Alcohol and tobacco consumption among seamstresses from the city of Formiga - Minas Gerais

Neliane Aparecida Silva\textsuperscript{2}  
Jaqueline Lemos de Oliveira\textsuperscript{3}  
Jacqueline de Souza\textsuperscript{4}

This study aimed to analyze the prevalence of alcohol and tobacco between seamstresses women from the city of Formiga - Minas Gerais, identifying possible relations with the socio-demographic characteristics. It is a quantitative study, developed with 56 women from four sewing factories. It was found that 32.1% have ever used tobacco at least once in life, and, of these, 55% used such substance in the last three months; 43% have consumed alcohol, being that 79% of them in the last three months. Nine women fit the pattern of tobacco abuse and five of alcohol, noting that consumption is above the national average. It emphasizes the need to deepen the specifics of consumption to design effective prevention strategies among such workers.

Descriptors: Women; Working; Alcoholism; Smoking.

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\textsuperscript{2} MSc, Professor, Centro Universitário de Formiga, Formiga, MG, Brazil.  
\textsuperscript{3} Nursing undergraduate course, Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo, WHO Collaborating Centre for Nursing Research Development, Brazil  
\textsuperscript{4} PhD, Professor, Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo, WHO Collaborating Centre for Nursing Research Development, Brazil
Consumo de álcool e tabaco entre mulheres costureiras da cidade de Formiga - Minas Gerais

Objetivou-se analisar a prevalência do consumo de álcool e tabaco entre mulheres costureiras de Formiga – Minas Gerais, identificando possíveis relações com as características sociodemográficas. Trata-se de um estudo quantitativo, desenvolvido com 56 das 66 trabalhadoras de quatro fábricas de costura. Verificou-se que 32,1% já consumiram tabaco alguma vez na vida, sendo que, destas, 55% utilizaram tal substância nos últimos três meses; 43% já consumiram álcool, sendo que 79% destas o fizeram nos últimos três meses. Nove mulheres se enquadram no padrão de consumo abusivo do tabaco e cinco no de álcool, apontando que o consumo está acima da média nacional. Ressalta-se a necessidade de aprofundar-se nas especificidades do consumo para delinear estratégias de prevenção eficazes entre tais trabalhadoras.

Descritores: Trabalho Feminino; Alcoolismo; Hábito de Fumar.

Consumo de alcohol y tabaco entre las mujeres costureras de la ciudad de Formiga – Minas Gerais

Este estudio tuvo como objetivo analizar la prevalencia de alcohol y tabaco entre las mujeres costureras Formiga - Minas Gerais, la identificación de posibles relaciones con las características sociodemográficas. Se trata de un estudio cuantitativo, desarrollado con 56 de 66 mujeres de cuatro fábricas de costura. Se encontró que el 32,1% ha utilizado alguna vez el tabaco al menos una vez en la vida, y, de éstos, el 55% utiliza dicha sustancia en los últimos tres meses; 43% ha consumido alcohol, con un 79% de ellos lo hizo en los últimos tres meses. Nueve mujeres encajan en el patrón de abuso de tabaco y cinco en el alcohol, y señaló que el consumo está por encima de la media nacional. Se hace hincapié en la necesidad de profundizar en los detalles de consumo para diseñar estrategias de prevención eficaces entre estos trabajadores.

Descritores: Trabajo de Mujeres; Alcoholismo; Hábito de Fumar.

Introduction

The clothing industry is historically marked by the predominance of female workers, and the sewing work has been highlighted, on the globalization scenario, for its precarious contracts, directly affecting the mental health of these women. It has been identified that the prolonged stress to which workers in sewing cooperatives are subjected to in Mexico City, mostly women (81.2%), lead to the presence of physical and mental suffering, such as: anxiety, depression, cardiocirculatory diseases, digestive diseases, psychosomatic diseases and sleep disorders[1].

Within Brazil, a qualitative study on the ability to work and the health of seamstresses points out that the ability to work depends on the following factors: training/qualification, satisfaction, health/aging and social support, and we highlight the need for research
studies to examine the exposure of this workers on the impact of work not only in the ability to work but also in the health of these women\(^{(2)}\).

We can then consider the working conditions faced by these professionals as a factor that certainly influences the consumption of substances, as licit and illicit drugs are generally used because of their effects of pleasure, to improve social performance, to face difficult situations and, especially, as self-medication to contain the anxiety generated by several factors\(^{(3)}\).

In the specific case of consumption of alcoholic beverages, it is emphasized that it often occurs to reduce stress and to provide relaxation, especially in situations of leisure and entertainment\(^{(4)}\).

The manual of the Brazilian Ministry of Health, which addresses diseases associated with work, considers work as one of the psychosocial factors of risk for chronic alcoholism, since consumption may be due to a defensive practice, as a means to ensure inclusion in the group. Moreover, it can be a way to enable the service itself, as a result of the pharmacological effects of alcohol (soothing, exhilarating, stimulating, relaxing, sleep inducer, anesthetic and antiseptic)\(^{(5)}\).

It is known that social and cultural factors exert greater control on the compulsive drinking in women, since, when comparing to men, there is less social pressure for women to start drinking and greater pressure to cease it if it is abusive. This is because, since antiquity, the few reports of consumption of alcohol by women show more the moral and social aspects than the psychophysiological aspects, therefore, women were considered to be promiscuous and liberals\(^{(6)}\).

Regarding smoking, it is known that it is one of the main preventable health risk factors that can contribute to the development of several chronic diseases, various cancers, diseases of the respiratory system, eye diseases, among others\(^{(7)}\).

In relation to the subject of female smoking, we can argue that tobacco use is a historical factor, as it follows women in their quest for equality and recognition in society. It is assumed that the cigarette has a role in relieving anxiety and anguish arising from the gender contradictions that women are living and it is possible that the overload of family and work responsibilities influence its use, since it is seen as a way to relieve stresses from the routine and also as a source of pleasure. Thus, the use of tobacco would be associated with the sense of autonomy and as an emotional release mechanism\(^{(3)}\).

In this way, there are different risk factors for smoking among women, especially workers in the formal market.

Given the above, this study aims to analyze the prevalence of alcohol and tobacco consumption among seamstresses employed in factories in the municipality of Formiga - State of Minas Gerais, Brazil -, and the possible associations with the sociodemographic characteristics of these women.

### Material and Methods

This is a cross-sectional research with epidemiological data on the prevalence of drug use in the population of the study, who are seamstresses who work in the factories of a neighborhood where the only Psychosocial Attention Center of the municipality of Formiga was situated. This neighborhood has four sewing factories registered in the labor union, with six, seven, eighteen and thirty-five workers, amounting to sixty-six women. Thus, the sample consisted of fifty-six participants, because, of the sixty-six women, two left the work during the phase of quantitative data collection and eight refused to participate.

The inclusion criteria adopted in the research were: working regularly at the factories selected for data collection and aged over 18 years. The exclusion criteria were: being illiterate and being on sick leave for more than six months during the phase of data collection.

We considered, to carry out the study, all ethical aspects of the guidelines and standards proposed by resolution 466/2012 of the Brazilian Health Council\(^{(8)}\), and the research project was approved by the Ethics and Research Committee of the Nursing School of Ribeirão Preto, University of São Paulo. The data were collected from February to July, 2014.

We applied questionnaires for the collection of sociodemographic data and pattern of substance use of the participants. The instrument used in data collection was the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), built through a multicenter project of the World Health Organization and validated in Brazil\(^{(9)}\). The ASSIST is a structured questionnaire with eight questions about the use
of nine psychoactive substances (tobacco, alcohol, marijuana, cocaine, stimulants, sedatives, inhalants, hallucinogens, and opioids). For this study, we used only the items relating to alcohol and tobacco. The data were submitted to descriptive analysis and the Chi-Square Test and Fisher’s Exact Test in order to verify the association between variables. We considered as outcome variables the use in life and the use in the last three months of tobacco and alcohol and as independent variables color (white or black/brown), age group (<41 years or >41 years), education (up to elementary school or up to high school) and marital status (with or without partner).

Results

Regarding the demographic profile of the women, 55.4% were self-referred as white, 60.7% had at least elementary school and 51.8% did not have a partner, as described in Table 1.

Table 1 – Sociodemographic data of the participants (n=56). Formiga, MG, Brazil, 2015

<table>
<thead>
<tr>
<th>Sociodemographic data</th>
<th># (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>31 (55.4)</td>
</tr>
<tr>
<td>Black/Brown</td>
<td>25 (44.6)</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
</tr>
<tr>
<td>22-31</td>
<td>09 (16.1)</td>
</tr>
<tr>
<td>32-41</td>
<td>23 (41.0)</td>
</tr>
<tr>
<td>42-51</td>
<td>17 (30.3)</td>
</tr>
<tr>
<td>52-61</td>
<td>07 (12.5)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>22 (39.3)</td>
</tr>
<tr>
<td>Complete/ Incomplete</td>
<td></td>
</tr>
<tr>
<td>Elementary school</td>
<td>34 (60.7)</td>
</tr>
<tr>
<td>Complete/ Incomplete</td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>With Partner</td>
<td>27 (48.2)</td>
</tr>
<tr>
<td>Without Partner</td>
<td>29 (51.8)</td>
</tr>
</tbody>
</table>

Regarding the pattern of alcohol and tobacco consumption during life, we observed that twenty-seven women have never used any of the two substances and thirteen used the two substances concomitantly. Among those who have used tobacco, 55% have done so in the last three months and 32.1% presented scores indicative of abuse. Among the women who have consumed alcohol, 79% have done so in the last three months and 11.6% presented scores indicative of abuse, according to Table 2.

Table 2 – Pattern of alcohol and tobacco consumption in life and in the last three months (n = 56). Formiga, MG, Brazil, 2015

<table>
<thead>
<tr>
<th>Substance</th>
<th>Tobacco # (%)</th>
<th>Alcohol # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use in Life</td>
<td>18 (32.1)</td>
<td>24 (43.0)</td>
</tr>
<tr>
<td>Use in the last three months</td>
<td>10 (17.8)</td>
<td>19 (33.9)</td>
</tr>
<tr>
<td>Indication of abuse</td>
<td>09 (16.1)</td>
<td>05 (8.9)</td>
</tr>
<tr>
<td>Never used the substance</td>
<td>38 (67.9)</td>
<td>32 (57.1)</td>
</tr>
</tbody>
</table>

In Table 3, we can observe the alcohol and tobacco consumption in relation to the self-referred color of the participants; use of tobacco did not present significant association with self-referred color. However, there was a significant association between alcohol consumption and self-referred color, both in life and in the last three months, since 70.8% of those who consumed this substance were self-declared as white.

Table 3 – Association of use in life and in the last three months of alcohol and tobacco and self-referred color of participants (n=56). Formiga, MG, Brazil, 2015

<table>
<thead>
<tr>
<th>Color</th>
<th>Use in Life - # (%)</th>
<th>Use in the last three months - # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alcohol</td>
<td>Tobacco</td>
</tr>
<tr>
<td>White</td>
<td>17 (30.3)</td>
<td>12 (21.4)</td>
</tr>
<tr>
<td>Black and Brown</td>
<td>07 (12.5)</td>
<td>06 (10.7)</td>
</tr>
<tr>
<td><strong>p value</strong></td>
<td>0.044(a)</td>
<td>0.241(b)</td>
</tr>
</tbody>
</table>

(a)Pearson’s chi-squared test (b)Fisher’s exact test
The correlations between age group and alcohol and tobacco consumption in life and in the last three months did not present significant results.

As for education, there was a significant association between alcohol consumption in life and in the last three months, in which 62.5% of those who reported consuming in life had complete or incomplete high school. This is similar to the use of tobacco in the last three months, as 75% of those who consumed it had up to high school, and the results are shown in Table 4.

### Table 4 – Association of use in life and in the last three months of alcohol and tobacco according to the education of participants (n=56). Formiga, MG, Brazil, 2015

<table>
<thead>
<tr>
<th>Education</th>
<th>Alcohol Use in Life - # (%)</th>
<th>Tobacco Use in Life - # (%)</th>
<th>Alcohol Use in the last three months - # (%)</th>
<th>Tobacco Use in the last three months - # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to elementary school</td>
<td>09 (16.1)</td>
<td>09 (16.1)</td>
<td>07 (12.5)</td>
<td>03 (5.4)</td>
</tr>
<tr>
<td>Up to high school</td>
<td>15 (26.8)</td>
<td>09 (16.1)</td>
<td>12 (21.4)</td>
<td>07 (12.5)</td>
</tr>
<tr>
<td>p value</td>
<td>0.002&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>0.259&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>0.009&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>0.038&lt;sup&gt;(b)&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>(a)</sup>Pearson’s chi-squared test  <sup>(b)</sup>Fisher’s exact test

Regarding marital status, there was significant correlation only among women who consumed alcohol in the last three months, of whom 48.3% reported not having a partner. The data is shown in Table 5.

### Table 5 – Association of use in life and in the last three months of alcohol and tobacco according to the marital status of participants (n=56). Formiga, MG, Brazil, 2015

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Alcohol Use in Life - # (%)</th>
<th>Tobacco Use in Life - # (%)</th>
<th>Alcohol Use in the last three months - # (%)</th>
<th>Tobacco Use in the last three months - # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Partner</td>
<td>08 (14.3)</td>
<td>06 (10.7)</td>
<td>05 (8.9)</td>
<td>02 (3.56)</td>
</tr>
<tr>
<td>Without Partner</td>
<td>16 (28.6)</td>
<td>12 (21.4)</td>
<td>14 (25.0)</td>
<td>08 (14.3)</td>
</tr>
<tr>
<td>p value</td>
<td>0.054&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>0.125&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>0.025&lt;sup&gt;(b)&lt;/sup&gt;</td>
<td>0.080&lt;sup&gt;(b)&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>(a)</sup>Pearson’s chi-squared test  <sup>(b)</sup>Fisher’s exact test

Regarding women who had scores indicative of abuse or low-risk consumption, the correlation tests showed no significant results in relation to the sociodemographic factors. However, we highlight that most of those who presented an indication of abuse belonged to the age group of 22 to 41 years.

We also found a significance in the association between the pattern of alcohol and tobacco consumption, as, among the women with abusive alcohol consumption, 60% also had a pattern of abusive tobacco consumption (p=0.002 - Fisher’s exact test).

### Discussion

The results show the prevalence of low education among the participants, which is expected when studying this working class<sup>(10)</sup>. This reality can be considered a situation of social vulnerability and together with the various health risk factors to which these workers are subjected it certainly is an aggravating factor for substance use. The creation of proposals is needed to promote adult education and professional training for the qualification of these women and which take into account mental health promotion, since education will certainly provide better job opportunities – or opportunities at work if the person already has it – which favors the increase of income and the social role of these women.

Regarding substance consumption, we observed that the prevalence of use in life of alcohol and tobacco in the studied group (respectively 43% and 32.1%) was lower than the national average (respectively 68.3% and 39.2%). We highlight that the national
survey included all women whether or not workers; it is probably for this reason why the prevalence found in this study is smaller, because of the approach of a specific group of workers\textsuperscript{(11)}.

In this study, the prevalence of women with scores indicative of abuse (8.9\% for alcohol and 16.1\% for tobacco) was greater than the national average (6.9\% for alcohol and 9.0\% for tobacco), indicating that there may be some specific risk factors in the working environment or the condition of workers which should be further investigated and considered in future intervention proposals.

The Brazilian Ministry of Health has pointed the relationship between high patterns of alcohol consumption with the possible discredit of some professions\textsuperscript{(5)} and other authors have reaffirmed it, highlighting the relationship between professions that are socially discredited, and even the reason of certain rejection, with excessive alcohol consumption\textsuperscript{(12)}. In this way, the pressures that such participants are submitted to should be considered, as well as their satisfaction with their professions, noting that such factors certainly have an influence on their pattern of consumption.

Workplace violence is also described in the literature as risk factor for alcohol abuse; 29.8\% of the interviewed, in a study with workers in Monterrey, considered violence at work as a cause for alcohol and drug consumption – most of those who consumed them (29.4\% reported having used tobacco at least once and 37.1\% used alcohol) performed manual and routine work\textsuperscript{(13)}. Nevertheless, alcohol use has been described by the workers as a form of leisure and relaxation after the work week and, in general, they do not ascribe negative effects to that\textsuperscript{(14)}.

Thus, given the high prevalence of tobacco and alcohol abuse among the participants of this study, we highlight the need for the implementation of intervention strategies that teach such population about the consequences of this consumption, while they motivate them to reduce it, aiming at health promotion and prevention of escalation of this consumption, culminating in a future addiction.

In the analysis of the reports of women with an abusive pattern or alcohol addiction in a previous study, it was verified a compulsion for alcoholic intake and that the use of alcoholic beverages was part of their daily lives. In general, such women did not see themselves as addicted despite the need to keep drinking and even after having been alerted to stop drinking by family or friends\textsuperscript{(19)}. The denial of addiction can harm these women, as they will not seek help to address their problem, since they do not see it as something that needs to be faced.

Thus, it is understood that interventions undertaken by a health professional may be more effective so that such women can be aware of the risks of this consumption and make efforts to change their behavior accordingly.

In addition, the health professional should be aware because they often also express other signs that may be the result or cause of this pattern of consumption, namely: negative emotions and/or depressive symptoms\textsuperscript{(16)}. Thus, the care of this audience must be devoid of prejudice, with acceptance and respect, encouraging not only the start, but also the compliance of the user to the treatment\textsuperscript{(17)}. Often, the woman does not seek the care by fear and/or shame of being discriminated\textsuperscript{(18)}, therefore appropriate acceptance is essential.

The observed association between alcohol consumption and the color of the women emphasizing the higher prevalence among those self-referred as white is reaffirmed in studies present in the literature\textsuperscript{(19-20)}. However, the relationship between such variables is not yet clear in the literature available; it is known that black and brown persons tend to be more vulnerable in economic terms\textsuperscript{(21)} and that persons with higher purchasing power are more vulnerable to substance use, as they have more financial availability to spend on alcoholic beverages, or that its use is linked to social status, easier access and lower social constraints\textsuperscript{(20,22)}, in this way the income factor could explain such a correlation. Additional studies are needed to examine this aspect in greater depth.

Despite such assertions, it is important to note that self-referred color implies taking into account that many persons still have difficulty in self-referring as belonging to the black ethnicity; therefore, the low number of participants that self-referred as black or brown may reflect this fact. Such a scenario, in the Brazilian culture, has influence from discrimination that causes many individuals belonging to the group to feel as displaced, subjected to social conditions of inferiority and thus they devalue their physical, cultural
and socioeconomic characteristics, self-referred classification, which sometimes does not match their reality. However, despite the strategy of self-referring color limiting the results, they are in accordance with what is advocated in legal and ethical terms.

Therefore, it is understood that proposals of ethnic awareness, both in the workplace and in health services and the community context, can be important tools for the strengthening of self-esteem and the rescue of the identity of these groups, mainly for understanding that this type of empowerment can be also an important factor of protection against abuse of substances.

Regarding education, according to the results, there was greater alcohol consumption among the participants with a higher education level, corroborating previous studies\(^\text{20, 22-23}\); it is understood that the higher the socio-cultural repertoire, the greater possibilities for social gatherings and, therefore, the greater vulnerability to alcohol consumption.

Regarding the association between recent alcohol consumption and marital status, the results of this study suggest, as well as other previous research studies, that the presence of a partner can be a protective factor for the habitual use of alcohol\(^\text{22-23}\). Considering that, currently, women yearn for freedom and independence, decide when and if they are going to get in a relationship and that their social networks are more extensive, the search for entertainment is certainly an influence in the drinking habit.

The association between tobacco consumption and education in this study does not match what exists in the literature, as it has been verified in previous studies that women with low education were most likely to be smokers than women with higher education (even if incomplete)\(^\text{24-29}\). Additional studies are needed to confirm such divergence, especially considering a research design that includes a more robust sample and with workers with different education levels, including superior education, which was not found in the sample of this study.

The association between alcohol and tobacco abuse was also appointed by a previous study on the factors associated with the Brazilian smoking habit\(^\text{26}\). Discussions about certain drugs being a “gateway” to other drugs have been very controversial, but often pointed out by some studies on the prevalence of substance use\(^\text{27-28}\).

Given the above, it is understood that the use of psychoactive substances can bring many problems to the worker, particularly when this use becomes an abuse; it is therefore a question of great importance when there is the need to draw a profile of the mental health of a group.

In addition, we can see from such a discussion that there are several factors that may be related to alcohol and tobacco abuse, but additional studies are needed in the population analyzed for a clearer definition of specific risk factors and a better foundation for possible prevention strategies in this group.

**Conclusion**

The analysis of the prevalence of alcohol and tobacco consumption among seamstresses employed in factories in the municipality of Formiga - State of Minas Gerais, Brazil -, revealed lower prevalence than the national average for both substances; however, the percentage of women with abusive pattern was higher than the national average.

We demonstrated associations between the use of alcohol and marital status and education of participants. Regarding the use of tobacco, we observed an association only with the variable of education. There was also a significant association between alcohol abuse and tobacco abuse.

Recommendations related to health promotion and prevention focusing on risk factors and on issues such as improved education, ethnic and cultural awareness and awareness about the consequences of substance use are punctuated as possibilities of interventions for the group studied.

Regarding the limits of this study, we consider the restriction of the quantitative method in itself that makes it impossible to enter the universe of meanings of the participants in relation to the object of study. Therefore, the evidence of an association between the use of alcohol, marital status and education could be further explored in a study that also used the qualitative approach.

Another limitation is related to the place and population established for this study, which was restricted to only one neighborhood of the municipality. We believe that a stratified sample of the municipality would provide findings that are more representative of the local population. In this way, we highlight that, although this study has provided important inferences, it is not possible to generalize the results to the municipality or to the seamstresses of other locations.

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