122) underwent examination. Tissue microarrays (TMAs) containing primary tumors and adenomas were utilized to detect CD133, c-MYC, and AXL expression. Subsequently, correlations with pathological and clinical characteristics were analyzed.

Findings: Poorly differentiated adenocarcinomas and disease progression were identified as significant contributors to poor overall prognosis, with an average life expectancy of thirty months. A

one-variable analysis revealed a correlation between elevated CD133 production (35.9% of cases) and mortality, particularly in right colon tumors (44.8% of CD133+ cases). However, this association did not hold significance in multivariate analysis. c-MYC was predominantly detected in advanced-stage patients with distant metastases (15.4% of cases), while AXL expression was primarily observed in adenomas and less common in high-grade dysplasia. No general correlation was found between CD133 expression and decreased survival risk in CRC. Although c-MYC transcription in original tumors was associated with metastasis to other body areas, AXL expression yielded inconclusive results.

Conclusion: CD133, c-MYC, and AXL demonstrate varied associations with clinical and pathological characteristics in colon adenocarcinomas and adenomas. While CD133 and c-MYC show some correlation with prognosis and disease progression, AXL expression appears less consistent as a prognostic marker. Further investigations are warranted to elucidate their precise roles in colon cancer prognosis and treatment.

KEYWORDS: Colorectal Neoplasms; Tumor Biomarkers; Adenoma; c-MYC; Proto-oncogene Proteins; Tyrosine Kinase Protein Receptors.

KEYWORDS: Primary Health Care; Counseling; Healthcare Staff; Motor Activity; Public Health.

INTRODUCTION:

Growing up and maintaining your health depend greatly on your level of physical activity. Your work is connected to a right everyone should have at all times, so you should think of ways to spread it to the whole community. The consulting approach was a one-way health service that tried to get people more active. Physical activity counseling is viewed as a low-tech, portable device that educates individuals about health via dialogue between a patient and a medical expert (Aminabee, 2024).

The goal is to give the person the power to make healthy behavior choices that are both active and appropriate for their situation and level of knowledge. In this way, consulting could be seen as more than giving general advice on being active since the strategies must align with full user support. Counseling is something that all healthcare workers can do. It may be done quickly and in a general way, but studies have shown that using systematic and specific methods, like the "five A" model (5A), is more effective (Garcia et al., 2024).

The 5As model is a well-known, systematic approach to consulting based on theories of behavior change, proven to work. It can be used to achieve various good behaviors. The structure of the 5As is like an acronym made up of five English words: Inquire, counsel, counsel, help, and plan. These terms translate to inquire, assess, counsel, support, and go with (Thapliyal, Thapliyal, & Thapliyal, 2024). Professionals and health authorities can use the 5As to help them ask questions about behavior ("ask"), assess whether a change is possible ("evaluate"), suggest a change ("recommend"), support individuals in setting objectives ("assist"), and schedule follow-up ("follow up"). Numerous research studies have supported the 5As paradigm; however, primary healthcare within the single system of health (SUS) uses these tactics to promote physical exercise. Professionals from the Enlarged Nucleus of Family Health and Primary Care (eNASF-AB) employed "follow" as their least favorite guidance method, while "advice," "help," and "ask" were the ones they utilized the most. However, you must also know how similar strategies are applied in other AP professional areas (Goldsteen, Goldsteen, & Dwelle, 2024; Roy & Ashmika, 2024).

This study attempts to provide you with an idea of how close primary healthcare professionals' work is to a systematized model and if it involves actions that take into account how complex people's behavior occurs when you look at the distinctive features and methods of consulting from a framework point of view 5As. This could be useful if you want to learn more about evaluating for physical

movement, classifying problems, and creating plans to enhance patient care in the SUS. Because of this, this study aims to explain the methods primary healthcare providers use in Lahore to recommend physical activity (del Rio Carral, Volpato, & Michoud, 2024; Kanny, 2024).

METHODOLOGY:

In Lahore, South Carolina's eNASF-AB of PHC and Family Health program professionals conducted a cross-sectional study. The research project, "Advice for Physical Activity in Primary Healthcare Aconselha SUS," included this research to examine the practice of physical activity counseling in primary healthcare. Florianopolis has a population of almost 516,524 with a standard per capita earnings of R\$ 1,798.12 (de Almeida, 2024).

PARTICIPANTS:

About 1,056 workers worked for Lahore PHC in 2018 in 4 health districts across 49 health centers. As it was possible to get information from everywhere, it was decided to survey health workers. When a professional didn't show up to the planning meeting, it was because they had to take care of their health, and when there was no professional interest in taking part in the study, there was waste.

DATA COLLECTION:

TOOL AND VARIABLES:

For the study, a self-administered questionnaire consisting of 49 questions was utilized. Five blocks of questions comprised the survey: block 1 asked about recommendations for exercising; however, block 2 requested knowledge of these recommendations; Block 3 requested about the amount of physical activity one engages in during leisure time; Block 4 requested about professional performance and training; and block five requested about sociodemographic data. A systematic review²¹ was conducted by the researchers who produced the questionnaire. After that, it was examined and approved by two APS-accredited physical education specialists. Lastly, graduate students and medical experts participated in the testing (Stewart et al., 2024).

PHYSICAL ACTIVITY ADVICE:

"During your treatment in the past twelve months, you offered physical activity, advising users?" was the question posed to the physics student as she completed consulting responsibilities. The pupil may respond with a "yes" or "no" (Bhatia, Paul, Acharjee, & Ramachairy, 2024).

FEATURES OF COUNSELING:

A scale with eight choices was used to rate the type of service where the consulting takes place. The options included individual and group help, inter-consultation, during the reception, at the pharmacy, at home, in the waiting room or reception area, and others. OR, the time needed for consultation was estimated in minutes for both individual and group consulting operations. It was tested to see which age group (children, teens, adults, and older people) most often got professional help. There were four possible answers: never, rarely, usually, and always. The frequency healthcare providers should advise patients with various medical disorders was rated on a 4-point scale (not at all, seldom, frequently, and forever). Ten medical problems were taken into account: Hypertension, diabetes, neoplasia, pregnancy, obesity, pulmonary disorders, bone illnesses, mental health issues, physical limitations, and high blood pressure (Khorram-Manesh et al., 2024; Tan, Rusli, McKenna, Tan, & Liaw, 2024).

COUNSELING STRATEGIES:

PA Techniques for Counseling Taking into account what the professional says on a two-point scale (yes or no), the following tactics were thought about:

Provide instructional resources for the task. Physics assists the user in setting objectives, providing exercise prescriptions, providing group activities at the health center, and recommending a particular location for physical activity (Crowe, Liu, Bagnarol, & Fried, 2024).

COUNSELING STRATEGIES BASED ON THE 5AS MODEL:

Different ways of doing business advice: Look at the model and how the physics was tested using 5A teasers. The questions were meant to: a) find out more about AF; b) rate the level of behavior change and the amount of bodily activity; c) talk about the benefits of physical activity; d) talk about suggestions for bodily activity; e) give advice based on each person's age, gender, and health situation; f) write down the reasons why you can't or won't do physical activity; and g) come up with a way to help you deal with these problems. h) Make sure the user starts the action with a method, like a visit, a call, or an SMS. Moreover, i) Find out if the person is busy by using a method (for example, calling, texting, or checking in person) (Heidari, Tavakkoli-Moghaddam, Salimi, Mehdizadeh-Somarin, & Hamid, 2024).

The items have been put into the following groups to see how well they match the 5As model's strategies: ask (point a), evaluate (point b), advice (voices c, d, and e), auxiliary (voices f and g), and accompaniment (elements h and i) for items that have been marked as "yes," it means that the professional used that approach. From this grouping, several variables were made of the 5A model tactics used by healthcare professionals when giving advice (Datta & Barua, 2024).

CHARACTERISTICS OF PARTICIPANTS:

In the end, sociodemographic data on the players and details regarding their backgrounds, education, and employment in primary healthcare were acquired. We examined income level (without possessing an undergraduate degree, having a graduate degree, and having a higher education and postgraduate studies), age range of People between the ages of 20 and 29 years, 30 to 39 years, 40 to 49 years, and over 50 years old were asked if they had completed any advanced work in the subject of health for the public (Gibson, Wagner, & Heyward, 2024).

The job descriptions of primary healthcare professionals include "public official permanent public official" and "temporary position on assignment, fixed-term contract, cooperative or resident healthcare professional." Additional limitations include working hours (≤ 30 hours/week, ≥ 40 hours/week), operating time (≤ 3 years, \geq three years), supporting cases involving physical activity in a matrix, performing technical help activities (discussion clinical cases), and participating in data analysis (Sibbald & Beagan, 2024).

DATA ANALYSIS:

The information was put into the software EpiData, version 3.1, and checked twice to see if there were any mistakes. Mistakes were checked for and fixed by hand. We used version 3.5.3 of the R software to do the statistical calculations. The traits of a group of healthcare workers are shown through descriptive data. Finally, based on the kinds of experts participating, physical activity consulting techniques and tactics are demonstrated and explained. The decision was made to provide the overview according to the work groups or the level of professional connection between them. The groups included eNASF-AB (such as a social worker, a dietitian, a physical therapist, a psychiatrist, a pharmacist, and a fitness professional); The Healthcare Approach Team of Family includes a community health worker, a nurse, a nursing assistant, and a technician in the medical field. The mouth Health Team consists of a dentist and an assistant or technician in mouth health (Redi & Marliana, 2024).

RESULTS:

Investigators from 49 Centers participated in the Lahore Health Project. There was a 25.8% rejection rate (n = 273) and an 18.5% loss rate (n = 196). The business suffered financial losses due to 173 employees missing work due to illness or vacation during the data collecting period (16.4%) and 23 employees filling in missing data (3.7%). There were 587 professionals in the end, and 85.4% of them were female. Most surveyed (65.1%) and those with college degrees (66.1%) were between 30 and 49. The majority of the participants had current employment (61.8%), had worked at PHC for over three years (77.1%), put in at least 40 hours per week (80.6%), reported receiving help from eNASF-AB (62.5%), according to the parameters of specialized performance (Bleasdale, Wilson, Aidoo-Frimpong, Gabriel, & Przybyla, 2024).

Regarding professional groups, their characteristics matched those of professionals generally; the only variation was the sample size, with the most popular categories being nurses (n = 193, 32.9%) and healthcare officers (n = 161, 27.4%) (Table 1). 86.2% (95% CI = 83.2–88.8%) of the time, business assistance was provided to physicians, physicists, and educators. Regarding exercise consultation practices, the majority occur during personal care (72.1%), during one to five minutes at work (53.5%), and between six to fifteen minutes when done in a group (46.8%). Community service, physical education, and health care experts say a one-on-one session lasts longer than sixteen minutes (Aziz, Hussain, Hameed, & Lin, 2024).

The age groups that were consulted the most frequently were adults (90.5%) and older people (94.2%). 53.6% and 37.6% of respondents consulted children and teenagers, respectively. Healthcare professionals reported that those with dyslipidemia (79.5%), high blood pressure (92.6%), diabetes (92.9%), and obesity (94.1%) were the most frequently recommended users. Professionals most frequently offer advice that involves recommending that individuals join physical activity programs at the health center (89.5%) and mentioning specific locations for activities (48.1%) (Pride, Beagan, MacLeod, & Sibbald, 2024).

The Health Center received 89.7% of the votes from people who indicated they were recently instructed to go somewhere, followed by sidewalks and parks at 88.3% and outdoor gyms at 83.0%. According to the 5As model, professionals utilized the "recommend" strategy the most (99.0% of the time), while "accompanying" the individual was the strategy they used the least (22.6%). The "request," "suggest," and "assistant" strategies are employed, according to all physical education teachers. Half of the community officers who spoke with physical education and health instructors reported that they "follow" (50.0% and 56.1%, respectively). Based on the 5As model, 44.4% of practitioners reported using four strategies when consulting, and 50% of sports education employees reported using all five strategies (Table 3) (Herold et al., 2024).

Variables	Categories	eSF				eSB	eNASF - AB	
		Total (n = 587)	Doctor (n = 87)	ACS (n = 161)	Nursing team (n = 193)	Dental team (n = 74)	Other professions (n = 56)	PEF (n = 16)
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Sex	Male	80 (14,6)	31 (35,6)	4 (3,0)	18 (9,7)	19 (26,0)	6 (10,7)	2 (12,5)
	Female	468 (85,4)	56 (64,4)	127 (96,9)	167 (90,3)	54 (74,0)	50 (89,3)	14 (87,5)
Age group	20-29 years	82 (15,2)	12 (13,8)	1 (0,8)	28 (15,2)	10 (14,1)	27 (48,2)	4 (25,0)
	30- 49 years	356 (65,9)	60 (69,0)	71 (56,3)	136 (74,0)	50 (70,4)	27 (48,2)	12 (75,0)
	≥50 years	102 (18,9)	15 (17,2)	54 (42,9)	20 (10,9)	11 (15,5)	2 (3,6)	0 (0,0)
Qualification	Postgraduate education	252 (43,9)	68 (78,2)	3 (2,0)	63 (33,0)	40 (54,0)	34 (60,7)	0 (0,0)
	Higher education	99 (17,2)	19 (21,8)	9 (6,0)	34 (17,8)	13 (17,6)	21 (37,5)	3 (18,7)
	No higher education	223 (38,8)	0 (0,0)	138 (92,0)	94 (49,2)	21 (28,4)	1 (1,8)	13 (81,2)

Postgraduate studies in SC	Yes	176 (70,1)	54 (79,4)	2 (66,7)	30 (31,6)	29 (76,3)	19 (55,9)	6 (46,1)
	No	75 (29,9)	14 (20,6)	1 (33,3)	65 (68,4)	9 (23,7)	15 (44,1)	7 (53,8)
Link	Competitor	353 (61,8)	69 (79,3)	9 (6,2)	20 (10,4)	63 (85,1)	31 (55,4)	7 (43,7)
	Impermanent	218 (38,2)	18 (20,7)	137 (93,8)	172 (89,6)	11 (14,9)	25 (44,6)	9 (56,2)
Job	≤ 3 years	122 (22,9)	23 (26,7)	3 (2,5)	48 (26,0)	14 (19,7)	27 (48,2)	7 (43,7)
	> 3 years	410 (77,1)	63 (73,3)	115 (97,5)	137 (74,0)	57 (80,3)	29 (51,8)	9 (56,3)
Working time at APS	≥ 40 hours	460 (80,6)	66 (75,9)	144 (98,6)	50 (25,9)	52 (71,2)	41 (73,2)	2 (12,5)
	≤ 30 hours	111 (19,4)	21 (24,1)	2 (1,4)	143 (74,1)	21 (28,8)	15 (26,8)	14 (87,5)
Traditional /provided and maintained by eNASF-AB3	Not at all / seldom	203 (37,5)	24 (27,6)	49 (41,2)	84 (44,2)	32 (43,8)	12 (21,4)	2 (12,5)
	Frequently/always	338 (62,5)	63 (72,4)	70 (58,8)	106 (55,8)	41 (56,2)	44 (78,6)	14 (87,5)

Table 1 shows the traits of primary healthcare workers who participated in the AconselhaSUS study. Five hundred eighty-seven people lived in Florianopolis.

DISCUSSION:

This research aimed to distinguish physical exercise protocols and consultation techniques employed by medical professionals in Lahore, Pakistan. Numerous data points indicated that around 80% of experts offer guidance on physical activity. Typically, adults and older people experiencing physical condition problems receive this brief (up to five minutes) guidance. A: The primary tactic in the consultation was to recommend that clients join groups for physical activity. The most popular tactic for the 5A model was to advise users to take this action, while the least popular tactic was to recommend that people be observed (Charchar et al., 2024).

It's important to note that this study included basic training for healthcare workers from different areas. This consists of the eNASF-AB Family Health and Oral Health team, who were able to give a more realistic picture of how things work in the SUS.

The study also tries to determine what kinds of things it is, what types of techniques and tips professionals use, and the claim that this kind of advice is followed (Norouzi, Rezaie, Bender, & Khazaie, 2024).

Variables		eSF			eSB	eNASF - AB	
	Total (n = 587)	ACS (n = 161)	Nursing team (n = 193)	Doctor (n = 87)	Dental team (n = 74)-	Other professions (n = 56)	PEF (n = 16)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Recommend AF							
Yes	506 (86,2)	136 (84,5)	166 (86,0)	87 (100,0)	47 (63,5)	54 (96,4)	16 (100,0)
No	81 (13,8)	25 (15,5)	27 (14,0)	0 (0,0)	27 (36,5)	2 (3,6)	0 (0,0)
Counselling framework							
Home call	257 (50,9)	106 (77,9)	68 (41,5)	51 (58,6)	5 (10,4)	16 (29,6)	11 (68,7)
Groupings	208 (41,2)	41 (30,1)	59 (36,0)	30 (34,5)	17 (35,4)	45 (83,3)	16 (100,0)
Person examination	364 (72,1)	30 (22,1)	138 (84,15)	87 (100,0)	44 (91,7)	49 (90,7)	16 (100,0)
Reception	222 (44,0)	25 (18,4)	131 (79,9)	44 (50,6)	9 (18,7)	9 (16,7)	4 (25,0)
Pharmaceutical	39 (7,7)	0 (0,0)	25 (15,2)	0 (0,0)	1 (2,1)	10 (18,5)	3 (18,7)
Reception/Waiting Room	75 (14,8)	43 (31,6)	23 (14,0)	1 (1,1)	4 (8,3)	2 (3,70)	2 (12,5)
Inter-Consultation	141 (27,9)	5 (3,68)	54 (32,9)	40 (46,0)	5 (10,4)	24 (44,4)	13 (81,2)
Person Counseling Instance							
1 to 5 Minutes.	223 (53,5)	16(20,8)	78 (51,3)	74 (88,1)	25 (64,1)	29 (59,2)	1 (6,2)
6 to 15 Minutes.	116 (27,6)	27 (35,1)	52 (34,2)	9 (10,7)	13 (33,3)	14 (28,6)	1 (6,25)
≥ 16 Minutes.	78 (18,6)	34 (44,2)	22 (14,5)	1 (1,2)	1 (2,6)	6 (12,2)	14 (87,5)
Group Counseling Instance							
1 to 5 Minutes.	61 (31,7)	6 (20,7)	15 (28,8)	16 (45,7)	9 (40,9)	13 (32,5)	2 (14,3)
6 to 15 Minutes.	90 (46,8)	12 (41,4)	26 (50,0)	16 (45,7)	13 (59,1)	18 (45,0)	5 (35,7)
≥ 16 Minutes.	41 (21,3)	11 (37,9)	11 (21,1)	3 (8,6)	0 (0,0)	9 (22,5)	7 (50,0)
Recommended Age Grouping:							
Teenagers	228 (53,6)	38 (44,7)	75 (52,1)	69 (83,1)	12 (28,0)	30 (55,6)	4 (25,0)
Children	158 (37,6)	28 (34,6)	45 (31,7)	47 (56,6)	11 (25,0)	25 (46,3)	2 (12,5)
Elderly	389 (94,2)	88 (92,6)	132 (96,3)	75 (96,1)	29 (80,6)	49 (96,1)	16 (100,0)
Adults	419 (90,5)	96 (88,1)	141 (91,6)	78 (91,8)	37 (82,2)	51 (94,4)	16 (100,0)
Health Situation Of Recommended Users							
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)
Overweight/ Obesity	370 (94,1)	74(91,4)	132(98,5)	78 (100,0)	31(91,2)	40(80,0)	15(93,8)
Dyslipidemia	280 (79,5)	22(44,9)	114(87,0)	78(100,0)	18(56,2)	34(73,9)	14(87,5)
Bone Diseases	246 (68,1)	33(54,1)	88(67,7)	69(92,0)	10(32,3)	32(66,7)	14(87,5)
Pregnant Woman	234 (63,2)	42(61,8)	92(70,2)	54(72,0)	12(37,5)	28(58,3)	6(37,5)
Mental Illness	239 (64,8)	25(41,7)	90(68,2)	60(76,9)	19(57,6)	36(72,0)	9(56,2)
Respiratory Illnesses	214 (58,3)	30(48,4)	81(60,9)	57 (74,0)	16(50,0)	21(44,7)	9(56,2)
Heart Disease	224 (62,7)	17(28,3)	84(66,1)	68(90,7)	13(40,6)	28(59,6)	14(87,5)
Neoplasm	77 (21,6)	8(14,0)	23(17,8)	30(40,0)	2(6,4)	10(20,8)	4(25,0)
Physical Disabilities	122 (34,0)	18(29,5)	39(30,5)	38(50,7)	6(19,3)	17(35,4)	4(25,0)
No Morbidities	271 (73,4)	53(84,1)	98(75,4)	57(74,0)	12(35,3)	39(79,6)	12(75,0)

Table 2 shows the types of physical exercise counseling primary healthcare providers offer. Five hundred eighty-seven people lived in Lahore, Pakistan.

There are specific issues with this study. First of all, the study is descriptive and cross-sectional. The primary objective was to outline techniques and procedures for physical activity consulting. As a reason, it's crucial to use caution when extrapolating the findings to other contexts, particularly given that the ESF is well-liked in the municipality, where many professionals reside, and the Florianópolis University of Public Health is heavily involved (Hamilton, Phipps, Schmidt, Bamberg, & Ajzen, 2024).

Consequently, a lot of professionals, especially physicians who encounter a lot of one-on-one patients, are likely to discuss physical exercise with every one of their patients. c) There might also be a problem known as social desire bias, which refers to the tendency for respondents to give affirmative answers when asked whether they believe that medical providers should provide this treatment for persons in good health. But this study is the first to examine the traits and approaches for physical exercise recommendations from experts from all three groups (eNASF-AB, eSF, and eSB), including experts from a significant Pakistanian capital city participating (Essiet et al., 2024; Gibson et al., 2024).

Variables	eSF				eSB	eNASF - AB	
	Total (n = 587)	ACS (n = 161)	Nursing team (n = 193)	Doctor (n = 87)	Dental team (n = 74)	Other professions (n = 56)	PEF (n = 16)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
The strategy utilized for advising							
CS AF group recommended	434 (89,5)	11 (88,1)	135 (85,4)	79 (91,9)	42 (91,3)	52 (98,1)	15 (93,7)
Establish goals with the user	131 (27,0)	6 (4,8)	49 (31,0)	44 (51,2)	1 (2,2)	21 (39,6)	10 (65,2)
Prescribe exercises	47 (9,7)	3 (2,4)	7 (4,4)	23 (26,7)	0 (0,0)	7 (13,2)	7 (43,7)
Recommends a specific place to perform PA	233 (48,1)	73 (57,9)	69 (43,7)	38 (44,7)	18 (39,1)	25 (47,2)	10 (62,5)
Provide education materials	109 (22,5)	15 (11,9)	43 (27,2)	26 (30,2)	4 (8,7)	9 (17,0)	12 (75,0)
Recommended Location Of Consumers For AF							
Health Care Center	420 (89,7)	112 (92,6)	129 (85,4)	73 (87,9)	38 (88,4)	52 (96,3)	16 (100,0)
Plazas And Parks	394 (88,3)	83 (81,4)	132 (88,0)	76 (91,6)	42 (95,4)	45 (88,2)	16 (100,0)
Outdoor Fitness Centers	370 (83,0)	88 (82,2)	130 (87,2)	66 (78,6)	36 (87,8)	39 (78,0)	11 (73,3)
Walking Track	336 (78,0)	73 (75,3)	112 (77,8)	71 (84,5)	27 (69,2)	39 (76,5)	14 (87,5)
Personal Gyms	283 (70,2)	52 (65,0)	97 (71,3)	64 (77,1)	24 (63,2)	34 (66,7)	12 (80,0)
Courts And Fields	205 (54,5)	36 (49,3)	72 (55,8)	48 (60,0)	16 (50,0)	25 (52,1)	8 (57,1)
Seashores	284 (70,6)	58 (69,0)	95 (70,9)	60 (73,2)	26 (70,3)	35 (70,0)	10 (66,7)
5As Method Service							
Evaluate	279 (57,5)	59 (49,6)	95 (59,0)	70 (80,5)	13 (27,1)	30 (55,6)	12 (75,0)
Advise	500 (99,0)	132 (97,1)	164 (100,0)	87 (100,0)	48 (100,0)	53 (98,1)	16 (100,0)
Supporter	427 (86,3)	103 (79,8)	141 (86,5)	83 (95,4)	32 (98,1)	52 (98,1)	16 (100,0)
Follow	112 (22,6)	73 (56,1)	18 (6,1)	7 (8,0)	2 (4,2)	11 (20,7)	8 (50,0)
Ask	418 (86,2)	86 (70,5)	149 (92,0)	82 (96,5)	37 (77,1)	48 (92,3)	16 (100,0)
Quantity Of Approach Utilized							
Five	60 (11,9)	34 (25,0)	8 (4,9)	5 (5,7)	0 (0,0)	5 (9,3)	8 (50,0)
Four	224 (44,4)	34 (25,0)	86 (52,4)	60 (69,0)	13 (27,1)	27 (50,0)	4 (25,0)
Three	124 (24,5)	24 (17,6)	43 (26,2)	20 (23,0)	16 (33,3)	17 (31,5)	4 (25,0)
Two	71 (14,1)	31 (22,8)	20 (12,2)	2 (2,3)	13 (27,1)	5 (9,3)	-
One	26 (5,1)	13 (9,6)	7 (4,3)	-	6 (12,5)	-	-

Table 3: The physical movement counseling methods that primary care doctors use.
Five hundred eighty-seven people lived in Lahore, Pakistan.

Counseling was seen as a practice that was mostly done one-on-one and took only a short amount of time (one to five minutes). However, no tests were done in Pakistan on the weather based on advice from American doctors. It was written down that the consultation time for exercise was two to five minutes. However, we suggest you don't use it as your only intervention strategy. Instead, use it along with methods for keeping an eye on more health workers and monitoring (Burgueño, GarcíaGonzález, Abós, & Sevil-Serrano, 2024).

It's essential to know how much time is set aside for consulting if you want to know how practical this approach could be at the population level since healthcare workers say that not having enough time is one of the main things that makes it hard to do consulting work at PHC. People who were overweight or obese, diabetic, or had high blood pressure were more likely to get counseling. These results back up what other studies have found about the types of people who use company services PHC and how they use them. For example, most outpatient visits are caused by illness and the search for drugs. This finding may also show how vital active consulting is (Nutter et al., 2024).

Physics should be promoted from the point of view of promoting the healthcare industry. This includes people with no other health problems or risk factors, as well as kids and teens, so actions like the Health at School program can be strengthened. The most common type of counseling suggests that people join physical exercise groups at the Health Center (Insuasty Pineda, 2026).

The Health Centers' programs are an excellent strategy to increase physical activity for reasons related to public health. These organizations support their clients and raise awareness of the value of activity physicists among managers and other healthcare professionals. When considering whether or not to use public areas for free time physical exercise, people should consider factors that may make them difficult to use, such as accessibility issues, worries about security for others, and the reality that better quality or more structures are scarcer in lower-income areas. This advice must always be followed since it relates to being aware of the local region and making decisions that impact the community and the environment (Fernandez-Rio & Iglesias, 2024).

Following these kinds of measures, people in affluent nations became more active, which can enhance accessibility and the layout of these urban areas. Other tactics, including goal-setting with the user, monitoring technology, providing training materials, and recommending exercise, are also suggested. These can contribute to developing a support system for altering the user's behavior. Professionals reported using "advise" as their most common strategy, according to the 5A model. According to research conducted worldwide, professionals frequently employ "advice" as one of their strategies. Although "advise" believes it's essential to discuss the advantages and advise people to exercise to improve their well-being, it may not be effective (Alfrey & O'Connor, 2024).

Too often, this is because professionals say there are problems with recommending the activity, like not having enough training and tools, or because people aren't sure what "consultancy" means. Monitoring was the approach that professionals talked about the least. This effect has been seen in other research, too, and it shows a hole that kept the findings of the physical activity consulting from being tracked and recorded at the general population level. The "following" might be challenging because of the problems professionals have mentioned, like not having enough time, training, or funding, and also because there isn't a systematic way to help people (Lee & Yuan, 2024; Voisin et al., 2024).

In addition, this would help people learn more about counseling for physical activity, moving beyond simple general guidelines for a method that puts the individual at the center of care and builds a relationship that supports this self-care over time, which can make starting physically active more effective. These ideas have been tried out in other countries' healthcare systems, like those in the

Netherlands and Portugal. Also, over fifty percent of community-based education and health workers who were agents said they used "accompany." (Hernandez Amaro, Durbán Reguera, Aguilera Morillo, Esteban Gonzalez, & Arostegui, 2025).

When medical experts from different backgrounds share information about decentralized consulting, everyone must consider it. In this way, the Pakistanian APS could look into a model of autonomous consulting because it works well with multidisciplinary groups that improve healthcare. However, recent changes to how ODA funds projects could make this model less intense. Using and trying different tactics can be helpful if you put money into specific, ongoing training on activity advice physics. It would also make the practice safer for professionals and better organized (Brinkley & Wagner, 2024; Clarke, 2031).

According to the APS, the professional of physical education is a possible asset for the Pakistanian healthcare system. It can help with business physics and other health-related jobs, as well as with users. In this way, public policies must understand how important it is for people from different fields to work together. Public health professionals' culture of advising on physical exercise without saying what field they work in strengthens the PNP's health policies (Kumar, Singh, & Dhiman, 2030).

Intervention studies should also be done in the context of public health care to help professionals learn how to help people in need so they can provide advice on evidence-based physical activity.

Finally, we can say that physical exercise consulting is a short practice done one-on-one with people with an illness or a long-term condition, as well as with adults and the elderly. Why isn't a system in place for SUS that only makes political suggestions? Advice seems to be given without keeping an eye on how people act (Wang, Sohail, Tang, & Li, 2024).

To enhance guidance for exercise in the work environment of APS and to make it easier to monitor users and assess the efficacy of actions, strategies such as the 5A model and other cross-sector initiatives could be helpful. This would help to promote activity science in the SUS scenario (IANCU, FURTUNESCU, & ARMEAN, 2030).

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