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Anxiety symptoms among rural women and associated factors[a]

Sintomas de ansiedade entre mulheres rurais e fatores associados

Síntomas de ansiedad entre mujeres rurales y factores associados

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Abstract

Objectives: to identify anxiety symptoms in rural women and the influence of socio-demographic, economic, behavioral and reproductive health variables on anxiety symptoms. Method: observational and transversal study. A total of 280 women living in rural areas participated. The Trace-state anxiety inventory was used. In the bivariate analysis, the t-Student test and the Pearson correlation were used. For multivariate analysis, multiple linear regression was performed. Results: the mean scores of women were 38.3 and 41.4 points in anxiety-state and anxiety-trace respectively. Women who reported "bad" coexistence with their partner had higher scores for anxiety-state symptoms and anti-anxiety. The variable number of children was a predictor of the scores of the symptoms of state-anxiety and trait-anxiety and the variable age, a predictor of the scores of the symptoms of trait-anxiety. Conclusion: the results showed the influence of different factors with the symptoms of anxiety among rural women. The identification of symptoms and associated factors by the health team can contribute to specific actions and appropriate referrals.

Keywords: Mental Health; Anxiety; Women's Health; Rural population; Primary Care Nursing.

Resumo

Objetivos: identificar os sintomas de ansiedade em mulheres rurais e a influência de variáveis sociodemográficas, econômicas, comportamentais e de saúde reprodutiva sobre os sintomas de ansiedade. Método: estudo observacional e transversal. Participaram 280 mulheres residentes na área rural. Foi utilizado o inventário de ansiedade Traço-Estado. Na análise bivariada, foram usados o teste t-Student e a correlação de Pearson. Para a análise multivariada, foi realizada a regressão linear múltipla. Resultados: os escores médios das mulheres foram de 38,3 e 41,4 pontos na ansiedade-estado e ansiedade-traço respectivamente. As mulheres que referiram convivência "ruim" com o companheiro apresentaram maiores escores de sintomas de ansiedade-estado e ansiedade-traço. A variável número de filhos foi preditora dos escores dos sintomas de ansiedade-estado e ansiedade-traço e a variável idade, preditora do escore dos sintomas de ansiedade-traço. Conclusão: os resultados evidenciaram a influência de diferentes fatores com os sintomas de ansiedade entre as mulheres rurais. A identificação dos sintomas e os fatores associados, por parte da equipe de saúde, pode contribuir para ações específicas e encaminhamentos adequados.

Palavras-chave: Saúde mental; Ansiedade; Saúde da mulher; População rural; Enfermagem de Atenção Primária.

Resumen

Objetivos: Identificar los síntomas de ansiedad en las mujeres rurales y la influencia de las variables sociodemográficas, económicas, conductuales y de salud reproductiva en los síntomas de ansiedad en las mujeres rurales. Método: Estudio observacional y transversal. Participaron 280 mujeres residentes en el área rural. Se utilizó el inventario de ansiedad Traza-Estado. En el análisis bivariado, se utilizaron el Test t-Student y la correlación de Pearson. Para el análisis multivariado, se realizó la regresión lineal múltiple. Resultados: Los puntajes promedio de las mujeres fueron 38.3 y 41.4 puntos, en estado de ansiedad y rasgo de ansiedad, respectivamente. Las mujeres que refirieron convivencia "mala" con el compañero presentaron mayores escores de síntomas de ansiedad-estado y ansiedad-traza. La variable número de hijos fue predictor de los escores de los síntomas de ansiedad-estado y ansiedad-rasgo y la variable edad predictor de la puntuación de los síntomas de ansiedad-traza. Conclusión: Los resultados evidenciaron la influencia de diferentes factores con los síntomas de ansiedad, entre mujeres rurales. La identificación de los síntomas y factores asociados por parte del equipo de salud puede contribuir a acciones específicas y encaminamientos adecuados.

Palabras clave: Salud Mental; Ansiedad; Salud de la Mujer; Población Rural; Enfermería de Atención Primaria.

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INTRODUCTION

Anxiety can be characterized by feelings of tension and thoughts of concern. It is considered a normal life experience and often provides adequate motivation for action. However, if at some point it becomes severe or lasting and begins to significantly impair life, it can be classified as a disorder or illness.[1]

Anxiety disorders tend to start in childhood or adolescence and may become chronic and recurrent, and are associated with high functional impairment, reduced quality of life and increased risk of developing some other psychiatric disorder, particularly depression.[2] They are among the most common psychiatric disorders in the community.[3]

Research has turned its attention to the occurrence of anxiety disorders in women. Studies have shown that they have higher prevalence rates of anxiety disorders than men.[4,5] In a study conducted in Bangladesh, the prevalence of severe psychic suffering was higher in women than in men and the difference increased with age.[4]

In this sense, considering another context of women's lives, such as rurality, some conditions associated with this environment may contribute to mental health problems, such as living conditions associated with poverty, limited economic and social resources, and demographic disadvantages.[6]

In the rural context, social isolation and stressful work were associated with higher anxiety scores and symptoms of depression. Social isolation had a greater effect on anxiety, and stressful working conditions had a greater impact on depressive symptoms among rural women.[7]

On the other hand, women in rural areas are less involved in making important decisions and, therefore, supposedly less exposed to the daily tensions of life.[8]

In this context, rurality is characterized by male hegemony in gender and labor relations. The uniqueness of rural women is evidenced by the social, economic, behavioral and health difficulties in which they are inserted. Therefore, socio-cultural roles, associated to housing region and gender, may undergo variations.[9] It is known that the insertion of rural women in agricultural and domestic work highlights the physical overload and vulnerability to which they are exposed, as presented in a study in Rio Grande do Sul, Brazil.[10] However, different factors may have an influence on issues related to the mental health of rural women, specifically anxiety.

In view of the above, it was found that anxiety symptoms may be prevalent among women. Screening for the indicative symptoms may highlight the frequency of suspicion of this disorder and the importance of their identification for mental health issues.

When considering that the symptoms related to the psychic illness, such as anxiety, can interfere with family life and quality of life of the affected person, the identification by the health team can contribute to specific actions and appropriate referrals.

This study intends to contribute to the reflection on the importance of new research and the implementation of health actions aimed at population groups, often overlooked by the scientific community and public policies, such as the rural population and specifically rural women.

In view of the above and considering the scarcity of national studies related to this subject, the objective of this study was: to identify the anxiety symptoms in rural women and the influence of socio-demographic, economic, behavioral and reproductive health variables on the anxiety symptoms.

METHODS

Observational and cross-sectional study conducted with women of fertile age (15 to 49 years) living in a rural area in the municipality of Uberaba (MG), Brazil.

The inclusion criteria were: women living in the rural area of the Family Health Strategy (FHS) for more than one year, aged between 15 and 49 years and oriented as to time, space and person.

The rural area of the municipality has FHS coverage. The following criteria were used to choose FHS: a greater number of women in the age group defined for the study, according to data provided by managers of the Rural Basic Health Units (BHU), in addition to coverage in the entire area with Community Health Agents (CHAs).

Prior to the start of data collection, a pilot study was conducted in order to adjust the instruments, if necessary. Small adjustments were made.

A previous list was used with the name of the women who were in the inclusion criteria of the research. The data collection took place at the women's home from October 2014 to May 2015. All interviews were conducted by a single researcher, in a private location, without the presence of other people. The visits were carried out in the company and in line with the monthly agenda of the CHAs.

Women were guided on the objectives of the research and then invited to participate. They formalized their consent by signing the Term of Free and Informed Consent and, in the case of minors, the acceptance and consent was requested from the adolescent and the legal guardian by signing the term.

The number of women eligible for the study was 407. Of these, 127 were excluded during the study for the following reasons: change in the rural area; not being at home after three attempts by the interviewer; refusal to participate in the research; participation in the pilot study; outside the age group at the time of collection; cognitive decline and death, totaling 280 participants at the end of the study.

The research started after the approval of the project by the Research Ethics Committee of the Ribeirão Preto Nursing School of the University of São Paulo (USP) with CAAE No. 21860113.2.0000.5393.

The data collection instruments related to the socio-demographic and economic, behavioral and reproductive health characterization were based on the literature and later submitted to the appreciation of three specialists in the area. The variables investigated were: age; schooling; color; conjugal situation; time of conjugal relationship; occupation; individual income; value

of individual income; family income; smoking habit; chronic disease; coexistence with partner; physical activity; leisure activity; number of people residing at home; pregnancy; number of children; occurrence of abortion and age of the woman in the first pregnancy.

For the identification of anxiety symptoms, the Trace-state anxiety inventory was used, translated and adapted for Brazil by Biaggio and Natalício.[11] It is composed of two scales that measure two concepts of anxiety: ansiedade-state (IDATE-State) and ansiedade-traço (IDATE-Trace). The IDATE-State scale has 20 statements that indicate how individuals feel at a given moment and presents the response options: 1- no; 2 - little; 3 - enough; 4 - much. The IDATE-Trace scale, also with 20 statements, describes how individuals generally feel and have the answers: 1 - almost never; 2 - sometimes; 3 - frequently; 4 - almost always. 11 Each item on the two scales is assigned a score from one to four and the total score can vary from 20 (minimum) to 80 (maximum) on each scale, and the higher the score, the higher the level of anxiety.

A spreadsheet was used in the Microsoft Excel® program, using the double typing validation technique to detect inconsistencies. The statistical analysis was performed in the SPSS for Windows software, version 20.0.

In the univariate analysis of the data, the distribution of absolute (n) and relative (%) frequencies was performed for the qualitative variables and mean and standard deviation values and maximum and minimum values for the quantitative variables. In the bivariate and multivariate analysis of the data, the t-Student test and the Pearson correlation were used. For multivariate analysis, multiple linear regression was used.

For all tests, a Confidence Interval (CI) of 95.0% and a level of significance α of 5% were considered.

The variables used in the bivariate and multivariate analyses were: marital situation - "living with a partner", in two categories, "yes" or "no"; occupation - "paid occupation", in two categories, "yes" or "no"; individual income - "yes" or "no"; value of monthly individual income - "less than a minimum wage" or "one or more minimum wages"; physical activity - "yes" or "no"; leisure activity: "yes" or "no"; smoking habit: "yes" or "no"; chronic illness - "yes" or "no"; coexistence with partner - "good" or "bad"; children - "yes" or "no"; abortion - "yes" or "no". The variables age, schooling, relationship time, number of people residing at home, number of children alive and age of the woman in the first pregnancy were classified in a quantitative manner.

The predictor variables used in the multiple logistic regression for the symptoms of anxiety-state and anxiety-trace were: age and education, being classified in a quantitative way; individual income, in two categories, "yes" or "no"; coexistence with partner, in two categories, "good" or "bad" and number of living children, classified in a quantitative way.

It is worth noting that there was no separation of women with prior diagnosis of anxiety symptoms.

The internal consistencies, measured by the Cronbach alpha coefficient of the IDATE-State and IDATE-Trace scales, were 0.93 and 0.91, respectively.

RESULTS

The average age of the participants in the study was 33.6 years (SD=9.8), with ages between 15 and 49 years. As for schooling, the time of study varied from zero to 15 years, with an average of approximately 7.0 years of study (SD=3.3) and a median of 7.0. The majority were considered white (72.1%), married or in a stable union (83.6%), the average time of relationship was 159.1 months (SD=97.8) and the median was 144 months. The stable relationship time ranged from four to 384 months. They did not have paid occupation 55.7% and 45.4% did not have monthly individual income. Among those who had some type of individual income, the predominant salary range was a minimum wage (51.0%). The value of family income between one and two minimum wages was 37.2%.

Regarding the behavioral variables, among the 280 participants, most of them did not smoke (78.2%), reported not having a chronic disease (73.9%) and having "good" coexistence with their companion (91.9%), did not perform physical activity (80.7%) and had leisure activities (54.3%). The average of residents at home was 4.1 (SD=1.5) and the median was 4.0 people, varying from one to ten in the same home.

As far as women's health is concerned - reproductive issue - most of them have already become pregnant (91.0%) and have not had an abortion (82.8%). The average number of pregnancies was 2.8 (SD=1.7). The average of living children was 2.5 (SD=1.43) and the median was 2.0. The number ranged from one to nine living children, and the mean age at first pregnancy was 19.4 years (SD=4.5) and the median was 19.0 years, ranging from 13 to 40 years.

On the anxiety-state scale, the average score of the interviewees was 38.3 points (SD=11.6) and the median was 35.0 points, varying between 20 and 76.

In the bivariate analysis, the variables no occupation (p=0.03), no physical activity (p=0.03), no leisure activities (p=0.04) and having "bad" coexistence with the partner (p=0.002) were associated with the highest score of anxiety-state symptoms (Table 1).

Table 1 below presents a bivariate analysis of socio-demographic, economic, behavioral and reproductive health variables according to the score of anxiety-state symptoms.

The mean score of the women interviewed on the anxiety-trace scale was 41.4 points (SD=11.9) and the median was 40.0 points, ranging between 23 and 71.

In the bivariate analysis, the variables do not perform physical activity (p=0.02), do not perform leisure activities (p=0.02), have chronic disease (p=0.006) and have "bad" coexistence with the partner (p<0.001) were associated with the highest score of anxiety symptoms (Table 2).

Table 2 presents the bivariate analysis of socio-demographic, economic, behavioral and reproductive health variables according to the score of anxiety-trace symptoms.

Table 3 presents the correlation of socio-demographic, economic, behavioral and reproductive health variables with the scores of the symptoms of anxiety-state and anxiety-trace.

Table 1. Comparison of socio-demographic, economic, behavioral and reproductive health variables and the score of anxiety-state symptoms in rural women, 2014-2015.

VARIABLES	IDATE-State		*p**
	Mean	Standard deviation	
Living with a partner			0.49
Yes	38.5	11.7	
No	37.2	11.7	
Paid Occupation			**0.03**
Yes	36.5	10.3	
No	39.5	12.3	
Individual income			0.54
Yes	37.9	11.0	
No	38.8	12.4	
Value of individual monthly income			0.27
Less than one minimum wage	39.2	10.8	
One or more minimum wages	37.1	11.0	
Physical activity			**0.03**
Yes	35.2	10.1	
No	39.0	11.9	
Leisure activity			**0.04**
Yes	37.0	11.2	
No	39.9	12.1	
Smoking habit			0.36
Yes	39.5	12.0	
No	37.9	11.5	
Chronic disease			0.09
Yes	40.4	13.1	
No	37.5	11.0	
Coexistence with partner			**0.002**
Good	37.4	10.6	
Bad	50.8	15.7	
Children			0.08
Yes	38.8	11.7	
No	35.3	11.0	
Abortion			
Yes	40.1	13.5	0.51
No	38.7	11.6	

*p-value for the t Student Test. Source: research data.

Table 2. Comparison of socio-demographic, economic, behavioral and reproductive health variables and the score of anxiety-trace symptoms in women living in rural areas, 2014-2015.

VARIABLES	IDATE-Trace		*p**
	Mean	Standard deviation	
Living with a partner			0.92
Yes	41.4	12.1	
No	41.6	10.9	
Paid Occupation			0.12
Yes	40.1	11.9	
No	42.3	11.9	
Individual income			0.58
Yes	41.1	12.0	
No	41.8	11.9	
Value of individual monthly income			0.54
Less than one minimum wage	41.8	11.9	
One or more minimum wages	40.6	12.1	
Physical activity			**0.02**
Yes	37.9	11.0	
No	42.3	12.0	
Leisure activity			**0.02**
Yes	39.9	11.6	
No	43.2	12.2	
Smoking habit			0.07
Yes	44.2	14.1	
No	40.6	11.2	
Chronic disease			**0.006**
Yes	44.7	12.9	
No	40.2	11.4	
Coexistence with partner			**<0.001**
Good	40.4	11.7	
Bad	52.7	12.0	
Children			0.26
Yes	41.7	11.9	
No	39.5	12.0	
Abortion			
Yes	45.0	13.5	0.07
No	41.4	11.7	

*p-value for the t Student Test. Source: research data.

It is observed that the greater the number of people living at home (p=0.003), the greater the number of living children (p<0.001) and that the lower the age of the woman in the first pregnancy (p=0.02), the higher the score of symptoms of anxiety-state.

The larger the number of people living at home (p=0.02), the larger the number of living children (p=0.008) and the lower the schooling (p=0.03) and the lower the age of the woman in her first pregnancy (p=0.04), the higher the score of anxiety symptoms (Table 3).

Table 4 presents the results of the multiple linear regression analysis regarding the relationship between the variables age, education, individual income, living with partner and number of living children and the scores of the participants in IDATE-State and IDATE-Trace.

Women who reported "bad" coexistence with their partner had higher scores for the symptoms of anxiety-state (Beta=0.30; p <0.001) and anxiety-trace (Beta=0.27; p <0.001) than those who had a "good" coexistence even after adjusting for the other variables previously identified in the scientific literature (age, schooling, individual income and number of children alive).

It should be noted that, in addition to coexistence with the partner, the variable number of children was a statistically significant predictor of the scores of the symptoms of anxiety-state (p <0.001) and anxiety-trace (p=0.02). Therefore, the higher the number of children, the higher the scores of anxiety-state and anxiety-trace symptoms.

The age variable was also a statistically significant predictor of the score of anxiety-race symptoms (p=0.01). The lower the age, the higher the score of the anxiety-trace symptoms.

DISCUSSION

On the anxiety-state scale, the average score of the interviewees was 38.3 points (SD=11.6) and the median was 35.0 points, ranging from 20 to 76 points. A lower data was identified in a research in Australia where rural women had a mean IDATE-state score of 33.60 points.[12]

The mean score of the women interviewed on the antenatal trait scale was 41.4 points (SD=11.9) and the median was 40.0 points, ranging from 23 to 71. In a research of pregnant women in rural Bangladesh, the mean score on the antenatal trait scale was 49.6 points.[13]

It is observed that, even considering the difference in population, the average score of anxiety-trace can be a reason for attention and concern for this population that lives in rural areas for the various issues that involve and resemble their economic, cultural realities, among others.

In a study in Mexico, with mothers living in urban, rural and indigenous areas, the highest prevalence of anxiety symptoms was identified in rural areas (31.8%).[14]

The findings of multiple linear regression models indicated that women who reported "bad" coexistence with their partner had higher scores of anxiety-state and anxiety-trace symptoms. In addition, the number of children presented as a predictor of the participants' anxieties-state and trait-anxiety symptoms scores.

Table 3. Correlation between socio-demographic, economic, behavioral and reproductive health variables and the scores for anxiety-state and anxiety-trait symptoms in women living in rural areas, 2014-2015.

VARIABLES	IDATE-State		IDATE-Trace	
	r	*p**	r	*p**
Age	-0.04	0.46	-0.09	0.14
Education	-0.09	0.15	-0.13	**0.03**
Relationship time	-0.10	0.13	-0.09	0.19
Number of people residing at home	0.18	**0.003**	0.14	**0.02**
Number of living children	0.23	**<0.001**	0.17	**0.008**
Women's age at first pregnancy	-0.15	**0.02**	-0.13	**0.04**

*Pearson's p value. Source: research data.

Table 4. Relationship between socio-demographic, economic, behavioral and reproductive health variables and the scores for anxiety-state and anxiety-trait symptoms in rural women in a multiple linear regression model, 2014-2015.

VARIABLES	Beta	IDATE Score	*p**
Age**	-0.12	IDATE-State	0.07
Education**	0.01		0.94
Individual income (yes=0; no=1)	0.06		0.37
Coexistence with partner (good=0; bad=1)	0.30		**<0.001**
Number of living children**	0.25		**<0.001**
Age**	-0.18	IDATE-Trace	**0.01**
Education**	-0.10		0.19
Individual income (yes=0; no=1)	0.04		0.55
Coexistence with partner (good=0; bad=1)	0.27		**<0.001**
Number of living children**	0.18		**0.02**

*p-value for the least squares test. **variable quantitative. Source: research data.

Therefore, it was found that the larger the number of children, the higher the scores of the anxiety-state and trait-anxiety symptoms. Age was also a predictor of the tent-anxiety symptoms score. The younger the age, the higher the score of the anxiety-attract symptoms.

In a study developed with pregnant women in Ribeirão Preto (SP), age was characterized as a risk factor for the genesis of

anxiety-trace symptoms. On the other hand, schooling was configured as a predictor of the scores of pregnant women in IDATE-State and IDATE-Trace.[15]

In a study at the Kofinou Rural Health Center, the authors identified that the higher the schooling, the lower the presence of symptoms of anxiety, depression and emotional suffering, therefore, the educational level is an important factor and may be related to mental disorders.[16] Low schooling is an aspect that can negatively influence women living in rural areas to seek assistance in the face of a mental health problem.[17]

In research with pregnant women in rural Bangladesh, anxiety (IDATE-trace) was associated with a poor relationship with her husband.[13]

Although pregnant women have different characteristics, participants in the above-mentioned study may resemble the women investigated in the research for the socioeconomic, cultural, and behavioral disadvantages related to their place of residence.

The relationship of "bad" coexistence with the partner with a higher score of anxiety-state symptoms and anxiety-trace is an important factor that must be treated with attention. Although the study does not go into the perspective of domestic violence, the issue of gender and all the factors that are inherent to the life of these women who live in a rural context, as already described, may be associated with the presence of anxiety symptoms among them.

Dissatisfaction in a relationship can trigger the development of the anxiety disorder and, also, can be responsible for the maintenance of this disorder.[18] Marital satisfaction is a common factor, affecting women's state of anxiety.[19]

The link between anxiety disorders and family relationships is two-way. Psychological problems negatively affect the person's relationships with this problem, and the partner's attitudes towards it significantly influence their anxiety.[18]

As evidenced, social risk factors, such as age and schooling, should be considered in the prevention of anxiety,[15] as well as the number of children and the relationship with the husband/partner.

The issue of mental health, within the cultural context of women living in a rural region, can be stigmatized and limit access to health services.[20] Therefore, it is believed that several factors inherent to the life of women living in rural areas can influence their mental health.

Women, in rural areas, perform domestic activities to a greater extent when compared to men, feeling more lonely and required and less supported and recognized.[21]

The family scenario is fundamental in issues related to women's mental health, specifically, the so-called "rural" ones. The position of these women, often limited to domestic activities, the number of children and care for them, absence or low pay, cultural, social and economic factors such as access to health and leisure services, may have an influence on their daily lives and on the appearance of symptoms related to mental illness. Therefore, several factors can be linked to the mental health of women, who are the main providers of family care. The position of rural women in relation to their families can impact the quality of life, relationships, and the health-disease process.

Mothers' mental health can put their children's emotional well-being14 and their relationship with their partner and close relatives at risk.

In view of the findings, the need to implement new health practices aimed at the mental health of women living in rural areas is evident. Health professionals need to redesign the dynamics of work actions through the identification of symptoms, conduct, referral of cases and knowledge about the associated factors.

The mental health care model advocates care at BHU with clinical assessment by the professional and referral when necessary.[22] The identification of factors that aim to contribute to the improvement of the health issue in the primary level of attention of the population of women living in the rural area should be inserted through conducts and routines in the care of this specific population, mainly by Nursing professionals.[23] There is a need for the nurse to expand knowledge and skills for mental health work,[24,25] and primary care nursing professionals have an indispensable role to play.

The direct action with these women through women's health consultations, childcare, among others, in addition to home visits and educational groups, favors the bond, the identification of signs and symptoms and health care.

It is believed that scientific research, such as the one developed in this study, can contribute with health professionals to the planning and development of specific assistance and educational activities, aiming at assisting the mental health of women who are part of specific groups, such as the rural population.

FINAL CONSIDERATIONS AND IMPLICATIONS FOR PRACTICE

The results indicated that rural women, participants in the study, presented scores for the symptoms of anxiety-state (38.3 points) and anxiety-trace (41.4 points).

Those who reported that they did not have a good coexistence with their partner had higher scores of anxiety-state symptoms and anxiety-trace. In addition, the variable number of children was a predictor of the anxiety-state and anxiety-truth symptoms scores and the variable age, the predictor of the anxiety-truth symptoms score.

It was shown that socio-demographic, behavioral and reproductive health factors are related to the mental health of rural women, specifically, in this study, the symptoms of anxiety.

Therefore, it is believed that the population of rural women needs to have mental health aspects investigated, including anxious symptoms, considering the conditions in which they live, among other factors.

It is hoped that this research can contribute to the reflection of health professionals and actors involved in this issue, impacting on the transformation of work practice and incorporating effective actions to the mental health of rural women through the identification

of symptoms, assistance, strategies, specific interventions and appropriate referral.

Research is needed to identify anxiety symptoms in rural women and their association with different factors due to the gap in scientific productions related to mental health, specifically related to anxiety symptoms among rural women.

The study had the following limitations: it was a cross-sectional study; the number of losses and the study was carried out in only one rural area.

AUTHOR'S CONTRIBUTIONS

Study design. Bibiane Dias Miranda Parreira. Flávia Azevedo Gomes-Sponholz.

Data collection or production. Bibiane Dias Miranda Parreira.

Data Analysis. Bibiane Dias Miranda Parreira. Flávia Azevedo Gomes-Sponholz

Interpretation of results. Bibiane Dias Miranda Parreira. Flávia Azevedo Gomes-Sponholz.

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Responsibility for all aspects of the content and integrity of the article published. Bibiane Dias Miranda Parreira. Bethania Ferreira Goulart. Mariana Torreglosa Ruiz. Juliana Cristina dos Santos Monteiro. Flávia Azevedo Gomes-Sponholz.

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