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ABSTRACT

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DESCRIPTORS: Alcoholism; Alcohol Drinking; Preventive Health Services; Primary Health Care; valuation of the Efficacy-Effectiveness of Interventions.
INTERVENÇÕES BREVES JUNTO A UTENTES DA ATENÇÃO PRIMÁRIA EM USO DE RISCO E NOCIVO DE ÁLCOOL

RESUMO
Objetivo: avaliar o efeito das intervenções breves na redução do consumo de álcool em utentes de uma Unidade de Saúde Familiar.
Resultados: na primeira avaliação, 189 (92,2%) encontravam-se na zona I; 15 (7,3%) na zona II e 1 (0,5%) na zona IV. No seguimento, quatro meses após as intervenções com os 15 utentes que pontuaram zona 2, teve-se perda da amostra de 5, demonstrando que 6 (60%) pontuaram zona I, 3 (30%) zona II e 1 (10%) zona III.
Conclusão: as intervenções breves são recursos efetivos na detecção precoce do consumo de álcool, sendo necessários à disseminação nos cuidados primários à saúde.

DESCRITORES: Alcoolismo; Consumo de Bebidas Alcoólicas; Serviços Preventivos de Saúde; Atenção Primária à Saúde; Avaliação de Eficácia-Efetividade de Intervenções.

INTERVENCIONES BREVES CON PACIENTES DE ATENCIÓN PRIMARIA EN USO DE RIESGO Y NOCIVO DE ALCOHOL

RESUMEN:
Objetivo: Evaluar el efecto de intervenciones breves en la reducción de ingesta alcohólica de usuarios de una Unidad de Salud Familiar.
Resultados: En la primera evaluación, 189 (92,2%) estaba en zona I; 15 (7,3%) en zona II y 1 (0,5%) en zona IV. En el seguimiento, cuatro meses después de las intervenciones con los 15 usuarios de zona II, se observó pérdida de la muestra de 5, expresando que 6 (60%) puntuaron como zona I, 3 (30%) zona II; y 1 (10%), zona III.
Conclusión: Las intervenciones breves constituyen recursos efectivos para detección precoz del consumo alcohólico, siendo necesaria su diseminación en atención primaria de salud.

DESCRIPTORES: Alcoholismo; Consumo de Bebidas Alcoólicas; Servicios Preventivos de Salud; Atención Primaria de Salud; Evaluación de Eficacia-Efectividad de Intervenciones.
Excessive alcohol consumption is considered a worldwide public health problem, causing major consequences at the individual and collective levels. According to the World Health Organization (WHO) report, in 2016, the harmful use of alcohol caused near 3 million deaths (5.3% of deaths worldwide). Mortality resulting from alcohol consumption is higher than deaths from diseases such as tuberculosis, HIV/AIDS and diabetes\(^1\). Although there are risks to the health of the world population due to alcohol abuse, it is hard to think about its extermination throughout life, being, therefore, a problem that affects millions of people, without cultural differences\(^2\).

In Portugal, according to the 2018 Report on the patterns of alcohol abuse and dependence, 2.8% of the population (4.9% of consumers) had, in the last year surveyed, a consumption considered to be high risk/harmful and 0.8% (1.3% of consumers) had symptoms of dependence, according to the Alcohol Use Disorders Identification Test (AUDIT)\(^3\).

Given this situation and thinking about the care process, we highlight the Brief Interventions (BIs) related to the risky and harmful use of alcohol and other drugs, both due to their universality and the large amount of the population who access health services daily.

The brief intervention is a type of care with limited time, focused on changing the patient’s behavior. Some steps are established: problem assessment (triage), feedback, goal setting, discussion of pros and cons of use, counseling, and promotion of the patient’s self-efficacy. It uses a harm reduction approach, seeking to reduce risky behavior and the drug’s harmful effects, for people who use it in an abusive and harmful manner\(^4\).

The BI technique can be applied by professionals from a variety of backgrounds, if they have received a brief training. Simple recommendations for reducing consumption, provided by a professional, or even numerous resources offered in a structured treatment program can be used\(^5\).

The training of health professionals, especially nurses, is critical for the early detection of risky alcohol use; implementing Brief Interventions to reduce excessive alcohol consumption, monitoring and referral, should, thus be a priority in the professional training process\(^6\).

It is critical to value aspects of nursing education, not only restricted to technical knowledge, but to praise existing resources for comprehensive care, with positive implications in assisting people who abuse alcohol and other drugs\(^7\). In this way, the relevance of the BIs in primary health care is perceived, with nurses being essential parts in the process of early detection of users with risk/harmful patterns concerning alcohol use and the application of BIs according to the level of risk found\(^8\).

To achieve a care model aimed at health promotion and disease prevention, the professionals involved must be prepared and able to recognize drug use-related problems and develop care actions. And considering the study\(^9\) that points to primary health care services as a gateway for users, family members and communities in general, these can be considered as relevant spaces for the completion of ways of caring and treating.

In Brazil, the role of Family Health Strategy (FHS) nurses is essential in the identification of patients, as well as in the systematization of assistance in primary care, as recommended in current national and international health policies\(^10\).

Thus, to understand risky/harmful use, more consistent strategies and interventions with alcohol users are imperative. It is also necessary that the care programs and policies are based on the already available scientific evidence on the treatment of substance
dependencies, so that they are more effective and there is greater control of this serious public health problem. However, BIs are not widely disclosed in clinical practices and studies on these dimensions are scarce.

It should be noted that in Portugal there are guidelines from the Direção Geral de Saúde (General Health Department) that recommend the use of BIs, under resolution 030/2012 of 28th December, updated on 12/18/2014\(^{(11)}\). In this context, the importance of this study is highlighted. It is questioned if the implications for the care practice will occur to contribute so that organs and entities that deal with population health, governmental or not, can develop strategies and policies aimed at improving the health of this population, specifically on the use of alcohol, providing improvements in quality of life and preventing grievances resulting from problematic use of alcohol.

Therefore, this study aimed to evaluate the effect of Brief Interventions on reducing alcohol consumption in users of a Family Health Unit.

### METHOD

This is a quantitative study, with a pre-experimental approach, of a before and after BIs (four months after) evaluation, with a single group. The study was carried out at the Unidade de Saúde Familiar (USF) Rainha Santa Isabel (Family Health Unit), in the Santa Clara, Cernache and Almalaguês health centers, located in Coimbra - Portugal, with a convenience sample, consisting of users registered at the Health Unit. Data collection took place in May and June 2019 and after four months (September/October) of the same year. The choice for this period was based on a study\(^{(12)}\) that guides a new assessment after four to six months.

The sample consisted of 205 users, who were over 18 years old, available, and agreed with formal consent to answer the survey, which are the inclusion criteria. For the post-test, exclusion criteria were considered: users who scored zone IV, that is, possible dependence and who had some deficiency or inability to answer the questions.

For data collection, a sociodemographic questionnaire and the Alcohol Use Disorder Test (AUDIT) were used, a questionnaire to assess risk levels for alcohol consumption indicated by the Clinical standard of the General Health Department of Portugal.

The AUDIT is a screening tool, recognized worldwide, developed by WHO, for risk assessment related to alcohol consumption, in health services of different levels and contexts. It is a questionnaire composed of 10 questions, which address three dimensions (pattern of alcohol consumption, signs and symptoms of dependence and problems resulting from alcohol use) and whose scores vary by identifying four patterns of use: use that will not lead to problems: 0 at 7 points (low risk - zone 1), they received an educational intervention; use that can lead to problems: 8 to 15 points (risky use - zone 2), received simple advice; use that is likely to lead to problems: 16 to 19 points (harmful use - zone 3), received simple advice, brief advice and continuous monitoring and use that probably already causes problems: 20 points or more (possible dependence - zone 4), were referred for diagnosis, evaluation, and treatment\(^{(4)}\).

The last three patterns of use are considered as problematic, and this instrument has good specificity and sensitivity to detect the different patterns in these cases. The BIs were developed based on structured guides, adapted\(^{(4)}\), within the scope of the project Saúde sem Reservas inscrito na Unidade de Investigação em Ciências da Saúde: Enfermagem (Health without Restrictions project registered in the Health Sciences Research Unit: Nursing).

The data were collected by trained nurses, mental health specialists with specific
training, through interviews in a private and reserved place. The questionnaires were numbered and coded for later evaluation in the post-test, in which each user received a card with telephone contact information and a post-test scheduling date. In the screening phase, a user with possible dependence was identified, who was referred for diagnosis, and did not integrate the subsequent evaluation. Informed consent was obtained from all participants.

For the data analysis, we used the software Statistical Package for the Social Sciences (SPSS), version 22.0. The Shapiro-Wilk normality tests (for a sample of smaller than 50 subjects) were used, all dependent variables address the assumptions of normality, due to the type of variable under study (risk levels for alcohol use) and the type of sample (combined sample), the non-parametric Wilcoxon test was chosen to assess the effect of BIs.

To meet the ethical criteria, the research was submitted to the Research Ethics Committee of the Escola Superior de Enfermagem of Coimbra, of the Health Sciences Research Unit (UICISA:E), with opinion P550/01-2019. Before the data collection process, consent was obtained from the Technical Administration Council of the Rainha Santa Isabel Family Health Unit, and the authorization by the Administração Regional de Saúde Centro (Regional Health Administration Center), belonging to the government of Portugal, with opinion 120/23.

RESULTS

The sample consisted of 205 individuals, with a mean age of 55.2 years (SD=17.1). As for sex, women were predominant (n=120/58.5%). Regarding education, it was found that 60 respondents (29.7%) in the sample have the 1st cycle; 148 (74.4%) are married, 83 (42.1%) are retired, 167 (81.5%) are homeowner, and 186 (91.2%) have income (Table 1).

Table 1 - Socioeconomic characteristics of users of the Rainha Santa Isabel Family Health Unit. Coimbra, Portugal, 2019 (continues)
<table>
<thead>
<tr>
<th>Schooling</th>
<th>n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>&lt;4 years of schooling</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td>1st Cycle (4th grade)</td>
<td>60</td>
<td>29.7</td>
</tr>
<tr>
<td>2nd Cycle (6th grade)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3rd Cycle (9th grade)</td>
<td>36</td>
<td>17.8</td>
</tr>
<tr>
<td>Bachelor and Degree</td>
<td>51</td>
<td>25.2</td>
</tr>
<tr>
<td>High school (10th, 11th, 12th)</td>
<td>41</td>
<td>20.3</td>
</tr>
<tr>
<td>Type of housing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>36</td>
<td>17.6</td>
</tr>
<tr>
<td>Leased house</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Mother in law's house</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Own home</td>
<td>167</td>
<td>81.5</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Employed</td>
<td>65</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>43</td>
<td>21.8</td>
</tr>
<tr>
<td>Retired</td>
<td>83</td>
<td>42.1</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>186</td>
<td>91.2</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>8.8</td>
</tr>
</tbody>
</table>

*Some columns do not score the 205, due to the lack of answers from some participants to the appropriate questions*

By analyzing the risk level, it was found that, in the first assessment, 189 (92.2%) of the participants had risk level I (low risk), 15 (7.3%) were at risk level II (risk level) and one (0.5%) at level IV (probable dependence), this one was excluded and referred to the family doctor, being diagnosed and referred to a specialized unit (Table 2).

Table 2 - Characterization of the initial AUDIT classification of users of the Rainha Santa Isabel Family Health Unit. Coimbra, Portugal, 2019

<table>
<thead>
<tr>
<th>Risk levels</th>
<th>n (%)</th>
<th>Median ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone I</td>
<td>189</td>
<td>(92.2)</td>
</tr>
<tr>
<td>Zone II</td>
<td>15</td>
<td>(7.3)</td>
</tr>
<tr>
<td>Zone IV</td>
<td>1</td>
<td>(0.5)</td>
</tr>
<tr>
<td>AUDIT score</td>
<td></td>
<td>3.0±3.4</td>
</tr>
</tbody>
</table>
In the follow-up, four months after the interventions with the 15 users who scored Zone II, there was a loss of the sample of 5. Of the remaining 10, six (60%) scored Zone I, three (30%) Zone II and one (10%) zone III (Table 3).

Table 3 - Sample before and after BI regarding the user’s risk zones of the Rainha Santa Isabel Family Health Unit. Coimbra, Portugal, 2019

<table>
<thead>
<tr>
<th>Risk zone</th>
<th>Pre-Intervention n (%)</th>
<th>Post-Intervention n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone I</td>
<td>0(0)</td>
<td>6(60)</td>
</tr>
<tr>
<td>Zone II</td>
<td>15(100)</td>
<td>3(30)</td>
</tr>
<tr>
<td>Zone III</td>
<td>0(0)</td>
<td>1(10)</td>
</tr>
<tr>
<td>Zone IV</td>
<td>0(0)</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

Table 4 shows the Shapiro-Wilk normality test. Based on the normality test, at the 5% significance level, we have statistical evidence that the AUDIT score in the first moment does not follow a normal distribution, and the second moment follows a normal distribution.

Table 4 - Normality test for the AUDIT questionnaire scores of users of the Rainha Santa Isabel Family Health Unit. Coimbra, Portugal, 2019

<table>
<thead>
<tr>
<th>Shapiro-Wilk</th>
<th>Statistics</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score AUDIT (1st Moment)</td>
<td>0.795</td>
<td>10</td>
<td>0.013</td>
</tr>
<tr>
<td>Score AUDIT (2nd Moment)</td>
<td>0.859</td>
<td>10</td>
<td>0.074</td>
</tr>
</tbody>
</table>

* Normality Test, Shapiro-Wilk, at the 0.05 (5%) significance.

Since it is a small sample, on the sequence, we used the nonparametric test Wilcoxon Test.

In the results shown (before and after the BIs), and as can be observed in Table 5, regardless of the progression of the risk level, there is a positive progression of the risk level, that is, the risk level after the intervention is lower than before the intervention. There is only one participant in the sample who increased the risk level, and three participants persisted on the risk level after the intervention. This positive progression, as can be observed, reveals a positive effect of BIs in reducing risk consumption.
Table 5 - Progression of the sample concerning the risk zone, before and after BI of the users of the Rainha Santa Isabel Family Health Unit. Coimbra, Portugal, 2019

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score AUDIT (2nd Moment)/Score AUDIT (1st Moment) (N=10)</td>
<td>Negative</td>
<td>7a</td>
<td>-1.402</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>1b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Even</td>
<td>2c</td>
<td></td>
</tr>
</tbody>
</table>

*Wilcoxon Test, at the 0.05 (5%) significance.
Note: a Risk level after < Risk level before. b Risk level after > Risk level before. c Risk level after = Risk level before.

DISCUSSION

Even in the face of a small sample, the results suggest that users submitted to BI show a positive progression in terms of consumption levels, thus reducing risk levels. A fact that deserves to be highlighted and is relevant to clinical practice was the referral of a user with probable dependence for specialized consultation due to early detection, which showed readiness for change, together with family support.

At this occasion, a study\(^{13}\) that aimed to describe the production of scientific knowledge on the implementation of BI in primary health care and to identify the difficulties of the health team on the theme, found that professional health training for use of alcohol screening and the performance of BI are crucial and necessary. However, the authors point out the team’s difficulties related to planning, the health system organization, beliefs and attitudes of workers aimed at alcohol users and the applied technique, which requires the growth of discussions about the theme, so that public policies are encouraged in the health services scenario\(^{13}\).

During the interviews, reactions of surprises were seen for a few moments when the consumption habits were questioned, which may be associated with the absence of such inquiries in routine consultations in health services. In this regard, researchers\(^{14}\) point out that primary health care professionals should use the Alcohol Smoking and Substance Involvement Screening Test (ASSIST) as a tool for early screening of alcohol use, to intervene briefly, to avoid a search for secondary and tertiary services due to problems related to the psychoactive substance abuse.

A study that evaluated the pattern of alcohol use and its consequences after the application of the BASICS intervention (Brief Alcohol Screening and Intervention for College Students), in a sample of Brazilian university students, confirmed the importance of BI and the application of screening instruments, scoring positive results and effective BI to reduce problem use\(^{15}\). Research also carried out among university students who are at risk of alcoholic beverages pointed out that BI presented a positive, significant result and readiness for change related to the use pattern, promoting health\(^{16}\).

Contextualizing the effect of BI on primary health services, research that tested the effectiveness of group intervention performed by nurses in reducing the use of risk/harmful alcohol was effective, suggesting that the technique be replicated in other services, as it requires less time from health professionals to assist a greater number of patients when compared to the individual form\(^{17}\).

The same authors reinforce in another study that BI is an effective strategy, based on the client’s motivation stages, so that a behavioral change in the way of drinking is
obtained, suggesting the application of the technique in different places, in the daily work of the clients. Nurses from primary care services, integrating BI into nursing consultations or psychoeducation groups existing in health services[16].

Contextualizing epidemiological data, research that aimed to evaluate the Brief Intervention in users of a family health unit showed that 88.6% of users were at the risk level I and 11.4% at the risk level II. And in the five-month follow-up after BI, 97.7% were at the risk level I, and 3% at the risk level II, concluding that BIs influenced decreasing and stabilizing risk levels of alcohol use, reinforcing the importance of applying BIs in primary health care[8].

Another investigative finding that also used the effectiveness of BI in an emergency service pointed out that three users referred for consultation of possible disorder due to alcohol use, three months after BIs, reduced risk levels[19]. Research that found the impact of an IB combined with art therapy on patients who use alcohol has shown high efficiency in reducing/ceasing alcohol abuse. The implementation of several service types for alcohol users in the primary care network subsidizes suitable and effective patient care, confirmed by the expressive number of individuals who ceased alcohol use[20].

In a survey that analyzed the clinical case of a female patient who reports risky alcohol consumption and a high level of stress, conducted in Mexico, the results achieved at the end and in the follow-up intervention show that the patient stopped using alcohol and her stress levels decreased[21].

It is worth mentioning that BIs can also be applied in other settings, such as a study[12] that highlighted the positive effect of BI in reducing problem alcohol consumption by HIV individuals, showing a positive progression when compared to the control group, which received usual instruction.

Therefore, given the results found and the comparative literature, it is possible to evidence the positive effect of BIs in reducing alcohol risk consumption, thus confirming the hypothesis initially raised. Finally, further investigations in different contexts with patients undergoing this intervention are considered important, to reinforce the effectiveness of BI in reducing the risk/harmful consumption of alcohol.

This was a non-probabilistic sample, with users who were served at the health services, which may have caused bias and hindered the representativeness of the target population. Besides being a single group, that is, without a control group, thus allowing the data internal validity to be compromised, as other variables that could guarantee the specific positive progression from the BIs were not controlled, making these the limitations of this study.

Before, even the evaluation after intervention followed the necessary protocols, with a four-month follow-up, further evaluations would be valid to verify the continuity and maintenance of the effectiveness of the BIs. The performed segment was useful to reinforce the need for early screening and the BIs instrumentalization in reducing alcohol risk consumption, which is the greatest potential of this study.

New researches should be carried out, however, they should consider the existing limitations, because, although researches show positive results when submitted to BIs, it is suggested that in future researches, control groups and increased follow-up time should be combined, is essential to invest in continuing education of primary care professionals to consolidate the improvements reached through the BIs and strengthen the evidence.

CONCLUSION
There was a positive effect of the Brief Interventions in reducing the risk of alcohol consumption, these strategies are essential in the early detection of alcohol consumption, and nurses are crucial in the identification and intervention of individuals who present a harmful risk of alcohol consumption.

It is worth emphasizing the importance of disseminating instruction, qualification, and training of professionals, especially nurses, to implement the BIs, for the detection, monitoring and necessary referrals before people become problem alcohol users. This theme is important in the nursing, mental health and public health context, to strengthen quality care and health care, as BIs are effective and simple resources, which can be used mainly in primary health care.

Lastly, the implications for the nursing area are that it is an entrepreneurial practice, fostered on a scientific basis, that overcomes mental health care and strengthens the nurse’s practice in professional practice and publicizes low-cost care technology, capable of reducing the risk/harmful consumption of alcohol and prevent its use, thus avoiding morbidities and related problems over time.

REFERENCES


