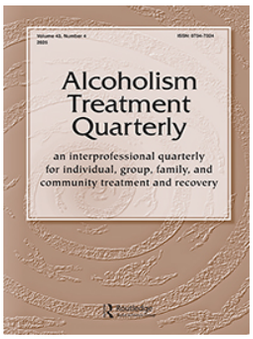

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Attitudes of Health Professionals Toward Alcohol and People with Alcohol Use Disorders. A Cross-Sectional Study

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ABSTRACT

Europe is the region of the world with the highest consumption of alcoholic beverages and this study aims to analyze the attitudes of Portuguese health professionals toward alcohol, its consumption, as well as their interpersonal relationships with people with problematic use of alcohol. An observational study with a quantitative approach was accomplished with a non-randomized sample of 471 health professionals. The Scale of Attitudes toward Alcohol, Alcohol-Related Problems and People with alcohol use disorders – Portuguese version (EAFAA-PT) was used for data collection. It was found that 68.58% of participants have positive attitudes and 31.42% have negative ones. Women and older individuals tend to have more negative attitudes toward people with problematic alcohol use. Having frequent professional experience with people with alcohol use problems, having an academic background and receiving in-service training on the topic are predictors of positive attitudes. Being a nurse is a predictor of negative attitudes. This study suggests that the combination of academic training, continuous in-service training, and recognition of the problem in everyday practice contributes to more positive attitudes toward problematic alcohol use and associated problems. This should be promoted given its impact on the quality of care and outcomes for individuals.

KEYWORDS

Alcohol-related disorders; health knowledge, attitudes, practice; health personnel; quality improvement

Introduction

Alcohol and the problems related to its consumption have received increasing attention from health organizations. Europe has been identified by the World Health Organization as the world's highest drinking region, with an average consumption of 9.8 liters (l) of pure alcohol, per person, annually (WHO, 2018).

Concerning the data for Portugal, there was an increase in the average consumption of liters of pure alcohol per year and per person between 2019 (9.5 l) and 2021 (12.1 l). The prevalence of any alcoholic beverage throughout life is 85.3%, 58,3% in the last 12 months, 48,5% in the last 30 days, and 3.6% have harmful use or dependence (SICAD, 2022). These data reflect the extent of the problem, warning of the consequences of harmful consumption in the general population (Yoo et al., 2021) as well as associated consumption of other substances (Gutiérrez-Cáceres et al., 2019). The association between psychiatric and physical comorbidities is frequent in people with excessive alcohol consumption (Hsu et al., 2022).

This reality influences both the way people attribute meanings to alcohol and the behaviors and attitudes toward its consumption (Vargas, 2014; Vargas et al., 2020), with health professionals being no exception. Professionals' attitudes toward alcohol consumption are a crucial aspect in addressing alcohol-related problems (Vargas, 2014). Attitudes are influenced by several factors, including professional knowledge and beliefs on the subject, personal experiences with alcohol consumption, as well as personal and professional experiences with people who consume alcohol (Crothers & Dorrian, 2011; Vargas et al., 2020). There are significant correlations between a health professional's ability to address alcohol-related problems and their age, years of professional experience, specialty, ability to obtain a history of alcohol use, and continuing studies after the initial degree (Fucito et al., 2003; Iqbal et al., 2015).

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An "attitude" may be defined "an acquired and enduring predisposition to act always in the same way toward a certain class of objects or a persistent mental and/or neural state of readiness to react toward a certain class of objects, not as they are, but as they are conceived" (DeCS, 2017). This definition reveals how the personal conceptions of the health professional can affect their attitude and the way they intervene.

According to Vargas (2014), nurses' attitudes can enhance the person's recovery when they are positive, an aspect previously highlighted by Crothers and Dorrian (2011). On the other hand, a negative view, consequently translated into negative attitudes, is sometimes observed in health professionals, and has been documented as one of the obstacles to the treatment of people with alcohol consumption (Happell & Taylor, 2001). Thus, identifying and comparing the attitudes of different health professionals is crucial for the implementation of strategies that contribute to improving their behavior toward people with alcohol consumption, to enhance treatment results (Vargas et al., 2020), as well as to increase people's satisfaction with the care received, which is a determining factor for better health outcomes (Seabra, Simões, et al., 2022).

Researchers from several countries have sought to understand the attitudes of health professionals toward this issue. Studies including different professionals (Vargas et al., 2020) and others involving only one professional group (Castañeda et al., 2019; Heredia et al., 2021; Vargas, 2011) have identified predominantly positive attitudes toward alcohol, alcohol consumption and people with alcohol use disorders (AUD), although there is sometimes a tendency toward ambivalence (Vargas, 2011), or even some negative attitudes toward the etiology of consumption (Castañeda et al., 2019; Vargas et al., 2020), and alcoholic beverages and their consumption (Vargas et al., 2020), as well as about work and interpersonal relationships with people with alcohol use disorders (Heredia et al., 2021). Other studies have generally described predominantly negative attitudes toward this problem (Morales-Castillo et al., 2021; Ramírez et al., 2019), which influences the type and amount of attention given to these people (Vargas & Luis, 2008). Negative attitudes are also associated with stigma (Lock & Kaner, 2004) and poor health outcomes for users (Roncallo & Aronson, 2023). That's all reasons that could make effective and comprehensive direct care difficult. Therefore, studies are needed to uncover this.

In the research by Vargas et al. (2020), it was found that nurses were the health professionals who reported the least favorable views of individuals with problematic alcohol use, compared to medical doctors, occupational therapists, social workers and psychologists. There is a negative and statistically significant association between the age of professionals and their attitudes, that is, the older the age, the more negative their attitudes toward alcohol, alcohol problems and people with alcohol use disorders (Ramírez et al., 2019; Vargas, 2013; Vargas et al., 2020). In turn, if we look at the gender variable, there is no consistency in the findings. Vargas (Vargas, 2013) identified that, within the category of Brazilian nurses, women have more positive attitudes compared to men, while in another study, involving Mexican and Colombian nursing students, it was emphasized that it is men who have more positive attitudes (Castañeda et al., 2019). It should be noted that this scale has been shown to be reliable when applied to health students (Heredia et al., 2021), particularly when they are already graduates and with clinical experience (Seabra, Silva, et al., 2022).

In Portugal, no studies have been identified that specifically analyze the attitudes of health professionals, so it is not known which behaviors are prevalent in each professional group. An initial "picture" about this is needed. Based on this, the research question of this study was "What are the attitudes of health professionals toward alcohol, its consumption and interpersonal relationships with people experiencing problematic consumption?"

Materials and methods

This study aims to analyze the attitudes of Portuguese health professionals toward alcohol, its consumption, as well as their interpersonal relationships with people with problematic use. Additionally, it aims to understand the association between these attitudes and sociodemographic, educational and professional variables.

An observational, analytical, cross-sectional study, with a quantitative approach, was carried out with health professionals from multiple institutions throughout the Portuguese mainland and islands. Considering that for a first large description of a given phenomenon, a cross-sectional study is the indicated

method (Gray & Grove, 2021), the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines were duly followed for the presentation of results (Vandenbroucke et al., 2007).

Participants

Non-randomized, convenience sampling of health professionals ($n = 471$). Participants accessed the e-mail sent by their institution or Professional Order, explaining the purpose of the study, the inclusion criteria (being a health professional – doctor, nurse, social worker, psychologist), and mode of participation. After obtaining free and informed consent, a link was provided with all the study questions (formulated on the Google Forms platform).

Materials

EAFAA-PT is a 41 items scale that consists of four factors (F): F1): attitudes toward work with and interpersonal relations with persons with alcohol use disorders; F2) attitudes toward persons with alcohol use disorders; F3) attitudes toward the causes of alcohol use disorders (etiology); and F4) attitudes toward alcoholic beverage use. It is scored on a five-point Likert scale (range 1 to 5), in which the participants are asked to indicate their responses (5=strongly agree, 4=agree, 3=indifferent, 2=disagree and 1=strongly disagree). A cutoff point of 3.15 differentiates positive attitudes, with higher scores representing more favorable attitudes.

The scale asks the attitudes of professionals, not in the immediate previous moment, but the construction that each one has made about caregiver contact with people with problematic alcohol consumption, throughout their professional career. The reliability obtained in previous studies with health-care professionals, using Cronbach's alpha, was satisfactory – 0.801 (Seabra, Silva, et al., 2022). A questionnaire, containing questions about sociodemographic data, elaborated by the authors, included variables such as gender, age, marital status, length of service, profession, academic qualifications, in-service training, periodicity of care, as well as personal and professional experience with people with problematic alcohol consumption.

Data collection, data processing and data analysis

For sample size, the minimum number of five observations per scale item was considered to ensure variability to estimate the parameters (Curado et al., 2014). Data were collected between July 2021 and February 2022, using an Excel file without any identification of participants, coded and exported to R software version 4.3.1 (R Core Team, 2023). Measures of central tendency and dispersion were analyzed for descriptive statistics. Inferential statistics used the assumptions of prior analysis of data distribution and homogeneity of population variances, variable by variable, to decide whether to use parametric or non-parametric tests. Inferential analysis with multivariate linear regression was also used, analyzing variance, testing linear regression models to compare the association of predictors with the overall EAFAA-PT score, which being categorical predictors led to the use of two-factor ANOVA. The value of $p < .05$ was assumed as the critical value of significance of the test results.

Results

A total of 471 health professionals participated in the study, mostly female (80.47%), married or in a civil partnership (67.52%), nurses (53.08%) and graduates (59.87%). The mean age is 44.68 years (standard deviation (SD) = 11.49) and range [maximum 21 - minimum 77], median 45 and an interquartile range (IQR) of 19. As for the length of time in practice, we found an average of 20.45 years (SD = 11.20) [1–50]. It should be noted that, as regards profession, the remaining participants are distributed among medicine (30.57%), social workers (11.89%) and psychology (4.46%) and, as regards qualifications, after graduates, those with a master's degree (34.61%) follow.

Regarding the proximity to the problem and aspects related to specific training, 71.13% reported professional experience working with people with alcohol consumption, and 46.04% reported not currently

Table 1. Professional, academic and personal experience related with alcohol problems.

Variable		n	%	Lower CI	Upper CI
Professional experience with	No	136	28.87	24.96	33.13
people with alcohol consumption	Yes	335	71.13	66.87	75.04
Currently caring	No	215	46.04	41.57	50.57
of people with alcohol consumption	Yes	252	53.96	49.43	58.43
	No answer	4	0.85		
Frequency of professional	Never	111	24.03	20.35	28.13
Contact with people with AUD	Monthly	135	29.22	25.26	33.53
	Weekly	123	26.62	22.79	30.84
	Daily	93	20.13	16.72	24.03
	No answer	9	1.91		
Academic background	No	113	23.99	20.35	28.05
about People with AUD	Yes	358	76.01	71.95	79.65
Professional training	No	269	57.73	53.19	62.13
about AUD	On duty	114	24.46	20.77	28.57
	Postgraduate program	10	2.15	1.12	3.96
	Workshop	70	15.02	12.05	18.56
	Other	3	0.64	0.13	1.97
	No answer	5	1.06		
Time since last training	Up to one year	9	1.95	0.97	3.72
	Between 1 and 3 years	35	7.58	5.47	10.38
	More than 3 years	164	35.50	31.27	39.97
	Untrained	254	54.98	50.42	59.46
	No answer	9	1.91		
Having someone close	No	255	54.14	49.62	58.59
with alcohol problems	Yes	216	45.86	41.41	50.38

caring for people with alcohol consumption. Although 76.01% had academic training on the subject, 57.73% had never had professional training. In addition, 45.86% of the participants recognized that they had a close person among their social relationships who had problematic alcohol use (Table 1).

Regarding attitudes toward people, interpersonal relationships and alcohol, assessed by the EAFAA-PT, the mean in the sample was 3.31 (SD = 0.32) [2.26–4.17], overall positive. The median of 3.17 (IIQ = 0.39) shows that more than a half of the participants have overall positive attitudes. There were 68.58% (n = 323) with positive attitudes and 31.42% (n = 148) with negative attitudes. Regarding the scores observed in factors 3 (mean = 2.76, SD = 0.45) and 4 (mean = 2.99, SD = 0.43), alcohol use disorder (etiology) and alcoholic beverages and their consumption, respectively, the mean value fits as negative attitudes. According to the scores observed in factor 1 (mean = 3.58, sd = 0.56) – Work and interpersonal relationships with people with alcohol use disorder, and factor 2 (mean = 3.58, sd = 056) – People with alcohol use disorder, values indicative of positive attitudes were found.

We highlight the four items that contributed the most to a negative attitude: in factor 3 (item 7 - Shy or inhibited people are more likely to develop alcohol use disorder = 2.38 and item 15 - What people with alcohol use disorder lack is willpower = 2.37) and in factor 4 (item 16 - Drinking in any quantity leads to dependence = 2.02 and item 30 - Drinking alcohol in small quantities is beneficial = 2.65).

When the relationship between the scores observed in the overall EAFAA-PT and its subscales with the covariates of the study was verified, age showed a significant association with the scores of factor 2 (Attitudes toward people with alcohol use disorders), verifying only that the lower the age, the better the attitudes toward people with alcohol use disorders (rp = −0.100; p = .029). Additionally, there was no significant difference between men (mean 3.30) and women (mean 3.34) (tstudent = −1.047 (df = 469); p = .296). Although no statistically significant relationship was observed between years of professional practice and attitudes, the results showed that professionals with fewer years of practice have slightly more positive attitudes. Significant differences were found between attitudes and the frequency of contact in their professional context with people with problematic alcohol use, with those who contact daily presenting a mean value of 3.34 (SD = 0.35), weekly 3.37 (SD = 0.30), monthly 3.28 (SD = 0.31) and those with the lowest values were those who stated that they never took care of people with this condition 3.25 (SD = 0.30) (Anova Z = 3.147 (df = 3); p = .025). There were also significant differences in attitudes, regarding the time since the last alcohol awareness training. Those who reported having received the training in the last year had a mean score of 3.62 (sd = 0.32), between 1 and 3 years 3.39 (SD = 0.29) and those who reported never having received any in-service training had a mean score of 3.25 (SD = 0.31) (Anova Z = 8.751 (df = 3); $p \leq .001$) (Table 2).

Table 2. Relationship between EAFAA-PT and age and professional experience.

X	Y	N	Correlation	Lower CI	Upper CI	p-value
EAFAA-PT.total	Age	471	−0.058	−0.147	0.033	0.210
EAFAA-PT.total	Years of practice	462	−0.068	−0.159	0.023	0.142
EAFAA-PT.F2	Age	471	−0.100	−0.189	−0.010	**0.029**
EAFAA-PT.total	Contact frequency*	462	0.094	0.034	0.154	**0.007**
EAFAA-PT.total	Time since last training*	462	−0.166	−0.224	−0.106	**<0.001**

*Kendall's rank correlation tau.

Regarding professional groups, the difference is statistically significant (One-way ANOVA (df = 3.46) = 9.264; $p < .001$), with nurses having the least positive attitudes, and psychologists having the most positive attitudes (Table 3). Comparing between groups, two by two, there were differences between Nurse/Social Worker; between Nurse/Psychologist and between Doctor/Psychologist (Tukey HSD pairwise comparison of means for EAFAA-PT) (Table 3).

It is found that professionals who have professional experience with people with alcohol use problems have a more positive attitude score, compared to those who do not. Also, those who currently care for people with alcohol use problems have a better attitude score, compared to those who do not currently care, as do those who have had academic training on the issue, compared to those who have not. Some of these differences have small magnitudes but are statistically significant.

Focusing on in-service training, those who have attended formal postgraduate training have the most positive attitudes. However, the most notable difference, when comparing sub-samples, was between those who had never had any training on the subject and those who had had in-service training (Tukey HSD pairwise comparison = 7.538; $p < .001$). There were no differences in attitudes between those who had close social relationships (family and friends) and those who did not (Table 4).

Multivariate analysis

Regression analysis was used to ascertain the interaction effect of covariates with the observed scores on the EAFAA-PT (dependent variable). The results showed that being a "nurse" ($p < .001$) is a predictor for negative attitudes, while "having professional experience with people with alcohol problems" ($p < .016$), receiving "in-service professional training" ($p < .001$), and having completed a "postgraduate degree" ($p < .001$), are predictors of positive attitudes (Table 5). This model showed a good fit with an adjusted R2 of 0.127 and also revealed that this set of variables is responsible for reproducing 0.142 of the attitude's variable (EAFAA-PT). The predictive value of reproducing the same response in a new sample was R2 (predictive) of 0.110. Excluding other predictor variables, the educational background is also a predictor of attitudes (Chi-squared test (MC simulation) = 40.31; $p = .002$).

Subsequently, exploring the association between these variables, a significant relationship was found between academic training and frequency of contact (Chi-squared test (df = 3) = 10.57; $p = .014$), with a correlation assessment between these categorical variables of V Cramer = 0.127, and between professional training and frequency of contact (Chi-squared test (MC simulation) = 27.58; $p = .004$), with a correlation assessment of V Cramer = 0.106.127, and between professional training and frequency of contact (Chi-squared test (MC simulation) = 27.58; $p = .003$), with a correlation

Table 3. EAFAA-PT values between professional groups.

Variable	Profession	N	Mean	SD
EAFAA-PT total	Social worker	56	3.433	0.326
	Nurse	250	3.257	0.315
	Medical	144	3.334	0.304
	Psychologist	21	3.540	0.332
Relationship between variables			**statistic**	**p-value**
Social Worker vs. Nurse			5.369	**<0.001**
Social Worker vs. Doctor			2.837	0.187
Social worker vs. Psychologist			1.882	0.544
Nurse vs. Doctor			3.316	0.090
Nurse vs. Psychologist			5.613	**<0.001**
Doctor vs. Psychologist			3.974	**0.026**

Table 4. Comparison of EAFAA-PT between professional variables.

Variable	Experience with people with AUD	N	Mean	SD
EAFAA-PT total	No	136	3.222	0.283
	Yes	335	3.352	0.329
Welch's ttest = −4.301 (df = 289); $p < .001$				
Variable	**Currently taking care of people with AUD**	**N**	**Mean**	**SD**
EAFAA-PT total	No	215	3.268	0.302
	Yes	252	3.355	0.330
Student's t-test= −2.952 (df = 465); $p = .003$				
Variable	**Education on AUD**	**N**	**Mean**	**SD**
EAFAA-PT total	No	113	3.243	0.339
	Yes	358	3.337	0.313
(Student's t-test= −2.719 (df = 469); $p = .007$).				
Variable	**professional training on AUD**	**N**	**Mean**	**SD**
EAFAA-PT total	No	269	3.249	0.318
	On duty	114	3.432	0.284
	Postgraduate programme	10	3.700	0.280
	Workshop	70	3.313	0.312
	Other	3	3.187	0.139
One-way ANOVA = 11.28 (df = 4.461); $p < .001$				
Variable	**Person near with AUD**	**N**	**Mean**	**SD**
EAFAA-PT total	No	255	3.321	0.328
	Yes	216	3.306	0.314
Student's t-test = 0.4981(df = 469); $p = .619$				

assessment of V Cramer 0.106. Finally, a close relationship was found between academic training and professional training with a significant association (Fischer's Exact test $p = .005$), with a correlation of 0.152 (V Cramer).

Discussion

These data can be analyzed in a comprehensive way, based on the social representativeness that alcohol consumption has in Portugal, with high alcohol consumption patterns and high acceptability (Lavado et al., 2020).

The sample of professionals from different fields was highly experienced in terms of years of professional practice (20 years on average) and age (44 years on average). The distribution among the different professions was proportionally the same as the number of professionals in the health area in Portugal, mainly nurses, doctors, social workers and psychologists (in descending order) (Ministério da Saúde, 2018). The sample acknowledges that most of them have professional experience of caring for people with alcohol use problems, which is sustained by the high prevalence in Portugal (Lavado et al., 2020). However, almost half of them say that they do not currently care for people with this condition, which is surprising given the prevalence in Portuguese society. This result may suggest that professionals often do not make proper assessment of patients regarding this issue (Stewart & Swain, 2012).

Most participants had academic training, a percentage that drops significantly regarding in-service training. Of those who had in-service training, the majority was more than 3 years ago. This result alerts us to the difficulty of updating practices and implementing evidence-based practices (Kranzler & Soyka,

Table 5. Linear regression to EAFAAT-PT.

	Coefficient	SE	Lower CI	Upper CI	p-value
(Intercept)	3.315	0.047	3.223	3.408	<0.001
Profession [Ref: Social worker]	0.000				
Profession [Nurse]	−0.156	0.046	−0.246	−0.067	<0.001
Profession [Doctor]	−0.071	0.048	−0.166	0.024	0.144
Profession [Psychologist]	0.093	0.077	−0.059	0.244	0.229
Experience with people with AUD [Ref: No]	0.000				
Experience with people with AUD [Yes]	0.082	0.034	0.016	0.148	0.016
Professional training on AUD [Ref: No]	0.000				
Professional training on AUD [In-service]	0.130	0.036	0.058	0.202	<0.001
Professional training on AUD [Postgraduate]	0.354	0.099	0.158	0.549	<0.001
Professional training on AUD [Workshop]	0.005	0.043	−0.079	0.089	0.903
Professional training on AUD [Other]	−0.190	0.176	−0.536	0.156	0.281

2018). This is clearly a predictor of negative attitudes, as found in a sample of professionals in Brazil (D. Vargas et al., 2020), although in that study the percentage of those with in-service training (1/3) was lower than the study with Portuguese professionals (43%). Mirroring well the Portuguese reality (Carapinha & Guerreiro, 2021) it was not surprising that almost half of the sample identified a person close to their social relationships with problematic alcohol use, but this variable did not prove to be a predictor, which, when broadly analyzed, may be indicative of the familiarity and non-problematization of alcohol consumption. Alcohol use in Portugal is significantly influenced by its long-standing tradition in wine production, as well as cultural and religious traditions. Furthermore, the national policy, which offers health support for individuals with problematic substance use, has fostered a more positive attitude toward treatment and professional acceptance. The country also has specialized units dedicated to addressing addictive behaviors, which are highly supportive and closely integrated with all national health services.

Regarding attitudes, more than half of the participants were found to have overall positive attitudes (68.58%) and about a third (31.42%) with negative attitudes. The average found is almost overlapping with a sample of Brazilian health professionals, and with a distribution by professional groups similar to this research ($n = 831$), with an average of 3.23 (SD = 0.34) (D. Vargas et al., 2020), and another study with mental health professionals (average 3.30 SD = 0.4) (Almeida et al., 2021). However, our participants have less favorable attitudes than professionals working in specialized units for the treatment of people with alcohol and drug problems (mean 3.57, SD = 0.03) (Prates et al., 2021). Our study indicates that the percentage of general professionals with less favorable attitudes is consistent with data from a systematic review with research from different countries (33%) (Casalis et al., 2023). Attitudes are mostly positive, and the same is found in a study in Ireland showing a positive role adequacy, task-specific self-esteem and role adequacy, with better results on those who had experience work with people with alcohol-related problems (Iqbal et al., 2015).

Positive attitudes have been explained by the high rate of academic and professional training on this topic (Casalis et al., 2023; D. Vargas et al., 2020), strengthened by the results showing that those who have completed postgraduate training have the most positive attitudes. However, this positive assessment of attitudes is not unanimous, as these findings contradict studies where the attitudes of primary care professionals were negative (Wakeman et al., 2016).

In the present study, and regarding attitudes by professional groups, nurses reported the least favorable views of individuals with problematic alcohol use, like in other studies, with nurses indicate less favorable attitudes, negative or indifferent feelings when caring for individuals with problematic alcohol use (Babiarczyk et al., 2024), and nurses had less favorable attitudes comparing with medical doctors (Iqbal et al., 2015) like in this present study. This has been a predictor variable for negative attitudes, in the regression analysis, and is in line with the findings in other studies (Iqbal et al., 2015; D. Vargas et al., 2020). This could be influenced by the fact that women are predominant in the sample of nurses, as well as because women have shown more negative attitudes than men related to the consumption of alcoholic beverages (D. D. Vargas, 2013), explained by the moral values present in their analysis (D. Vargas et al., 2020). This data shows a cultural convergence between Portuguese and Brazilian societies, raising the possibility that societies with similar cultures have similar attitudes.

Regarding the relationship between age and attitudes, namely in the study with professionals in Brazil, results indicated a significant trend toward less favorable attitudes with advancing age (D. Vargas et al., 2020), which was only partially validated in the Portuguese sample. No significant relationship was found with the total scale, but it was found that lower age was associated with more favorable attitudes in factor 2 - attitudes toward people with alcohol use disorder.

As far as the subscales are concerned, the dimensions related to understanding etiology (factor 3) and to the drinking itself and its consumption (factor 4) are framed as negative attitudes or less favorable attitudes as the others. They are clearly positive in the dimensions of working with people and interpersonal relationships (factor 1) and related to understanding people with alcohol use disorders (factor 2). These results validate the findings of studies in Brazil (Prates et al., 2021; D. Vargas et al., 2020). These findings, in relation to alcohol itself and its consumption, may be related to the equally negative view regarding the etiology of the disease, the illness, and this can be considered the stigma still present in society in general and, in professionals in particular, which are associated with less positive health outcomes (Fernandes &

Ventura, 2018). There is often difficulty in understanding and accepting the disease as a real health condition with multifactorial causes, which often collide with constructions of attributing guilt only to consumer behavior (Fernandes & Ventura, 2018; Smith-Bernardin et al., 2022).

The reality of providing care to people with problematic alcohol consumption is a factor associated with a more favorable attitude, especially those who care more frequently, compared to those who do not provide care directly. However, we did not identify in the literature other reports on this connection. There is also a significant difference in the more positive attitudes of professionals who have professional experience compared to those who do not. Although we did not find studies that corroborate these results, in studies where most participants have experience, the mean value of attitudes is positive (Prates et al., 2021; D. Vargas et al., 2020).

Adjusting to other factors, nurses had the least favorable view of individuals with problematic use of alcohol. This finding aligns with a study in Brazil (D. Vargas et al., 2020) which revealed that being a medical doctor or psychologist is a predictor of positive attitudes, which was only partially corroborated in our study, regarding the positive attitudes of psychologists. When considering why being a nurse in Portugal is associated with negative attitudes, there are few studies that point to these reasons. However, we can hypothesize that these results are due to social factors, such as stigma and high prevalence, the fact that the majority of the sample are women, who usually present less positive attitudes, and also by the nurses' work overload. It is widely acknowledged that these patients are people who require a lot of attention and availability from nurses and the latter, in Portugal, have a low ratio (OECD/European Union, 2022). Previous experience, in-service training and academic training also appear as predictors of positive attitudes in different societies (Calleja, et al., 2029; Prates et al., 2021).

The study's findings highlight the strong association between undergraduate training, continuing education, as well as previous experience, which have an impact on the ability to better identify problems and facilitate and contribute to better attitudes of those who most often treat people with problematic alcohol consumption.

Limitations of the study

Although we have uncovered some factors related to attitudes, some limitations should be acknowledged. These include the impossibility of analyzing in detail some potential predictor variables, such as professionals working conditions, workload´, and the possibility of choosing to care (or not) for people with this condition. These limitations can be considered challenges for future research.

Conclusion

The main results of this study, based on the EAFAA-PT, show that health professionals in Portugal have positive attitudes toward people with problematic alcohol consumption. Attitudes are more favorable mainly in the dimensions of understanding the person, ability and commitment in interpersonal relationships and in finding answers to people's needs. They are less favorable regarding the understanding of the etiology and in relation to alcoholic beverages and their consumption. Participants demonstrate a compassionate attitude toward the person with problematic alcohol consumption, but less understanding, and possibly a somewhat stigmatizing view, toward the phenomenon of consumption and understanding the pathways leading to the problem.

It is noteworthy that women have a less favorable attitude, which is relevant in their representation in proportion, in almost all samples of health professionals. Being a nurse is also associated with less favorable attitudes, which is also relevant, since they are the most representative professionals in the world of health professions.

Previous experience in caring for people with problematic consumption, academic and in-service training on this subject are clear predictors of more favorable attitudes. These results have a direct bearing on clinical practice, as they suggest the importance of investing significantly in specific and transversal educational programs, as well as a strong commitment to ongoing training.

The fact that it is a study in just one country is of interest to the international community as it raises awareness, allows a comprehensive approach to countries that are culturally close and allows the attitudes of professionals to be mapped across different regions.

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Authors contribution

All authors have made substantial contributions to all research process. Paulo Seabra and Divane Vargas had the idea for the research project and for the article. Paulo Seabra, Inês Nunes, Vanessa Silva and Divane Vargas performed the literature search. Paulo Seabra, IN, VS, OV, LM, LP, perform all methodological procedures. Paulo Seabra, Divane Vargas e Alice Curado perform data analysis. Paulo Seabra, DV, VS, LM, LP, OV draft the article, and all revised the work. Finally, all are responsible for writing the article. All authors have done essential contribution and approved the version being submitted.

Availability of data and materials

The data sets generated during and/or analyzed during this study are available from the corresponding author on reasonable request.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Ethical considerations

This study received the positive opinion of the Ethics Committee of the Regional Health Administration of Lisbon and Tagus Valley, Portugal (1903/CES/2021). All participants were asked for their informed consent, without which they would not have been allowed to participate in this study. They could withdraw from the study at any time by not submitting the questionnaire or by contacting the lead researcher. Data were accessed by only three of the researchers via a virtual platform and a password-protected personal computer.

Ethical approval and consent to participate and for publication

This study received a positive opinion of the Ethics Committee of the Regional Health Administration of Lisbon and Tagus Valley, Portugal (1903/CES/2021) and is following the ethical standards of the Declaration of Helsinki. To recruit the sample, a request was sent by e-mail to several hospital and primary health-care institutions and Professional Orders (Nursing, Medicine, Psychology and Social Workers) requesting the dissemination of the study to their professionals/members. All participants were asked for their informed consent, without which they would not have been allowed to participate in this study. They could withdraw from the study at any time by not submitting the questionnaire or by contacting the lead researcher. All participants were asked for their informed consent for publication of their participation data unanimously.

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